ICO/CFC STUDY OF MARKETING AND TRADING POLICIES AND SYSTEMS IN SELECTED COFFEE PRODUCING COUNTRIES









The experience gleamed from this and eight other country studies has been incorporated into an overall project review published by the Common Fund for Commodities (CFC): Study on marketing and trading policies and systems in selected coffee producing countries. Amsterdam 2000. CFC Technical Paper No. 3.

Sponsoring Agency: International Coffee Organization 22 Berners Street London W1P 4DD England

Tel: (0044 20) 7580 8591 Fax: (0044 20) 7580 6129

Principal Funding Agency:

Common Fund for Commodities

Willemshuis Stadhouderskade 55 1072 AB Amsterdam The Netherlands

Tel: (0031 20) 664 6409 Fax: (0031 20) 676 0231

Principal Executing Agency:

The World Bank
1818 H Street N.W.
Washington D.C. 20433
United States of America
Tel: (001 202) 477 1234
Fax: (001 202) 477 6391

Principal Consultants: LMC International Ltd. 14 - 16 George Street Oxford OX1 2AF England Tel: (0044) 1865 791737

Tel: (0044) 1865 791737 Fax: (0044) 1865 791739

LMC INTERNATIONAL

ICO/CFC Study of **Marketing and Trading Policies** and Systems in Selected Coffee **Producing Countries: GUATEMALA COUNTRY PROFILE**

Principal Executing Agency: The World Bank

LMC International Ltd 14-16 George Street Oxford OX1 2AF England

Tel: +44 1865 791737

Fax: +44 1865 791739

LMC International Ltd

1841 Broadway New York, NY 10023

Tel: +1 (212) 586-2427 Fax: +1 (212) 397-4756

CFS 5105 February 2000

Table of Contents

Executive Summary: Guatemala	l
Background Prominent Features of the Sector	
Supporting Services	11
Guatemala	1
Introduction	1
Trends in Coffee Production and Exports Coffee in the Economy	
Government Policy	5
Macroeconomic Environment	
Marketing Systems	12
Marketing Channels Pricing PolicyQuality and Quality ControlRisk Management	13 15
Institutions/Organisations	
Co-operativesProducer AssociationsExporters' Association	20

List of Tables

Table 1:	Guatemala — Coffee Production, Trade and Prices	2
Table 2:	Guatemala — Planted Areas for Major Crops, 1985-1997	3
Table 3:	Guatemala — Production by Type of Producer, 1987/88-1996/97	4
Table 4:	Guatemala — Macroeconomic Conditions, 1980-1997	7
Table 5:	Guatemala — Loan Repayments	10
Table 6:	Guatemala — Quality Classification	15
Table 7:	Guatemala — Coffee Exports by Grade, 1987/88-1994/95	16

List of Diagrams

Diagram 1:	Guatemala — Coffee Production and Yields,	2
Diagram 2:	Guatemala — Main Export Markets, 1990-1997	5
Diagram 3:	Coffee Marketing Channels	13
Diagram 4:	Guatemala — Grower Prices as a % of Export Unit Values, 1980/81-1996/97	14
Diagram 5:	Guatemala Prime Washed Differentials, 1980-1997	17

Executive Summary: Guatemala

BACKGROUND

The Guatemalan coffee sector has had a long history of being a free and competitive coffee market. The only controls that were imposed on the market were those that were required to ensure compliance with the International Coffee Agreement's (ICA) export quotas. These were abolished with the collapse of ICA economic clauses in 1989.

PROMINENT FEATURES OF THE SECTOR

In recent years, with little direct taxation and a competitive marketing system, grower prices have typically averaged between 70% and 90% of the export unit value. For 1997/98, domestic marketing costs are estimated to be around US\$17 per 100lbs, corresponding to approximately 13% to 15% of the f.o.b. price.

An important component of the Guatemalan coffee sector is the role that ANACAFE, a producers' association, plays in providing policy advice to the government and supporting services to the sector. ANACAFE seems to be popular among coffee growers and they appear to feel that it belongs to them, probably because its programmes are effective and efficiently run. ANACAFE has some notable features to its status, management and structure. These include:

- Accountability: ANACAFE's activities are essentially funded by a 1% levy on exports. This means that effectively, farmers are paying for its activities, a fact of which they seem to be well aware. Once a year at the Congresso, ANACAFE's management reveals and reports on all its activities, financing and results. This accountability appears to be a sufficient incentive for ANACAFE's staff to perform well;
- Arrangements with the government: There are agreements between ANACAFE and the government in several areas including the setting of an export levy, obligatory membership and official representation at international conferences and negotiations. Coffee policy is determined by a committee made up of representatives of ANACAFE and the government; and
- Renumeration for the management: One interesting feature of the renumeration arrangement for the president and the general manager of ANACAFE is that they receive practically no salaries. The purpose of this was to attract people who are interested in coffee not financial gain.

Prior to export, samples are sent to ANACAFE, although all coffee is allowed to be exported. Exports are required to be labelled according to ANACAFE's grading standards. A quality certification programme has also been introduced for "specialty" coffee where coffee is certified according to region, altitude, variety, processing method and final preparation.

As prices are determined by the New York futures market, producers, traders and exporters are exposed to the vagaries of fluctuating international prices. The number of coffee producers who hedge to reduce this price risk has increased from zero to around 20% over the last three years partly as a result of ANACAFE's activities. To

hedge prices, producers usually contact an exporter with whom they fix a price for future delivery of the crop, or they purchase minimum price protection. Subsequently, exporters sell futures or purchase options on the New York market to hedge their assumed exposure. Initial and variation margins are from the exporter's account. In the case of options, exporters pay for the premium up-front and deduct it from the price they pay the producer when he/she delivers coffee to them. Producers are then required to deliver the quantity of coffee corresponding to the amount of coffee in the futures contracts to the exporter.

Supporting Services

Coffee extension is provided by one of ANACAFE's 53 extension officers. A very successful extension programme for small growers is supported by ANACAFE, the government and USAID. Under this programme, intensive extension, including school-type courses, is provided to groups of about 30 growers. These groups are formed on a voluntary basis. The programme lasts for several years for each group.

ANACAFE also provides assistance to growers to enable them to approach commercial banks for both long term credit and crop finance. In providing this assistance, ANACAFE maintains a large computer database on each growers' coffee production and sales. This data, with the farmers' permission, is made available to the commercial banks to help them assess loan applications. In spite of this, small farmers, many of whom do not have properly registered land, have problems in obtaining credits from banks because of lack of collateral.

ANACAFE, through its Social Fund, also provides funds to assist with projects in rural areas, these projects are in the health, education and housing sectors. Some of these projects are run in conjunction with local government programmes.

