



A study case on Coffee (Coffea arabica L.) Limu Coffee



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"It is also the coffee type. It took its name from the Kaffa province¹ where it grows spontaneously, and where, once ripened, it is picked without any effort by the natives as a wild fruit. I found out about this in many scholarly books: all admit that south western Abyssinia is the only country of the world where coffee grows as a natural soil product. Weather conditions not found elsewhere in the universe, the alliance between tropical heat and mountainous altitudes realized in this Earth paradise the unique miracle."

Ménélik et nous, Hugues le Roux (Paris, 1903)

Coffea Arabica L., as it has been written and rewritten, finds its birthplace in south western Ethiopian forests even if Linnaeus gave its scientific name in 1753 paying tribute to his future country. The relationship between Ethiopians and coffee is deep-rooted, and coffee production and consumption are closely intertwined with Ethiopian history, culture and economy. Coffee has been cultivated, traded and consumed over centuries and still play a significant role in the daily life of most Ethiopians and for the state of Ethiopia as a whole (Stellmacher, 2007). As told me Ato Tarreessa Fayisa, a peasant living Limu Genet (Limu Kosa woreda, Jima zone, Oromiya region): "Coffee is the backbone of our life". Coffee production is of highest importance for monetary income generation, followed by honey and livestock production. Farmers realizing income through surplus of any production rely on coffee since the greatest share of income is gained through coffee production which is the surplus production archetype. Economic development is depending on it for further diversification of activities. Moreover, due to the origin and centre of the genetic diversity of Coffee arabica lays in the south western region of Ethiopia, the historical Kaffa zone, it represents a treasure for global breeding benefits (future breeding programmes estimated as high as US\$ 1-2billion) as well as it means for local farmers the most important source of income² (Urich, 2005). Some tools like geographical indications are currently developed to link these economic benefits and conservation goals.

¹ The scientific community agrees to recognize that the vulgar name *coffee* comes from the Arabic word *qahwa* which used to mean wine before having been applied to coffee beans or husk decoctions (Mercier, 1980-2).

² Refer Annex: Sources of income.

Several names

In the 14th and 15th centuries, Arabs brought coffee from south western Ethiopia to Yemen where they developed its culture. Then Islam spread a huge propaganda on coffee consumption, essentially Ethiopian Muslim traders, even Arabs, who exported coffee from its production places to Red Sea or Aden Gulf ports (Pankhurst, 1968 and Soleillet, 1886). Whereas at the end of 19th century, Amharas of Shewa kingdom conquered these regions developing considerably coffee exploitation and commercialisation (Mercier, 1980-1982). These different influences on coffee production also act on the Ethiopian coffee vocabulary.

Principally three terms point out coffee in Ethiopia: *bun*³ (Tigrinya) or *bunna* (Amharic) or *buna* (Oromic), *tukke* (Gamo, Wälläyta, Kullo) and *qahwa* (Harari). Other ones are *tika* (Me'en) or *buno* (Gurage). These terms correspond to the coffee bean, and as the word *bun* both used in Arabic and Ethiopian languages, some coffee accessories or botanical parts follow this trend: as *jebena* (coffee claypot) or *jenfal*⁴ (dried coffee bean with its husk or just the green bean). The latter are daily used in Limu.

Limu coffee names

Table 1: Limu coffee designations according to its process and geographical areas (data: Home

Area	Name ⁵		
	Unwashed processed	Washed processed	
Local area	Ye-Limmuu buna	Ye-Limmuu buna	
Regional area	Ye-Jimmaa buna	Ye-Limmuu buna	
National level	Ye-Jima bunna	Ye-Limu bunna	
International level	Jima unwashed coffee	Limu washed coffee	
Botanical Latin	Coffea Arabica		

Garden Project, prod: Bossolasco, 2009)

³ The root *bun* drifted into many variations according different Ethiopian languages.

⁴ Could be written *jabana*, and *janfal*.

⁵ The names corresponding to local and regional areas are written in Oromic, then in phonetic Amharic at national level.

