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The Effect of Global Coffee Price Changes on Rural Livelihoods and Natural Resource Management in Ethiopia

A Case Study from Jimma Area

Aklilu Amsalu, with Eva Ludi

NCCR North-South Dialogue, no. 26

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dialogue

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Cover photos
Left: Typical landscape in the Jimma area – a mosaic of coffee forests and crop land. *Middle:* After pulping and washing, coffee beans need to be dried before being sorted and packed for export. *Right:* Ripe coffee cherries. (Photos by Eva Ludi, 2007)

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Abbreviations and Acronyms

CIP	Coffee Improvement Program
CSA	Central Statistical Agency (of Ethiopia)
DFID	Department for International Development (UK)
ECEX	Ethiopian Commodity Exchange
EPA	Environmental Protection Authority (of Ethiopia)
FGD	Focus Group Discussion
GWOARD	Gomma Woreda Office of Agriculture and Rural Development
ICO	International Coffee Organization
JARC	Jimma Agricultural Research Center
JZOARD	Jimma Zone Office of Agriculture and Rural Development
MDG	Millennium Development Goal
MEDaC	Ministry of Economic Development and Cooperation
MoA	Ministry of Agriculture
MoFED	Ministry of Finance and Economic Development
MWOARD	Mana Woreda Office of Agriculture and Rural Development
NBE	National Bank of Ethiopia
OCFCU	Oromia Coffee Farmers Cooperative Union
PASDEP	Plan for Accelerated and Sustainable Development to End Poverty
PRSP	Poverty Reduction Strategy Paper/Program
UNDP	United Nations Development Program
WB	World Bank

1 Introduction

1.1 Background

Coffee is one of the world's most important agricultural commodities. It ranks as the second most valuable export commodity after oil (Pendergrast, 1999). Global annual production ranges between 10 million and 130 million bags (1 bag = 60 kg) (Potts, 2007). It is estimated that over 125 million people worldwide are dependent on coffee for their livelihoods (Osorio, 2002a). More than 80% of the coffee is traded internationally, generating over US$ 15 billion in export revenue (calculated on the basis of 1997/98 prices and volumes) (Baffes et al., 2005). On the other hand, retail sales in consuming countries have increased from around US$ 30 billion in the 1980s to around US$ 80 billion today (Slob, 2006). Nevertheless, most coffee producers live in poverty and manage agroecosystems in some of the world's most culturally and biologically diverse regions (Bacon, 2005). Several countries in Africa base their economies on coffee export revenues. About 33 million people in 25 African countries derive their livelihoods from growing coffee, mainly on subsistence farms (Kotecha, 2002). Until 2000, coffee contributed 80% of Burundi's, 67% of Ethiopia's, 55% of Uganda's and 30% of Nicaragua's export earnings, respectively (Gresser and Tickeel, 2002).

However, the global coffee market has been unstable over the past years. Oversupply of coffee in the market is often considered as the main reason for the crisis. In particular, coffee supply has increased substantially since the collapse of the International Coffee Agreement (ICA) in 1988/89, mainly due to new production in Brazil and Vietnam, while aggregate demand has changed little (Gibbon, 2005). Hence, excessive quantities of coffee entered international markets, prices became quite volatile and the overall quality of coffee began to deteriorate (Ponte, 2002). This has reduced the income of millions of coffee producing poor farmers. According to Petit (2007), although oversupply is clearly one of the main factors, the recent price crisis reflects key structural changes in the global coffee commodity chain in the last 20 years. This is a serious threat to the livelihood of millions of poor farmers in producing countries and to the environment. Farmers are faced with rising uncertainty about prices in the future due to the market's volatility, and hence are reluctant to make long-term investments in their crop (Oxfam, 2005). Poor farmers in developing countries have been selling their coffee beans for much less than they cost to produce (Osorio, 2002a; Gresser and Tickeel, 2002). This aggravates coffee farmers' poverty and represents a hindrance to the accomplishment of the Millennium Development Goals (MDGs), which were adopted by the United Nations at the 2000 Millennium Summit (Avery, 2007). Furthermore, rural unemployment related to the crisis is increasingly becoming a source of social unrest and mobilisation, fuelling poverty, malnutrition and migration (Eakin et al., 2006).

In the 1980s the World Bank adopted the slogan 'Get the prices right' for its policies of structural adjustment, but it appears that on the primary commodity markets, the prices went catastrophically wrong (Lines, 2006). Coffee prices, which averaged around 1.20

US$/lb. (2.65 US$/kg) in the 1980s, dropped to around 0.50 US$/lb. (1.10 US$/kg) at the turn of the millennium, which is the lowest in absolute terms for 100 years (Osorio, 2002b). This has affected countries that largely depend on coffee export revenues and millions of poor producer farmers. Though the global coffee price has recovered slightly, the effects of a 30-year price low reached in 2001 and 2002 are still being felt in farming communities (Oxfam, 2005). Specifically, the price crisis has considerably reduced the foreign currency earnings of exporting countries, caused serious difficulties for coffee producers and forced many countries to replace coffee with other higher-value cash crops (ICARD and Oxfam, 2002). Further attempts to stabilise prices, either by curbing supplies in producing countries or through international trade agreements, have met with varying degrees of success (Rice, 2003). According to Lines (2006), the problem is not just declining prices but a near-exclusion of the most valuable tropical agricultural commodities from competitive international markets.

Ethiopia is one of the major producers and exporters of coffee in the world. In 2005, it was the sixth largest coffee producer after Brazil, Colombia, Vietnam, Indonesia and India, and the seventh largest exporter worldwide (Petit, 2007). The country largely depends on coffee as a major earner of the economy. It has accounted on average for about 5% of gross domestic product (GDP), 10% of total agricultural production and 60% of total export earnings for the past three or four decades (Worako et al., 2008). The contribution of the coffee sub-sector to creating a dynamic economy in the country by allowing the importation of developmental goods and creating employment is enormous (Alemayehu, 1999). More recently, the country has also widely promoted the flower industry, which is becoming a new source of foreign exchange. The export proceeds from cut flowers, which were negligible a few years before, reached about US$ 60 million in 2007 (Mulu, 2008). As part of its PASDEP, Ethiopia also aims to intensify flower production by expanding the area under flowers from 519 ha in 2005/06 to 2000 ha by 2009/10 (MoFED, 2006). It appears that the government is pursuing diversification of export commodities to avoid any overdependence on individual agro-commodities, thereby reducing risks associated with the market.

Coffee is produced in many places of Ethiopia that range in altitude from 550 to 2,750 m a.s.l. In 2007/08, about 773,000 ha of land were under coffee, which accounts for 3.14% of the country's total area under crop cultivation (see Appendix 1). Ethiopia produces only arabica coffee, which is widely believed to have originated in this country. The bulk of *Coffea arabica* is produced in the eastern, southern and western parts of Ethiopia, with altitudes ranging from 1,300 to 1,800 m a.s.l. Arabica coffee still grows wild in the forests of the south-western part of the country, which remains an important source of genetic resources for the world coffee industry (Tadesse, 2002). The number of coffee growers in Ethiopia is estimated to be about one million. Small farmers, most of whom work on less than half a hectare of land, are the main producers of coffee in the country since they account for over 90% of total coffee output.

Coffee production has traditionally been undertaken on small farms and modern inputs are used very rarely. The average coffee yield is between 340 and 490 kg/ha of clean

beans, which is much less than the yield, for instance, in Brazil (600 kg/ha) or Colombia (950 kg/ha). Although yields are restricted by the dominance of traditional techniques, low wage rates and good growing conditions make Ethiopia one of the world's lowest-cost arabica producers (Petty et al., 2004; Dempsey and Campbell, 2006). According to Kidane (1999), annual domestic coffee consumption is 24.5 kg per household and per capita consumption is 4.5 kg. Estimates indicate that of all the coffee produced in the country, more than half is absorbed by the domestic market for local consumption (Dempsey and Campbell, 2006; Bastin and Matteucci, 2007), which is about 1.5% of world consumption and 6% of producing countries' domestic consumption (Kotecha, 2002). This makes Ethiopia different from other coffee producing countries such as Kenya, Tanzania, Uganda and Brazil where local consumption is generally below 10%.

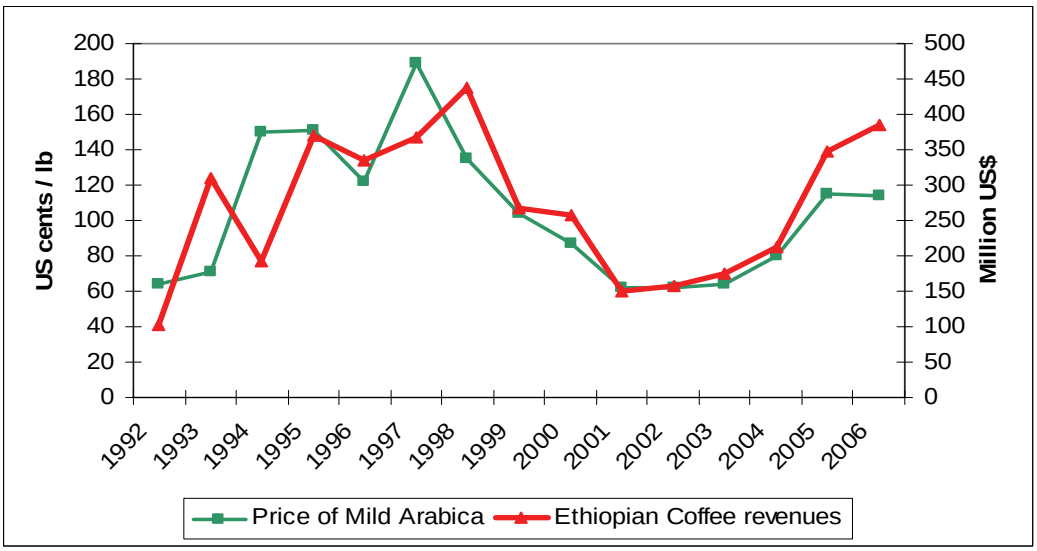

Figure 1: Ethiopian coffee export revenue (1992–2007)

Ethiopia is Africa's leading producer and exporter of arabica coffee, one of the finest varieties on the world coffee market (Mayne et al., 2002). The country exported 176,438 tons of coffee in 2006/07 and an average of 112,000 tons of coffee annually over the last 16 years (see Appendix 1). However, Ethiopia has been hit hard by the recent global coffee price slump. Producer farmers have been exposed to income losses and faced severe food shortages. For instance, the price of sun dried coffee fell from around 58 Birr for 65 kg (i.e. 0.96 Birr/kg) in 1999 to 20 Birr for 65 kg (i.e. 0.31 Birr/kg) in 2001 (Oxfam, 2002). This also caused considerable losses in the country's export revenue. As shown in Figure 1, coffee revenue, which was US$ 281 million in 1998/99, dropped to US$ 163 million in 2001/02 – a loss of US$ 118 million (with values not corrected for inflation). Reduced foreign exchange revenue had an impact on government budgets but was compensated for by donor lending (Oxfam, 2002). The situation in the global coffee market affects not only the livelihoods of the people dependent on the production, processing and marketing of coffee in Ethiopia, but also the genetic resources of coffee and forest biodiversity in general (Tadesse, 2002).

Income from coffee accounts for a substantial share of household income in most coffee growing areas of Ethiopia. Overall, coffee production is primarily aimed at meeting subsistence household needs. Hence, the market orientation of smallholder farmers (measured in terms of per capita market share, the volume of farm output supplied to markets or their profit motive) is limited (Gebreselassie and Ludi, 2007). Moreover, declining coffee prices considerably affect the livelihoods of producer farmers as they largely depend on income from coffee to meet most of their basic household needs. Lower prices mean, for instance, that they cannot afford to send their children to school, buy medicines or food. According to Oxfam (2002), many farmers were forced to sell assets such as cattle and cut essential expenses, including food, during the price slump between 1999 and 2002. In addition, coffee traders and others involved in the coffee sub-sector have been affected by the global price decline. For instance, some coffee traders went out of business while many seasonal workers – among the poorest and most vulnerable participants in the coffee chain – lost their jobs (Petit, 2007).

1.2 Study objectives

This study is part of the TP (Transversal Package) project "The Political Economy of Coffee", which addresses actors and institutional environments related to the production and trade of agro-commodities at local and national scales and links them to questions of global markets and their determinants. The project is funded by the NCCR North-South and is carried out in three East African countries: Ethiopia, Kenya and Tanzania. It focuses on coffee, as this agro-commodity is of vital importance in these countries with regard to state revenues and the dependence of a considerable portion of the workforce on its production, processing and marketing. Within this framework, this study was aimed at examining the effects of coffee price changes on producers' livelihoods and the management of natural resources, and points out options for sustainable coffee production in Ethiopia by drawing on cases from a renowned coffee growing part of the country, namely Jimma area. The study covered the patterns of small-scale coffee production, the marketing chain and the impacts of coffee price changes on livelihoods and natural resources. Another focus was on identifying the social importance of coffee growing and the major economic factors affecting the production and trade of coffee. The roles of government, institutions and existing policies on smallholder coffee producers are explained and some implications on the sustainability of the coffee economy outlined.

The specific objectives were:

1. to examine the effects of coffee price changes on the livelihoods of producers;
2. to explore coffee value chains and the stakeholders involved at various levels of the chain;
3. to identify household responses and coping strategies with regard to coffee price changes; and
4. to assess the impacts on natural resources and the environment, including implications for the future of coffee.

1.3 Methodology

Data sources

This study is based on both primary and secondary data. Primary data were collected using a detailed household questionnaire survey, in-depth interviews and group discussions. The survey was conducted between April and October 2007. The questionnaire survey included 119 households selected from three rural *kebeles* (villages) located in Jimma zone of Oromia Regional State: Chidero-Suse, Genji-Ilbu and Haro (Table 1). Sampling was performed in a two-stage procedure. First a list of households from each village was obtained from the *kebele* administrations and a wealth ranking was performed with the help of key informants, in order to differentiate households based on socio-economic conditions. After gaining insights into the local criteria of wealth differentiation, households were identified and grouped into three wealth categories:[1] poor, medium and rich. The main criterion was land holding size, particularly the area under coffee.