INTRODUCTION

Guatemala is the second largest producer of arabica coffee in Central America and has had a long history of being a free and competitive coffee market. The only controls that were imposed on the market were those that were required to ensure compliance with the International Coffee Agreement's (ICA) export quotas. These were abolished with the collapse of ICA economic clauses in 1989.

An interesting feature of the Guatemalan marketing system is the role that ANACAFE, a producers' association, plays in providing policy advice to the government and supporting services to the coffee sector.

The Guatemala profile firstly provides an overview of the Guatemala coffee sector and the macroeconomic setting under which the marketing system operates. The profile then details the supporting services that are provided to the farmer and the role ANACAFE plays in providing these services. The marketing system is then described along with the key aspects of pricing policy, regulation, crop finance, risk management and taxation. Finally, the key organisations operating in the sector are described.

OVERVIEW

Trends in Coffee Production and Exports

Production

Guatemala is primarily an arabica coffee producer, although small quantities of robusta are grown on the Pacific coast. Annual production has risen from 1.8 million bags in the 1960s to an average of 3.7 million bags in the 1990s. However, with lower prices, growers reduced maintenance and input use which led to production falling to 3.3 million bags in 1993/94. Higher prices since 1994/95 have reversed this trend (Diagram 1 and Table 1). The coffee sector was severely hampered over thirty years by the civil war, since rebel activity was largely concentrated in the same highland areas where coffee is grown: farmers lost millions of dollars each year in payments to rebels who demanded "war tax". Investment in coffee was also hampered by the constant threat of attack.

Production increases in the early 1990s were due to a combination of increases in the planted area and higher yields from the replanting with high yielding varieties in the late 1980s. Increases in the planted area occurred as farmers diversified production away from food crop production (such as wheat, maize, beans and rice) towards non-traditional crops (including small vegetables, fruits, cut flowers, berries, cardamom, sesame), rubber, bananas, and coffee (Table 2).

Diagram 1: Guatemala — Coffee Production and Yields, 1980/81-1997/98

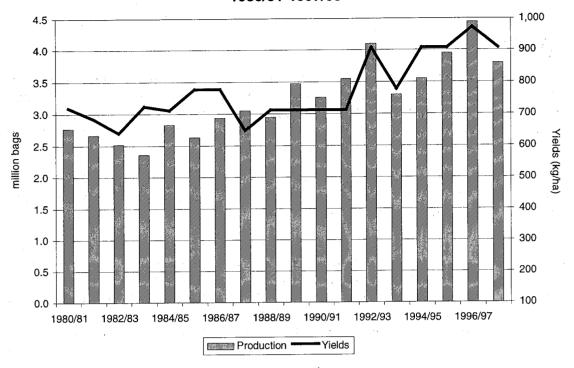


Table 1: Guatemala — Coffee Production, Trade and Prices

		Production		Total	Grower	Export
	Total	Arabica	Robusta	Exports	Price	Unit Value
	'000 bags	'000 bags	'000 bags	'000 bags	USc/lb	USc/lb
1960s	1,759					
1970s	2,250					
1979/80	2,482	2,482	0	2,202		
1980/81	2,770	2,770	0	1,919	78	119
1981/82	2,661	2,661	0	2,444	87	126
1982/83	2,518	2,518	0	2,004	86	117
1983/84	2,361	2,361	0	1,976	117	126
1984/85	2,833	2,833	0	3,120	114	125
1985/86	2,634	2,634	0	2,301	170	161
1986/87	2,942	2,942	0	2,717	85	121
1987/88	3,053	3,053	0	2,222	86	118
1988/89	2,950	2,945	5	2,870	80	106
1989/90	3,475	3,468	7	3,490	52	73
1990/91	3,260	3,251	9	2,803	59	77
1991/92	3,550	3,537	13	3,288	41	62
1992/93	4,100	4,092	8	4,018	39	54
1993/94	3,300	3,287	13	3,138	66	71
1994/95	3,550	3,540	10	3,564	93	123
1995/96	3,950	3,938	12	3,713	89	92
1996/97	4,350	4,336	14	4,197	87	
1997/98	3,600	3,590	10	3,864		
Source: IC	CO, LMC	<u> </u>				

Table 2: Guatemala — Planted Areas for Major Crops, 1985-1997 ('000 manzana)

	'				
	1985	1990	1997		
Coffee	328	364	378		
Banana	11	12	19		
Cardamom	48	63	70		
Rubber	23	23	44		
Sesame	44	38	71		
Maize	942	858	823		
Wheat	38	23	12		
Beans	243	166	175		
Rice	21	22	17		

Note:

1. manzana is equivalent to approx. 0.7 ha

Source:

National Accounts, Banco de Guatemala, ANACAFE

Coffee is grown by over 61,000 farmers. The size of holding varies enormously. It is estimated that there are 50 large farms, *fincas*, 450 medium farms, 5,100 small farms and 40,000 very small family farms. Approximately 30% of production is from small farmers, 25% from medium sized farms and 45% from large farmers. Land distribution in Guatemala is skewed and limited land reform measures have not been successful.

Most of the increases in production in the last ten years come from the larger and medium size *fincas*. Their production has more than doubled from 1.9 million bags to 3.9 million bags. Coffee production by co-operatives also more than doubled from 106,000 bags to 214,000 bags. Production by very small producers (under 4,000lbs annual production, or having under three to four hectares of land) increased only under 5% during the whole period 1987/88 to 1996/97 (Table 3).

Coffee producers in Guatemala are quite diversified. Smallholders usually plant corn and beans in addition to coffee, although they rely on coffee for cash. In addition, small producers have their labour as means of diversification. Larger farms are diversifying their activities into rubber, sugar cane, fruits, ornamental plants, flowers, livestock and managed forest areas. Some large farms even have plans for eco-tourism. Approximately, 50% of the large coffee growers are well diversified, with the other 50% still relying very much on coffee.

PAGE 3

¹ In the classification of "fincas" or farms there could be included some smaller farms. Thus, the category does not exclusively cover large and medium sized farms.

Table 3: Guatemala — Production by Type of Producer, 1987/88-1996/97 ('000 bags)

	1987/88	1996/97
Farms	1,915	3,904
Co-operatives	107	214
Very small producers	418	433
Total	2,440	4,551

Source: ANACAFE

The major pests and diseases are *broca* and to a much lesser extent, coffee leaf rust. According to ANACAFE, coffee leaf rust is not a major problem. All chemicals and fertilisers are imported.