1) Description and distinctiveness of the product

As noted Petit (2007), the main Ethiopian coffee sector distinctive features are that 1) Ethiopian coffee is an important source of coffee genetic resources since the country is the centre of origin and diversification of Arabica coffee (wild coffee still grows in different areas, and forest and semi-forest coffees constitute an important part for the country's production); 2) that domestic consumption represents more than 40 % of coffee production. There is a long and strong tradition of coffee drinking. In this way, national production is very difficult to approach and is estimated around 280,000 metric tonnes in which participate 700,000 households (Save the Children UK, 2003 and Dempsey, 2006) representing around 15 millions people (including daily labourers); 3) that different flavoured beans produced in various regions (such as Harar, Limu or Yirgacheffe) are recognized internationally and marketed in blends or 100% Ethiopian products at high premiums; 4) that smallholders represent 95% of total production in a low input-output system making Ethiopian coffee production naturally organic. Thus the importance of coffee in Ethiopian economy explains why coffee should be considered as a political crop

1.1) Botanical description

Phylum	Spermatophytes			
Class	Dicotyledoneae			
Order	Rubiale			
Family	Rubiaceae			
Genus	Coffea			
Species	Arabica Linnaeus (among 60-80 species)			

Table 2: Botanical description of C.arabica (Bantte, 1995)

Indigenous to Ethiopia, *Coffea arabica L.* is the oldest species known and the most traded one: in the beginning of the millennium, 60% of world coffee produced was *C.arabica* whereas 40% was *C.robusta* (a third economic species is *C.liberica*, which amounts are relatively insignificant). There is a great variation within *C.arabica* species itself, and

eighteen improved cultivars/varieties are grown in south western and western Ethiopia (not including local ones).

C.arabica tree lives up to fifty years, thirty years productive, and can be twelve meters tall but is generally cut not to get taller than two to three meters in order to facilitate cultural practices and harvest. Its genotype is characterized by 2n=44 chromosomes; it is self-fertile and contains 0.8-1.7% of caffeine (Banttee, 1995). The Coffee Producing Development Enterprise (2005) in charge of Ethiopian state farms provided them the following botanical description in its coffee management manual:

The root system consist of a short stout tap-root, rarely extending beyond 45 cm, four to eight axial roots originating as laterals from the tap-root and going down vertically to two to three meters. Many laterals are found on the first foot of the soil and below them, the first and lower laterals ramify evenly and dive deeply in the soil.

The shoot system has a prominent vertical stem with horizontal primary branches arising from it in pairs opposite to each other. These latter give rise to secondary laterals, which in turn produce tertiary and quaternary branches.

Leaves are dark green. Each pair of leaves is approximately at right angles to the pair below. Just above the insertion of each leaf on the vertical stem, a series of four to six buds may be found which give rise to a new vertical stem (sucker). Above these series, head of series bud develops into a horizontal branch. The serial buds on these branches develop into branches, inflorescence or remain undifferentiated.

Illustration 1: Coffee tree with unripe berries in Suntu State Farm, Limu Kosa woreda, Bossolasco, 1st July 2009)



Flowers are white and generally pentamerous. The flower buds are produced at the leaf axils of mature green wood. Temperature and drought bring buds into dormancy. After several weeks of water stress, rain induces flower growth followed by opening within eight to ten days. Fertilization takes place after pollination where the fusion of one male nucleus and the polar nuclei forms endosperm. It is this endosperm that forms the coffee bean.



Illustration 2: Coffee flower (Bossolasco, 10th October 2009)

The fruit of the coffee tree is a drupe which normally contains two seeds; these ones are flat on one side. When a single seed develops, its shape is oval and gets called peaberry. Fruit is commonly referred to as cherry when ripe, and as berry when unripe. Five periods can be distinguished during the growth of the berry: pinhead, rapid fruit growth, endosperm growth, endosperm hardening, and fruit ripening. The whole takes seven to eleven months (the most of it eight to ten months). The coffee fruit is oval. When unripe the colour is green, and when ripe the skin is red (yellow for some varieties). The seed is covered with a thin membrane (silver skin). Above the silver skin is the parchment. A coating of slimy mucilage covers the parchment. The fleshy outer covering comprises the pulp and skin.



Illustration 3: Coffee red cherries, pulp, and beans covered by their sticky mucilage (Bossolasco, 1st July 2009)

