ECONOMIC LIBERALIZATION AND THE PERFORMANCE OF COFFEE SUB-SECTOR IN ETHIOPIA

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1. BACKGROUND

Coffee is the most important product that account for the largest share to the country's foreign exchange earning. During the seventeen years of centralized economic management, a significant reduction of coffee production took place due to the misguided economic policies that were adopted by the regime. After the demise of the regime, however, several economic liberalization measures have been introduced. All measures might have some impact, but, among the economic liberalization measures that are expected to have direct impact on the performance of the coffee sub-sector are devaluation of the Birr, introduction of floor prices for some export commodities including coffee, liberalization of trade licensing and introduction of investment incentives. These economic liberalization measures are believed to have created incentives for those involved in the production, processing and marketing of the product. However, an attempt has not been made so far to show the impact of the economic policy measures on the improvement in the technology of production and processing and marketing as well as the resulting improvement in the income of the population at various stages as well as the Government.

Thus the major objective of the paper is to assess the impact of economic liberalization on the performance of coffee sub-sector with respect to growth in production, improvement in processing and marketing. It is also aimed at assessing the effects of its contribution to the country's overall foreign exchange earnings.

2. COFFEE PRODUCTION IN ETHIOPIA

Coffee arabica that contributes over 75% of the world's production is dominant in Ethiopia. It is a hardy plant that thrives well in almost all types of soils under a wide range of tropical conditions. Both verbal and written reports invariably confirm that coffee, the principal export crop, is believed to have originated in Ethiopia. According to legend, coffee was first grown in the province of Keffa the inhabitants of which were the first to discover the value of coffee as a stimulating beverage. In Ethiopia, coffee is found growing in almost all regions. The conditions range from the semi-savanna climate of the Gambella plain (550 m.a.s.l) to continuously wet forest zone of the Southwest (2200m.a.s.l)[1]. It grows generally on sloping land of different gradients.

There is no study that can accurately confirm both the areas under coffee and volume of production in the country. Hence, there is a general lack of information regarding total area under coffee plantation, age of coffee trees, density and yield per hectare. However, according to official estimates, total green coffee production in Ethiopia is well over 200,000 tons per year. With a conservative yield estimate of around 0.5tons/ha based on the volume of production estimated above, the total area under coffee plantation in Ethiopia would be in the order of 400,000 hectares.

2.1. The Coffee Sub-sector in the Ethiopian Economy

Ethiopia is one of the poorest and least developed countries in Africa. Its economy is based on subsistence agriculture, which accounts for about 45% of GDP, 90% of exports and 80% of total employment. Coffee generates over 60% of export earnings. With annual production of more than 3.5 million bags, Ethiopia produces about 2.5% of the World's marketable coffee. It provides employment to about 25% of the population directly or indirectly. It also generates a significant amount of revenue for the Treasury in the form of taxes and surtaxes. Therefore, coffee is an important sub-sector that has a significant impact on the county's economy. The Government's objectives in the coffee sub-sector are to maximize foreign exchange earnings; to meet domestic demand for coffee and to encourage the development of coffee production and processing as a major part of the rural economy.

2.2. Mode of Coffee Production in Ethiopia

In Ethiopia coffee is produced on small holder and state owned farms. About 95% of Ethiopian Coffee is produced in the peasant sector including approximately 2% previously produced by peasant associations under communal farms. The remaining about 5% is produced on state farms. There are also coffee trees grown wild particularly in the southwestern part of the Country, where coffee is said to have its origin. There were few commercial coffee farms before the nationalization of rural land in 1975..However, the coffee farms that were about 10,000 hectares in size, were taken over and organized as Coffee State farms. Two major coffee plantations (about 10,000 ha) were also developed in *Bebeka* and *Teppi* areas financed by loans obtained from the Development Bank of Ethiopia and the African Development Bank during the *Dergue* regime. Following the demise of the Dergue and subsequent

[1] Mesfin Amha. "The Significance of Ethiopian Coffee Genetic Resources to Coffee Improvement". *Bunatchin.* Public Relations Department, Ministry of Coffee and Tea Development. May 1990.

liberalization, some private investors have shown interest to invest in coffee production. However, achievements have not been significant because of the difficulties in obtaining land. Therefore, currently, the are very little privately owned modern commercial coffee farms in Ethiopia.

2.2.1. The Traditional Peasant Sector

The existing stock of coffee trees in the traditional peasant sector consists of three broad categories[2]. These are *modified forest* coffees grown under shade at densities around 4000 trees per hectare, normally in a single stand. This category is typical of Kefa, Illubabor, and Wollega regions. Under this category, yields, on average, is around 350 kgs per hectare. About 55% of the total production also comes from this category. The second category is what is known as the *garden coffee* planted at low densities (100-1800 tree/hectare) and some times inter-cropped with food crops. This is typical of the previous Sidamo Region, parts of Shoa and South and North Omo. Average yield of this category is about 450 kgs /hectare and accounts for 35% of the country's production. The third category is the *Hararghe Coffee* grown in generally marginal climate at densities of 900-1200 trees per hectare, sometimes inter-cropped with food crops and chat (*catha edulis*). Under this category yields average 400 kgs per hectare and production accounts for 5-10% of the country's total production.