Exports

Exports rose to 4.0 million bags in 1992/93 due to a combination of higher production, the liquidation of stocks, following the collapse of the ICA in 1989, and smuggling from neighbouring countries, in particular Honduras and El Salvador. Exports fell to 3.1 million bags in 1993/94. Higher prices from 1994/95 have reduced the incidence of smuggling although contraband exports continue from Honduras and are estimated to be around 0.2 million bags in 1998. Exports reached 4.2 million bags in 1996/97. A proportion of green coffee exports are in bulk containers. Guatemala has not joined the Association of Coffee Producing Countries (ACPC) export retention plan. As a result, Guatemala has maintained exports in pace with increases in its production.

The most important markets for Guatemalan coffee are the US and the European Union. The US accounts for 45% of Guatemalan coffee exports, Germany for 14%, Japan for 7%, Belgium and the Netherlands follow with 6% and 5% respectively. Overall, the EU accounts for approximately 42% of total exports (Diagram 2).

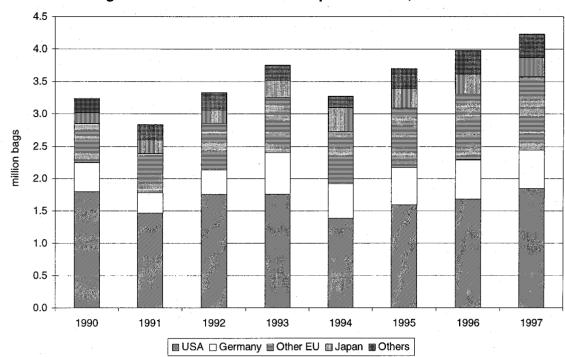


Diagram 2: Guatemala — Main Export Markets, 1990-1997

An increasing proportion of production and exports, around 10%, are being targeted for the specialty market, primarily in the US but also Europe and Japan. Sales to the specialty market have been aided by ANACAFE's promotion efforts. These have concentrated on promoting particular coffees for the gourmet industry. Seven regional brands have been promoted: Antigua, Huehuetenango, Fraijanes, Coban, Atitlan, San Marcos and Nuevo Oriente. All are Strictly Hard Bean coffees. Each of these coffees has specific and distinguishable characteristics and a historic reputation.

Exports of soluble coffee started in 1992 when the equivalent of over 1,400 bags were exported. In 1994, 650 bags were exported. The main soluble export destination was Romania in 1992 and 1993. In 1994, this market collapsed and all soluble exports were to other Central American producers.

Coffee in the Economy

Coffee is the most important export earner and accounted for 24% of export earnings in 1996 and 35% of earnings in 1997 due to higher coffee prices and production. Coffee accounts for 7% of GDP and 11% of the economically active population are employed in the sector.

GOVERNMENT POLICY

Macroeconomic Environment

Guatemala has the largest GDP of any Central American economy (around US\$18 billion in 1997), but despite its size and abundant resources, the country has not yet consolidated a stable political, social and economic environment. There are inequalities in income, the root of over three decades of warfare between successive governments and guerrilla movements.

The peace accord between the government and the Guatemala National Revolutionary Unity was signed at the end of 1996 to end thirty-six years of civil conflict. The Accords recognise that sustaining peace will require fundamental economic and social changes and present a comprehensive programme to achieve this goal. A Peace Commission which includes representatives of former combatants, the government, and civil society was established to supervise the implementation of the Accords.

During the 1960s and 1970s, Guatemala enjoyed single-digit inflation, steady growth of around 6% per annum and substantial foreign investment. Growth stalled in the early to mid-1980s due to a combination of external factors, the mounting civil conflict, and weakening fiscal and monetary policies. Economic development was based on a strategy of import substitution (incorporating strong tariff protection) which also distorted the economy. Per capita GDP fell by 20% between 1980 and 1985. Attempts to restore macroeconomic stability and initiate structural reforms in the second half of the 1980s were largely unsuccessful, and by 1990 the country was again in balance of payments and fiscal crisis with substantial external debt arrears.

The first comprehensive package of stabilisation and structural adjustment was introduced in 1991 and is still in progress, despite two changes of government. The package centred on trade liberalisation, financial sector modernisation, rationalisation of public utility tariffs and increased allocations to basic social services. The package has improved the Guatemalan economy significantly. A stable nominal exchange rate and tight monetary policy brought down the inflation from 60% in 1990 to 7.1% in 1997. GDP growth has averaged over 4% per annum since the reforms. But population grew at 3% resulting in modest gains in terms of per capita GDP. In addition, all external debt arrears have been cleared.

Because of the tight monetary policy, the Quezal appreciated by 7.6% in 1996 and a further 4.2% in 1997 but remained stable in the first quarter of 1998, in 1990 real effective terms. Remittances of foreign currency and other capital flows are free. There is no parallel exchange market. Financial institutions' holdings must be in local currency, however, commercial banks offer dollar denominated offshore accounts. Though foreign exchange savings are restricted, this control will be removed in the near future.

Net private capital flows increased from US\$457 million to about US\$564 million in 1997 accounting for about 3% of GDP. Foreign direct investment increased from \$60million in 1990 to \$86 million in 1997. The Foreign Investment Act of 1998 was enacted to provide a more favourable environment for foreign investors.

To accelerate economic growth, the Azul administration has been focusing on: (i) improving infrastructure; (ii) lowering government expenditure by streamlining public sector; and (iii) increasing government revenue by improving tax revenue. The first two aspects have been successful. Transportation infrastructure including rural roads has improved and privatisation of the electricity and telecommunication sectors is underway. The non-financial public sector fiscal balance improved from a deficit of 3 % in 1990 to a surplus of about 0.3% in 1997. Though the government expenditure is low, government revenue remains small with a narrow tax base and widespread evasion. The government aims to improve its revenue performance through reducing tax evasion (using improved controls and tough penalties) and improving the effectiveness and efficiency of tax administration. However, the tax revenue accounted for only 9% of GDP in 1997 which is the second lowest in Latin America.

Guatemala's trade policy is fairly open. Guatemala became a member of WTO in 1995. Guatemala's export policy has been consistent with the WTO standards. Import

licence and export subsidies have been eliminated and quantitative restrictions have been replaced with tariff quotas (for apples, corn, pears, wheat and rice). Guatemala's current import tariff rates for agricultural commodities are the same or below the WTO tariff bindings. In 1997, total merchandise trade accounted for 44% of GDP while exports accounted for 19%.