1.2) Two ways of processing coffee: the dry and wet methods

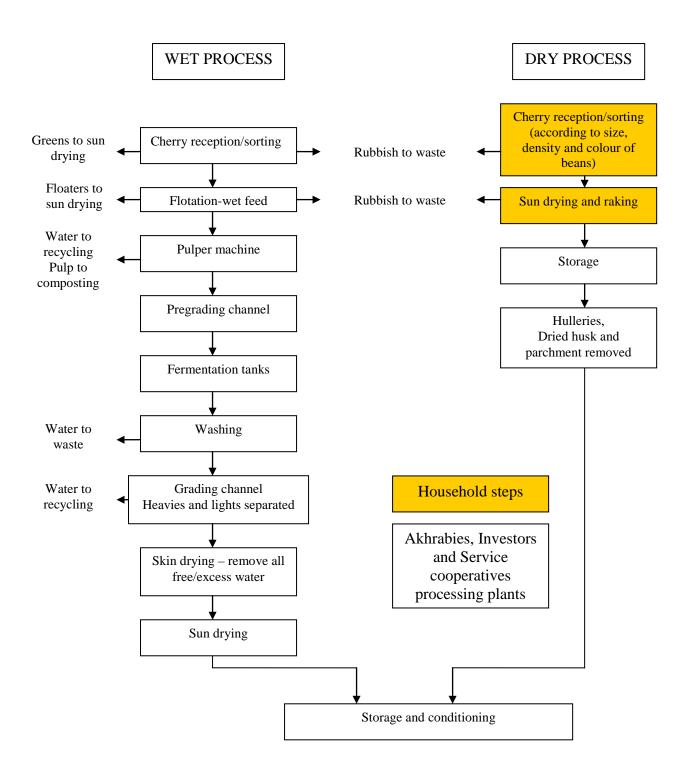


Illustration 4: Wet and Dry methods (adapted from the International Trade Center, 2002)

The dry method: Coffee bean is drying in the cherry, part of the drying sometimes taking place before harvesting. Picking and drying are often the only operations undertaken by the grower, especially for agro-forest coffee. When these have been carried out, dried beans (janfal) addressed to central market are sent to local processing plants (hulleries) where the dried pulp and the parchment are removed in one operation. The dried bean is then sent to Addis Abeba, where it will be processed again in export case. Dry coffee still constitutes the bulk of Ethiopian coffee produced but it is considered that is impossible to produce a first-class coffee by this method, although the procedure is far simple (Banttee, 1995).

The wet method: This new procedure has been brought to Ethiopia during the 1970's socialist regime and is now preferred to reach quality goals and prices. The sitting of the pulper is near a river or stream which can provide a good supply of water, and evacuation channel, at picking time since the whole process is carried out in presence of clean water. The pulpery or washery should be laid out so that the coffee is moving through each stage of the process by gravity flow (Bantee, 1995). The main constraint of this method is the water contamination inherent to rubbish then evacuated in streams feeding neighbouring households. Moreover ripe cherries start to ferment very soon after it is picked and become brown. So it is important to keep it in the shade and to process it as soon as possible, on the day it is picked. Generally washeries process the coffee grown in a 20 km radius because of that. The final product is coffee with parchment. This latter will be removed in Addis Abeba, once coffee with parchment has been bought to the Ethiopia Commodity Exchange⁶, before getting exported.



Illustration 5: Pulpery (akhrabie's pulpery), Agard machine (pulper), last washing tank, and pulp evacuation in Suntu State Farm (Bossolasco, 29th June and 10th October 2009)

⁶ Refer 6.1.1) Function and role of each actor of the value chain.

1.3) Quality seen by the value chain actors

As distinctiveness factor, the quality parameter plays a major role alongside the historical depth but often gets wrongly interpreted because of its strong linkages with origin, environmental, traditional, etc. aspects. The aim of this section is to point out what is called quality concerning coffee production.

There are many differing views on what constitutes quality but, as told me a breeding expert of the Jima Research Center, the coffee quality comes from a combination of the coffee genotype, environment and processing. That means the botanical variety, topographical and weather conditions, and the care taken during growing, harvesting, storing and transporting. Botanical variety and topographical conditions are constant and dominate the inherent character of a coffee whereas weather conditions are variable and cannot be influenced. Only growing, processing, storage, export preparation and transport can be influenced involving human beings interventions (ITC, 2002); in this way, Ethiopian government incites producers to follow normalised practices through a quality system considering uniformity and origin of these coffees.

It is generally not known whether the distinctive nature of a provenance is due to the genetic make-up of the coffee trees involved, to environmental factors in the place of production, or to cultivation practices or processing of the harvest. As far as coffee growing goes, there does not seem to be much difference indeed from one producing area to another, nor are practices particularly homogenous within growing regions. Commercially speaking, the preferred treatment is wet processing (washing), a recently introduced process that does not stem from local tradition (Verdeaux and Roussel, 2007).