2.2.2. Modern Coffee Production

New coffee plantings started sometime in 1978/79 with Government programs that concentrated on coffee beans disease (CBD) resistant varieties mainly on communal and producer cooperative farms. Planting this new variety on individual holdings were allowed since 1984/85. By 1987, total area under modern coffee production with CBD resistant varieties have reached about 12,000 hectares and to-date it is estimated to be about 50% with almost all being under individual holdings.

In addition to the new plantings under government programs, a survey of the 32 main coffee growing *woredas* in 1982/83 indicated that farmers were continuing to plant new seedlings to replace the aged trees. In Hararghe, however, planting of new trees was found to be slow, where only one percent of the trees was under 4 years at the time of the survey. Although, there is no accurate and official figure that indicates additional planting since then, there are indications that new plantings are taking place in all coffee growing areas in response to the better farm gate prices following the devaluation of the Birr in 1992.

The area of coffee on state farms almost more than doubled after 1978/79 from 7000 to about 18,000 hectares and more or less stabilized in the 1990s. On the state farms

[2] ULG Consults Limited. (1987), 'Coffee Marketing, Processing, Transport and Storage Study'. (Final Report. Volume I).

yield were not better than the peasant sector, despite better management. Moreover, costs were high due to fixed overhead costs and the quality of much of the coffee produced has not been attractive.

3. ECONOMIC LIBERALIZATION MEASURES FOR THE COFFEE SUB-SECTOR

3.1. The Need for Liberalization Measures

During the seventeen years of centralized economic management, coffee production suffered from lack of appropriate incentives to producers. During this period, producer prices were too low to provide the typical smallholder coffee farmer with an adequate cash income, and in particular were too low in relation to the price of cereals. This could be one of the reasons for the low intake of modern inputs and low adoption of yield increasing agronomic practices by coffee farmers. For instance, the price per kg of red cherries used to be in the range of Birr 0.40 to 0.50 for many years. Furthermore, farmers were forced to sell red cherries to service cooperative for wet processing in the form of advance payment, but they have never been paid final payments by their cooperatives. As a result, there were several cases where farmers had to uproot their coffee trees and replace with *Chat* or plant cereal crops on the land. Moreover, over valued exchange rate, high marketing margin, and high tax incidences were among the major factors that reduced farm gate prices to coffee producers. A state enterprise, cooperatives and few private traders dominated the market. While all wet processed coffee was exported only through the Ethiopian Coffee Marketing Corporation (ECMC), its share of total coffee exports has once reached 70% of total coffee exports. Hence, few outlets for producer farmers and monopolistic pricing of coffee prevailed prior to economic liberalization.

Tax levels on coffee were extremely high by international standards. The effect of this was to keep producer prices down to the level, where the small-holder coffee producer had no incentives to adopt improved agronomic practices recommended by the extension services. Moreover, the tax system was biased against exports. The absence of taxation of coffee destined for the domestic market, combined with heavy export taxation, introduced a systematic bias towards domestic consumption and illicit trade rather than exports which is at variance with the Government's desire to maximize the value of foreign exchange that could be earned from the sub-sector.

3.2. Economic Liberalization Measures

Since the launching of the New Market Oriented Economic Policy in 1992, a number of policy measures and reforms have been undertaken to change the structure of the economy and bring about rapid economic growth and development. The reforms included short-term stabilization and structural adjustment measures. These included, among others, deregulation of domestic prices; abolishing of export taxes (except coffee) and subsidies; reduction of inflation through budgetary and monetary controls and liberalization of foreign trade. It further included devaluation of the national currency, the Birr; privatization of public enterprises; promulgation of a liberalized investment law, issuance of new labour law and liberalization of foreign exchange regime. All of these policy measures may have effects on production and marketing of coffee directly or indirectly. However, deregulation of domestic prices, abolishing of taxes, liberalization of domestic and foreign trade and devaluation of the national currency are expected to have direct impacts on production and marketing of coffee. Each one of these issues is discussed in the following sections.

3.2.1. Deregulation of Domestic Prices

Under the centralized system of economic management, official prices of sun-dried coffee in the interior were determined in two stages. In the first stage, the Ministry of Coffee and Tea Development or its successors calculated the daily auction prices on the basis of current FOB values, tax deductions, and post-auction permitted costs of the exporter. In the second stage, each Ethiopian Coffee Marketing Corporation's, ECMC, purchasing station makes permitted deductions reflecting the transport and other costs incurred in the interior. The net effect of that system was that the price of sun-dried coffee fluctuated daily with movements of international coffee prices. Some differentials in the auction market were maintained for coffee of different origins. However, the case for washed coffee was different. For washed coffee, a fixed official price base was set annually for red cherries purchase by washing stations. Under the system of fixed prices for washed coffee and fluctuating prices for sun-dried, there were erosions of benefits from washed coffee arising from increasing sun-dried coffee prices that led to reduction in the flow of fresh cherries to washing stations.