Table 4: Guatemala — Macroeconomic Conditions, 1980-1997									
	1980	1985	1990	1993	1994	1995	1996	1997	
Exchange Rate, Quetzales per US\$	1.0	1.0	4.5	5.6	5.8	5.8	6.0	6.1	
Real GDP Growth	4%	-1%	3%	4%	4%	5%	3%	4%	
GDP (1995 prices) Bn Quetzales	63	60	69	- 78	81	85	88	91	
GDP (1995 prices) Bn US\$	13	19	9	13	14	15	16	17	
Per Capita GDP (US\$)	1,889	2,439	991	1,275	1,361	1,378	1,504	1,537	
Interest Rate (lending rate)	11	12	23	25	23	21	23	19	
Annual Inflation (CPI)	11%	19%	41%	12%	11%	8%	11%	9%	
Population (mn)	. 7	8	9	10.	10	11.	11	. 11	

Agricultural/Coffee Policy

Agriculture is the most important sector of the economy and accounts for 25% of GDP, 60% of exports, and more than 50% of employment. Agricultural exports account for 70% of export earnings. Agricultural exports had been concentrated in traditional commodities such as bananas, cardamom, coffee and sugar but since the mid-1980s, there has been a sharp growth in non-traditional horticultural exports such as berries, vegetables and tropical fruits, cut flowers and ornamental plants. From 1990 to 1995, exports of fruits, vegetables and plant products (cut flowers and foliage) increased from US\$18.2 million to US\$42 million, US\$27.3 million to US\$50.1 million, and US\$14.6 million to US\$34.8 million, respectively. In 1997, total exports of non-traditional agricultural commodities were \$321 million which accounted for 12% of total merchandise exports.

Guatemala's agricultural sector is split between a modern large farm sub-sector dedicated to producing export crops and responsible for the bulk of agricultural GDP and a traditional small farm sub-sector devoted to subsistence production of basic food crops. Past figures suggested that just 2.5% of farmers controlled 65% of the total agricultural land. Although no concrete current figures exist, indications are that the number of farmers currently controlling the majority of land is now greater than 2.5%.

After growth of 5.1% per annum over the 1965-80 period, agricultural output stagnated in the 1980s. Not all sectors experienced decline: production of sugar, bananas, cardamom and coffee all experienced some growth over this period while production of cotton and meat fell abruptly. The performance of the agricultural sector has improved in the 1990s. Agricultural growth increased from 1.2% per annum for 1975-85 to 3.2% for 1986-96.

The Government's Role in Coffee Sector

The government's role in the coffee sector is extremely limited: coffee growing, processing and exporting are undertaken entirely by the private sector. The coffee sector has always been dominated by the private sector since the start of coffee cultivation in 1860. In 1965, export quota restrictions imposed on Guatemala by the International Coffee Agreement (ICA) were passed onto individual growers when each estate was allocated a production quota by the government, equivalent to 55% of its production of the previous three years. Problems of storage and disposal were thus transferred from the government to the grower. In subsequent years, changes to the ICA quota were passed on to individual growers pro rata. Farm quotas were abolished in 1973 (at the same time that ICA quotas ended), although these were re-introduced in the late 1970s when quotas were re-applied and growers were free to expand acreage and/or increase yields. Since the collapse of ICA economic clauses in 1989, a free market has prevailed.

Major coffee policy issues (e.g. whether or not to join the ACPC) are decided by the Consejo de Política Cafetera which is made up of representatives from ANACAFE, the Central Bank, the Finance Ministry, the Agriculture Ministry, the Economics Ministry and the Foreign Affairs Ministry. One of its roles is to promote regional co-operation among Central American coffee producing countries by exchanging technical information. Over the past decade, the government has suggested that farmers diversify production towards non-traditional crops such as flowers, ornamental plants, fruits, vegetables, sesame, cardamom, timber and rubber. ANACAFE has also assisted in this objective to a small extent by introducing mango and oil palm cultivation to coffee growers in certain regions.

ANACAFE, a non-profit organisation representing all coffee producers, is responsible for quality control, extension services, dissemination of price information, finance to growers as well as being the coffee sector's representative in government negotiations. ANACAFE is also engaged in a number of programmes aimed at increasing the efficiency of coffee production and improving coffee quality. ANACAFE is funded entirely by farmers: all farmers are members of ANACAFE by decree. The ANACAFE levy is 1% of the export price.

ANACAFE, through its Social Fund, also provides funds to assist rural areas, these programmes include projects in the health, education and housing sectors. Some of these programmes are run in conjunction with local government.

Research and Extension

All the work on research and extension on coffee is conducted by ANACAFE. In carrying out research and extension programmes, ANACAFE often co-ordinates with a number of domestic and foreign organisations such as bilateral donors, co-operatives, research organisations in other Central American countries and NGOs.

There are two *Centros Experimentales y Demostrativos* (Experimental and Demonstrative Centres) which conduct technical research on production and processing. These centres also provide seminars, courses and workshops to coffee growers. Co-ordination in research with other Central American countries has strengthened in recent years.

Extension services are provided by 53 ANACAFE extension officers to all coffee growers but recently emphasis has shifted towards the provision of extension to small growers. A very successful extension service programme is the *Proyecto Mejoramiento*

de Pequeños Productores (Small Producer Betterment Project). The programme was launched in 1989 by ANACAFE with technical and financial help from USAID and financial assistance from the government. The total cost of the programme is \$25 million of which \$11 million is provided by the USAID, \$9.25 million by the government of Guatemala, \$2.3 million by ANACAFE, and \$2.45 million from participating banks. The programme provides technical assistance and credit for production and processing (especially on wet processing), training in marketing and the dissemination of market information. Extension advice to small growers under the project is provided through co-operatives, NGOs (coffee producer associations) as well as directly to independent small growers. Independent growers often receive extension advice through Grupo de Amistad de Trabajos (GAT). This system of voluntary groups was developed by ANACAFE and each group consists of around 30 small coffee growers. This allows ANACAFE's extension staff to be able to access a large number of smallholders. Each extension staff member handles around 10-15 groups. By early 1998 the project provided extension advice to 15,382 small growers (approximately 26% of all small growers).

Credit

In general, credit for the coffee sector in Guatemala is provided formally by commercial banks, including the state controlled bank (BANRURAL), and informally by savings and loan co-operatives, agricultural co-operatives, NGOs, and exporters and intermediaries. There was a sharp decrease in formal credit over the period 1984 to 1994 although it was compensated for by an increase in informal credit provisions. With higher grower prices since 1994 and with the involvement of ANACAFE as a facilitator, commercial banks have begun to have some renewed interest in advancing funds to the coffee sector.

Credit is skewed in favour of producers with good collateral, usually larger producers. BANDESA, the former state bank, was restructured in 1993 with the aim of improving smallholder access to credit. While reforms improved internal efficiency, the bank, in general, was not successful in channelling resources to small producers, who in 1993 accounted for 15% of investments. BANDESA was liquidated in 1996 and replaced by BANRURAL, which is an anonymous company (S.A.) with the state as a majority shareholder. BANRURAL's mandate is to increase credit availability to small producers and put emphasis on rural finance. For 1997/98, BANRURAL's portfolio consisted of 47% of loans to small and medium producers, with an average loan size of approximately \$800.

