

Coffee: The Backbone of Ethiopian Economy

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Abstract

More than 1,000 years ago, a goatherd in Ethiopian south-western highlands plucked a few red berries from some young green trees growing there in the forest and tasted them. He liked the flavour and the feel-good effect that followed. Today those self-same berries, dried, roasted and ground, have become the world's second most popular non-alcoholic beverage after tea. Ethiopian province where it first blossomed "Kaffa" gave its name to coffee. Coffee is the number one foreign exchange earning export commodity of Ethiopia. Almost 2% of the world's coffee comes from Ethiopia. Well over 60% of the country's foreign exchange is obtained through the export of coffee. About half of the coffee produced in Ethiopia, is exported to Europe, 1/4th to Asia and the rest to North America. It also contributes about 100% of government revenue. It is estimated that area under coffee trees are 679, 147 ha. The annual coffee production of the country ranges from 200-250 thousand tons. A quarter of the population is directly or indirectly engaged in the production, processing and marketing of coffee. Almost 95% of the total production is covered by 2 million small holders and the remaining share of the output goes to the state owned enterprise i.e. Coffee Plantation Development Enterprise. About half of the coffee produced is for domestic consumption. There are four main coffee production systems in Ethiopia: forest coffees, garden coffees, traditional small coffee farms and large scale modern plantations. About 35% of the total production is consumed within the producing areas. Coffee ceremony is a strong cultural tradition throughout Ethiopia. Important events are opened with a coffee ceremony. As well, people traditionally gather together over coffee to just enjoy conversation on a regular basis.

1. Introduction and History of Coffee

Coffee is the 2nd most traded commodity in the world market after petroleum. (Girma, 2011). It is estimated that over 500 Billion cups are consumed every year. Ethiopia is the birthplace of coffee. As much as this country is the homeland for the coffee plant, its people are also heavy consumers of coffee. Over 50% of the coffee produced is consumed within Ethiopia. Coffee accounts for 60% of exports, and 80% of total employment (Wikipedia, 2010). The story of coffee has its beginnings in Ethiopia, the original home of the coffee plant, *coffea arabica*, which still grows wild in the forest of the highlands between altitudes 1100 to 2200 meters with annual rainfall ranging from 1500 to 2500 mm, in slightly acidic soil with a pH of 4.5-6.5. It is believed that Kaldi, an Abyssinian goatherd, who lived around 850 AD, one day he observed his goats behaving in abnormally exuberant manner, skipping, rearing on their hind legs and bleating loudly. He noticed they were eating the bright red berries that grew on the

green bushes nearby (FAO, 2014). Kaldi tried a few himself, and soon felt a novel sense of elation. He filled his pockets with the berries and ran home to announce his discovery to his wife. They are heaven-sent, she declared. You must take them to the Monks in the monastery. Kaldi presented the chief Monk with a handful of berries and related his discovery of their miraculous effect. exclaimed the monk, and hurled the berries in the fire. Within minutes the monastery filled with the heavenly aroma of roasting beans, and the other monks gathered to investigate. The beans were raked from the fire and crushed to extinguish the embers. The Monk ordered the grains to be placed in the ewer and covered with hot water to preserve their goodness. That night the monks sat up drinking the rich and fragrant brew, and from that day vowed they would drink it daily to keep them awake during their long, nocturnal devotions. (FAO, 2014)

It is nature which initiated coffee production in Ethiopia thousands of years ago, in the jungles of Kaffa, Illubabor,



Wollega, Bale and other regions. It was in these forests that *Coffee arabica* originated and then spread to the rest of the world to constitute the ancestor of the present day coffee plantations of the world. Coffee grew as a second storey under the canopy of forest trees. In Ethiopia, coffee production by man started much later than the one by nature. It is believed that man started to grow coffee in the fourteenth or fifteenth century to supplement his natural coffee supply, and its production methods have passed through several stages: ranging from simply picking coffee berries from the forest to the management of modern coffee plantations. However, all these forms of production still exist today.