Following the declaration of the new economic policy, however, both prices of sun-dried and washed coffee were liberalized, but the minimum floor prices for coffee of each region is fixed. Some regions also tried to fix the minimum price for red cherries, depending on international coffee price forecast each year. It is also noted that there was no downward tendency of prices because of the increase in the number of washing stations from year to year.

3.2.2. Devaluation of the National Currency, Birr

Before the 1992 liberalization the national Currency, the Birr, had been overvalued. As a result the amount of revenue received in terms of Birr, from exported goods, was small. After devaluation of the Birr in 1992, however, the amount increased more than twofold. This encourages, not only traders engaged in export business, but also producers of tradable goods.

3.2.3. Liberalization of Domestic and Export Trade

Private coffee exporters and domestic traders were encouraged by measures like exchange and tariff rates adjustment and abolishment of the minimum capital rate for coffee exporters. Furthermore, the decline in initial license and license renewal fees increased their participation. The measure taken to ease entry into coffee trade by private coffee traders is given in Proclamation No. 70/1993[3]. This proclamation provided for coffee trade license issuance fees. Accordingly the fees were set as follows.

	License and renewal fees(Birr)
1. Coffee Export License	200
2. Coffee Supply License	150
3. Coffee Cleaning License	150
4. Coffee Collecting License	150
5. Coffee trade Auxiliary License	150
6. Coffee Washing License	150

3.2.4. Tax Reform

As stated in the preamble of the proclamation, the reform was required for a number of reasons. In the first place, there was a need to consolidate the various taxes and duties levied by different Proclamations and regulations into simple tax facilities. Furthermore, it was also required to ensure the equitability of the tax and lay down procedures and protect revenue against fluctuations due to changes in prices and adjust the tax rate following market prices. It was, therefore, on the basis of these reasons that Government recently issued proclamation for tax on coffee exports (Proclamation No.99/1998). According to this proclamation, the FOB price of the coffee to be exported will be the basis for computation of the tax and the rate is 6.5% of the FOB price. The proclamation also repealed transaction tax Proclamation No.205/1963, the third schedules attached to the Customs Tariffs regulation No. 42/1976, Coffee Surtax Regulation No. 280/1964 and all subsequent amendments and Cess on Coffee exported from Ethiopia (Regulation No.47/1976).

[3] A Proclamation to Amend Coffee Trade Proclamation

4. THE IMPACT OF THE ECONOMIC LIBERALIZATION MEASURES

4.1. Growth in Coffee Production

There is no comprehensive and reliable statistics on coffee production. Some estimates put the average annual production in the order of 200,000 tons on an estimated area of about 400,000 hectares. The only reliable data that can be used as a proxy for annual production level is the coffee "arrivals" at the terminal market. This obviously excludes consumption on the farm and coffee sold in the illicit market. The data available for five years both before and after the reform shows that in the pre-reform period the annual growth rate was mostly negative, with an average annual growth rate of only 3%. During the five years in the post reform period, however, the annual growth rates of production as indicated by coffee arrivals at the terminal market were positive and significant. The average annual growth rate for the period was 17%. This can be attributed to the reduced outflow of coffee through the unofficial market, and probably lesser domestic consumption of coffee due to better prices as compared to the pre-reform period. Although, there could be new plantations coming to production during this period, it can not be attributed to the increased incentives, because of the relatively longer gestation period of coffee plantation. However, increase in production due to increased price incentives can not be ruled out. The following figure depicts the flow of coffee to the terminal market five years before and after the reform.

Figure 1. Coffee Arrivals at the Terminal Market

Period	Year	Coffee Arrivals	Growth Rate(%)
Before	1987/88	64287	
Liberalization	1988/89	109299	70
	1989/90	90650	(17)
	1990/91	77316	(15)
	1991/92	60155	(22)
Average		**80341**	**3.2**
	1992/93	87669	-
After	1993/94	113680	30
Liberalization	1994/95	102302	(10)
	1995/96	141361	38
	1996/97	165536	17
Average		**122110**	**19**

Source: National Bank of Ethiopia Quarterly Reports.

4.2. Technological Development in Coffee Processing

4.2.1. Wet Coffee Processing

Ethiopia has a number of natural coffee varieties in its coffee tree population. As a result, the country is the owner of a considerable number of "traditional" coffee qualities identified by origin that are preferred by world coffee consumers. Of the washed coffee, Sidamo, Limmu and Yirgachafe coffee are the traditional qualities possessing the famous "Mocha" flavor. Of the sun-dried type, Harar longberry, Ghimbi, Lekempti, Kefa, and Sidamo coffee provide the bulk of Jimma 5 quality. From practice it has been found that the Jimma 5 grade can be improved up to grade 1 by washing the coffee at its red cherry stage. In recognition of this fact, washing coffee started in Ethiopia three decades ago by some private individuals. However, a large scale establishment of coffee pulping stations started in late 1980s with the implementation of the first phase of the *Coffee Processing and Marketing Project* financed by the International Development Association of the World Bank, IDA. The Agricultural and Industrial Development Bank, AIDB, and the Project Implementation Unit of the Ministry of Coffee and Tea Development implemented the project.