Table 1: Sample households included in the questionnaire survey

Woreda	*Kebele*	Population	Number of HHs	Sample HHs			
				Rich	Medium	Poor	Total
Gomma	Chidero-Suse	5,634	840	8	17	14	39
	Genji-Ilbu	8,411	1,750	5	11	25	41
Mana	Haro	4,578	1,248	4	11	25	40
			Total	**16**	**39**	**64**	**119**

The survey questionnaire included questions pertaining to the socio-demographic profile of the household, land resources and farming system, patterns of coffee production, coffee marketing and responses to price changes, and the impacts of price changes on coffee production and the environment. Semi-structured and open interviews were carried out with individual farmers, community leaders and *kebele* officials. We also interviewed coffee traders at different levels of the coffee marketing chain in the locality as well as coffee exporters and others involved in Ethiopia's coffee trade. Discussions were also held with cooperative officials and experts from the zonal and *woreda* agricultural offices. Cross-checking and triangulation were used whenever necessary and possible. Translators were used while interviewing informants and conducting discussions since we do not understand the local language.

Secondary data were collected from official government sources and published reports obtained from institutions concerned with coffee production and marketing in the country. Relevant documents (both published and unpublished) on the patterns and pros-

[1] The most important indicator of wealth is the size of land holding under coffee, measured in a local unit called *fechasa*. A *fechasa* is equivalent to a quarter of a hectare. Hence, "Rich" includes households with more than 4 *fechasa*; "Medium" includes households with 2-4 *fechasa*; "Poor" includes households with less than 2 *fechasa*.

pects of coffee production, price trends, and impacts on livelihoods and natural resources were also reviewed.

Methods of data analysis

Data obtained through a combination of methods were analysed by employing both quantitative and qualitative techniques. The quantitative information obtained from the household questionnaire survey was coded, entered into a computer and analysed by employing SPSS software. The data were summarised and frequencies and descriptive statistics were derived. In addition, One-way Analysis of Variance with post hoc Scheffe's test was used to examine the variations across the study *kebeles* and wealth categories in terms of various variables.

The qualitative information collected from the group discussions and from key informant farmers, experts and officials was carefully coded and analysed. The local coffee marketing chain was also analysed based on information gathered from the stakeholders involved in the coffee trade. Coffee prices at each link of the chain were documented and the margins calculated. In addition, comparisons were made between the different coffee market outlets available in the area.

1.4 Conceptual framework

Rural people in developing countries are the victims of global economic reforms that have taken place over the last 20 years: generally poor and politically weak, they have suffered while people in developed countries have prospered as never before (Lines, 2006). In particular, commodity markets have been changing to the disadvantage of poor people in many developing countries. The fact that exports of a small number of agricultural commodities (sometimes even a single commodity) account for a large share of the export revenues of many developing countries makes the latter vulnerable to changes in the global commodity market. For many governments, uncertainty of foreign exchange earnings combined with lack of access to credit that could smooth fluctuations in income makes long-term planning of spending difficult (DFID, 2004).

Recently, the commodity issue has become central to development thinking and strategies aimed at poverty alleviation since there is a clear link between poverty and dependence on commodities. This is because high dependence on few commodities exposes poor countries to unfavourable market or climatic conditions, in the event of which their foreign exchange reserves are drained quickly, stifling their ability to pay for essential imports and eventually plunging them into debt (FAO, 2004). On the other hand, the governments of major consumer nations impose various taxes on processed commodity imports, which limits value addition in producer countries while increasing the disparity between producer and consumer prices (Rice, 2003). This problem has been largely observed in the international commodity market during the past decades, affecting producer countries mainly because it has received little attention in international forums (Maizels, 2000; Gibbon, 2003)

Theoretical analysis suggests that agricultural commodity prices fall relative to other manufactured goods because of the rather inelastic demand and lack of differentiation among producers, which means that the markets are competitive (DFID, 2004). Agricultural products are linked to final consumers through so-called global value chains. A value chain describes the full range of activities that are required to bring about a final product from the growth of a primary commodity, through the intermediary phases of production (transformation and producer service inputs), delivery to consumers and final disposal after use (Kaplinsky, 2000; Dempsey and Campbell, 2006). As Dempsey (2006) noted, a comprehensive value chain approach to global marketing is an excellent framework to direct business development and market linkages.

In a global economy, trade is increasingly taking place via global supply networks or value chains that facilitate the sourcing of components and finished goods by large global buyers (Kanji and Barrientos, 2002). Changes in the international policy environment, new arrangements regarding supply and demand, technological changes and/or the asymmetrical character of power in the coffee value chain have increasingly narrowed the opportunities for vulnerable economies to secure benefits from the coffee trade (Petit, 2007). This has an impact on producers' income and on the sustainability of coffee production. While globalisation provides opportunities for economic growth, it also brings increased competition and heightened uncertainty, influencing the extent to which local enterprises can survive and grow. Some even argue that liberalisation policies designed in line with the new order of globalisation could help to link producer farmers to the global market, but such policies also increase the cost of cultivation by reducing support and farm subsidies. On the other hand, dominant firms control standards, quality, production criteria and employment conditions that commodity producers and suppliers are obliged to meet. This implies that coffee farmers in producing countries need to be appropriately linked to global markets in order to benefit from direct marketing linkages. Nevertheless, linking coffee producers to international markets requires institutional and capacity building that is carefully designed to provide support to the expansion of value chains (Dempsey, 2006).

A major problem faced by commodity-dependent producers is the mismatch between supply and demand in the international market. In recognition of this and similar challenges, a wide variety of mechanisms at both the national and international levels have been implemented as a means of improving the terms of trade and overall predictability of commodity markets (Potts, 2007). Such mechanisms have had varied degrees of success and some are yet to be tested. Among these mechanisms are new speciality market segments for coffee. Fair-trade, organic and shade grown coffees, together known as sustainable coffees, are the most important of the new speciality market segments (Bacon, 2005; Calo and Wise, 2005). In particular, the fair-trade movement has been regarded as a key strategy to overcome the effects of volatile world coffee prices. The movement has spread throughout the coffee world over the past ten or twenty years and is mainly dedicated to promoting social equity, democratic participation in decision making within communities, and paying a fair price to the farmers (Fair Trade Foundation, 2000; Rice, 2003). However, the volumes of coffee moved through speciality,

organic and fair-trade commodity chains remain relatively small and must be seen within the context of changing global coffee markets (Bacon, 2005).

The impact of agro-commodity price fluctuations on livelihoods and natural resources is complex and poorly understood. Much of the discussion on commodities takes place in something approaching an evidential vacuum concerning the actual social and environmental impact of particular commodity booms and busts (DFID, 2004). However, long-term trends and short-term shocks on commodity markets have a direct impact not only on the prices of basic necessities but also on the economic well-being of households and the natural resource base (FAO, 2004). Farmers devise adaptation strategies to cope with income losses due to commodity price fluctuations. Such adaptation strategies can be either tactical (i.e. short-term) or strategic (i.e. long-term) (Risbey et al., 1999). However, the survival of smallholder coffee farmers depends on their capacity to move beyond the strategies they have traditionally used to cope with periodic downturns in the market and instead proactively to adapt to structurally new conditions (Eakin et al., 2006). For some farmers, such adaptation may entail new production practices and unfamiliar forms of collective and household organisation. For others, survival may necessitate income diversification, migration or even the abandonment of coffee production.

The decision made by poor people as to specialising or diversifying their livelihood sources in response to changing commodity market conditions has been the subject of debate (Kanji and Barrientos, 2002). According to Ellis (2000), diversification is the more common response of poor people to manage risks, reduce vulnerability and increase security instead of depending on a single crop that is subject to market volatility such as coffee. Diversification has been widely acknowledged as a central part of people's livelihood strategies against shocks such as illness, loss of employment and price falls that may lead to loss of income, wealth or consumption (Dercon, 2005). However, finding alternatives to cash crops like coffee that can deliver equal benefits is exceedingly difficult (Oxfam, 2005). On the other hand, the success of diversification depends on available resources, institutional environment and appropriateness of new farming activities to local conditions (Dixton et al., 2003).

2 Description of the Study Area

2.1 The Jimma area

The study was carried out in Jimma zone of Oromia Regional State, which is located in the south-western part of the country at a distance of about 350 km from Addis Ababa. Jimma zone is one of the 24 zones of the Oromia region and is divided into 17 *woredas*[1], 258 rural *kebeles* and 43 urban *kebeles*. The zone covers a total area of 18,696 km^2. Total population is over 2.2 million, of which about 12.3% are urban dwellers. Oromo people are the predominant ethnic group in the zone, with the Amhara, Guraghe, Tigre and others forming significant minorities concentrated mainly in the urban areas.

The zone is characterised by a humid tropical climate with relatively reliable rainfalls that range from 1,200 to 2,000 mm per annum. The rainfall pattern is normally distributed, with the major rains extending from February to October. The maximum temperature ranges between 25 °C and 30 °C, which is higher than in other places of the Ethiopian highlands. The soils are predominantly of volcanic origin with good fertility status. The top soils are deep and predominantly dark brown in colour. As the area is well covered with natural vegetation and perennial crops, the fertility of the soils is replenished with addition of organic matter and the effect of erosion is generally low.

Jimma zone is renowned for its long history of coffee production and is one of the main source areas of coffee in Ethiopia. Coffee is predominantly cultivated in 11 of the 17 *woredas* of the zone. Of these, Mana and Gomma *woredas* are the main places of coffee production. On average, the zone produces about 30,000 tons of coffee per year, which constitutes 15% of the country's annual production. Hence, the zone is one of the top three coffee producers of the country, together with Sidama and Gedeo zones. Other major crops grown include maize, *teff*, sorghum, barley, pulses (beans and peas), root crops (*enset* [false banana], yams and potato), fruits and *khat*[2]. *Teff*, honey and *khat* production are important sources of cash for households, apart from coffee.

Coffee has long been an important source of cash in Jimma area and a considerable portion of the population still depends on it as a major source of income. The marketing of coffee in the area has a long history and its structure has been changing over time mainly due to changes in government. At present, the coffee market is partly liberalised and there are a number of actors participating in the coffee trade. Important actors in the local market include producers, collectors and suppliers. Collectors purchase or

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1 *Woreda* (district) is an administrative unit below the zone level. A *woreda* consists of a number of *kebeles*, which are the smallest administrative units.

2 *Khat (Catha edulis)* is an evergreen perennial tree the leaves of which are used for their stimulating effect. Its cultivation is expanding in many places of the country and the number of people using the stimulant is growing extremely fast.

collect coffee from producer farmers and sell it to suppliers. Both collectors and suppliers are obliged to hold licences, without which they cannot operate.

There are 107 wet and 109 sun dried coffee processing mills in the zone. Twenty-eight of the wet processing mills are owned by cooperatives (Table 2).

Table 2: Coffee processing mills and number of traders in the study area

	Jimma zone	Mana *woreda*	Gomma *woreda*
Wet processing mills			
Privately owned	79	15	34
Cooperative owned	28	10	14
Dry coffee processing mills			
Privately owned	109	14	32
Cooperative owned	-	5	2
Number of suppliers	-	62	93

Source: JZOARD, 2008; MWOARD, 2008; GWOARD, 2008

2.2 Study villages

The study was carried out in three villages (*kebeles*) located in two *woredas* of Jimma zone: Chidero-Suse and Genji-Ilbu *kebeles* in Gomma *woreda* and Haro *kebele* in Mana *woreda*. Coffee production is the most important economic activity in all three villages. There is a long-standing tradition of coffee farming, which is favoured by the physical conditions of the area. Here, coffee is cultivated at higher elevations and benefits from good rainfall. A brief description of each study village is given in the following sections.

Chidero-Suse

Chidero-Suse is one of the 25 *kebeles* of Gomma *woreda* and covers a total area of 2,098 ha. The *kebele* has a total population of 5,634, of which 53.5% are males and 46.5% are females. About 16.7% of the 840 households are female headed. The average household size is 6.7, which is above the average for the *woreda* (5.8). Coffee production is the economic mainstay of the people in the *kebele*, supplemented with other activities such as beekeeping and the cultivation of cereals, pulses, fruits (orange, banana, mangoes, pineapple and avocado), root crops and *khat*. About 75% of the total cultivated land in the *kebele* is under coffee and the remaining is used to grow cereals and other food and cash crops.

Chidero-Suse is at a distance of 5 to 7 km from Agaro town, which is the capital of Gomma *woreda*. Farmers in the village use the weekly market in Agaro and the daily market in Bulbulo, which are at about 55 and 40 minutes' walking distance from the village, respectively. There are 15 coffee suppliers and about 17 licensed collectors in the *kebele*. Further, the village has four wet processing coffee mills and five mills for

dry coffee processing. The big market centres are accessible throughout the year as there is an asphalt road joining Jimma to Agaro town and Chidero-Suse *kebele*.