Banks use various forms of collateral. The most preferable form of collateral is the land title. However, many smaller producers do not have a land title, which makes it difficult to obtain credit. In the absence of a land title, some banks accept a land registration from the local municipality as collateral. In a way, this is an informal land title. Forward contracts with exporters and traders can serve as forms of collateral, as can warehouse receipts or promissory notes (bonos de prenda). The efforts of ANACAFE in providing information on individual growers (when directed to by the grower) from its database has also contributed to increase the confidence of the commercial banks in lending to the sector.

Debt restructuring (debt consolidation)

Many growers are heavily indebted. The low prices of the early 1990s and high interest rates had a particular detrimental impact on the medium sized farmers and some large producers who were dependent on coffee for their income.

There have been several initiatives over the past few years to relieve producers' indebtedness and provide alternative sources of finance. One of these efforts involved the substitution of informal and expensive credit, with credit from commercial banks, which was cheaper following the fall in interest rates. Credit to substitute debt is usually for eight years with one year of grace and can be in a combination of US\$ or local currency.

Coffee Bonds (Los bonos de la caficultura)

With the fall in international prices in the early 1990s, ANACAFE negotiated with the government the issue of US\$60 million of coffee bonds in order to subsidise the producer price. The bonds were issued through the Bank of New York, guaranteed by the government and provided funds for a price subsidy of US\$12 per 100lbs exported in 1992/93. The funds were effectively advanced as a loan, which attracted an 11% interest rate. Repayments were made by the exporters, who charged it back to growers. The level of repayment was determined on a sliding scale according to the level of international prices. The loan was repaid by the sector in the summer of 1998 (see Table 5).

Table 5: Guatemala — Loan Repayments (per 100lbs)					
NYCSCE 'C' Contract	Loan Repayment				
\$ 0.01 to \$60.0	\$1.00				
\$60.01 to \$65.0	\$1.25				
\$65.01 to \$70.0	\$1.50				
\$70.01 to \$75.0	\$1.75				
\$75.01 to \$85.0	\$1.80				
\$85.01 to \$95.0	\$3.30				
Above \$95	10% of difference between world price and \$95 plus \$3.30				

Crop Finance

Around 90% of the crop is pre-financed. Of that, about 75% is pre-finance from exporters, while the remainder is pre-finance from commercial banks. Many loans from the exporters are in dollars as exporters do not want the risk of further devaluation of the Quetzal. Typically, producers obtain financing through exporters and traders and commit to deliver their crop to repay the loan. These loans are informal, without any collateral and often carry high interest rates. Large producers with good collateral have had access to commercial banks.

In recent years, ANACAFE has been implementing a credit programme (*El Programa de Créditos*), which aims at improving the access of producers to commercial bank financing. At the beginning, ANACAFE provided training to its staff on credit issues and worked with local banks to better understand lending to the coffee

sector. Producers can participate in the credit programme as long as they have a record of production and possess some form of collateral, usually land title. The process of qualifying for a loan within ANACAFE's credit programme is as follows:

- First farmers receive education on credit-related issues, develop an understanding of their commercial operations, and determine their costs and "break-even" prices;
- Second, trained extension staff from ANACAFE verify the production potential of the farm and assist farmers with the necessary paperwork for the loan;
- Third, ANACAFE provides a list of banks with which it has agreements, and the farmer chooses a bank to provide the loan. With the permission of the farmer, ANACAFE provides all the necessary information to the bank for it to process the loan.
- Fourth, the bank approves the farmer for the loan, but before the farmer can receive the loan, he/she has to obtain a hedge from an exporter (selling forward, purchasing options, etc.). This provides producers with protection against the drop in the market price thus guaranteeing that they will be able to cover loan payments. The exporter notifies ANACAFE that the farmer has a hedge and subsequently ANACAFE notifies the bank, who disperses the loan. ANACAFE receives 1% of the interest rate for its services.

This hedged coffee loan system has contributed significantly in reducing the risks faced by commercial banks in providing crop finance to coffee farmers at lower interest rates. The hedged coffee loan system was established in 1994 and has so far totalled US\$20 million.

During the 1996/97 crop year ANACAFE had signed agreements with eleven commercial banks: Banco de Exportación, Banco Granai & Townson, Corpobanco, Banco del Agro, Banco Reformador, Banco Agrícola Mercantil, Banco Continental, Banco del Quetzal, West Trust Bank, FGSA and FIASA. During that crop year, ANACAFE's credit programme mobilised US\$16.5 million (about Q99 million), with minimum loan sizes of Q125,000 (US\$20,000) and a maximum loan size of Q1.2 million (US\$200,000). According to ANACAFE's estimates, this programme reduced interest costs to coffee farmers of around Q13 million (over US\$2 million).

Producers can also obtain loans outside ANACAFE's credit programme. This is more the case for larger producers with good collateral and co-operatives and producer associations. Two such co-operatives are FEDECOCAGUA and FEDECOVERA. Co-operatives receive bank loans, which are on-lent to their member producers. In 1998, banks lent funds to co-operatives at an interest rate of around 12% to 13%, and these funds were on-lent to its members at an interest rate of around 18%. Growers, particularly smaller ones, that access credit outside of the co-operatives usually pay interest at between 18% and 21%.

Even though lending from commercial banks has been significantly increasing lately, a major source of financing coffee producers is still credit from exporters and intermediaries (intermediaries usually obtain credit from exporters). This credit tends to be more costly compared to credit from commercial banks but is easier to obtain in terms of procedures. Exporters obtain financing through local commercial banks, foreign banks abroad, or through importers. Local banks can accommodate financing in both local currency and dollars.

Investment credit

There is credit available for longer-term investments of up to eight years. According to BANRURAL, 70% of its credit is for up to one year, while 10% to 15% of its lending is for periods of between five and eight years. There is increasing demand for longer-term credit as a result of the intensification of production (i.e., the adoption of new varieties, rehabilitation and improved cultural practices), the expansion of coffee plantations, and investment in wet mills.

A notable program to improve small producers access to credit is the ANACAFE/government/USAID Proyecto Mejoramiento de Pequeños Productores. Under the credit component of the project, credit is available for seven years if it is for improving plantations and five years if it is for wet mills. The interest rate on the funds is 21%, of which 6% is paid to ANACAFE (for the technical assistance), 6% to the banks. 1% to the Central Bank, and 8% is used for the creation of a fund to cover defaults. The provision of credit and technical assistance are provided together and around 13,000 small growers have received credit under the programme. To access credit, each farmer within the GAT has to make his/her own application with the assistance of the extension staff from ANACAFE. Two commercial banks, BANRURAL and Banco de Café are responsible for distributing credit to applicants. BANRURAL's default rate on the programme's loans is estimated at around 8.7%, compared to a 7.7% default rate on loans from its own resources to small and medium coffee growers. The majority of defaults have been due to poor weather, which caused unexpected low production, or, lower than expected world coffee prices, in particular during the late 1980s and early 1990s.