The product's qualification and the productive rules implementation are concretely an agreements' creation between coffee actors upon the product characteristics and the ways to get it. In this way, as it has been formerly written, regulations tend to a normalisation of agricultural practices, a technologies and skills control and large scale traceability more than the establishment of exact producer books of requirements as it could be found in certification frameworks. The latter only concerns producers who are indeed members of any certification (organic, fair trade) project and in a lesser way those who are directly in contact with the

experts of the local offices of the Ministry of Agriculture and Rural Development. That means the model farmers⁷. So, in Addis Abeba coffee laboratories, coffee shall reach a defined score in a 0 to 100 scale to obtain the required grade. This score is evaluated upon the coffee defect distribution and odour at raw value then upon the acidity, body, flavour and cleanness at cupping. And it is directly linked to the coffee process, wet or dry process, and to the different cultural practices, harvesting and drying methods and care given to those. This to satisfy international requirement; if it doesn't, coffee will be sold in the Ethiopian Commodity Exchange (coffee exchange place, new auction system) as lower quality coffee, even to the national market as undergrade coffee, at lower prices. In this production management approach, quality is intended as a standard set of characteristics which can be measured, observed and certified (Rangnekar, 2003). Normalisation for uniformity, alongside traceability, is applied to reach large scale quality goals in Ethiopia, and are both ensured by the Ethiopian Commodity Exchange Authority and Ministry of Agriculture and Rural Development⁸. Compared to most other producing countries that have a grading and classification system by bean size, Ethiopia follows a system of cup taste profile according to regional flavours (Petit, 2007).

But quality goals are not yet reached and practices generally lead by quantity goals rather than quality whatever is the value chain actor concerned. Interviews of the three most influencing local actors go this way:

Feresulla ⁹	17 kg	
Fetchassa ¹⁰	0.25 ha	

These two units of measure are currently and generally used in the district and the whole zone, the first one is even the national counting coffee measure up to the national exchange place (Ethiopia Commodity Exchange in Addis Abeba). And due to the farmer land size generally inferior to one hectare, the second one is more suitable and in this way employed.

⁷ They are innovation vectors, the link between WARDO and other farmers. They take the innovation and spread it through their farmers' environment. Thy are generally better-off producers with more than one hectare.

⁸ Refer 6.1.1) Function and role of each actor of the value chain.

⁹ Arabic. Could be phonetically written *frasleh* as did Rimbaud to evoke an ivory trade in his "*Rapport sur l'Ogadine: par M. Arthur Rimbaud agent de MM. Mazeran, Viannay et Bardey, à Harar"*, 10th December 1883. ¹⁰ Oromic.

Producers

A thirty-seven-years-old farmer of Genet surrounds: "Collectors (sabsabiis 11 or sebsabies) come to the village with their trucks and bring the coffee to chaanyiis 12 (suppliers & wholesalers) who will process it. But sebsabies are not asking about quality. They are just collecting quantities. Even producers don't care about quality. I sold them one feresulla for 150 birr (8.82 birr/kg) what is a good price." 27th June 2009.

A forty-five-years-old model farmer living Genet: "Sabsabiis are oriented by chaanyiis to collect according to quality but sabsabiis "are collecting during the night". It means they are focusing on amounts, even buying coffee eyes closed or on the balance. So there are conflicting ideas between sabsabiis and chaanyiis. In the market, chaanyiis concert with farmers and sometimes advise them to sell quality coffee to sabsabiis. But not all farmers are on the same standard: careless farmers exist. Some object coffee quality while careless sabsabies are fighting with chaanyiis. But sometimes government also asks farmers to pay taxes before harvesting time. So, not to go to jail, farmers collect too early and in this case are accused of mixing full and no full ripened berries, and leaves." 28th June 2009.

A seventy-eight-years-old farmer, member of the Babo service cooperative: "Harvesting full ripened cherries, good agricultural practices (tillage, stumping, fertilizing), with no chemicals, and well drying coffee (to loose at least 80% of the water part of coffee), and then after drying, stocking in good conditions (well ventilated, constant temperature, no such moisture) allows quality. Quality is on management and environment. I know that caring makes the quality. That's why sebsabies paid me 180 birr/feresulla (10.6 birr/kg) which is a good price" 2nd July 2009.