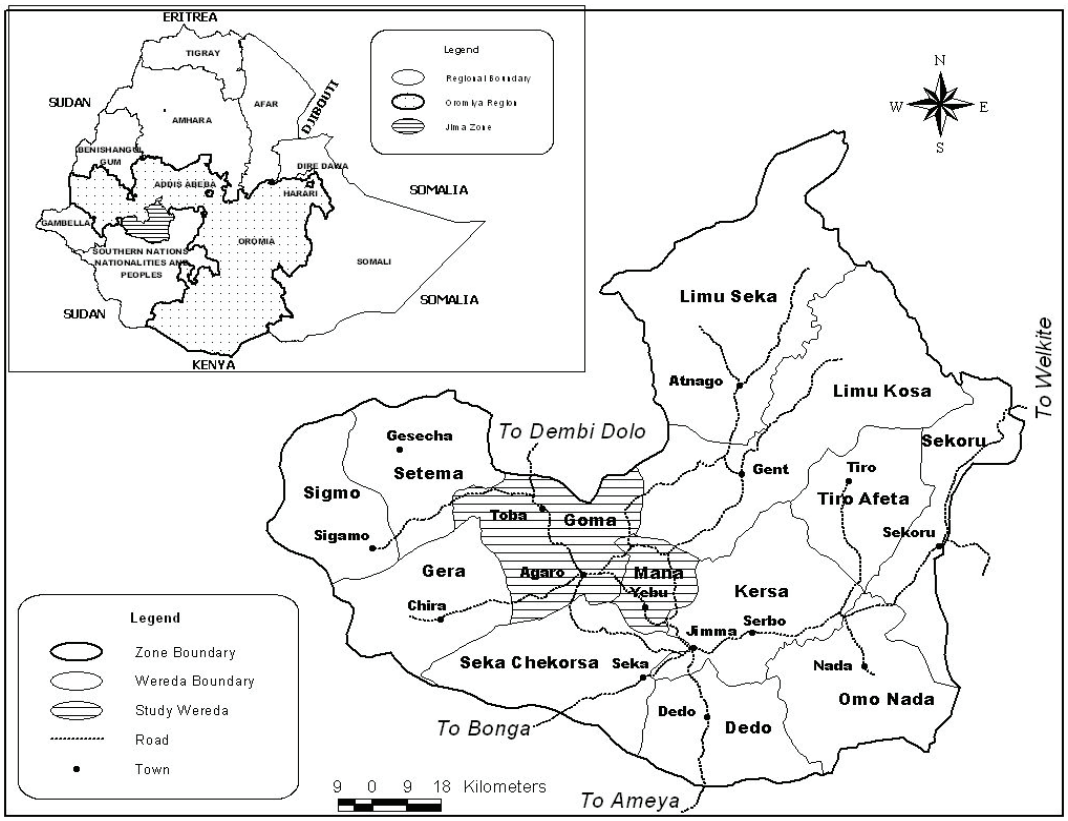

Figure 2: Location of the study area

Genji-Ilbu

Genji-Ilbu, like Chidero-Suse, is located in Gomma *woreda*. It covers a total area of about 2,080 ha. The *kebele* is situated at rather higher altitudes that range between 1,400 and 2,270 m a.s.l. A considerable expanse of indigenous trees cover the area. The forests host a diversity of wild animals including monkeys, apes, wild pigs, leopards, hyenas and a variety of birds.

The population of Genji-Ilbu is estimated at 8,411. About 97% of the total population are Muslims. The share of Muslims is higher in this *kebele* than in the other two *kebeles*. Agriculture is the prime economic activity and the people are mainly engaged in the cultivation of coffee and *khat*. *Khat* is more widely grown in Genji-Ilbu than in the other two *kebeles*. Cereals, pulses, root crops and *enset* are also cultivated. Though some fruit trees are grown in the area, the production of fruits in this *kebele* is not as widespread as it is in Chidero-Suse. Moreover, beekeeping and the production of timber for household furniture are important income sources in the area. Agaro town is the main market for this village, located at a distance of about 6 km. There are over 40 coffee collectors in the *kebele*, of which about half are licensed. Coffee suppliers actively operating in the area are not based in the *kebele*. They are based in Agaro but

purchase coffee from the collectors and directly from the farmers within the *kebele*. The *kebele* has four coffee processing mills, one of them being for dry coffee processing.

Haro

Haro is one of the 25 *kebeles* of Manna *woreda*. The *kebele* covers a total area of 1,132 ha. It is located at about 25 km from Jimma town on the way to Agaro. Yebu is the capital of the *woreda*. The climate of Haro is favourable for the cultivation of coffee and a range of other crops. There are six perennial rivers draining the *kebele*. Some of these rivers are used for traditional small-scale irrigation, particularly for the cultivation of *khat*.

The *kebele* has a total population of 4,578 in 1,205 households, of which 19% are female headed. Most of these households are engaged in coffee farming as coffee is the economic mainstay of the people in the area. According to information obtained from the Mana *woreda* Office of Agriculture and Rural Development, about 87% of the total area of the *kebele* is under cultivation and 71% of the cultivated area is under coffee. Several other crops are also cultivated in the area, such as cereals, *khat*, fruits and root crops. There are about 572 modern and 2,672 traditional bee hives in the *kebele*. Livestock production and beekeeping are widely practiced in Haro as compared to the other two *kebeles*. Cattle, sheep and goats are the most common types of livestock.

Yebu town has one of the most important coffee markets in Jimma zone. Farmers in Haro *kebele* sell their coffee at the market in Yebu. There are 2 suppliers and 15 collectors participating in the coffee market of the *kebele*. Being an important coffee producing *kebele*, there are 10 mills for coffee processing, of which 5 are for processing sun dried coffee.

3 Patterns of Coffee Production

This section describes the farming system in the study area and particularly the patterns of coffee production. After a brief introduction of the history of coffee production, details are given about agricultural production in the area, the importance of coffee to the household economy, the spatial and temporal patterns of coffee farming, and the constraints on coffee farming.

3.1 History of coffee production

Coffee is one of the major crops in the study area and has a long tradition of production. Although it is difficult to specify when the cultivation of coffee started in the area, its history dates back several hundred, if not thousand years. In particular, Gomma and Mana *woredas* are famously known for coffee farming and they are considered to be places where coffee originated (*Coffea arabica*). Coffee still grows wild in the area although coffee plantations at the household level have been expanding recently.

Farmers in the area have inherited the tradition of coffee farming from their fathers and forefathers. They declared that they still harvest coffee from trees that were planted over 30 years ago. However, production is limited to home gardens and smaller plots and is primarily meant to meet basic household needs. With the growing market for coffee, farmers have become aware of the potential gains from their produce. This has influenced their production behaviour to some extent: Instead of solely relying on wild coffee they started to plant more coffee trees of improved varieties promoted in the area by Jimma Agricultural Research Centre (JARC). As a result, demand for improved coffee seedlings has increased in the area. Improved varieties have been supplied through the *woreda* offices of agriculture. Nevertheless, as supply of improved seedlings is short of demand, the farmers also produce seedlings on their own initiative, both for own use as well as for the market.

Coffee production data for Jimma zone show an increase over the past years (Table 3). For instance, coffee production was 13% higher in 2007 than in 2004. Overall, coffee produced in the zone accounts for about 16% the country's annual production. However, only about 64% of the coffee produced in the zone is delivered to the central market while the remainder is either smuggled and illegally exported across the border with the Sudan or locally consumed.

Sun dried coffee accounts for about 76% of the total coffee marketed in the zone. Although washed coffee fetches relatively good prices for producer farmers, its production is limited due to lack of processing facilities, labour shortage with regard to picking up the red cherries, and fluctuating (low) prices. Hence, the pattern over the past years in the area indicates a tendency towards the production of sun dried coffee rather than washed coffee.

Table 3: Annual coffee production and amount marketed in Jimma zone

Year	Total production (tons)	Amount marketed (tons)			
		Washed	Sun dried	Total	% of total
2003/04	46,365	7,949	21,260	29,209	63.0
2004/05	44,618	6,372	20,340	26,712	59.9
2005/06	51,393	9,150	26,481	35,631	69.3
2006/07	52,475	6,946	26,354	33,300	63.5

Source: JZOARD, 2009

3.2 Production patterns for coffee and other crops

Farming system

Although coffee is the dominant crop in the study area, the farming system is generally characterised by the cultivation of a mix of crops, both cash and food crops. However, coffee farming constitutes the major land use. Other crops cultivated include cereals, root and tuber crops, fruits and vegetables, as well as pulses and spices. Maize, *teff*, sorghum and wheat are the most important cereal crops cultivated in the area. The major fruits produced include avocado, mango (*Mangifera indica*), orange (*Citrus aurantium*), banana (*Musa acuminata*), guava (*Psidium guajaova*), papaya (*Caracal papaya*), lemon (*Citrus lemon*), pineapple and jack fruit. Pineapple and jack fruit have recently been introduced by the Jimma Agricultural Research Center (JARC) and many farmers started growing these fruits on their farms. Other commercially important perennial trees grown include *khat*, sugar cane and *gesho* (*Rhamnus prinoids*), among others. *Enset* (*Ensete ventricosum*) is also cultivated and used mainly for household consumption. In the area, three major coffee farming systems are recognised and practiced at the household level: forest coffee, which is grown in the shade of natural forests; garden coffee, which is cultivated around the home compound; and plantation coffee, which is planted on individual farms. The coffee plantations are expansions of coffee farms on farmland that was previously under a different crop.

All the farmers interviewed cultivate coffee in the shade of indigenous trees. The most important shade tree species include *Albizia* spp., *Acacia* spp., *Cordia africana*, *Milletia* spp., *Erytherinia* spp., *Sesbania sesban* and *Leucenia lecocephala*. Shade trees provide numerous benefits for coffee production, such as creating a favourable microclimate, improving soil fertility, protecting the soil from erosion, and increasing infiltration rate (VAAST et al., 2001). Shade trees thus improve both the productivity and the quality of coffee grown in less than ideal conditions. In the group discussion, the farmers also recognised the benefits of shade trees in terms of improving and sustaining coffee production. In addition, the shade trees are used as important sources of fruits and timber, as well as for honey production. Coffee is also widely cultivated in home gardens in the area, often mixed with vegetables and fruit trees. Although the coffee gardens are smaller in size, they are well managed and productive as compared to the coffee farms located far away from the homestead.

The type of coffee cultivated in the study area is mainly local arabica with some species of improved arabica. The local arabica is indigenous and is locally known as *begeja* at the age of 10 to 20 years. *Begeja* thus refers to mature coffee trees and provides relatively good yields. About 97% of the farmers in the study area cultivate local arabica coffee and several of them still harvest coffee from trees that were planted over 30 years ago. According to the farmers, *begeja* provides yields every year and is resistant to diseases, sun burn and hail. Improved coffee varieties are also widely cultivated in the area: About 49% of the farmers cultivate improved arabica, which has been introduced by the Crop Improvement Project (CIP) and JARC over the last few years. These varieties are disease-resistant and provide yields every year if properly managed. It appears now that there is a gradual shift towards the planting of improved coffee cultivars in the area. Most of the coffee farming activities, including harvesting, are carried out by hand, which is time-consuming and labour-intensive. Improved varieties, in particular, require intensive care to provide better yields and are easily affected by diseases. Draught power is used for the cultivation of cereal crops. Use of fertiliser for coffee production is very limited in the area. The farmers instead use organic waste to supplement the natural fertility of the soil. Nevertheless, they use pesticides to fight coffee pests and diseases although such use is not intensive.

Land area under coffee

All the households included in the survey own farm land. However, this does not mean that there are no landless households in the area. The size of land holdings ranges from 0.13 to 2.5 ha, with an average size of 0.94 ha. However, differences in the average size of farm land are observed among the three *kebeles* (Table 4). Average per capita land holding size is smaller in Chidero-Suse and Genji-Ilbu (0.85 ha) than in Haro. However, land area under coffee cultivation is smaller in Chidero-Suse than in the other two *kebeles*. Coffee cultivation has long been a predominant activity in Chidero-Suse, as in many other *kebeles* of Gomma *woreda*. However, recent trends indicate a shift to the cultivation of other crops, mainly *khat* and maize, because of diminishing benefits from coffee cultivation. Moreover, the proximity of Chidero-Suse to Agaro town encouraged the expansion of *khat* cultivation as the market in Agaro is very attractive. According to Hailu and Aune (2003), *khat* is less risky to grow than cereals and coffee because it is less vulnerable to climate change and requires low labour inputs. Farmers in Haro devote more of their farmland to coffee than farmers in the other two *kebeles*.

Table 4: Total farm area per household and area under coffee

	Total farm area (ha)	Area under coffee	
		Mean (SD)	% of the total
Kebeles			
Chidero-Suse	0.85	0.47 (0.34)	55.3
Genji-Ilbu	0.85	0.58 (0.36)	68.2
Haro	1.15	0.86 (0.66)	74.8
Wealth category			
Poor	0.65	0.44 (0.27)	68.0
Medium	1.14	0.71 (0.52)	62.3
Rich	1.67	1.22 (0.63)	73.1

Source: Own field survey, 2007

Differences in total farm area and area under coffee were also observed across the different wealth categories. The wealth categories had been established according to local criteria of wealth which is based on coffee farm area. The survey results confirm the relationship between area under coffee and households' wealth status, which indicates the extent of households' dependence on coffee as a source of cash income. The rich own relatively large land holdings and areas under coffee. However, the poor devote a considerable portion of their farm land to coffee as compared to the medium wealth group. This indicates that large farm areas enable households to diversify their production.

Most farmers in the area obtained land through inheritance from their families although some came to own land or received additional farm areas during the 1975 land redistribution that was carried out in Ethiopia. Due to continued sharing of family land with new family members, the per capita land area has been diminishing over time. Increasing population pressure has turned land into a very scarce resource in the area. Thus, households have to find other ways of gaining access to land for cultivation. These commonly include share-cropping and renting land from other farmers. Of the total number of households included in the survey, 24% engage in share-cropping and 8% rent land. Land rental agreements usually last from 1 to 3 years and are concluded informally without going through any sort of legal process.

Farmers in the study area use livestock to provide them with draught power for cultivating their land (Table 5). Oxen are the most important animals used for ploughing. However, unlike many other places of the Ethiopian highlands, the use of oxen in the study villages is not very widespread. Of the interviewed farmers, only 61% use oxen for cultivation. While 39% of these farmers use their own oxen only, others share oxen with other households (31%) or borrow them for free (11%). Oxen are used by more farmers in Chidero-Suse (77%) than in the other two *kebeles* (58% in Genji-Ilbu and 48% in Haro). This is because of the stronger focus on cereal crop production in Chidero-Suse than in the other *kebeles*. Farmers who do not use oxen cultivate their land by hoe. The main reasons given by the farmers for manual cultivation include unsuitable terrain, insufficient plot size and unaffordable oxen prices. Other farm ac-

tivities such as weeding, stumping coffee trees and harvesting largely use family labour and, to some extent, hired labour. Farmers usually do weeding twice a year. Stumping is practiced in order to manage very old and exhausted coffee trees that need to be rejuvenated. Coffee trees over 30 years of age are normally stumped.