MARKETING SYSTEMS

Marketing Channels

The majority of production, around 95%, is wet processed in one of the 4,000 wet mills which are distributed across the country, usually on farms². The wet mills are either privately owned (by farmers, local intermediaries or exporters) or owned by co-operatives. The large number of mills allows the fast processing of cherry and the possibility of preparing small lots for high quality beans.

Small farmers can market either fresh cherry or parchment and the majority market fresh cherry. The harvested cherries are delivered daily to small collecting stations where they either receive a receipt for the quantity delivered (and retain ownership of the coffee) or sell the cherry. The intermediaries may be independent but often work for a particular exporter. From these stations, the coffee is transported by lorry to a wet mill. The parchment coffee is then sun-dried, where space permits, or mechanically dried and sold to exporters. Small farmers processing their own coffee use small depulping machines and sell parchment coffee to intermediaries or exporters (Diagram 3).

About 20-25% of farmers belong to co-operatives or producer associations. These farmers deliver cherries to their co-operative wet mill. In some cases, co-operative mills purchase coffee from farmers that are not members.

² This should be contrasted with the systems in other Central American countries, such as Costa Rica and El Salvador, where coffee is processed in centralised wet mills. In Costa Rica, for example, there are only 30 wet mills.

Large and medium producers do their own wet milling and sell parchment coffee mainly directly to exporters, although in some cases may also use intermediaries. Some medium producers and an increasing number of larger farmers directly export coffee under their own names. Producers who are also exporters would usually employ the services of an exporter, on a commission basis, to handle logistics. CODECAFE is a co-operative of large producers, with around 15 to 20 members. It also directly exports coffee, although it accounts for only a relatively small share of total exports.

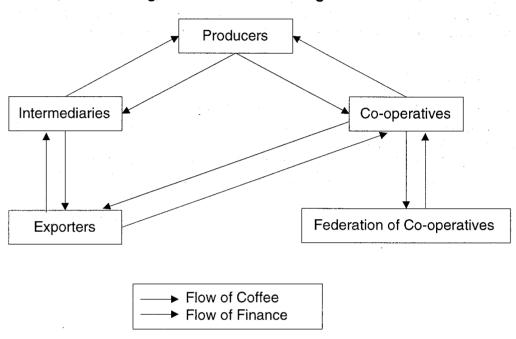


Diagram 3: Coffee Marketing Channels

The domestic market is very competitive. There are many buyers and exporters who compete to obtain coffee for exports. The co-operatives sell their coffee to FEDECOCAGUA who exports it on their behalf. In the Coban region, the co-operatives sell to FEDECOVERA who then exports the coffee through FEDECOCAGUA. In a few cases, co-operatives sell to private exporters. Producer associations sell either directly to private exporters or through intermediaries.

There are currently 95 exporters (some of whom are processors and producers), although 35 companies account for 90% of exports, while the five largest exporters registered 46% of exports in 1996/97. Six companies are related to the multinational coffee traders and these companies hold approximately 35% of the export market. Due to reasons related with the application of the VAT, there is a growing tendency for larger producers to become producer/exporters. There are also 12 co-operatives involved in exportation.

Pricing Policy

The prices received by growers are unregulated and determined according to the free market.

In order to increase growers' access to market price information, ANACAFE distributes market information to growers via eleven Reuters' screens located in the rural coffee growing regions. ANACAFE also sends out leaflets on reducing production costs and the need to hedge, plus a daily report containing price and other market information.

Information is distributed by a network of producers: farmers with fax machines have an obligation to make the report available to local farmers. In addition, since 1997 ANACAFE has started using a price information system based on beepers which regularly updates New York futures and options prices. All ANACAFE extension workers have these beepers (as well as the producers who are willing to pay an annual subscription of about \$130). Guatemalan newspapers also print coffee prices. There are radio broadcasts in both Spanish and local mayan languages and television programmes to disseminate prices.

The market information system has improved the bargaining power of producers when negotiating prices. According to ANACAFE, producers get about a Q75 per 100lbs (or US cents 11 per lb.) higher price as a result of the better market information systems.

Grower Prices

Grower prices in US dollar terms averaged 96 c/lb during the 1980s. The highest prices received were in 1985/86 when grower prices were 170 c/lb. Prices subsequently declined, falling to only 39 c/lb in 1992/93. With higher international prices since 1994/95, grower prices peaked at 93 c/lb in 1995/96. As a proportion of export unit values, grower prices have averaged between 70% and 90% (Diagram 4).

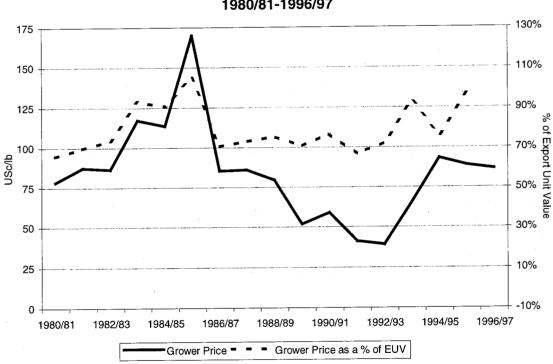


Diagram 4: Guatemala — Grower Prices as a % of Export Unit Values, 1980/81-1996/97

Marketing Costs

Domestic marketing costs are estimated to be around US\$17 per 100lbs, corresponding to approximately 13% to 15% of the f.o.b. price. Marketing costs include: processing (both wet and dry), cost of bags, transportation, docking and loading costs, two contributions for ANACAFE (Q0.25 per 100lbs and 1% of export value), local taxes (Q0.15 per 100lbs), exporters' and traders' margins, storage, insurance, and financial costs. Exporter margins are estimated around 1% to 3% of the

export value and they are included in the US\$17 mentioned above. At world prices around US\$1.20 to US\$1.30 per lb, exporter margins are around US cents 2 per lb.

Taxation

Taxes are relatively low, producers and exporters alike pay a 25% tax on income. There are other low provincial taxes. Municipal taxes are currently around \$0.06 per 100lbs. The government was under increased pressure from the IMF to raise the tax levied on the coffee industry in 1995 in order to reduce the inflationary impact of high coffee prices, but an export tax has not been reintroduced due to concerns over the high level of grower debt. Coffee is subject to a 10% value added tax, although the refunding of the tax to exporters upon exportation is often delayed.