Although it is matter of discussion how or when coffee originated, but the coffee ceremony is a strong cultural tradition throughout Ethiopia. Important events are opened with a coffee ceremony. As well, people traditionally gather together over coffee to just enjoy conversation on a regular basis. Cafes will have an ongoing ceremony where one can enjoy a small cup any time. Thus “coffee ceremony” is core to Ethiopian culture and hospitality

2. Major Coffee Growing Zone

In Ethiopia, coffee is grown almost everywhere. There are 600,000 hectares of land cropped with coffee. (Samual and Ludi, 2008). But so far, the major areas include Kaffa, Illubabor, Wollega, Gimbi, Sidamo, Gedeo, (including) Yirga-Cheffe, and Harrarge (consisting of 3 zones). A part from representing some of the distinctive coffee types, each area is also a place of their origin. For instance, coffee traded as ‘Kaffa’, is produced in Kaffa, in parts of Illubabor, Wollega and other regions.

3. Modes of Coffee Production

Coffee has been part of their indigenous cultural traditions for more than 10 generations. In Ethiopia, there are four types of production system: forest coffee, semi-forest coffee, garden coffee, and plantation coffee. Forest coffee accounts for 10%, semi-forest coffee for about 35%, garden coffee for about 35% and plantation for about 15% (5% government, 10% private) of total coffee production in Ethiopia. 95% of coffee produced under these systems is organic. (CSA, 2008).

It should, however, be noted here that the contribution of the forest coffees has been dwindling as a consequence of accelerated deforestation. On the other hand, small coffee farms contribute about 90% of the country’s coffee, while state farms account for the rest. Smallholder farmers produce 95% of Ethiopia’s coffee (Tafera and Tafera, 2013). Coffee is cultivated by 4 million preliminary smallholder farming households .Furthermore, coffee plays an important role in social gathering and is important in local consumption,

as more than half the Ethiopia’s coffee production is consumed locally (Bart et al, 2014)

4. Worldwide Status of Coffee Production

Coffee is produced in more than 50 developing countries providing income for approximately 25 million smallholder producers (Petit, 2007; Oxfam,2002) and employing an estimated 100 million people (NRI, 2006). In 2005-06, 52% of world’s production was accounted by main three coffee producers (Brazil, Colombia and Vietnam). Brazil total supplying about a third of total production (Figure 1). The top five consumers are USA, Brazil, Germany, Japan and France, while the Nordic countries have the world’s highest coffee consumption per capita. About 65% of the world’s supply of coffee is *Arabica*, while *Robusta* currently makes up around 35%, compared to 25 years ago (Scholer, 2004). An annual growth rate of 2.6% during the last 50 years (1963-2013) have been recorded, increasing to 3.6% since 1990. Ethiopia is first in Africa and 7th in the world with 7.5 million bags annual production of coffee (ICO, 2011).

During 2012 about 8.46 millions of metric tons of coffee were produced by top 10 coffee producers in the world (FAO, 2013). Ethiopia is the second largest exporter of organic coffee by volume after Peru (Kodama, 2009). In 2005, Ethiopia shipped about 9,000 tons, which represent 19% of world organic coffee exports and 6% of Ethiopia’s total coffee export volume (ICO, 2007). The low cost of producing organic coffee in Ethiopia may explain its large export share. Most Ethiopian coffee is grown with few or no chemical inputs. Thus, often only the