Table 5: Source of draught power and reasons for manual cultivation of land

	Frequency	%
Source of draught power (n=88)		
Used own animals	35	39.8
Shared with another household	27	30.7
Borrowed for free	10	11.4
Rented for cash	6	6.8
Exchanged labour/something else for draught power	10	11.4
Reasons for manual cultivation (n=102)		
Couldn't get access to draught animals	9	8.2
Draught animals too expensive	11	10.0
Land not suitable for animals	52	47.3
Plot too small for animals	38	34.5

Farming in the study area is almost entirely based on rainfall. There is hardly any irrigation although interviewed farmers declared that they needed it for cultivating vegetables, fruits and *khat*. A small number of farmers (9%) practice traditional irrigation along the rivers in Chidero-Suse and Haro. As *khat* cultivation is spreading in Chidero-Suse, there is a strong demand for irrigation from farmers.

3.3 Importance of coffee to household economy

As mentioned in the sections above, coffee farming represents the major source of cash and livelihood in the area. All the farmers included in the survey cultivate coffee on their farm land. The farmers are engaged in a subsistence mode of production in which most of their livelihood requirements are met with income obtained from coffee. Based on the local criteria of wealth, a considerable portion of the households in the area are poor, while only about 7% of the total number of households are rich. According to the survey results, coffee accounts for about 54% of the total annual household income. In this regard, differences were observed among the three *kebeles* and within the wealth categories (Table 6). The annual household income from coffee ranges from 140 to 9,000 Birr[1], with an average amount of 2,201 Birr. There is a significant variation in coffee income among the three *kebeles* ($p<0.05$). The highest average annual income is earned in Haro (2,900 Birr) and the lowest in Chidero-Suse (1,363 Birr). Nonetheless, Scheffe's post hoc test indicates that a statistically significant difference in household

[1] Ethiopian currency (1 Birr = US$ 0.11).

income from coffee is found only between farmers in Chidero-Suse and Haro. This is because farmers in Haro devote more land to coffee production and hence earn more income.

Table 6: Annual household income from coffee

	Income from coffee (Birr)				Contribution of coffee to household income
	Min.	Max.	Average	F-value	%
Kebeles					
Chidero-Suse	140	5,000	1,363	5.57*	49
Genji-Ilbu	400	7,000	2,235		62
Haro	460	9,000	2,900		53
Wealth category					
Poor	140	8,250	1,698	10.02**	54
Medium	150	9,000	2,261		51
Rich	580	9,000	2,969		63

NB: The mean difference is significant at the 0.05 (*) and 0.01 (**) levels.

However, the contribution of coffee to household income is highest in Genji-Ilbu (62%) and lowest in Chidero-Suse (49%), indicating that farmers in Genji-Ilbu are more dependent on coffee production than farmers in the other two *kebeles*. Differences in coffee income were also observed across the wealth categories. As shown in Table 6, the poor earn 1,698 Birr and the rich 2,969 Birr annually from coffee; the difference in mean values among the three groups is statistically significant ($p<0.01$). Scheffe's test shows a statistically significant difference only between rich and poor households and between rich and medium households. The difference between poor and medium households is not statistically significant.

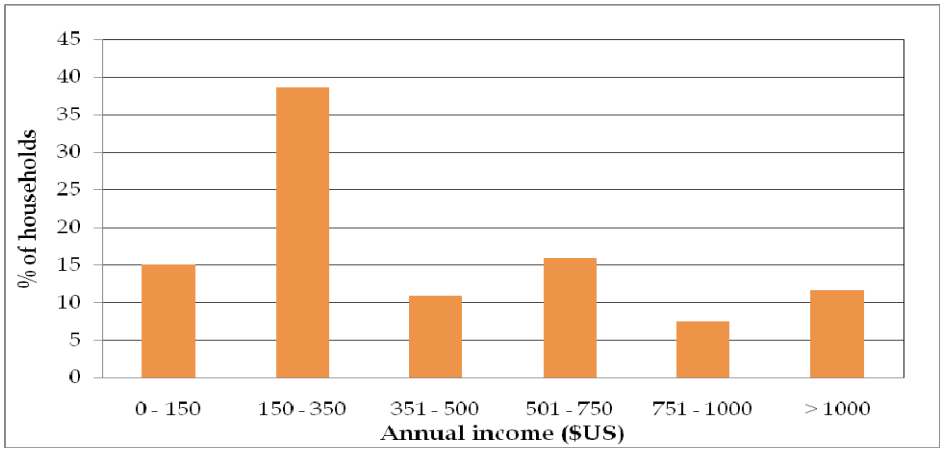

Figure 3: Total annual household income (in US$) during 2006/07

The mean annual income of households during 2006/07 was US$ 503. However, as shown in Figure 3, more than 50% of the households earn less than 350 US$ and more than 75% less than 700 US$, which is less than a dollar and two dollars a day, respectively.

3.4 Spatial and temporal patterns of coffee production

As the area is well suited to coffee production, farmers have been engaged almost totally in the cultivation of coffee. However, they have started to diversify their cropping patterns as they have become much more aware of the risks of depending on a single crop. According to the results of the survey, 12% of the interviewed farmers fully devote their farmland to the cultivation of coffee. The rest of them cultivate other crops, mainly cereals and *khat*, in addition to coffee. The cultivation of cereal crops and *khat* is widespread in Chidero-Suse and Genji-Ilbu. Nevertheless, the cultivation of cereal crops is hampered by wild animals in Genji-Ilbu, unlike in the other two *kebeles*. As a result, the farmers in Genji-Ilbu focus more on *khat* than on cereals in addition to coffee.

There have been changes in the farm area under coffee during the past several years (Table 7). Of the total respondents, 49% indicated that they had changed the area under coffee as compared to 10 years before, with 86% saying that they had increased the area under coffee while 14% had reduced the size of their coffee areas. According to the farmers, the decline in coffee area is mainly related to the cultivation of other crops than coffee due to price decline. That is to say that farmers have been reducing the area under coffee in response to the recent slump in world coffee prices. They reported that they were forced to cultivate cereals, vegetables, root crops and *khat*. Nevertheless, the current rise in the price of coffee is encouraging farmers to plant more coffee trees on converted land as well as in areas that were not under coffee before. Hence, the production trend shows that both the number of growers and the area under coffee are increasing. Survey results show that farmers' responses to the changes in coffee yield over the last 10 years vary. The majority of the farmers (69%) indicated that coffee yields were lower than 10 years before. About 27% of them indicated that there was an increase in coffee yields and 4% said there was no change.

Table 7: Changes in area under coffee.

	Frequency	%
Did you change the area under coffee compared to 10 years ago? (n=116)		
Yes	57	49
No	59	51
What changes did you make? (n=57)		
Increased the area under coffee	49	86
Reduced the area under coffee	8	14

The average coffee yield per household during the 2006/07 cropping season was 291 kg, with a maximum of 2,000 kg. However, coffee yield varies within the surveyed *kebeles* and among the three wealth categories. As shown in Table 8, average coffee yield was high in Haro (541 kg per household) and low in Chidero-Suse (188.4 kg per household), and the differences across the three *kebeles* were statistically significant ($p<0.01$). On the other hand, there is a positive association between a household's wealth status and coffee yield. Moreover, differences in coffee yield across the wealth categories are statistically significant ($p<0.01$). Since coffee is the major source of household income in the study area, it is to be expected that rich households produce more coffee than medium and poor households.

Table 8: Average coffee yield per household during the 2006/07 cropping season

	Coffee yield (kg)				Cereals (kg)			
	Min.	Max.	Average	F-value	Min.	Max.	Average	F-value
Kebeles								
Chidero-Suse	0.0	480.0	127.1	22.46**	0.0	2,120.0	437.1	0.83
Genji-Ilbu	20.0	550.0	188.4		51.0	1,700.0	487.4	
Haro	50.0	2,000.0	541.0		20.0	3,510.0	591.2	
Wealth categories								
Poor	17.0	850.0	210.0	7.39**	15.0	1,700.0	360.9	8.94**
Medium	0.0	1,500.0	315.5		0.0	1,500.0	547.2	
Rich	50.0	2,000.0	579.9		200.0	3,510.0	922.3	

NB: The mean difference is significant at the 0.01 (**) level.

About 84% of the interviewed farmers cultivate cereal crops at different scales. The annual average yield of all cereal crops cultivated per household was 502 kg. Although there are variations among the three *kebeles* in the yield of cereal crops, the differences are not statistically significant. However, significant differences are found across the wealth groups. Like coffee yield, the yield of cereal crops is associated with a household's wealth status, meaning rich households produce more cereal crops than poor households.

3.5 Constraints to coffee production

Coffee production in the study area is constrained by several factors. These include the prevalence of infectious coffee diseases, wild animals, volatile coffee prices and weak institutional support.

Several diseases affect coffee production in the area. The most common of these are Coffee Berry Disease (*Colletotrichum coffeanum*), Coffee Wilt Disease (tracheomycosis) and Coffee Leaf Rust (*Hemeleia vastatrix*). Although there are other diseases and pests, they are not causing as widespread damage as the ones mentioned. Coffee Berry Disease (CBD) affects green or immature coffee berries and the coffee flower at any stage of its development. The disease can cause crop losses of 75% or more. Previ-

ously, farmers used chemicals against CBD. However, the use of chemicals was not cost-effective and thus other options were sought. CBD-resistant cultivars were introduced through the JARC, and this turned out to be a very effective solution that is much favoured by the farmers.

Coffee Wilt Disease (CWD) poses another major threat to current and future coffee production in the area. The disease is infectious and is widely spreading in the area. It causes coffee trees to wilt and eventually die. According to agricultural experts of the *woreda*, the disease started to spread 10 years ago and no solution has yet been found to control or eradicate it. The farmers are not well aware of this disease and the management options to halt its spread. They are rather frustrated since the disease affects some of their mother coffee trees. No curative options are available yet, but research is underway at the JARC. Although not widespread, Coffee Leaf Rust (CLR) is also a constraint to coffee production in the area. The disease causes leaves to drop prematurely, thus reducing photosynthesis capacity, growth and yield.

Wild animals represent a major predicament to coffee production in the area. In particular, monkeys and apes hamper coffee production by destroying coffee seedlings and ripe coffee beans (the red cherries). Apart from the damage itself, the presence of these animals is a great pressure on farmers, who have to spend a considerable amount of time looking after and protecting their crops from destruction, instead of devoting it to crop production. Although the problem is common to all of the three *kebeles*, it is very serious in Genji-Ilbu. Killing wild animals is prohibited by law and hence there is a great deal of complaint among the farmers regarding the destruction caused by the animals.

Farmers in the study area require institutional support, in particular agricultural extension services, in order to improve the quality and quantity of coffee they produce and to fight coffee diseases. Historically, extension services in the area have been weak, often top-down and with low adoption of extension recommendations (Petty et al., 2004). Although there are some improvements, the support farmers receive from extension is still very limited. There is a shortage of improved varieties, and consulting as to the management of coffee farms is weak. The demand for improved coffee varieties is so huge that it could not be met by the locally available supply. Realising the demand, some farmers are involved in establishing coffee nurseries around their home gardens for own plantation as well as for selling in the market. Nonetheless, this individual-level endeavour to supply coffee nurseries is too limited to satisfy demand. JARC is involved in generating and multiplying improved coffee varieties. It is the only institution supplying improved seeds to the farmers at present.

Lack of improved coffee management practices is the second most important factor limiting productivity. The management of coffee farms is very poor; the farmers simply harvest what is produced with limited input such as labour, although productivity could be enhanced with certain labour investments and management efforts. Farmers rarely prune coffee trees and weeding is carried out once or twice a year. As one farmer

stated, many farmers visit their farms only during the harvest season. However, practices such as pruning and weeding are of paramount importance to increase both production and productivity. There is also a lack of knowledge and of appropriate farm implements. CIP used to assist farmers in this regard: They received important farm implements and they were advised about coffee farm management. This is not available any more, nor is support provided by other institutions such as the *woreda* offices of agriculture. On the other hand, the farmers in the study area operate in an environment which is conducive to the production of high value crops with a lower risk of production failure. Surprisingly, however, the farmers do not make any efforts to maximise the benefits from such great potential. Instead, most farmers spend their money and time on chewing *khat* and/or frequently going to nearby towns.

Changing coffee prices entail additional constraints to coffee production in the area. At times of price decline, the farmers are unable to meet their basic household needs. This discourages farmers from continuing to invest labour in their coffee farms and encourages use of household labour for the production of food crops or other cash crops such as *khat*. In extreme cases, the farmers are forced to shift to the production of timber. This is a major obstacle that affects farmers' focus on coffee production and the maintenance of its quality and quantity. In the group discussions, a farmer from Haro *kebele* indicated that farmers in the area had lost their confidence in coffee production because of volatile prices. As he said: *"As it is difficult to tell when a pregnant woman is going to give birth, so is predicting the price of coffee tomorrow."*

4 Analysis of the Coffee Value Chain

This section provides an analysis of the coffee value chain in the study area. Specifically, the section presents detailed descriptions of the marketing chains, the stakeholders in the chain and their roles, an overview of coffee prices in the chain, actor and stakeholder relations, and the role of government in creating enabling conditions in the coffee marketing chain.

4.1 Coffee marketing in the study area

At the beginning of the coffee marketing chain are the producer farmers, who plant and manage coffee trees. Farmers sell their coffee mostly to collectors, suppliers or to a cooperative in the neighbourhood. Hence, there are different market outlets for coffee in the area. The most important of these outlets are the free market, cooperatives and the fair-trade market.

Farmers do not sell all of their coffee at once. In particular, sun dried coffee is sold over a long period of time. The buying season starts after the marketing of red cherries is over, and is announced officially by the government. It usually lasts from November until July. According to the survey results, a farm household sells sun dried coffee 8 times a year on average. The maximum number is 30 times and the minimum is only once within a year. Even at times of attractive coffee prices, farmers do not sell all of their coffee at once. They keep some as a reserve for times when they need cash, so this is a kind of saving mechanism. The price of sun dried coffee rises in June and July because of a shortage of supply in the market. In this regard, there is no considerable difference in the frequency of selling coffee between poor and rich households.