Quality and Quality Control

Grading is undertaken by individual exporters and samples are sent to ANACAFE. All coffee is allowed to be exported after samples have been sent. Exports are required to be labelled according to ANACAFE's grading standards.

Exporters need to register all export transactions at ANACAFE and receive a permit. The issuing of this permit is automatic. Prior to export, taxes have to be paid and foreign exchange declared at the Central Bank. These procedures are handled expediently by ANACAFE.

The quality classification system, of eight grades, is based on the altitude at which the coffee is grown and on liquoring quality (Table 6).

	Altitude (m)
Good Washed	700
Extra Good Washed	700 - 850
Prime Washed	850 - 1,000
Extra Prime Washed	1,000 - 1,200
Semi-Hard Bean	1,200 - 1,350
Hard Bean	1,350 - 1,500
Fancy Hard Bean	1,500 - 1,600
Strictly Hard Bean	1,600 - 1,700

A quality certification programme has been introduced for "specialty" coffee where coffee is certified according to region, altitude, variety, processing method and final preparation. The extension services provide assistance to wet processors to help them to improve cup quality.

Coffee exports fall into two main groups, the lower altitude Pacific Coast coffees (Prime Washed and Extra Prime Washed) and the high altitude coffees (Hard and Strictly Hard Bean). The relatively low prices of the lower altitude coffees means that producers have been diversifying out of coffee to more profitable crops, mainly rubber.

Conversely, and as a result of higher production in the higher altitude areas, the share of Hard and Strictly Hard Bean has been increasing (Table 7). A large portion of Strictly Hard Bean coffee typically receives a premium of US cents 10 to 15/lb on Prime Washed coffee.

While there has been some trend towards the production of organic coffee, farmers' experiences in Guatemala indicate that the production of organic coffee does not pay as most of the premium remains in the hands of intermediaries and organic coffee yields are low. In 1997/98, registered organic production accounted for between 5% to 8% of total production compared to 3% in 1996/97.

Table 7: Guatemala — Coffee Exports by Grade, 1987/88-1994/95 ('000 bags)

	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95
Prime washed	511	556	785	612	850	992	662	778
Extra Prime Washed	474	762	638	466	514	490	440	497
Semi-hard Bean	158	231	266	211	190	185	133	112
Hard Bean	467	493	680	576	698	903	609	758
Strictly Hard Bean	468	668	810	665	860	1,131	923	1,065
Maragogype	5	5	6	7	6	6	5	4
Natural non-washed	106	71	81	119	55	87	96	123
Robusta	5	24	14	9	16	17	11	10
Stock Lots	2	27	169	104	58	156	229	178
Total	2,196	2,836	3,450	2,770	3,249	3,968	3,109	3,524
	-						Ţ.	

Source: ANACAFE

The quality of Guatemalan coffee can be gauged by examining Guatemalan price differentials (i.e., the premium for Guatemalan coffee over New York futures). Guatemalan Prime Washed coffee traded close to average New York second and third position prices in the period between 1982 and 1987 but fell to -3% below the NY average in the second half of 1988. The differential recovered in 1990, averaging 1% above New York until 1993 when it again fetched a discount, this time of around -0.5%. The differential rose between 1994 and 1997. The strong rise in the differential in early 1997, was due to a perceived shortage of washed arabica globally which led to a strong increase in differentials for all origins supplying washed arabica (Diagram 5).

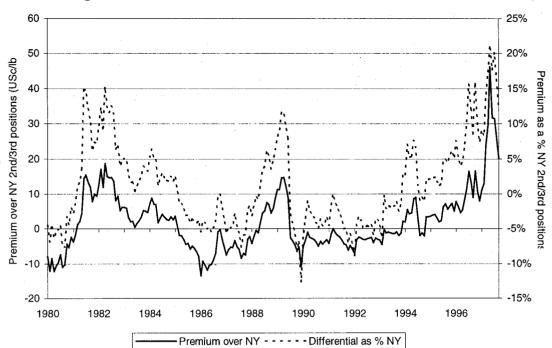


Diagram 5: Guatemala Prime Washed Differentials, 1980-1997

Risk Management

As prices are determined by the market and are linked to international coffee prices in New York, producers, traders and exporters are exposed to the vagaries of world coffee price volatility. The proportion of coffee producers who hedge has increased from zero to around 20% over the last three years as a result of ANACAFE's activities. One case has been documented of a 400-member co-operative, including many illiterate farmers, voting to hedge their crop on the New York exchange. Around 90% of exports are regularly hedged. Price risk management is a prerequisite for producers receiving loans through ANACAFE's credit programme.

To hedge prices, producers usually contact an exporter with whom they fix a price for future delivery of the crop or purchase minimum price protection. Subsequently, exporters sell futures or purchase options on the New York market to hedge their assumed exposure. Initial and variation margins are from the exporter's account. In the case of options, exporters pay for the premium up-front and deduct it from the price they pay the producer when he/she delivers coffee to them. The majority of hedging operations that producers use involve futures/forward contracts, although there is an increase in the use of option strategies such as purchases of puts or construction of price fences (purchases of puts and sale of calls). Producers are required to deliver the quantity of coffee corresponding to the amount of coffee in the futures contracts to the exporter.

ANACAFE assists in providing estimates of the expected crop so producers will not over or under hedge their exposure. ANACAFE also helps producers to estimate their production costs and develop risk management strategies that allow them to lock-in or ensure a minimum level of profitability. Producers can also, and do, visit the offices of ANACAFE to receive advice on their specific situation. ANACAFE's role is one of training farmers in price risk management techniques and providing information on futures and options prices. However, the hedging transaction is handled through an exporter with no involvement from ANACAFE.

Despite the significant use of price risk management instruments by producers and exporters, there are still certain impediments. These are:

- Lack of knowledge by various producers, especially the smaller ones: These producers do not yet understand the cost and benefits of hedging and are still reluctant to consider price risk management, particularly if it involves a cost to them (options). ANACAFE's training programmes are seeking to address this situation:
- Performance risk: The delivery of coffee to the exporter is a crucial factor for risk management. If the producer does not deliver the agreed coffee and prices have risen, exporters stand to make significant financial loses. Exporters, therefore, only offer risk management instruments to producers whom they trust. There is no formal system to enforce obligations, although ANACAFE is trying to play the role of arbitraire so that producers and exporters comply with their obligations. In the case of default, exporters run the risk that ANACAFE will not renew their licence, while for farmers, ANACAFE could block their account. Given that efforts to encourage price risk management are recent, it is hard to say whether ANACAFE has been successfully able to arbitrate in cases of default; and
- Low volumes of production by smallholders: Small producers do not have adequate production to enter into price risk management operations. Small producers in Guatemala usually produce less than 2,000-3,000lbs, which is significantly lower than the lot size of the coffee futures contract in New York, which is 37,500lbs. The only way that small producers could access risk management instruments would be through aggregating their production and exposure. This can be done through producer co-operatives and associations, or traders and exporters that are willing to assemble small quantities into lot sizes. Some co-operatives and producer associations have started offering price risk management tools to their producers.