Washed Coffee attracts varying premiums over the basic sun-dried one that is categorized as Jimma 5. The FOB price premium of washed coffee for four years before and after economic liberalization is an evidence for this. As can be observed from Figure 2 below, the average FOB price premium of washed coffee for four years after economic liberalization in Ethiopia has increased by fivefold. The average price premium, which was only Birr 883/ton for the period 1982/83 to 1985/86, increased to Birr 5698/ton during the period 1993/94 to 1996/97. This increase may be attributed to relative price changes of washed coffee over the years as well as the devaluation of the Birr. However, the price premium is affected by external market factors, the level of processing ability and therefore coffee quality. The detail is shown in Figure 2 below.

Figure 2. Average FOB Price Premiums of Washed Coffee (over sun-dried one) For the Periods 1992/83-1985/85 and 1993/94-1996/97

Period	Year	Birr/ton
	1982/83*	910
Before Economic	1983/84*	784
Liberalization	1984/85*	645
	1985/86*	1191
	Average	883
After Economic	1993/94**	7930
Liberalization	1994/95**	5460
	1995/96**	4000
	1996/97**	5400
	Average	5698

Source: * Coffee Marketing, Processing, Transport and Storage Study By ULG Consultants Limited.
** Coffee and Tea Authority

The experiences gained so far in wet coffee processing proves the viability of coffee washing stations, even though the majority of them have not operated at full capacity. Capacity achieved so far does not exceed 60%. Capacity utilization of coffee washing stations is affected by weather conditions, and financial and transports capacity of owners. Guided by the high premium of washed coffee and viability of washing stations, particularly following economic liberalization, several private individuals have established coffee processing plants. The total number of washing stations, that were about 200 before the onset of the liberalization has now increased to 388 of which 195 are owned by private investors. The establishment of coffee washing stations by cooperatives has almost ceased as competition from the private sector increased. Only 10 washing stations in SNNPR were established by cooperatives since 1992. The details of ownership and distribution of washing stations by regions is shown in Figure 3 below.

Figure 3. Number and Distribution of Wet Coffee Processing Stations Up to August 1998

Location	Owned By			
SNNPR	**Cooperatives**	**Private**	**C.P.D.E**	**Total**
1. Sidama	80	69		149
2. Gedio	36	43		79
3. Amaro	3	3		6
4. Bench	3	2		5
6. Kefitcho	4	3	11	18
7. North Omo	1	2		3
8. K.& H	-	1		1
Sub-total	**127**	**123**		**250**
Oromiya				
1. Illubabor	3	9	-	12
2. Borena	5	26	-	31
3. Jimma	28	29	18	75
4. W.Wollega	1	8	-	9
Sub-total	37	72	18	127
Grand Total	**164**	**390**	**29**	**776**

Source: Coffee and Tea Authority.

Total Coffee processed by these processing stations was 20,105 tons in 1996/97 and 25,019 tons in 1997/98.

4.2.2. Dry Coffee Processing

In old days, most Ethiopian coffee had been dry processed using traditional means. At a later stage, however, hulling mills were introduced. Towards the beginning of the Dergue regime, there was already excess hulling capacity in the country. In all areas, Coffee hullers operated with limited shift for relatively short seasons. However, there was no replacement of the hulling mills as they completed their service life. The marketing policy did not encourage mill owners to invest in the business and improve the technology. Most of them were also nationalized or taken over by Cooperatives. It was with the advent of African Development Fund (ADF) loan, implemented by AIDB, towards the end of the 1980s that some 30 hullers were imported from Brazil and distributed to private coffee traders in OROMIYA and SNNPR regions. This not only improved the hulling capacity, but also the quality of cleaned coffee that was meant for export. Currently, a number of local manufacturing plants have emerged in the country, making good quality hulling machines by importing only some components. As of August 1998 the total number of dry coffee processing stations in the country was 206 of which 135 are operated by the private sector. Service Cooperatives and Coffee Plantation Development Enterprise (CPDE) owned 10 dry coffee processing stations each. The rest 51 stations are owned and operated by the Ethiopian Coffee Purchase and Sales Enterprise (CPSE). Presently there is a strong movement towards installing new dry processing stations, but the demand for its service is declining as there is a shift to wet processing to meet the demand for high quality.

Figure 4. Number and Distribution of Dry Coffee Processing Stations Up to August 1998

Location	Owned by				
	C.P.S. E	Cooperatives	C.P.D.E	Private	Total
SNNPR	30	4	2	57	93
OROMIYA	21	6	6	78	111
Gambella	-	-	2	-	2
Total	51	10	10	135	206

Source: Coffee and Tea Authority.

4.2.3. Coffee Cleaning for Export

There are ten private old coffee-cleaning plants with a total capacity of 14.42 tons per hour. The cleaning plant owned by Ethiopian Coffee Export Enterprise also has a capacity of 15tons/hour with a capacity of 7.5 ton/hour in two shifts. Recently, two modern coffee-cleaning plants with 6 and 4tons/hour in two shifts each have also started operation, bringing the total cleaning capacity to 39.42 tons/hour. In addition, there are also some exporters that use labour for cleaning coffee for export. In view of the current level of the volume of exports, it is evident that there is a need for more cleaning plants to improve the quality of coffee for export.