The free market

Normally coffee producers sell their coffee to a trader, a collector or supplier, in the local market. This market represents what we call the free market in that it is basically driven by local demand and supply. Such market outlets are present in all the study *kebeles*. Yebu and Agaro towns are the market centres in the study area where most of the coffee trade takes place. While Yebu is a nearby market place for the farmers in Haro, the market in Agaro serves farmers from both Chidero-Suse and Genji-Ilbu. Except Genji-Ilbu, the study *kebeles* are located at a close distance from the nearby market place. Genji-Ilbu is relatively distant, with the farmers having to travel an average of 5 to 7 km to reach the main market in Agaro. In these markets, coffee is sold based on market prices set every day.

Unlike farmers in the other two *kebeles*, farmers in Chidero-Suse sell their coffee in the free market. The main reason for this is the absence of a well-functioning alternative marketing outlet in the *kebele* that could offer competitive prices or benefits. Although there is a cooperative in the *kebele*, it is not particularly successful at maximising the advantages of organised marketing (see below for more information).

Cooperatives

Cooperatives have long been used as important outlets particularly for agro-commodities. The history of cooperatives in Ethiopia dates back to the 1950s. However, cooperative movements were very active during the *dergue*[1] regime. Cooperatives are intended to support farmers by supplying market information, credit, farm implements, etc. Nonetheless, despite the existence of 4,052 agricultural cooperatives in Ethiopia with a total membership of 4.5 million, smallholder farmers continue to be under-served, exploited and marginalised (Walton, 2001). A breakthrough was achieved in 2001, however, when the government of Ethiopia abolished the requirement for cooperatives to sell all coffee through the national auction, opening the way for direct export sales (Dempsey and Campbell, 2006). This has to some extent encouraged cooperative movements and enhanced their roles in stabilising local coffee prices. In general, the cooperatives have thus far provided higher profits to farmers than have private traders although it is too early to assess the sustainability of their roles in counteracting volatile coffee prices (Kodama, 2007).

There are also some cooperatives established in the study *kebeles* to enhance coffee production and marketing in the area. Many farmers sell their coffee to the cooperatives, and cooperatives with mills process the coffee. Some farmers use hand pulpers to process their coffee. However, not all farmers sell their coffee to the cooperatives. Asked to indicate to whom they preferred to sell their coffee, the farmers in Genji-Ilbu mentioned cooperatives while the farmers in Chidero-Suse opted for private traders. This is because the cooperative in Chidero-Suse is not working well and is currently in a state of bankruptcy. By contrast, the cooperative in Genji-Ilbu is a member of OCFCU and is performing well. Many farmers in Chidero-Suse are extremely dissatisfied with the cooperative regarding the timing of payments. Since the financial situation of the cooperative determines when the farmers are paid, they only receive their money long after they delivered their coffee.

OCFCU is the largest cooperative union that provides services primarily to its member cooperatives and facilitates the coffee trade. Unions are stronger negotiators than individual farmers, particularly in the upper levels of the coffee marketing chain. Since the cooperative in Genji-Ilbu is a member of OCFCU, member farmers can take advantage of the various facilities available. Being a member of a union, a cooperative gains several benefits that include better coffee prices in the form of dividends, credit facilities at times of coffee purchase, market information and technical assistance. The cooperative collects coffee from the farmers and delivers it to the union. The union either sells the coffee at the central auction market in Addis Ababa or directly exports it without paying tax. In Ethiopia, all coffee is sold by law at the auctions or, based on special arrangements, through cooperatives/unions. The unions are exempted from tax and have the privilege of directly exporting, thereby skipping the coffee auctions. Unions export coffee on a fair-trade route or a conventional route (Kodama, 2007). Nevertheless, un-

[1] *Dergue* is the military government that ruled Ethiopia between 1974 and 1991 before it was ousted by the current government.

ions sometime buy coffee from private traders in the name of fair trade, which is an illegal act (personal communication from an expert at the Ethiopian office of Oxfam America). The time of payment to union member cooperatives depends on the financial situation of the union; payments are usually made immediately or a few weeks after coffee delivery.

The fair-trade market

Fair trade is a niche or speciality market intended to guarantee producer farmers in developing countries a fair price for their coffee while meeting the requirements of the fair-trade code of conduct. The scheme is designed to offer farmers better prices, with a minimum price that is initially paid and the fair-trade premium paid later on in various forms. This marketing opportunity is available in the study area, particularly in Haro. The fair-trade scheme in this *kebele* is facilitated through an individual coffee trader who collects coffee from participating farmers. There are about 150 fair-trade farmers in Haro *kebele*, which is about 12% of its total number of households. The fair-trade arrangement is made with an agency called Rainforest Alliance. Though most farmers in the area have no detailed knowledge of this scheme, some of them do participate and sell their coffee to the coffee trader in charge of the scheme. Unlike the situation in other countries, exporters in Ethiopia are not allowed to buy directly from the farmers (Oxfam, 2002). However, the situation in Haro appears to reflect a strategy to directly obtain coffee from the farmers in the name of a fair-trade arrangement.

Overall, participation in the fair-trade scheme in the area is limited and some of the participating farmers have even withdrawn. Although the fair-trade strategy is intended to protect producer farmers from unfair terms of trade, the practical situation in Haro is different. Most farmers do not have trust in the scheme since participating farmers do not receive any marked benefits compared to non-participating farmers. This clearly shows that the fair-trade system in the area is not working to the benefit of poor producer farmers, nor does it help to realise sustainable coffee production. In the group discussion, the farmers indicated that they preferred to sell their coffee to a cooperative or in the free market instead of selling it in the fair-trade scheme that is dominated by an individual trader. However, experiences in other countries indicate the comparative advantages of fair-trade networks for producer farmers. For example, Bacon (2005), based on a study in Northern Nicaragua, suggests that participation in organic and fair-trade networks reduces farmers' livelihood vulnerability.

On the other hand, the cooperative in Genji-Ilbu has got an initiative underway to obtain fair-trade certification for its farmers' coffee. Certification is facilitated by OCFCU and is one of the most important services it renders to member cooperatives. This appears a more organised move than the individual initiative in Haro, which is perhaps driven by personal profit motives. Upon certification, the cooperative will be entitled to directly export coffee without paying taxes, and a portion of the export income is to be used for the provision of social services such as schools, drinking water, clinics, electricity and other basic infrastructure to the community. As Bigirwa (2005) clearly pointed out, for a considerable number of smallholder farmers from the South to be involved in fair trade,

deliberate efforts should be made to support the organisation of small-scale farmers into larger bodies, whether as cooperatives or as associations, capable of exporting coffee and managing their organisations effectively. However, what impact the fair-trade arrangement has on the living conditions of farmers in Genji-Ilbu is yet to be seen.

In general, there were marked differences in the amount of coffee marketed in the study *woredas* over the past 10 years (Table 9). The amount of sun dried coffee supplied to the central market shows a progressive increase in Mana *woreda* while that of washed coffee has fluctuated since 1999. On the other hand, the amount of washed coffee supplied from Gomma *woreda* shows an increasing trend over the past 10 years while that of sun dried coffee shows a general decline, particularly since the year 2003. The main reasons for the decline were the expansion of illegal trade in Gomma *woreda* where coffee is exported without reaching the central national market, and limited control in the marketing of sun dried coffee as compared to washed coffee. Washed coffee is not illegally traded in the area since it fetches a competitive price at the central market. In addition, the amount of washed coffee produced is documented and properly monitored by the *woreda* Office of Agriculture and Rural Development. The office routinely checks if all the coffee processed at the wet processing mills is delivered to the central market.

Table 9: Coffee supplied to the central market from Mana and Gomma *woredas* (in tons)

	Mana		Gomma	
Year	Washed	Sun dried	Washed	Sun dried
1998/99	-	-	885.9	9,494.7
1999/00	1,348.7	1,753.8	1,000.6	10,641.8
2000/01	733.5	1,760.7	1,535.3	8,478.4
2001/02	432.6	2,712.6	2,218.6	6,954.6
2002/03	741.2	2,404.0	752.2	11,076.8
2003/04	1,126.9	3,158.3	2,599.1	13,395.0
2004/05	1,284.4	3,753.0	2,065.7	8,022.4
2005/06	2,251.1	4,903.1	2,693.7	8,253.5
2006/07	1,721.9	5,198.3	2,234.9	7,040.3
2007/08	1,767.1	5,587.7	2,273.1	7,182.5

Source: Mana and Gomma *woreda* offices of agriculture and rural development

Apparently, there has been a general shift in recent years towards the production of sun dried coffee instead of red cherries in the study area. This is mainly because of:

- Changes in the rainfall pattern and the effect of excessive moisture on the red cherries;
- Unstable and unpredictable coffee prices in the local market;
- The possibility of storing sun dried coffee for a longer period; and
- The weakened role of cooperatives in the coffee market.

4.2 Stakeholders in the coffee chain

Consequent to the 1991 introduction of the market economy in Ethiopia, the coffee market was liberalised, giving way to the participation of new stakeholders in the chain. Previously, coffee marketing in the country was linear and involved few stakeholders, among which the government was the main and dominant actor. The most important stakeholders in the marketing chain in the study area include producer farmers, various kinds of traders (including collectors, suppliers and exporters), middlemen (brokers locally called *dellalas*), exporters (individuals and cooperatives) and the government. The stakeholders considered in this paper include only those that participate in coffee marketing within the country.

Producer farmers
Producer farmers are at the base of the coffee supply chain. The producers, who are smallholder and subsistence farmers, sell their coffee to other stakeholders in the chain. They are responsible for growing and harvesting coffee, thereby determining the amount and quality of coffee produced.

Collectors and suppliers
Collectors and suppliers are important actors in the coffee supply chain of Jimma area. Collectors are basically traders holding a licence without which they are not permitted to operate in the coffee market. In order to obtain the licence, a collector should have 5,000 Birr in working capital, a place and balance to collect and weigh coffee, and a small warehouse. Nevertheless, a number of collectors are short of the working capital required and thus work as agents of the suppliers rather than as independent actors in the coffee value chain. The collectors collect coffee from the farmers. Although most of the collectors are not actually engaged in coffee production, there are some who cultivate coffee and at the same time collect coffee from other farmers. We asked the farmers why some of them were engaged in the coffee trade and others were not. They indicated that farmers were interested in taking part and benefiting from the trade, but most of them lacked the cash to participate.

Coffee suppliers are licensed traders and are supposed to collect coffee directly from the collectors. The requirements to be met to qualify as a coffee supplier are a working capital of 100,000 Birr, a coffee drying field and a warehouse. Many of the suppliers in the study area have collection centres, pulping stations and warehouses. The licence is subject to renewal every year on condition of good performance in the coffee market. For instance, a supplier is expected to deliver coffee to the central market at least once in a year to get his licence renewed. Hence, the suppliers organise as many collectors as they can in order to obtain a greater bulk of coffee from the producers. Sometimes, suppliers even make their way into the villages to directly collect coffee from the producer farmers. On average, a supplier in the study area supplies between 5,100 and 6,300 quintals of sun dried coffee annually to the central market. Suppliers who fail to collect the required amount of coffee to deliver to the central market sell their coffee through other routes. Such practices not only distort the local coffee market but also encourage the marketing of poor quality coffee in the area.

Middlemen and others

The middlemen participating in the coffee trade in the study area are illegal traders who are engaged in the coffee trade without holding a licence. These are rather small traders who purchase coffee from producer farmers. The middlemen are locally called *dellalas*, which literally means "brokers". The middlemen with better knowledge of the market price and other coffee buying systems purchase coffee from the farmers below the market price. An important time when the middlemen operate is during the transition period from the red cherry market to the sun dried coffee market. This normally extends from late October to early November, during which time the coffee market is not officially open. The middlemen collect and transport coffee in greater bulk than the producer farmers, who sell their coffee little by little. In general, the middlemen are part of the informal economy operating in the area.

There are also other people who intermittently participate in the coffee trade. These include school teachers, people engaged in other occupations in government offices and individuals who have money during peak seasons of the coffee market. Since they do not hold a licence, their activity is limited to collecting coffee from producer farmers and selling it to suppliers.

Cooperative in Chidero-Suse

The cooperative in Chidero-Suse is one of the oldest cooperatives in the area. It was established in 1976. The cooperative has two wet processing mills, one of which is not functional at the moment. Overall, the performance of the cooperative has been poor since 1993 and it is currently bankrupt. The cooperative has 465 members, of which only less than a quarter of them are active members supplying coffee. Until 1992, the cooperative operated efficiently in providing services to producer farmers in the area; it supplied up to 250,000 kg of coffee to the central market, and this is now reduced to 20,000 kg. It also used to supply agricultural inputs and farm implements for both coffee and cereal production. In recent years, however, the cooperative has not been able to secure credit from the banks in time to purchase coffee. The main reasons include administrative inefficiency and corruption on the part of the committee members, in particular their failure to submit credit requests in good time and problems related to the timely reporting of financial reports on previous credits. As a result, the cooperative starts buying coffee late and ends up collecting a smaller amount. In 2008, for instance, it was unable to obtain any credit from the banks and hence did not purchase any coffee at all. The management is very weak and not committed to improving the cooperative and its services to the members. Rather they focus on their own benefits such as salaries, per diem and other personal incomes.

Despite this, producer farmers need the presence of the cooperative as it helps to stabilise the local coffee market. Local coffee traders and former cooperative committee members think otherwise, though; they do not want to see the cooperative strengthened and function properly. In 2008 the cooperative became a member of OCFCU. Indeed, OCFCU has been providing credit for the cooperative, which in turn sells its coffee to

the union, but without dividends. Recently, however, the cooperative has become a full member of the union, meaning that dividends are expected to be paid.

At the time of its establishment, the union comprised 34 cooperatives and about 23,000 farm households as members. The prime objective of the union was to improve farmers' incomes by maintaining the quality of coffee production and regulating the local coffee market. The union undertakes a range of activities that directly or indirectly help to achieve this objective. By 2007, the number of member cooperatives and farm households had increased nearly four- and sixfold, respectively (Table 10).