INSTITUTIONS/ORGANISATIONS

There are various organisations involved in coffee production and marketing in Guatemala. These include ANACAFE, producer co-operatives, producer associations and the exporters' association.

ANACAFE

The most important organisation that affects the coffee subsector in Guatemala is ANACAFE (*Asociación Nacional del Café* (National Coffee Association)). ANACAFE is a non-profit and non-governmental organisation and a successor to *Oficina Central del Café* (Central Coffee Office) which was created in 1932 to increase coffee growers' income through promotional campaigns abroad. ANACAFE succeeded Oficina Central in 1969 with three new mandates namely to: (i) represent coffee growers' interests; (ii) contribute to the overall economy through providing assistance to the coffee growers; and (iii) search for alternative crops for coffee growers (i.e., diversification). It is an industry financed association that aims at increasing the welfare of coffee growers.

ANACAFE is not a co-operative and is not directly involved in any commercial or financial activities, although as a member of the *Consejo de Política Cafetera* (Coffee Policy Committee) it has important influence on coffee policies. Its main activities are focused on assisting coffee growers to improve the competitiveness of producing and

marketing coffee. Its approach is market based and refrains from applying interventionist measures.

ANACAFE's activities were expanded substantially in 1985 when a new law was passed which increased ANACAFE's budget substantially. Its main source of funds switched from an export levy of Q. 0.25 per quintal to 1% of the export value. This has enabled the organisation to expand its activities into the areas of extension and rural development in the coffee growing areas. Additional revenues (accounting for up to 10% of total revenues) include an additional export levy of Q. 0.25 per quintal, the sale of roasted and ground coffee, fees from soil testing and a 1% charge on the farmer credit arranged by ANACAFE.

The annual budget and activities are formulated by the general manager and submitted to the Board for approval. After approval by the Board, they are presented to General Assembly for adoption. The Board members 20 directors; 12 representatives of coffee growers, four representatives of coffee co-operatives, two appointed by the Minister of Agriculture, and two appointed by the President. The term of the sixteen representatives of coffee growers is two years although re-election is allowed. The election process is essentially the same as in the national political election. Any coffee grower registered with ANACAFE can be a candidate and all registered coffee growers can vote. The groups of small, medium and large growers each elect four directors. Each grower has a number of votes in accordance to his/her production, although there is an upper limit. The representatives of the co-operatives are elected in a similar fashion except that each of the 147 coffee co-operatives has one vote. For government appointed directors, there are no formal selection procedures or time limit. The directors are paid token salaries and hence are performing essentially honorary jobs. The general manager is appointed by the management committee of the Board.

Main tasks of ANACAFE include:

- Policy formulation: Being a member of Consejo de Política Cafetera, ANACAFE participates in formulating key government policies that affect the subsector;
- Extension, training and research: Since the mid-1980s ANACAFE has been providing training and extension to the coffee growers. The advice given covers not only agronomic issues but those related to credit and marketing;
- Market Information Dissemination: Market monitoring and analysis of futures and option prices of the New York market is conducted by ANACAFE and disseminated to the industry participants through fax, newspaper and radio. In addition, coffee growers are encouraged to make phone calls to the regional offices and headquarters to obtain market information;
- Market Promotion: To cope with very low world coffee prices in the early 1990s, ANACAFE launched a programme to promote the production and marketing of specialty coffee. Promotion is through publishing advertisement brochures and attending trade fairs. Marqket promotion expenditure has been around US\$ 500,000 per annum in recent years;
- Assistance to credit acquisition: As ANACAFE keeps records of coffee production of each producer, it is able to provide information to the commercial bank (when requested to by farmers), which facilitates growers obtaining credit;
- Assistance to social programmes in coffee growing regions: To promote various social programmes in coffee growing regions, ANACAFE created Fundación

Rural (Funrural). This is ANACAFE's sister organisation and much of the staff and office facilities are shared. Its budget is as large as that of ANACAFE and consists of contributions from ANACAFE (about US\$ 500,000), bilateral and multilateral donor organisations, and the government (Ministries of Agriculture, Health, and Education). Funrural's funding is essentially "seed money" constituting 10% of any project cost with the rest to be funded by the beneficiaries, usually coffee growers. The projects undertaken by Funrural include constructions of schools, hospitals and local roads; and

Other activities: These include promoting domestic coffee consumption, testing soils (when required to by growers), issuing export licences, registering coffee exports, collecting and maintaining statistics and testing quality (when required to by producers or exporters).

Co-operatives

Co-operatives play an important role in the subsector especially for the smallholders, around 25% of smallholders are estimated to belong to co-operatives. Out of 147 coffee co-operatives registered to ANACAFE, 64 of them belong to a federation. The largest federation of co-operatives is FEDECOCAGUA and it has 35 co-operatives as members as well as the other federation, FEDECOVERA. FEDECOCAGUA covers the whole country and its members include marketing, processing and production co-operatives. The main functions of FEDECOCAGUA are to export coffee and obtain short-term credit for the co-operative members. It exports not only the coffee produced by its associates, but also coffee produced by other non-associate co-operatives and producer associations. Thirty production co-operatives in the Coban are associates of FEDECOVERA. Apart from these two federated co-operatives there are 83 co-operatives that are not federated.

FEDECOVERA is also involved in the provision of extension and credit to its members. It has its own extension staff who collaborate closely with ANACAFE especially in carrying out the *Proyecto Mejoramiento de Pequeños Productores*. The fees FEDECOVERA levies on providing credit are its main source of income. Currently FEDECOVERA receives funds at an interest rate of between 12% and 13% and loans these funds out to its members at 18%.

The main function of the production co-operatives is to manage plantations that became government owned after the Second World War when German plantations were confiscated. These co-operatives also undertake wet processing and sell coffee through the federation.

Producer Associations

Apart from the co-operatives, there are a number of producer associations. These are NGOs and have provided extension and credits under the *Proyecto Mejoramiento de Pequeños Productores*.

Exporters' Association

This association has 40 exporters as its members, out of a total of about 95 exporters. The purpose is to exchange information and discuss trade issues. There *is Comisión de Enlace* (Joint Committee) where the Exporters' Association discusses various trade issues with ANACAFE.