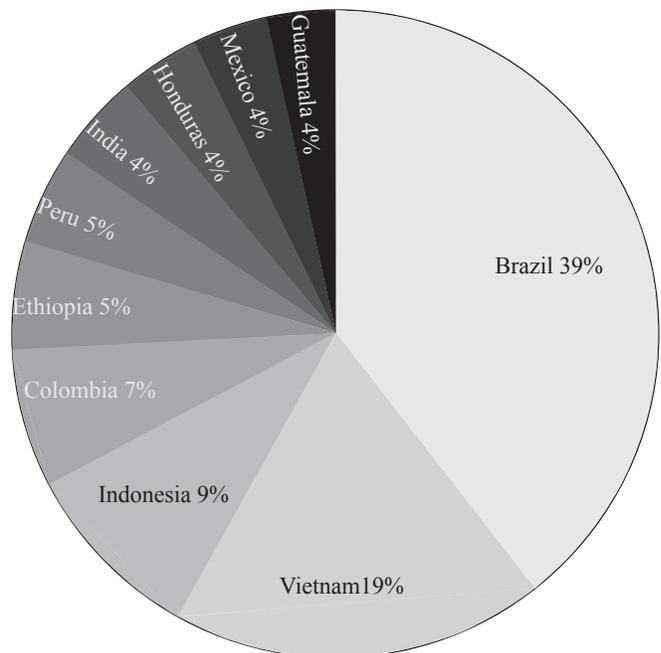


Figure 1: Top ten coffee producing countries (2011)

fee for organic certification is required for the coffee to be officially recognised as organic. Some say that no chemical inputs are needed because coffee is indigenous to Ethiopia thus adapted to local conditions. The government had also introduced improved coffee varieties. But poverty may also play a role as many farmers cannot afford to apply chemical fertilizers or pesticides (Kodama, 2009; Sherlock, 2004)

5. Outline of Production

Two coffee species are currently used for commercial purposes i.e. *Coffea arabica* and *Coffea robusta*. Ethiopia only produces Arabica coffee, which is widely believed to have originated there. Arabica coffee still grow in 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 (Gole et al, 2002). Yields are considered to be low as compared to the other countries. With less than 200 kg ha⁻¹ for forest coffee and around 450-750 kg ha⁻¹ for semi-modern coffee plantations (FDRE, 2003). Most coffee farmers do not use fertilizers, pesticides and herbicides (LMC, 2000).

Each woreda (district) is classified as a major, medium and minor coffee grower based on the area covered by coffee trees (Petit, 2007). Coffee production is currently mainly in the Oromiya and the Souther nations, Nationalities and People's Region (SNNPR). Major and medium growing woredas contain an estimated 800,000 coffee farmers with approximately 5,20,000 ha under coffee, of which 63.3% is in Oromiya, 35.9% in SNPP and 0.8% in Gambela. Smallholder producers are responsible for about 95% of production, while state owned plantations account for 4.4% and private investor plantation 0.6% (Petit, 2007). According to the international trade centre, Ethiopia produce some of the world's original coffees such as Yirgacheffee, Limu and Harar. (Petit, 2007).

After harvesting, coffee berries are processed by two widely applied methods, namely dry and wet processing. For unwashed *arabica* (or sun-dried coffee), the cherries are dried on mats, concrete, or cement floor immediately after they have been picked. After drying to a moisture content of about 11.5%, the outer layer of the cherries are removed by hulling and the green bean obtained is ready for marketing. For washed coffee (wet processed coffee), once the cherries are harvested they are pulped, fermented in tanks and then finally washed in clean water. The wet parchment coffee is then dried in the sun or raised table and stored at 11.5% moisture content (IFPRI, 2003).

Currently there are more than 1000 coffee cherry processing plant in the country, with approximately 492 hulleries and 601 washing stations. The coffee washing stations are owned by private individuals, farmers' cooperatives or state enterprises, and have an estimated total processing of around 80,000

tones annum⁻¹ of washed coffee (FDRE, 2003). Historically, over 90% of Ethiopian coffee was sun dried. However since washed coffee sells at significant premium over sun dried coffee, the government has encouraged cooperatives and traders to invest in machinery to raise the output of washed coffee (LMC, 2003). In 1980-81 washed coffee was only 9.1% of total coffee exports; by 2004-05 it amounted to 32.7% (Petit, 2007).