Akhrabies

A twenty-nine-years-old Genet supplier: "I am orienting sebsabies to collect quality coffee. It means full ripened cherries and well dried coffee: full ripened and high bright cherries and high bright dried coffee. I deal with ten to fifteen sebsabies according to the production levels. I paid them 150 to 190 birr/feresulla for dried coffee. Me: "Do you know

Amharic. Refer 6.1.1) Function and role of each actor of the value chain.
 Amharic. Synonyms: chagn or chaanyii. Refer 6.1.1) Function and role of each actor of the value chain.

about sebsabies' marge?" No, I don't. Moreover there is an annual government tax (merchant tax): 30% of total production which is paid after trading time according to a grade given according to the amount:

. Grade A: > 1 000 000 birr earned due to coffee trade: from August

. Grade B: > 500 000 birr earned due to coffee trade: from July

. Grade C: < 500 000 birr earned due to coffee trade: from June

The same system, but with quality instead of quantity criteria, could incite akhrabies to give more attention to quality." 3rd July 2009.

A thirty-four- years-old Genet akhrabie: "Farmers ask me credit and I pay for their future harvest, but at picking time I meet a lot of problems on quality: they dry coffee directly on soil and therefore mix parasite elements of this soil in the bags (branches, stones, leaves, mud), then they don't dry correctly and often put coffee in non adequate bags preventing air circulation which provokes with high humidity the coffee fermentation inside these bags". 5th September 2009.

WARDO

Limu Genet WARDO expert: "The market is not asking about quality, always it is quantities. Who cares about coffee quality in Ethiopia?" 27^{th} June 2009.

Locally, quality dynamism lies on the shoulders of *akhrabies*, whose local and especially Addis Abeba clients ask and pay according to quality, and of WARDO¹³ officers through their development agents assisting model farmers, their Farmer Training Centres and Demonstration Sites, and of every unit supervising or influencing coffee producers as state farms. But peasants are not incited to produce quality because no difference is made on it by collectors, generally focusing in quantity. If efforts are not rewarded, why shall they suffer? Other coffee channels as service cooperatives and cooperative unions pay according to quality. This way, farmers who are members of active service cooperatives selling to unions as the powerful Oromia Coffee Farmers Cooperative Union and the arising Limu Inara Multi-

¹³ Refer 6.1.1) Function and role of each actor of the value chain.

Purpose Cooperative Union¹⁴ are requested to provide quality products. But they represent 8,140 coffee producing households (4,378 members of the first + 3,762 members of the second one) among the 27,004 coffee producing households of the whole *woreda*. The main quality criterion, and often the only one for agro-forest coffee, remains harvesting full ripened cherries. Another problem concerning traceability is that coffee growers mix the coffee coming from their garden with this coming from their agro-forest trees, and sell those mixed in the same bags. This is understandable since agro-forest coffee is paid neither more nor less than garden coffee, but exactly at the same price. That doesn't incite producers to distinguish agro-forest coffee even if they generally consider the latter as the best tasting.

Addis Abeba coffee cuppers

A lot of rumbles judge of coffee quality as the presence of *oil* on greasy coffee cups, beans size or as a clean humus management by a leaves selection while growing coffee. But in fact no one can really judge of quality parameters. There is no coffee specialist as there are wine specialists for example. That means it is impossible for a cupper to distinguish a place and year of production tasting a single coffee. At most, a cupper can judge of the altitude according to the body and acidity since acidity decreases for lower altitudes whereas the body increases conversely. However, in order to identify a place of production, a cupper should taste samples of different and accurate places, learn it then remember it. It needs practise and provided marked samples for cuppers. The value chain is currently not organized to do so. Market is not allowing doing it. Specialty market could but tends to disappear (OCFCU cupper, 16th June 2009).

1.4) Ethiopian coffee research: selected varieties

Nowadays, quality locally and nationally appears as a synonym of new selected coffee varieties in the way that they mean high yielding. This joins the value-chain actors' perception of quality as the result of good agricultural practices, materialized in high yields.

Modern coffee plantations as state farms and investors' ones use high yielding coffee cultivars as now use to do small scale farmers in the framework of extension programmes

¹⁴ Refer 6.2.2) The Limu Inara Multi-purpose Cooperative Union, an initiatives' leader?

since the 70's and the socialist government policies. Nowadays, the bulk of planted coffees (if it is not the whole) are selected varieties. So far there are 14 coffee selected cultivars released and cultivated in Limu Kosa *woreda* (and 18 in whole coffee areas of south western and western regions of the country):

S.N	Cultivar	Growth habit ¹⁵	Suitable area ¹⁶
1	74-1	Open	Medium-high altitude
2	74-4	Open	Low-medium-high altitude
3	74-40	Intermediate	Low-medium-high altitude
4	74-54	Intermediate	Low-medium-high altitude
5	74-87	Intermediate	Medium-high altitude
6	74-110 Compact Medium-high a		Medium-high altitude
7	74-112	Compact	Medium-high altitude
8	74-140	Compact	Medium-high altitude
9	74-148	Compact	Medium-high altitude
10	74-158	Compact	Medium-high altitude
11	74-165	Compact	Medium-high altitude
12	75-4	Open	Medium-high altitude
13	75-227	Open	Medium-high altitude
14	F-59	Open	Low-medium altitude