Table 10: Members of and coffee sold by OCFCU over the last 10 years

Year	Members		Coffee sold	
	Cooperatives	Farm households	Volume (tons)	Sales value (Birr)
1999	34	22,503	–	–
2000	34	22,821	–	–
2001	34	23,043	126	2,271,157
2002	34	23,593	375	7,679,344
2003	34	23,593	967.2	18,796,130
2004	74	47,912	2,431.5	45,309,011
2005	101	74,795	2,690.5	67,207,845
2006	115	102,950	3,182.3	86,644,278
2007	129	128,391	3,248.2	102,725,628

Source: OCFCU

Cooperative in Genji-Ilbu

The cooperative in Genji-Ilbu was established in 1980. Currently it has 796 members (57% of the total households in the *kebele*), of which 54 are women. The cooperative performs relatively well in providing services to coffee farmers in the area as compared to the cooperative in Chidero-Suse. It has one wet processing mill and purchases red cherries only. Since it is a member of OCFCU, it benefits from better support in terms of accessing credits from the banks and agricultural inputs. The cooperative collects coffee from its members and other farmers in the area. Though they are not severe, this cooperative also suffers from credit problems at times. In most cases, the credits are secured late, after the announcement of coffee purchases. In addition, there is a time lag in coffee buying due to committee meetings to decide on the price of coffee purchased. The suppliers collect most of the coffee during this period when the prices are low. As the farmers have no alternatives, they cannot wait until the cooperative has taken its decision. Rather they continue selling their coffee to private traders despite low prices as most of them are in urgent need of money. Nevertheless, interviewed farmers indicated that the cooperative played a significant role in stabilising the local coffee market and that they were being protected from the low prices of private traders. They further indicated that the cooperative should be strengthened and in future collect not only red cherries but also dry cherries. As Oxfam (2005) noted, small-scale farmer organisations

are striving to obtain financing to increase their processing and exporting capacities so that they can increase their share of the price paid by international traders and buyers.

Exporters

At the end of the chain are the coffee exporters. They include individuals and cooperative unions. There are over 40 registered individual exporters in Ethiopia and six cooperative unions. Most of the exporters have agents working in the coffee producing areas. Individual exporters mostly buy coffee from suppliers at the central auction. In some cases, exporters obtain coffee from suppliers operating in the respective areas of coffee production. The unions mainly buy coffee from member or non-member cooperatives. The exporters have access to market information and coordinate operations in the local coffee chains.

The government

The government is the main stakeholder in the coffee value chain. The government fixes the price of coffee and regulates its marketing. The Tea and Coffee Authority, a government body, is responsible for the production and marketing of coffee in Ethiopia. It issues licences to traders at the various levels of the chain, from collectors to exporters. The coffee collected from the local markets is checked to make sure it meets minimum quality standards before it is delivered to the central auction market. Check points are established in major coffee producing regions of the country. In the study area, important check points are located in Yebu and Agaro towns. The officers in charge of quality control in these check points are government employees with relatively low pay who can thus be easily manipulated by coffee suppliers.

As shown in Figure 4, the coffee chain in the study area is very complex and consists of various actors, legal and illegal, linked in the chain. Although not widespread, the illegal coffee trade prevails in the study area. Coffee smuggling occurs particularly when the price of coffee falls at the central auction market. During such price declines, licensed traders also participate in the illegal coffee trade. A common route of coffee smuggling has been and is still running through Agaro town to Nekemt, then to Bahir Dar and on to Sudan. More routes have emerged recently on which coffee is smuggled to Sudan through Gambela and Assosa. At the core of coffee smuggling are suppliers operating in the study area. Illegal coffee traders offer higher prices to the farmers as they do not pay taxes and other fees. This enables coffee smugglers to collect a considerable volume of coffee as they attract the farmers by offering them a better price for their coffee than the legal market.

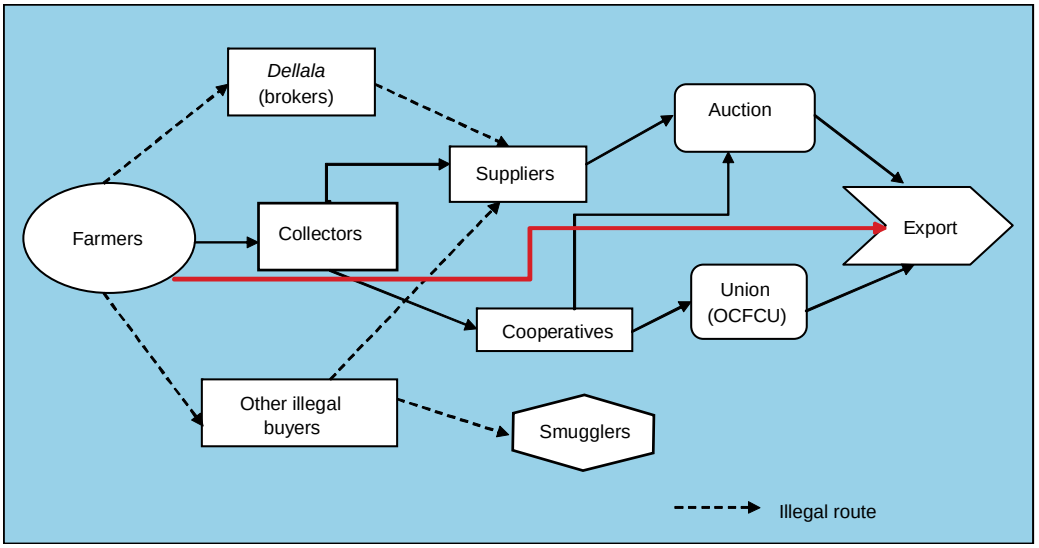

Figure 4: The coffee marketing chain and stakeholders in Jimma area

Since prices are not differentiated based on the quality of coffee produced, maintaining uniformly high quality has remained a major challenge in the area. Both collectors and suppliers focus rather on the amount of coffee they buy than on its quality. This makes farmers reluctant to give particular attention to coffee quality in production as well as in processing. Farmers do not lack a market for their coffee despite its varying quality. Competition with the local coffee traders, mainly among the suppliers, results in a market that does not take coffee quality into account. Furthermore, the expansion of illegal trade in the area encourages the purchase of low quality coffee in the local market. It has become standard practice to take the illegal trade route when coffee supplied to the central national market fails to pass the quality standard check at the *woreda* level.

4.3 Coffee prices in the chain and price margins

Coffee marketing in the study area takes place throughout the year. However, the peak season of marketing is during the harvest of red cherries. Red cherries are sold out from mid-September to the first week of December. Selling sun dried coffee resumes afterwards and continues through the year until the next coffee season.

Marketing of coffee starts on the farms by producer farmers. Farmers are the main actors in the coffee value chain. They are involved in transporting the produce to the purchaser's site or give information to collectors. The starting price for the red cherries is first announced by the washing stations owned by cooperatives or private individuals. Local collectors, the *sebsabis*, move to the roadside with their balance to buy red cherries and send them immediately to washing stations. Since cooperatives are the owners of washing plants/machines, they determine the starting price for a kilogram of fresh red cherries and are followed by private washing stations. During the 2007/08 coffee season, they set a price that ranged between 0.9 and 1.5 Birr/kg, to which private processors added up to 0.25 Birr/kg. This was in late September and early October. The maximum harvest load was reached in November and the maximum price offered was 4.00 Birr/kg of red cherries.

Farmers sell red cherries on a daily basis. The income is mostly spent on food items for household consumption since they face food shortages during the last months (from July to October) preceding the coffee harvest season. They sell on average 3 to 10 kg of coffee daily to local collectors in the village (especially those who have mini shops in the village usually collect most of the coffee during this early period).

As shown in Table 11, there was no considerable difference in the price of red cherries offered to producer farmers by the collectors and suppliers at Agaro market in 2006/07. However, the cooperatives offered different prices: While the cooperative in Chidero-Suse offered 3.00 Birr/kg of red cherries, the cooperative in Genji-Ilbu offered 3.20 Birr/kg. In the same year, collectors sold red cherries for a similar price to suppliers and cooperatives. Fair-trade farmers in Haro received a better price (3.20 Birr/kg) in 2006/07 from the organisation engaged in the fair-trade scheme than from the collectors and suppliers. But the price paid to the farmers was lower than what was offered to the collectors (3.25 Birr/kg).

Table 11: Coffee prices, the value chain and price margins at the local markets. (Continues next page)

Year	Market place	Coffee chain		Red cherries (Birr/kg)[1]	Sun dried (Birr/17 kg)	Margins (Birr/kg)
2006/07	Agaro	Farmer to:	Collector	3.20	130.00	
			Supplier	3.20	140.00	0.00 (10.00)*
			Cooperative	3.00	–	
			Union member cooperative	3.20	–	
		Collector to:	Supplier	3.25	140.00	
			Cooperative	3.20	–	
			Union member cooperative	3.20	–	
	Yebu	Farmer to:	Collector	3.00	135.00	
			Supplier	3.00	140.00	0.00 (5.00)
			Cooperative	2.75	–	
			Fair-trade organisation	3.20	–	0.20
		Collector to:	Supplier	3.25	140.00	
			Cooperative	3.25	–	
			Fair-trade organisation	3.25		
	Agaro	Farmer to:	Collector	3.50	150.00	
			Supplier	3.75	160.00	0.25 (10.00)

[1] The conversion factor of red cherries to clean beans is approximately 5:1, and that of dry cherries to clean beans is 2:0.45.

Year	Market place	Coffee chain		Red cherries (Birr/kg)[1]	Sun dried (Birr/17 kg)	Margins (Birr/kg)
2007/08			Cooperative	3.50	–	
			Union member cooperative	3.75	–	0.25
		Collector to:	Supplier	3.75	160.00	
			Union member cooperative			
	Yebu	Farmer to:	Collector	3.50	150.00	
			Supplier	3.75	160.00	0.25 (10.00)
			Cooperative	3.75	–	0.25
			Fair-trade organisation	–	–	
		Collector to:	Supplier	3.75	160.00	
2008/09	Agaro	Farmer to:	Collector	3.50	135.00	
			Cooperative	3.75	–	0.25
			Union member cooperative	3.75	–	
		Collector to:	Supplier	3.75	160.00	0.25
	Yebu	Farmer to:	Collector	3.50	150.00	
			Supplier	3.75	160.00	0.25 (10.00)
			Cooperative	3.50	–	0.25
			Fair-trade organisation	–	–	
		Collector to:	Supplier	3.75	160.00	

Source: Own market survey, 2008 & 2009

* Figures in parentheses indicate price margins for sun dried coffee.

Although the price offered by cooperatives is lower than that of other traders, they protect the farmers by setting a floor price below which other traders could not buy coffee. This is seen as an advantage by the farmers as it protects them from unfair coffee prices offered by the traders. In this regard, farmers in Genji-Ilbu and Haro emphasised the contribution of the cooperatives in regulating the local coffee price. Nevertheless, cooperatives perform relatively strict checks on the quality of coffee they buy as compared to private traders. In the discussion, the farmers indicated that 6 Birr/kg of red cherries is a fair price for their coffee, which is about half of the average price of red cherries during the last three years.

Figure 5 presents the patterns of producer and export prices of coffee and the price margins over the last 16 years. Since 2001/02 both export prices and the margins have increased while producer prices have considerably fluctuated. On average, coffee producers received about 38% of the export price. Even at times of high export prices

(such as in 1994/95, 1995/96, 1999/00, 2005/06 and 2006/07) producers only received a small share of the export price. This is part and parcel of the problem in other coffee producing developing countries of the world where the share received by producers is generally low. For example, coffee producers in Tanzania received about 42% of the export price of arabica coffee and 30% of the price for robusta in 1998/99 (Baffes, 2003). According to Worako et al. (2008), multiple factors contribute to the low share received by producers in Ethiopia. Among others, transport costs and government-related taxes account for 35 to 45% of the price spread between producer and auction. Although the market in Ethiopia is liberalised, the government maintains some level of control over producer prices. Further, the involvement of different actors in the chain contributes to reducing the share of producer prices.

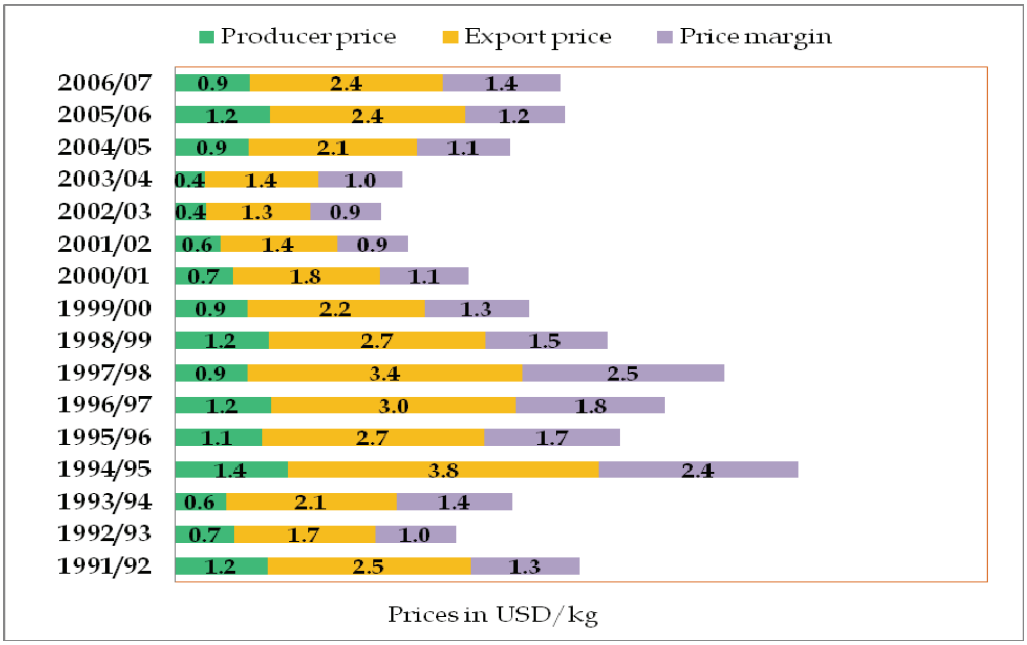

Figure 5: Patterns of producer prices, export prices and price margins of coffee

4.4 Actor and institutional relations

In order to gain a better understanding of the position of smallholder farmers in the global coffee value chain, it is important to analyse who the actors are and what their interactions are like (Fromm and Dubon, 2006). As discussed in the sections above, various stakeholders are involved in the coffee value chain in the study area. The relationships and interactions among these actors are very complex and will be discussed in this section.