4.2.4. Coffee Grading

In order to classify both washed and sun-dried coffee according to grade, the technical capability of the Coffee Liquoring Unit has been strengthened with professional expertise. At present all coffee to be exported must go through the liquor taste process and graded accordingly. Grading of coffee by liquor taste is expected to encourage export and also create price incentives.

4.2.5. Financing Coffee Processing and Marketing

Until the emergence of private banks in the recent years, the Development Bank of

Ethiopia (DBE) and The Commercial Bank of Ethiopia (CBE) were the only institutions engaged in the financing of coffee processing and marketing. DBE usually financed the investment components, while CBE concentrated in the short-term working capital components. DBE's financing of the Coffee sub-sector accounted for about 32.1% of its agricultural lending up to 1992. During 1993 and 1994, however, loan approvals for the sub-sector was insignificant because of absence of demand for investment. The demand picked up again in 1995 with the coming of the Swiss Government assistance for establishment of Coffee washing stations in the SNNPR and some parts of OROMIYA Region. Currently the bank's loan disbursement to the sub-sector exceeds birr 150 million, including short-term loans. Agricultural loan approvals by DBE for the period 1989 to 1996 that shows the proportion approved for coffee sub-sector is shown under figure 5 below.

Figure 5. Development Bank of EthiopiaAgricultural Loan ApprovalsYears ending June 30

	1989	1990	1991	1992	1994	1995	1996
Coffee Processing and marketing (Birr)	27 9	36.5	37.0	37.1	2.5	25.3	64.5
Per cent of Coffee as of total Agriculture (%)	31.2	34.2	31.7	31.4	2.4	12.4	20.9
Total Agriculture (Birr)	**89.3**	**106.8**	**116.7**	**118.0**	**102.9**	**204.2**	**309.2**

Source: Calculated from DBE Annual Reports, 1988/1989-1995/1996.

4.3. Growth in Quantity of Exports

There are a number internal and external factors that affect coffee export. Internal factors are related to weather conditions that affect both the quantity and quality of coffee as well as capacity to export such as (transport, processing, storage and quality control). External factors are availability of competing coffee, and international coffee prices. Weather conditions in the major coffee producing countries also affect the level of export of Ethiopia's coffee. For instance, towards the end of the 1992/93 fiscal year the destruction of Brazilian coffee harvest by frost and an increased world demand contributed to higher coffee prices and hence an increased earnings[4]. Most of all, however, the domestic economic policy is the most important limiting factor. Taxation and licensing policies are among such domestic policies that can discourage or encourage export. Hence, the reforms made in these policies after 1992 are expected to have contributed positively towards increased exports. The quantity of exports for six years before and after economic liberalization indicates that the quantity of coffee exported after the reform has increased substantially. The average annual growth rate of increase in quantity exported that was negative 12.9% before the reform, increased to positive 12.9% after the reform. Furthermore, the average

[4] NBE. 1993/94 Annual Report.

quantity for six years that was 70,487 tons before also increased to 93,045 after the reform. Quantity exported in 1997/98 declined by 1.8% probably due to bad weather that affected the quality of coffee. The details are shown under figure 6 below.

Figure 6. Quantity of Exports Before and After Economic liberalization

Period	Year	Quantity Exported(metric Tons)	Growth Rate(%)
	1986/87	80,216	-
Before Economic	1987/88	71,165	(11.3)
Liberalization	1988/89	92,141	29.5
	1989/90	88,916	(3.5)
	1990/91	58,232	(34.5)
	1991/92	32,249	(44.6)
	Average	70,487	(64.4)
After Economic	1992/93	67,375	-
Liberalization	1993/94	69113	2.6
	1994/95	82,199	18.9
	1995/96	97,578	18.7
	1996/97	123,166	26.2
	1997/98	121,000	(1.8)
	Average	93,405	12.9

Source: NBE, Annual Report. 1995/96.

4.4. Increase in the Export of Quality Coffee

Even though the number of coffee washing stations has increased substantially in the last two years, the share of washed coffee in total quantity of exported coffee did not increase to a great extent. In fact, as the total quantity increased, the share of washed coffee followed a declining trend. The declining trend started following the declaration of the Mixed Economy Policy by the Peoples' democratic Republic of Ethiopia (PDRE) in 1989. After this time, cooperatives have lost control over their members that were forced to delivery red cherries to cooperative owned washing stations. As a result, the flow red cherries decreased and washing stations had to operate much below their capacities. Some washing stations were also looted and destroyed during the change of Government in 1991. Consequently, the quantity of washed coffee decreased from year to year. However, there is an up ward trend in terms of quantity exported. The average annual washed coffee exported for the last ten years was about 13,802 tons, accounting for about 16.9% of total coffee exports. The details are shown in figure 7 below.