The coffee supply increases from 155,377 tons in 1998 to 236,712 tons (2,73,400 reported by FAO) in 2007 with average annual growth rate 6.13%. Even though decline in supply of about 10.7% in 2005-06 while in all other years it shows increase of about 1 to 16.8% (ECE, 2008).

Estimates for 2008 indicate that Ethiopia has become first in Africa and fifth in the world next to Brazil, Vietnam, Colombia and Indonesia producing 5.68% of total world coffee production.

6. The Potential of Coffee Production in Ethiopia

Coffee is an emblematic product for the country, making up around half of its exports. It represents an important part of Ethiopia's foreign exchange earnings, tax income and gross domestic product. Coffee also directly supports the livelihoods of more than 25% of the population, and is at the centre of social and family life. Environmentally, the situation in Ethiopia is also unique, as coffee is still produced mainly in its natural habitat: 33% of Ethiopia's coffee comes from forest or semi-forest areas in which local biodiversity, as well as traditional practices, are generally maintained. The main feature of Ethiopian economy is its dependence on rainfed agriculture. Coffee, Ethiopia's largest export crop, is the backbone of Ethiopian Economy (Petit, 2007).

Ethiopia is endowed with environment suitable for producing different varieties and flavour coffee beans in general and Arabica coffee in particular. In the international market, there are some unique flavour coffee beans which are favoured by many consumers. These include: floral, sweet, mocha, winy and fruity. Ethiopia can produce all these and other types of beans. This is due, among other things, to its diverse ecological features such as suitable altitude, ample rainfall pattern, optimum temperature and fertile soils. Owing to this, the country is termed as "Coffee flavour museum" (Birhe, 2010)

7. Significance of Coffee in the Ethiopian Economy

Agriculture is the dominant sector in the national economy of the Ethiopia. It account for around 90% of foreign exchange and 40% of GDP. Thus the sector is the back bone of Ethiopian Economy. The coffee industry dominates agriculture sector in its contribution to the national economy in general and export sector in particular (Birhe, 2010). Coffee in Ethiopia

accounts for 25% of GNP, 40% of total export and 10% of total government revenue (MoARD, 2007). Coffee is most important and backbone of Ethiopian economy, which accounts for an average 5% of GDP, 10% of the total agriculture production and 60% of export earning (Girma, 2011)

Ethiopia is the oldest coffee producer, consumer and exporter in the world (Girma, 2011). In 2005 it was sixth largest coffee producer after Brazil, Colombia, Vietnam, Indonesia and India, and 7th largest exporter worldwide. It is the largest coffee producer and exporter in Africa. During 2007 Brazil rank first in coffee export (30%) followed by Vietnam (14.05%), Colombia (11.7%), Indonesia (5.14%) and Mexico (3.80%) of world exports while Ethiopia took ninth place with 3.34% of world coffee export. Coffee has always been the Ethiopia’s most important cash crop and largest export commodity, which account 90% of exports and 80% of total employment (CSA, 2008). Coffee has thus significant impact on the socio-economic life of the people and economic development of the country. It is estimated that more than 15 million people are directly or indirectly engaged in the production, processing and trading of coffee. Coffee account for significant amount of Ethiopian export earning. Germany accounts for 1/3rd of the Ethiopia’s coffee export followed by 12% by Saudi Arabia (ICC, 2014). Exports in 2005 were 2.43 million bags, a share of 2.82% of world trade in coffee beans (ICO statistical database). In 2012, Ethiopia exported 3.2 million bags, making it the most important African coffee exporter and the tenth largest exporter in the world (ICO, 2013). The % contributions of coffee during different years are shown in Figure 3.

Though decreasing from time to time due to increase in number and quantity of other export items, coffee, historically used to account for about 60% of the total export revenues (Petit, 2007). The coffee sub-sector is important for Ethiopian economy and generated about 335 million USD or 41% of the foreign exchange earning in 2005 (Gebreselassie and Ludi, 2008) and it is estimated that 7.5-8 million households depends on coffee for considerable share of their income.