Farmers and collectors/suppliers

In the study area, there are many ways in which farmers and collectors are linked to each other. The collectors and suppliers lend money to the farmers at times of financial hardship, and this is something which the farmers value and which strengthens their relations. Farmers borrow money from collectors or suppliers which they will return in kind, that is to say coffee at the market price. Furthermore, farmers value trust and consider it the basis of their relations with collectors or suppliers. Farmers sell their coffee to collectors or suppliers whom they trust in terms of weighing up coffee and offering them a price according to the current market.

Farmers and middlemen

Farmers also sell their coffee to middlemen. However, this relationship is infrequent and prevails at times when the middlemen offer a competitive price. In most instances, the middlemen are deployed by unlicensed traders and coffee smugglers to collect coffee before the start of coffee buying is officially announced. Licensed traders also sometimes work together with middlemen in order to collect as much coffee as possible.

Collectors and suppliers

Suppliers normally buy coffee directly from the farmers and/or through the collectors. The collectors in the coffee chain include licensed traders, producer farmers who partake in the local coffee trade, and jobless youngsters in the area. Although a supplier could buy coffee from any of the collectors, most of the collectors have previously established business relationships with suppliers. As most collectors face financial constraints with regard to collecting coffee, they work as agents of suppliers. They depend on the suppliers for buying their coffee and thus have no bargaining power when selling coffee to suppliers. Until 2008, suppliers were not permitted to directly collect coffee from the farmers although they still participated illegally in the chain.[1] Therefore, they deployed as many collectors as they could to collect coffee. In other words, most collectors have not been independent actors in the coffee value chain, but agents of the suppliers. Suppliers use this relationship to compete with other suppliers in the volume of coffee they purchase and to weaken the role of middlemen in the coffee chain.

Farmers and cooperatives/unions

Farmers become related to cooperatives by becoming a member. Membership is voluntary but farmers should pay a registration fee of 60 Birr at the beginning. Full membership is granted after paying 384 Birr, which may be paid at once or in six instalments. A farmer who pays the first instalment could be granted membership and can receive his share of the profits. In addition to purchasing coffee, the cooperatives provide the farmers with coffee drying implements and other agricultural inputs.

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1 In 2008, collectors were banned from operating in the local coffee market and the suppliers were allowed to directly collect coffee from producer farmers.

Collectors and cooperatives

In the area, some collectors supply coffee to the cooperatives. In particular, relatively strong cooperatives like the one in Genji-Ilbu attract collectors that supply coffee to them. Some cooperatives, such as the one in Chidero-Suse, employ collectors who can collect coffee from the farmers as most farmers are not willing to supply their coffee to the cooperative.

Cooperatives and unions

A cooperative becomes related to a union by becoming a member. As a member a cooperative gets support from the union in many ways. The main support services include exporting its members' produce, provision of a warehouse, supply of modern inputs, providing transport, training and capacity building, and credit facilities (Oxfam, 2002). As indicated in the sections above, the cooperative in Genji-Ilbu is a member of OCFCU and benefits from some of the support services provided by the union.

4.5 The role of the government in the coffee value chain

The government is an important stakeholder in the coffee sector of Ethiopia. Since coffee earns a good portion of the national income, the government should play a considerable role in supporting its production and marketing. It is responsible for regulating the coffee trade in the country, which consists of several mechanisms at the different levels of the chain that are designed to ensure the quality and legitimacy of the coffee trade. The Coffee and Tea Authority (CTA) has been in charge of handling the marketing of coffee in the country. It was responsible for coffee quality grading before the days of auction and export, before the Ethiopian Commodity Exchange (ECEX) took over the marketing of coffee in 2008 (see Box 1). There are a growing number of complaints by suppliers and exporters regarding ECEX's handling of coffee marketing though it is too early to assess its efficiency.

The government used to give due attention to the production aspects of coffee, assisting farmers by supplying necessary inputs and technical assistance. However, the support provided to farmers has recently been dwindling and the government is instead focusing on regulating the marketing of coffee. For instance, the extension system is weak and not geared to giving technical assistance to coffee farmers. In the discussions, the farmers indicated that they received very little support from agricultural extension in the areas of coffee production and quality maintenance. As a result, the country was unable to benefit from its distinctive high quality coffee in the speciality and gourmet coffee market, because of the limited attention given to quality maintenance (Teferi and Dejene, 2002). Coffee quality is lost in production, processing and marketing, but things could be improved if there was proper training and technical support in place. As a result, coffee from Jimma area is usually graded low quality at the central auction market as compared to coffee from Yirgachefe and Harar. The main reasons include little investment in quality control, labour shortage for coffee picking due to reduced labour migration to the area, and excessive moisture when coffee ripens. Efforts are undertaken by the unions to assist the farmers in improving coffee production and fa-

cilitating coffee marketing. Nevertheless, such efforts are hampered by organisational problems and limited capacity. Though farmers are board members of the unions, they hardly influence the decisions made. Instead, the directors, who are usually government appointees, make most of the decisions without taking account of the farmers' priorities.

The Ethiopian Commodity Exchange (ECEX)

ECEX, a new type of commodity marketing body in Ethiopia, started its operation in 2008. It is a national multi-commodity exchange service intended to provide market integrity by guaranteeing the product grade and quantity of coffee supplied, as well as enhancing marketing efficiency, transparency and risk management. Coffee is one of the major commodities the marketing of which is handled by ECEX. Previously, coffee was marketed at the central auctions in Addis Ababa and Dire Dawa. ECEX is planning to expand its service to more locations in the country.

Even though the government deals with coffee marketing, there are a lot of problems faced by the farmers. In the group discussion, the farmers complained about the government's insufficient regulation of the price of coffee. Collectors and suppliers set their own price which is usually below the market price as announced by the government. Until the year 2000, the Coffee Board was collecting coffee from the farmers to ensure better prices. But now the board is no longer buying coffee from the farmers. As the farmers indicated, this is exposing them to unfair terms of trade with private collectors and suppliers. In this regard, appropriate government intervention aimed at regulating local coffee prices is what most farmers hope for. Furthermore, the farmers indicated that they were not sure about the price of coffee in the future. They have seen enormous fluctuations in the price of coffee and have thus lost confidence regarding the future situation. The government has not yet introduced a mechanism to help reduce the vulnerability of coffee farmers to price declines.

5 The Impact of Coffee price Changes on Livelihoods and Natural Resource Management

Changes in global coffee prices have impacts on the livelihoods of producer farmers and their activities. Especially when coffee prices fall, subsistence farmers are easily affected as they have a limited capacity to cope with this. Hence, they react to the changes in many ways and their actions may have varied impacts on their livelihoods and the environment. As Eakin et al. (2006) argue, coffee farmers are generally accustomed to variability in market conditions and, to different degrees, the risks to their livelihoods and sustenance that such variability entails. This section discusses the impacts of coffee price changes on farmers' livelihoods and their natural resource management activities.

5.1 Household strategies to cope with falling coffee prices

Changing coffee prices cause fluctuation in farmers' incomes. When prices fall, farmers react in many ways to cope with reduced income that makes meeting basic household needs difficult. With continued fluctuations, farmers lose confidence in the coffee market and this causes a shift to other activities in order to avert possible risks. The most important strategies adopted by the farmers in the study area in response to unstable coffee prices include crop diversification, timber production and selling household assets.

Diversification and shift to other crops

When the price of coffee falls as it has happened in recent years, farmers focus on the cultivation of other crops, such as cardamom, ginger and *khat*, that could fetch a good income. These crops are mainly cultivated in home gardens and in some cases mixed with coffee. Farmers who manage relatively large farms pay particular attention to diversifying their crops.

The cultivation of *khat* is a recent phenomenon in Jimma area and is expanding for several reasons: high economic benefit, high market demand and the existence of a cohesive trade network. According to key informants, *khat* used to be very rarely cultivated in the area and cultivation was in the home gardens, primarily for own consumption. However, for the last 10 years, demand for *khat* has been increasing particularly in the urban areas. *Khat* earns a relatively good income as compared to other crops and the market for it is comparatively dependable. This is leading many coffee farmers to gradually focus on the cultivation of this crop. *Khat* is chewed by millions of people in the Horn of Africa and in the Middle East, and there is no explicit legal ban on the use of this stimulant in Ethiopia and its neighbouring countries. On the other hand, *khat* production is hurting the country's economy because it is part of the underground economy and therefore it is difficult to properly collect tax. Tax evasion is widespread and beyond the capacity of tax collection check points. By contrast, coffee is Ethiopia's prime source of hard currency.

A new development in local agricultural production is the shift to eucalyptus plantation. Planting eucalyptus trees emerged as an important source of cash income in the area due to increasing demand and the relatively short maturing period of the trees. Though eucalyptus plantations are expanding in many places in the study area, it is becoming an important source of cash income especially in Haro due to its closer distance to Jimma town where there is a market for eucalyptus. Moreover, the farmers appear to be attracted by the relatively low input (especially labour) required for producing eucalyptus trees as compared to what is required to manage coffee farms.

Some farmers work for other farmers at times of crisis. Although this is common with those farmers who do not own farmland or cultivate small farms only, it is more prevalent during falling coffee prices. On the other hand, when coffee prices rise, farmers react by planting more coffee seedlings and taking care of existing coffee trees. Nevertheless, still some farmers retained their cereal farms despite a relative increase in the price of coffee. Asked why they did not focus on coffee production alone, the farmers indicated that they were still suspicious about the price of coffee and that they had seen enough of this volatile nature of the coffee market in their lifetime.

Timber production

Timber production is illegal in Jimma area. Nevertheless, the high market demand in urban areas for timber produced from some of the indigenous trees has been causing loss of the valuable shade trees in the area. As income from coffee declines, farmers resort to timber production from indigenous trees that have been used to provide shade for coffee. While this is becoming a ruinous strategy throughout the study area, the phenomenon is particularly widespread in Genji-Ilbu and Haro *kebeles*. In the discussions, the farmers indicated that the indigenous trees were the most valuable resources to them as coffee production in the area was difficult without the shade trees. However, loss of income from coffee during the past years forced some farmers to cut the shade trees for the production of timber. In this regard, Asefa (2008) indicated the need to diversify the livelihood base of local people by enhancing the production and commercialisation of non-timber forest products (NTFPs) so as to help the people withstand coffee market failures and price declines.

Selling household assets

Income obtained from coffee is largely used to meet basic needs such as food and clothes. Farmers also spend their money on various household assets. Selling these assets is one of the reactions of households to cope with reduced coffee income. Commonly sold assets include radio, tape recorders, goats, jewellery, and sometimes they even sell the iron sheet of their houses if they are in a particularly bad financial situation. While this is a common practice at times of falling coffee prices, farmers sell their assets even in good years when they are short of cash. The period from May to July is when farmers lack money to meet their basic needs, including food. According to the informants in Genji-Ilbu, the farmers literally starve and sell whatever in their possession can get them money to feed their family. Farmers in the area get into such difficul-

ties not only because the income they obtain from coffee is insufficient, but also due to problems in the management of their financial resources.

Farmers in the study area generally have problems managing the money they obtain from selling coffee. This is not specific to the farmers in the study area: it is a typical problem of most coffee farmers in the country. They spend their money rashly and without prioritising their needs and demands. The traders in the towns take advantage of this and collect as much money as they can from the farmers during the coffee season. A narrative of the misappropriation of funds by farmers in Genji-Ilbu is given in the Box below.

> Coffee farmers normally spend a good portion of their coffee income on manufactured goods such as clothes, footwear, radios, tape recorders, iron roof sheets, etc. During peak coffee harvest times, traders in the towns cheat the farmers by charging them high prices for the goods; mostly the farmers have to pay double or more of the normal prices for the goods. Later in the year when they encounter financial hardship, they sell these items back to the traders or others who collect such items, at cheap prices. The farmers sell the items for less than one-third of the normal market price and are thus cheated again. While selling back radios and tape recorders is quite common, there are also cases of farmers selling the iron roof sheets of their built houses. The traders in the towns are aware of farmers' spending behaviour and exploit it during the different seasons of the year.

5.2 The effects on livelihoods and household economy

Households in Jimma area are highly dependent on coffee for meeting their livelihood requirements. Food, which accounts for about 42% of household expenditures, is paid for mainly using coffee-based income. In view of such a high level of dependence, fluctuations in the world coffee prices have become a serious concern to households. Households in the study area have been exposed to severe food shortages at different times during coffee price slumps. They are engaged in subsistence production and do not have cash or food reserves that could be used in such times of crisis.