Figure 7. Share of Washed Coffee in Total Coffee Exports

Year	Washed Metric tons	Unwashed Metric tons	Total Metric tons	% washed
1988/89	24,602	67,539	92,141	26.7
1989/90	17,428	71,488	88,916	19.6
1990/91	12811	45,421	58,232	22.0
1991/92	5,869	26,380	32,249	18.2
1992/93	9,982	57,393	67,375	14.8
1993/94	9,120	59,993	69,113	13.2
1994/95	10,401	71,798	82,199	12.7
1995/96	13,000	84,578	97,578	13.3
1996/97	19,747	103,419	123,166	16.0
1997/98	15,063	106,000	121,063	12.4
Average (year 88-98)	**138,023**	**694,009**	**832,032**	**168.9**

Source: Coffee and Tea Authority.

4.5. Growth in Foreign Exchange Earnings

A comparison of six years data before and after economic liberalization has been made in Figure 8. The comparison shows that the average rate of growth of the value of coffee exported was negative 16% before the economic liberalization. By contrast, this average rate is found to be positive and 46% after economic liberalization.

Figure 8. Value of Coffee Exported 1986/87-1997/98

Period	Year	Value of Coffee Exported ('000 Birr)	Growth Rate(%)
	1986/87	524,348	-
Before Economic	1987/88	439,181	(16.2)
Liberalization	1988/89	. 626,448	42.6
	1989/90	405,103	(35.3)
	1990/91	268,451	(33.7)
	1991/92	168,324	(37.3)
	Average	405,309	(16.0)
After Economic	1992/93	536,982	-
Liberalization	1993/94	626,448	33.7
	1994/95	1,799,034	150.6
	1996/97	2,307,494	33.8
	1997/98	2,718,000	17.8
	Average	**1,618.661**	**46.3**

Source: National Bank of Ethiopia. Quarterly Report, 1996/97.

4.6. Share of Coffee Export earnings in Total Export Earnings

Five years data before and after economic liberalization (figure 9) has been used to compare the extent of growth of foreign exchange earnings from coffee export and its contribution to the country's total foreign exchange earnings. The data reveals that average annual foreign exchange earnings from export of coffee has increased from birr 382 million in the pre-liberalization period to birr 1.4 billion in the post-liberalization period. The share of Foreign exchange earnings from coffee also increased from 58.9% in the pre-liberalization period to 65.6%. This was only a 6.7% increase. This could be because of diversification and the increase in export of other commodities. For instance, foreign exchange earnings from coffee export in 1996/97 increased by about 33% over that of the preceding year due to favorable prices in the world market. During the fourth quarter of the 1996/97, average price of unwashed and washed coffee stood at 173.4USC/lb, and 225USC/lb, respectively. However, its contribution during the year to total country's foreign exchange earnings was 66.2% being less tha- the preceding year by about 1.7%.

Figure 9. Share of Foreign Exchange Earnings from Coffee Export In Total Foreign Exchange Earnings

Period	Year	Total Export Earnings	Coffee Export Earnings	Share of Coffee In Total Earnings %
	1987/88	773,642	439,181	56.8
Before Economic	1988/89	902,753	626,448	69.4
Liberalization	1989/90	736,806	405,103	55.0
	1990/91	542,485	268,451	49.5
	1991/92	279,026	168,324	60.3
	Average	646,942	381,501	58.9
After Economic	1992/93	800,814	536,982	67.0
Liberalization	1993/94	1,238,729	718,019	58.0
	1994/95	2,732,046	1,799,034	65.8
	1995/96	2,539,056	1,724,008	67.9
	1996/97	3,485,625	2,307,494	66.2
	Average	**2,159,254**	**1,417,107**	**65.6**

Source: National Bank of Ethiopia, Quarterly Bulletin, Vol. 12. No. 4, 1996/97.

4.7. Coffee Price Trends

As can be observed from figure ten below, there was no regular trend in both the domestic and export markets for washed and unwashed coffee. While 1989/90 and 1992/93 were years of low international prices, there was some price recovery following the price rise to US cents 134.45 /lb. from 1994 onwards. International market for coffee depended on the international supply of and demand for coffee. The international supply is usually affected by weather conditions in the major producing countries such as Brazil, Colombia and Mexico. On the other hand, economic situation and weather conditions of importing countries affect demand for coffee. Good economic situations and cold climates encourage consumption of coffee and hence higher demand for it. Consequent to changes in these factors, the international price of coffee fluctuates from year to year.

Ethiopia's share of the world's export market, being only about 2.5%, will not have any influence on international coffee prices. As indicated in the previous sections, most of Ethiopia's coffee export is unwashed and hence fetches lower prices in the international market. As shown in Figure 10 below, washed coffee from Ethiopia fetches about 43% higher than unwashed coffee per kilogram in the export market and about 42% in the domestic market. This is an obvious indication that by increasing the proportion of washed coffee it is possible to increase the country's foreign exchange earnings as well as the income of the producers. With the current low level of the proportion of washed coffee, only about 16%, the potential to increase wet processing are still untapped.

The fluctuating international price of coffee would also be regarded as a risk for a country like Ethiopia that heavily depends on one commodity. Neither should a highly increasing price of coffee be considered good for Ethiopia, as this would also lead to heavy shift of resources to coffee from the production of other goods. The situation will even be worse if such shifts would be from food production.