Table 3: Limu Kosa selected coffee cultivars (CPDE, 2005)

These cultivars are coffee berry disease (CBD) resistant, results of the Jima Agricultural Research Centre. Compared with some other producing countries average yields, Ethiopian ones appeared to be lower and not satisfactory; noticing this, the latter Ethiopian institute, with stations in principal growing regions, is working at the development and use of improved coffee varieties, mainly for disease resistance and high yield through the following research work procedure (Banttee, 1995):

¹⁵ Open, intermediate and compact respectively point out big, middle and little canopy covered area.

¹⁶ These altitudinal zones vary according to scientists but, in the classification of the Jima Research Center, high lands (dega) are > 1750 masl, mid lands (woinadega) > 1550 masl and low lands (kola) < 1550 masl.

Step 1: Collection of different coffee variety seeds, both international and national. Collection from abroad takes into a consideration the importing of well known Arabica varieties from coffee producing countries, for different purposes such as crossing with indigenous varieties. National coffee collection consists of the collection of different coffee cultivars from various coffee growing areas. This is the exploration of coffee population at a specific area and a detailed observation on different types of available coffee to distinguish one type from the other by: growth habit, leaf shape & size & colour, fruit shape & size & ripe colour & maturity state, beans shape & size, internode length, leaf retention during heavy cropping, and disease and insect freeness where there is an infestation of the disease and insect. The collection sheet comprises collection date and number, altitude, region, district, subdistrict, specific location, habitat and farm owner.

Step 2: Evaluation consisting on close investigation on the productivity, quality, resistance to different diseases and insects pests, and adaptability of the collected coffee seeds.

Step 3: Primary selection dealing with the selection of best performing coffees based on the undertaken investigation. At this step those cultivars which have been introduced from abroad and adapted to the evaluation site can serve as a comparison.

Step 4: Verification. Different regions have different sets of environmental factors. A cultivar which will do well at a locality may perform better or worse at the other one. This step consists on planting and investigating on those desirable characteristics at various areas of the producing regions to identify where does the cultivar perform the best.

Step 5: Second selection. This step aims at the selection of a cultivar which has fulfilled the first selection criteria and that has been proved best of the others in all required parameters at a particular environment.

Step 6: Seed multiplication and distribution. Selected seeds are multiplied in a large quantity then distributed to coffee producers through the *woreda* agriculture and rural development offices (local ministry branches).

Step 7: Crossing programme. It deals with the development of productive and disease resistant hybrids through: the crossing of the finally selected varieties (both national and international selections), the selection of the best performing hybrid at a region, and the multiplication and distribution of the improved hybrid variety.

1.5) Ethiopian cup profiles

Illustration 6: Localisation of the nine Ethiopian coffees and cup profiles



- **Harar coffee**: Sun dried processed only. Produced in the eastern highlands, it is exported from Dire Dawa. It is one of the finest premium coffee, and the most famous natural Ethiopian coffee.
- **Yirgacheffe coffee**: Washed only. This is the most famous washed Ethiopian coffee, especially in the United States, with a soft, fragrant and flowery note very distinctive.
- **Limu coffee**: Washed only. It is renowned for its good cup, sweet, spicy/winey flavour and balanced body and is therefore sought by many roasters, especially in Europe and United States. It is one of the premium gourmet coffees worldwide.
- Sidamo coffee: Washed and sun dried processed.
- **Gimbi/Lekempti coffee**: Washed and sun dried processed. It is an important part of many roasters' blends but could be a gourmet single variety.
- **Bebeka/Tepi coffee**: Washed only. These coffees have less acidity, body and soft flavour but assist roasters to achieve specific results in their blends.
- **Jima coffee**: Sun dried processed only. It is the best known Ethiopian coffee by the coffee industry, and represents the bulk of Ethiopian coffee exports. But it covers a multitude of south western coffees, as Limu unwashed processed coffee, as well as specialty coffees are often simply exported as Jima coffee.