Ethiopian prime minister in his opening remarks of 1st Ethiopian Conference on Coffee stated that Ethiopia’s coffee production and export picked up over the past nine years to an export volume reaching close to 200,000 tonnes, generating close to 842 million USD in foreign exchange in 2010-11 with a strong growth in volume amounting to 235,131 tonnes. Coffee accounted for 74% of the trade value in 2010-11, taking the lead in the commodity exchange market. The Ethiopian coffee export in the international market would increase by at least 25% from the present level, in which the export volume will exceed 220,000 tonnes and the foreign earnings will surpass one billion USD (The Ethiopian Herald, 2015)

Ethiopian President Mulatu Teshome says the country’s coffee

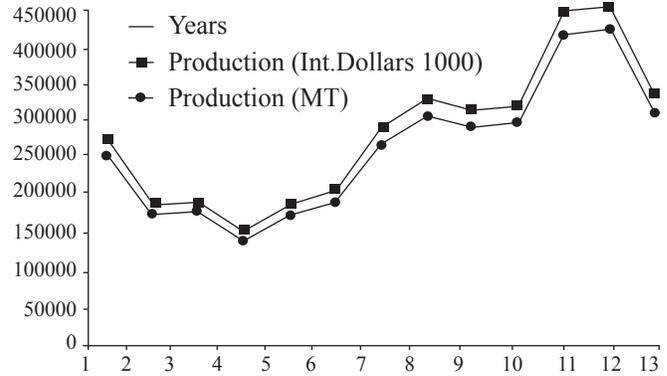


Figure 2: Year wise coffee production of Ethiopia (2000-2013) (FAO, 2013)

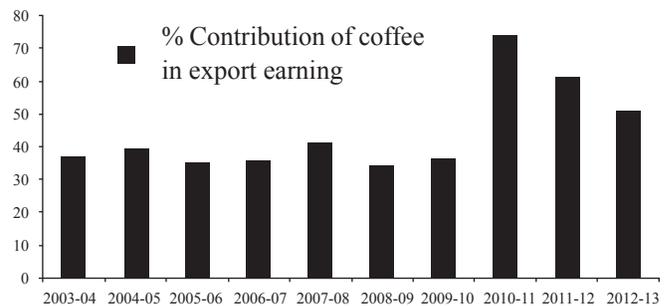


Figure 3: Contribution (%) of coffee in Ethiopian export earning during different years (2003-04 to 2012-13)

industry has to increase exports to reach a \$1 billion annual revenue target. Despite a steady increase in coffee production in recent years, Ethiopia’s supply to the global market has not exceeded a target of 200,000 metric tonnes. Speaking at the 3rd International Ethiopian Coffee Conference, Teshome said in 2013-14 exports were lower than in 2010-11 where coffee exports reached 196,118 metric tonnes and the country earned close to \$842 million. Official statistics show that the amount of coffee exported in the 2013-14 Ethiopian fiscal year was 190,837 metric tonnes. “We must now break this one time export income record by supplying more quality to the global market surpassing the near 200,000 metric tonnes registered so far and generating export income reaching \$1 billion,” he said.

Though Ethiopia exported a bigger amount of coffee in 2012-13 (199,104 tons, an increase of 17.7% from 2011-12), the actual revenue from coffee exports fell by 10.4% in between 2011-12 and 2012-13. (The Ethiopian Herald, 2015). Annually, the average Ethiopian coffee farmer earns about \$900 annum⁻¹.

8. Conclusion

Ethiopia and coffee are the two sides of a coin. Ethiopia is the oldest coffee producer, consumer and exporter in the world. The country ranks in top ten in export of coffee. Total coffee production is about 200,000 tonnes of clean coffee per year and

contribute to 60% of the country's foreign exchange. Ethiopia is also second largest exporter of organic coffee by volume after Peru. There is ample opportunity for the country to increase coffee export through improving quality of coffee.

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