Figure 10. Coffee Price in Domestic and Export Markets 1993/94-1997/98

Period	Year	Washed Birr/qt	Unwashed Birr/qt	Washed Birr/qt	Unwashed Birr/qt
		Domestic Market		Export Market	
After	1993/94	1485	958	1765	972
Economic	1994/95	1950	1846	2896	2350
Liberalization	1995/96	1461	1308	2102	1702
	1996/97	1980	1237	2242	1873
	1997/98	2920	1529	3512	1962
	Per qt.	1959	1376	2503	1772
	Per feresula	333	234	426	301
	Per kg.	19.59	13.76	25.03	17.72

Source: Coffee and Tea Authority.

5. MANAGEMENT OF THE COFFEE INDUSTRY

Following the structural adjustment program, a series of institutional changes have been made in the coffee sub-sector. The Ethiopian Coffee Marketing Corporation that was engaged in domestic purchase and export of coffee was abolished and two separate enterprises were established. These were the Ethiopian Coffee Export Enterprise, established under Council of Ministers Regulation No.128/1993[5], and Ethiopian Coffee Purchase and Sales Enterprise, established under Council of Minister's Regulation No.127/1993[6]. On the production side, the Coffee Development

[5] Council of Ministers' Regulations to Provide for the Establishment of Ethiopian Coffee Export Enterprise.
[6] Council of Ministers' Regulation to Provide of the establishment of Coffee Purchase and Sales

Corporation was also abolished and the Ethiopia Coffee Plantation Development Enterprise was established under Council of Ministers' Regulation No. 151/1993[7].

Initially, in the past decades, there were a number of attempts at reorganization of the overall management of the coffee industry. The Ministry Coffee and Tea Development replaced the old Coffee Board. At one time, the extension service and the Coffee Improvement Project were transferred to the Ministry of Agriculture, but were brought back to the Ministry. Towards the end of the Dergue's regime, the Ministry of Coffee and Tea Development was merged with the Ministry of State Farms and formed the Ministry State Farms, Coffee and Tea Development. Currently, the coffee and tea sub-sectors are under Coffee and Tea Authority, an autonomous organization formed under Proclamation No.116/1995[8]. A Board that deals with policy matters and a General manager that executes its day to day activities manage the Authority. Among the major mandates of the Authority are reviewing and submitting to Government, the short and long-term plans and recommending policy matters for the coffee and tea sub-sectors.

6. BENEFICIARIES FROM COFFEE PRODUCTION AND MARKETING

Several groups benefit from coffee at each stage of production. Farmers, traders, primary processors, transporters, and exporters are among the groups that benefit from coffee production directly or indirectly. With an estimated farm size of 0.25 hectare per household and with an estimated total coffee area of 400,000 hectares, the total number of farm households that benefit from coffee production would be in the order of 1.6 million. With an average family size of 5 members, it is expected that 8 million people derive its livelihood from coffee production at the farm level.

Local traders that participate in coffee trade are the *sebsabi* (licensed local dealers in sun-dried coffee), and *akrabi* (Licensed wholesale dealers in sun-dried coffee). Licenses for these categories of traders are given at regional level. Although, their number is not known it is expected to be large as compared to other categories of coffee traders. The number of coffee exporters that was very limited in the pre-reform period has increased due to the ease of entry after the reform. In 1996/97, there were 89 private organizations that were licensed to export coffee, but only 56 of them were actually engaged. Private organizations exported about 68% of the total exporte during the year.

Enterprise.

[7] Council of Ministers' Regulation to Provide for the establishment of Coffee Plantation Development Enterprise.

[8] A proclamation to Provide for the establishment of Coffee and Tea Authority.

With respect to coffee processors, the number beneficiaries are related to the number of processing stations. At present, there are about 388 coffee washing stations in the country. With an average of 6 persons per washing station, it is estimated that about 2,328 are benefiting as permanent employees. In addition, about 35 persons are also expected to benefit from temporary employment for about 75 days every year from coffee washing stations. In the 206 existing industries, the numbers of beneficiaries are estimated to be about 2060. Furthermore, it is also estimated that private exporters in Addis Ababa and Dire Dawa employ more 4000 persons, the majority of which are women. These are benefiting from processing plants established for final cleaning of coffee for export.

The other major sector that benefits from coffee production and marketing is transport. In the coffee sub-sector, transport is involved from farm to collection points, from collection point to primary processing, from primary processing to terminal market and from terminal market to exporting port. In transporting coffee heavy and light trucks are involved. Therefore, all owners and employed operators including persons engaged in loading and unloading do benefit from coffee transport.

Moreover, the Government is also the major beneficiary from Coffee production and marketing. The benefits are realized in the form of taxes from income of organizations and persons engaged in coffee production and marketing, license fees and export duties. Before the new tax reform on coffee export there were three types of taxes on coffee export known as coffee duties, surtax, and coffee cess. These taxes are now consolidated and a flat rate of 6.5% is charged on the FOB value of coffee to be exported. As shown under figure 11 below, the amount of tax revenue from coffee export was not very significant during the fiscal years of 1991/92 and 1992/93, but it took off in 1993/94 as the volume of coffee export increased. The highest tax revenue from coffee export was collected in 1994/95, which represent about 3.4% of the total domestic revenue of the Government.