Region	Туре	Shape and make of bean	Colour	Roast	Liquor quality	Remark	
Sidamo	Washed	Mixed small to medium round, hardish, burbon type good to good/fine quality	Grey/green to greyish, blue slightly coated (silver skin)	Bright, white to normal	Balanced acidity, body of good quality	Good quality coffee with attractive style	
	Unwashed	Idem	Greenish to brownish, green rather coated	Normal, few pales of lightish brown beans	Fairly balanced acidity, body with fair average quality	Occasionally ordinary flavour but round cup	
Limu	Washed	Oval to oblong shape with pointed or rounded ends	Greyish/blue to bluish	Bright, white to normal	Well balanced of good acidity and body, good to fine quality	Good cup, balanced, excellent flavour, winey flavour, one of the best Ethiopian highland grown coffees	
Gimbi	Washed	Medium to large, mostly long and with pointed ends	Greenish/grey, green slight	Bright, normal	Good acidity, medium body, good quality	Generally clean, slightly fruity	
	Unwashed	Idem	Light brownish/green, rather coated	Rather ordinary, softish appearance	Light/medium acidity and body, fair average quality	Clean cup, rather fruity flavour	
Harar	Unwashed Medium to large, long with pointed ends, greenish, slightly coated called long berry harar		Normal, softish appearance, good roast quality	Medium acidity, full body, round cup, typically Moka flavour of good quality cup	Known as the best highland grown Ethiopian Arabica		
Yirgacheffe	Washed	Mixed, average medium size, round to oval shape, hardish type, good to good/fine quality	Greyish/blue to bluish, good quality	White to normal	Medium to pointed acidity, good body, well balanced cup of good Moka flavour	The best highland grown Ethiopian Arabica coffee alongside Harar coffee.	

Table 4: Qualities of Ethiopian Highland Grown Arabica Coffees (Banttee, 1995)

1.6) Limu coffee cup profile

Let see some points of view met on roasters forums:

- About an organic coffee produced at 1850 masl in Goma woreda, and called Ethiopia Limu-Goma organic coffee: "The altitude allows for a slowing of the growth process and a much denser bean. This coffee is an explosion of citrus. In the cup, we get bright citrus, lemon grass and even sweet garden peas in the finish." (Kenneth Davids Coffee review)

Flavour profile				
Aroma Honey, cherryish coffee fruit, flowe				
	grass			
Brightness	Vibrant acidity			
	Cocoa and honey with a long, resonantly			
Flavour	flavourful finish			
Body	Lightly syrupy			

- "So I'm surfing and looking at the profile charts and I stumble upon this newer coffee from Ethiopia. I looked at the chart and saw that it is really what I could want in a coffee...I think the Sidamo is dark although I like it a lot...I like Yirgacheffe but I thought Limu was a bit weak, lacking that distinction the Ethiopian coffees have...or of course I could have roasted it poorly...I am relieved to see that I am not the one struggling with the Limu. It is easy to think that being a new roaster poor results come from the operational errors and not from the bean used..."
- About Ethiopian Limu Dry-Processed: "We kept this roast quite light, more than we would normally do for a dry processed Ethiopian coffee. This Limu has lighter body, herbal bright notes, lemon balm. It is not a super intense Ethiopia. But with a lighter roast treatment, some subtle complexities come out, unhindered by an overbearing bitter sweetness from the roast. A one tasting I had a lot of honey sweetness, but overall it's not a very sweet coffee. It is quite dry in fact. I cupped it while travelling a few days later and other cuppers were commenting on they dry fruit finish (not dried fruit). It is unusual and I think it has to do with regional Limu origin character." (Thompson Owen, 2008)

- About Ethiopian Limu Wild Grown (organic): "This was presented to us by our importer friends and they said "We don't have a lot to tell you about this coffee apart from it is a stonker." It has a profile that is more like a Yirgacheffe than a Harar as I expected to be. These wild grown coffees normally are a little winey and spicy and uneven. But this one is clean and fruity and bright and light. It has a lovely grapefruit mixed with molasses acidity that is lovely and refreshing. It's also an organic which is nice. A top coffee."

Clean cup (1 ton 8): 7 Sweetness (1 ton 8): 6 Acidity (1 ton 8): 8 Mouthfeel (1 ton 8): 6 Flavor (1 ton 8): 7 Aftertaste (1 ton 8): 6 Balance (1 ton 8): 6 Overall (1 ton 8): 7 Correction (+36): +36

Total (max 100): 89

2) Zone of production

It is easier to talk about Limu coffee than to evoke its area. Indeed the first one is often mentioned between exporters, roasters, journalists, etc. but who has never known the area it exactly covers? This issue logically arises in differentiation & promotion tools development frameworks as trademarks registrations or geographical indications. What could be the Limu area boundaries covered by a Limu coffee geographical indication? And what are they in the Limu coffee currently traded?