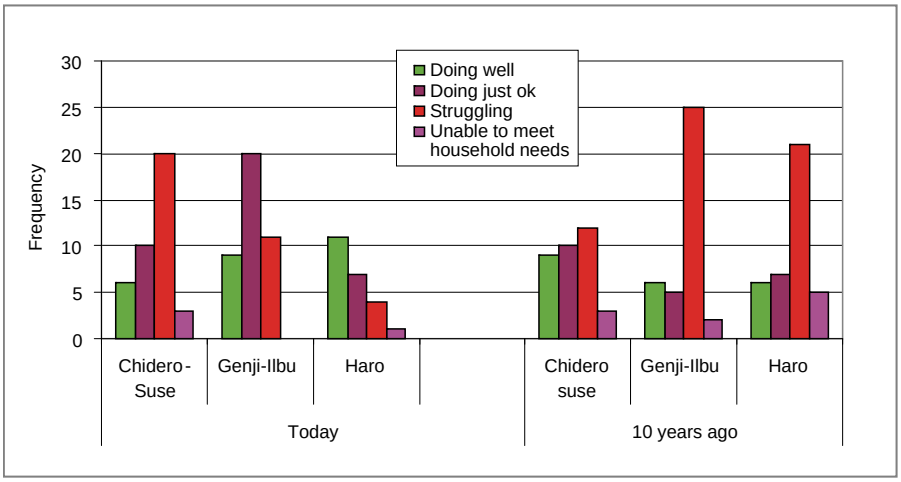

Figure 6: Household well-being (self-assessment)

Figure 6 portrays the results concerning the household well-being situation today and 10 years ago in the study area. Ten years ago, households in Chidero-Suse were doing well compared to the households in other places. This was partly because of the presence of a well-organised and efficiently functioning cooperative that was delivering important services to the farmers. Farmers in Genji-Ilbu were struggling 10 years ago but now they have better conditions. The presence of a strong cooperative and the focus of households on *khat* production have contributed to this status. In particular, relatively attractive and stable market prices for *khat* have enabled households to withstand the effects of financial crisis caused by fluctuations in the price of coffee. Households in Haro are doing well due to better market access, i.e. proximity to Jimma town.

5.3 The impact on natural resources and the environment

According to Chambers and Conway (1992), a livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the resource base. In the absence of other options, however, households are sometimes forced to shift to unsustainable livelihood activities.

In the study area, there has been land use change from the cultivation of coffee to the production of annual crops and others. Households resort to the cultivation of cereal crops and eucalyptus trees because income from coffee is insufficient to meet their basic needs. Maize, sorghum and *teff* are widely cultivated cereal crops. In particular, maize cultivation has expanded in Chidero-Suse and Haro *kebeles* where the crop is cultivated on previous coffee farms. Also in the discussions, the farmers reported that some farmers had been forced to uproot some of their mother coffee trees and cultivate annual food crops instead. This has led to clearance of the forest cover associated with the coffee production system and exposure of the soils to erosion and other forms of land degradation. Such conversions, though, might bring immediate benefits to the farmers in terms of meeting household food needs, even if they are not compatible with local agro-climatic conditions.

The shift to the cultivation of cereal crops not only takes up land that could be used for the expansion of coffee but also competes for farmers' labour. Since the production of annual crops requires more labour, the farmers spend more time on these farms. In addition, wild animals cause significant destruction of the cereal crops cultivated and thus the farmers have to watch over their farms. As a result, coffee farms are left unattended and this has affected the quantity and quality of coffee produced, as well as the overall future of coffee production in the area.

On the other hand, rising coffee prices encourage local coffee production. As the market for washed coffee improves, wet processing plants flourish. The government has a plan to increase the share of wet processed coffee over the coming years (MoARD, 2008). This has led to the expansion of wet processing mills by private traders, unions and cooperatives. Nonetheless, such developments have not left the environmental resources in the area unscathed, mainly land and water. The wet processing stations are often constructed near rivers and streams to draw water and discharge their effluents,

thereby causing water and soil pollution. In a study on the environmental impacts of coffee pulping stations in Mana and Gomma *woredas*, Yared (2008) found that down-stream areas were considerably affected due to the discharge of effluents from coffee washing stations into the nearby surface waters.

5.4 Institutional support

Undoubtedly, the coffee sector is a vital sector in Ethiopia and a considerable portion of the population is engaged directly or indirectly in coffee production and marketing. Although the coffee sector has been liberalised since 1991, the government still has considerable control of its marketing. This partly affects the efficiency of the stake-holders in coffee production and trade. There are a lot of restrictions imposed by the government particularly on coffee traders that range from bureaucratic hurdles in the issuance of a licence to the long procedures in the export of the commodity. Although setting rules for a sound functioning of the trade is desirable, long chains of processes and bureaucratic hassles at the different levels of the government structure are major hindrances. According to discussions with collectors and suppliers, the government regulating body at the *woreda* level is rather a problem to their activities, mainly at the coffee quality control check points. On the one hand, the quality check procedures are not clear and transparent, with no sufficient explanations being provided as to when coffee supplied fails to pass the check. Quality checks are carried out by way of inspection and thus the process suffers from subjective judgments and corruption. In addition, there are no mechanisms for appeal against unjust judgments in place.

On the other hand, the role of the government in counteracting the illegal coffee trade is very weak. According to informants, the number of illegal traders in the local coffee market is increasing continuously. Apart from creating confusion and price distortions in the market, this is affecting licensed coffee traders. As one supplier noted, the lax attitude towards illegal coffee trade is persuading licensed traders to take part in illegal trading as well. In the group discussion, the farmers also stressed the need to have proper regulation of the coffee trade particularly during the peak seasons of coffee market, which includes regulating prices according to the officially announced floor price and taking action against the illegal coffee trade.

In 1999, the government of Ethiopia lifted restrictions that prohibited cooperative unions from directly exporting coffee without passing through the central auction. Since then cooperatives have been directly selling coffee to international markets. The arrangement is intended to allow the unions to gain more profits from which producer farmers would benefit. For example, OCFCU is engaged in direct coffee export and member farmers obtain dividends. The union also uses this opportunity to strengthen its member cooperatives and promote fair-trade and organic certifications to the advantage of poor producer farmers. In addition to delivering training and technical assistance to member cooperatives, unions provide an opportunity for increased integration of markets and increased empowerment of farmers in terms of regional and national influence (Walton, 2001). Hence, unions can support the farmers in improving and sustaining local coffee production in many ways. Nevertheless, farmers in the study area receive

more support from the union on the marketing of coffee. The union looks for international buyers and facilitates direct marketing by reducing the coffee chain. As both farmers and cooperatives indicated, there is as yet limited support from the union for enhancing coffee production. Indeed, there are promises and a plan by the union to support local coffee production. Current trends indicate that developing countries are likely to gain a relatively substantial market share for organic and fair-trade coffee in the future (see Calo and Wise, 2005; Giovannucci, 2006). In this regard, the union should maximise this comparative advantage in the global coffee market by assisting farmers in improving the quality and quantity of coffee they produce so that they can obtain a competitive price.

6 Conclusion and Policy Implications

Coffee is one of the most extensively traded agricultural commodities in the world. While most of the global coffee production takes place in the developing countries, a significant portion of coffee is consumed in the developed nations. However, the coffee sector has suffered from volatile global prices over the past years and this has been considerably affecting countries heavily dependent on coffee as their main source of income and employment. Ethiopia is one of the leading producers of arabica coffee, which is the major source of foreign exchange to the country. Over 95% of the coffee is produced by smallholder subsistence farmers.

Jimma is an important coffee growing area in the country. However, coffee production is largely limited to home gardens and smaller plots, and it is primarily meant to meet the basic household needs of producers. Although coffee has traditionally been the most important crop in the area, recent changes in coffee prices have persuaded farmers to diversify and gradually shift to the cultivation of other crops. Survey results indicate that farmers react quickly to coffee price changes, due to the subsistence nature of the household economy. They start to diversify their cropping pattern once the risks of depending on a single crop have become apparent. As the cultivation of cereals and fruits is hampered by wild animals, farmers tend to focus on the cultivation of *khat* in addition to coffee. Growing uncertainty regarding the global coffee market and lack of insurance for poor farmers has complicated the problem. Despite the recent increase in the international price of coffee, an adequate, sustainable and stable price of coffee is a priority concern for smallholder farmers (Oxfam, 2005).

Survey results indicate that with a growing market for coffee, farmers have started to plant more improved coffee varieties promoted by Jimma Agricultural Research Centre in the area instead of solely depending on wild coffee. There is increased demand for improved coffee cultivars and supply is short of demand. This requires an organised supply of these varieties in order to encourage the farmers to continue coffee farming. The local coffee market is dominated by sun dried coffee. Although washed coffee fetches relatively good prices for producer farmers, its production is limited by lack of processing facilities, labour shortage with regard to picking up the red cherries, and fluctuating (low) prices. Hence, the pattern over the past years in the area indicates a tendency towards the production of sun dried coffee rather than washed coffee.

Differences in household income were observed between the study *kebeles* and across the wealth groups. The contribution of coffee to household income is highest in Genji-Ilbu and lowest in Chidero-Suse, indicating that farmers in Genji-Ilbu are more dependent on coffee production than farmers in the other two *kebeles*. Differences in coffee income were also observed across the wealth categories. The poor earn much less income from coffee than rich households because of the relatively small coffee farm area. Nevertheless, the poor devote a considerable portion of their farm land to coffee as compared to the rich and medium households. Limited diversification makes poor households more vulnerable to volatile coffee prices.

Analysis of the coffee value chain in the area indicates participation of several actors at the different levels of the chain. While most of the actors in the chain operate with a licence, there are also some involved in the local illegal coffee trade. Participation of these actors is inducing coffee price distortions. The cooperatives operating in the area play a significant role in stabilising the local coffee market in that they protect farmers from the low prices offered by local traders. However, cooperatives need to be strengthened in order to enhance their financial and managerial capacities. The study showed that union member cooperatives were doing better than non-member cooperatives, indicating that cooperatives on their own are not viable; they need to be part of a union in order to get support in various ways. Though fair trade is basically designed to give farmers better prices for their coffee, the experience in the study area was different. The way in which the fair-trade scheme was arranged exposed producer farmers to exploitation by the individual coffee trader who had been managing the fair-trade scheme, and led to the eventual collapse of the network. It should, therefore, be noted that there is no guarantee for fair-trade schemes working; their success depends on how they are managed at the local level, particularly with regard to sharing benefits with producer farmers. Cooperatives might be suitable entry points for fair-trade arrangements.

It has been found that the support producer farmers get from the government is generally limited. Overall, government intervention is biased towards coffee marketing rather than production support. There is excessive involvement of the government in the coffee trade through licensing, tax, auction, etc. Production support is minimal and handicapped by a weak extension system. The liberalisation measures introduced in the country have not been matched by improvements in production infrastructure such as credit, knowledge transfer, insurance and communication.

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Appendix

Appendix 1: Data on coffee collected for the present study.

Year	Area under coffee (ha)	Total production (tons)	Volume inspected (tons)	Volume exported (tons)	Value of export (x 1,000 Birr)	Share of GDP (%)	Producer price (USD/ton)	Export price (USD/ton)
1991/92	383,930	216,000	60,155	32,249	168,324		1,340	2,497
1992/93	393,143	210,000	87,669	67,375	536,982		994	1,731
1993/94	402,349	222,000	113,680	69,160	718,019		1,440	2,085
1994/95	413,022	228,000	102,302	82,199	1,799,034		2,437	3,833
1995/96	421,844	230,000	141,361	97,579	1,724,008		1,673	2,745
1996/97	432,844	228,000	165,536	123,166	2,307,394		1,834	3,023
1997/98	444,969	230,000	155,377	120,050	2,889,531	5.5	2,489	3,385
1998/99	460,436	232,000	148,271	101,232	2,112,713	3.8	1,497	2,661
1999/00	475,712	230,000	164,435	116,558	2,133,646	3.4	1,285	2,185
2000/01	493,741	221,000	128,597	99,134	1,520,101	2.4	1,085	1,810
2001/02	468,980	257,938	180,537	110,347	1,393,809	2.2	882	1,443
2002/03	493,590	271,470	197,033	126,128	1,418,324	2.1	877	1,273
2003/04	516,900	284,300	199,009	156,409	1,926,679	2.4	1,027	1,404
2004/05	560,000	308,570	226,971	161,061	2,901,327	2.9	1,142	2,065
2005/06	600,779	302,316	202,657	147,725	3,076,494	2.5	1,217	2,401
2006/07	661,026	320,636	236,712	176,438	3,741,745	2.3	1,431	2,369
2007/08	773,166	360,111	–	–	–	–	–	–

Source: CSA, 2008; MoARD, 2008; NBE, 2008

Appendix 2: Results of Scheffe's test

Dependent variable: Income from coffee

Multiple Comparisons		Mean Difference (I-J)	Standard Error	Significance
Genji-Ilbu	Chidero-Suse	872.5	463.8	0.175
	Haro	-665.0	448.3	0.336
Chidero-Suse	Genji-Ilbu	-872.5	463.8	0.175
	Haro	-1537.5*	461.1	0.005
Haro	Genji-Ilbu	665.0	448.3	0.336
	Chidero-Suse	1,537.5*	461.1	0.005

* The mean difference is significant at the 0.05 level.

Dependent variable: Income from coffee

Multiple Comparisons		Mean Difference (I-J)	Standard Error	Significance
Poor	Medium	-563.4	401.8	0.377
	Rich	-2,471.0*	552.5	0.000
Medium	Poor	563.4	401.8	0.377
	Rich	-1,907.8*	591.0	0.007
Rich	Poor	2,471.0*	552.5	0.000
	Medium	1,907.8*	591.0	0.007

* The mean difference is significant at the 0.05 level.

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This report is about coffee producers in three villages in Jimma Zone in the highlands of Ethiopia. Ethiopia is known for its high-quality coffee which is much sought after by speciality buyers. Over 60% of Ethiopia's foreign earnings are generated by coffee export and the sector directly and indirectly provides a livelihood for over 15 million people.

As part of a larger project exploring coffee value chains in East Africa and the Horn of Africa, this study looked into different ways of producing and selling coffee, either for the mainstream (commodity) market or for the Fair Trade market. One of the key questions that this research aimed to answer was whether producers producing for the Fair Trade market are better off – in both financial and non-financial terms – than their fellow coffee producers who produce for the commodity market. Jimma is an important coffee growing area in Ethiopia and is home to several cooperatives that are members of the Oromia Coffee Farmers' Cooperative Union (OCFCU), a Union representing growers, processors and suppliers of high quality, organic Arabica coffee for direct export. There are a number of benefits of being a member of OCFCU for smallholder coffee producers, such as higher farm-gate prices. However, several factors limit the benefits of smallholder production, e.g. tiny landholdings that allow only limited income, or a considerable proportion of organically produced coffee that does not find premium buyers but is sold as commodity coffee at much lower prices.

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