Figure 11. Coffee Taxes in total Government Revenue For the period, 1991/92-1996/97 (Millions of Birr)

Year	Coffee Duties	Coffee Surtax	Coffee Cess	Total tax on Coffee	Total Gov. Revenue	% of Coffee tax as of total Gov. Rev.
1991/92	2.2	1.4	1.9	5.5	2208.0	0.2
1992/93	6.3	2.7	3.1	5.8	3191.3	0.2
1993/94	13.0	17.5	7.3	37.8	3938.8	1.0
1994/95	11.5	171.4	7.2	190.1	5839.0	3.4
1995/96	14.2	83.2	9.7	107.1	6839.2	1.7
1996/97	17.9	72.9	9.0	99.8	6426.7	1.6

Source: National Bank of Ethiopia, Quarterly Report, Vol.12 No.4, 1996/97.

7. THE FUTURE OF COFFEE PRODUCTION IN ETHIOPIA

At the farm level, small holders are motivated by the better farm gate price to increase area under coffee and to maximize yield through the use of modern agronomic practices. In fact there are indications that farmers are bringing more land under new plantations by abandoning other crops. Although there is a risk of going in to mono-crop system, the tendency towards area expansion under coffee and improving the cultural practice is a positive aspect. The private commercial sector in coffee production may also emerge promptly, despite some of the persisting problems in rural infrastructures that are not conducive for investment and the bureaucratic hur :es to obtain land. Those under state holding are also expected to be privatized and their management be improved in the near future.

Despite the favorable domestic situations, Ethiopia's chances to increase her production and annual sales depend on a number of factors. The major factors that would affect Ethiopia's coffee production and export in the future are future increases in global coffee consumption which is in turn affected by world population growth, and global coffee production. The World's major contenders for substantial increases in production appear to be Asia and Africa. Coffee consumption in the traditional markets is more or less static and any increase would only be expected from quality improvement. Overall consumption increase in the traditional markets (Western Europe and Scandinavia (55%), The USA (about 36%) is very limited being about 1% per annum. It is only Japan that consumes about 8%, where consumption is still growing at about 5% per annum. While markets in Eastern Europe are affected by foreign exchange constraints, the markets in South East Asia are constrained by domestic production. Therefore, the future of coffee production more depends on these external factors that are beyond the control of the country.

Figure 12. Percentage of Coffee Exported by Importing Country For the Period 1993/94-1996/97

Country	1993/94	1994/95	1995/96	1996/97
Germany	35	44	52	35
Japan	25	20	17	16
Saudi Arabia	11	8	10	10
United States	14	9	5	16
France	5	8	5	5
Italy	5	4	3	3
Belgium	1	3	3	5
Others	4	4	5	10
Total	**100**	**100**	**100**	**100**

Source: Bunana Chai, No. 6. Tir 1990.

As can be observed from the above table, Germany is the major importer of Ethiopian Coffee followed by Japan and the United States. However, Germany and Japan followed a declining trend, while the United States increased import of Ethiopian Coffee in 1996/97. Belgium also followed an increasing trend while countries such as Italy and France did not increase their imports significantly. However, there is much improvement in the share of coffee imported from Ethiopia by other countries in 1996/97 as compared to the previous three years.

8. CONCLUDING REMARKS

It is not the scope of this paper to quantify the benefits that are obtained from coffee production. However, it can be generalized that the coffee sub-sector performed well in response to the economic liberalization measures undertaken by the Government. While liberalization of licensing and introduction of tax reform has encouraged entry by the private sector to coffee marketing business including domestic and export trade, devaluation of the national currency, the birr, has increased the income of the farmers as well as of all other beneficiaries. The benefits derived from the sub-sector have also encouraged investment in coffee plantation, primary processing, storage, transport and cleaning for export. For instance, the price of red cherries per kg that used to be between birr 0.45 and 0.75 before economic liberalization is now between birr 2.50 and birr 3.0/kg, on average. The increase in the number of wet and dry processing stations has also increased the demand for unprocessed coffee and thus encouraged producers.

On the other hand, although the international price of coffee has been fluctuating over the years, there were years of favourabe prices due to reduction in production of other coffee producing countries. The increase in the number of exporters has also led to the increase in the amount of coffee exported. The direct and indirect effects of the increase in quantity of coffee exported are the increase in the availability of foreign exchange earnings for purchase of imported investment goods, increase in government revenue and expenditure.

Notwithstanding all the positive impacts, increase in export of coffee may also have negative effects. In the first place, there is a tendency to shift resources from the production of other goods to the production of coffee. This is particularly dangerous since it may negate the national objective of food self-sufficiency. It may also lead the economy to dependency on one crop.

The other very serious issue is that of its environmental impacts. While, the residues from pulping stations are freely disposed without any control, the qualities of washed coffees processed by stations down the rivers are deteriorating, human and animal lives are also at risk from using the contaminated rivers. Expansion in area will also result in the deforestation of the natural vegetation cover.

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