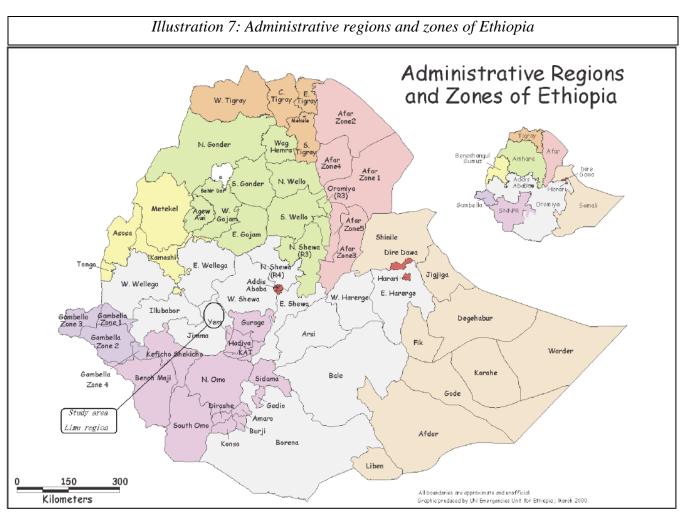
Origin products (OP) correspond to the whole geographical indications, recognized or not recognized, protected or not protected, identified or not identified. These products are characterized by specificities due to their environment (Belleti and Marescotti, 2006). But there is confusion about the exact definition of the "environment". Van der Meulen (2006) suggests an interesting methodological tool to evaluate the contribution of various factors to the connectedness of food products to their places of origin, and distinguishes as origin parameters:

- Territoriality: degree of physical connection with the place of origin;
- Typicity: place-specific peculiarities of the production process;
- Traditionality: rootedness of an OP's history in its place of origin;
- Communality: shared experience and practices;
- Landscapeability: connectedness of the production process to the landscape.

As the geographical indication consequences are the articulation of inalienability, strong linkage with place and transmission on a collective basis clearly meaning an intention of continuity in relationship between the group and its place (Verdeaux and Roussel, 2007), it fatally implies an excludability phenomenon while delimitating boundaries. But to define a place, it is necessary to first define a space, and considering these places' parameters, I finally inclined towards an historical approach through administrative changes, and landscapeability unlike territoriality, typicity and practices are lesser difference factors distinguishing Limu region from other coffee producing regions but commonly shared parameters between the latter.

I will associate Limu region and Limu coffee region because, unlike other located products as specific spices, coffee is the Ethiopian symbolic product which doesn't get limited into specific locations but spread into all *woreda* area. In this way, a *woredas*' and consequently administrative boundaries' approach appears to be more suitable.

2.1) Administrative units: region, zone, woreda and kebele



Before 1996, Ethiopia was divided into thirteen provinces of which many drifted from historical regions. Ethiopia now has a federal government overseeing ethnically-based regional states, zones, districts (*woredas*), and neighbourhoods (*kebeles*). Ethiopia is divided into nine ethnically-based administrative states (*kililoch*, sing. *kilil*) and subdivided into sixty-eight zones and two chartered cities: Addis Ababa and Dire Dawa. It is further subdivided into 550 *woredas* and several *special woredas*. The constitution assigns extensive power to regional states that can establish their own government through an executive committee and regional sectoral bureaus. Such structure of council, executive and sectoral public institutions is replicated to the next level (*woreda*).



Illustration 8: Historical boundaries of Ethiopia

Last century, Ethiopia wore different clothes appearing under feudalism rules, and then communism redefined rules before adopting the current democratic liberalized system. Meanwhile, identities changed remaining a complex and central political topic in regard to people and places. Few years ago, the ex-woredas Limu Kosa and Limu Seka split into four new woredas: Limu Kosa, Chore Botor, Limu Seka and Nono Benja¹⁷. What has been Limu? What about now?

¹⁷ Which Oromic names are respectively Limmuu Kossaa, Cooraa Botor, Limmuu Saqqaa and Naanoo Beenjaa.

2.2) A brief view on Ethiopian administrative units through Limu region evolutions

Previously zones were provinces including *awarajas* in which were found the already existing *woredas*, the smallest administrative units. Up to mid-DERG¹⁸, there were six *awarajas* under Kaffa province:

- Limu awaraja including four woredas: Limu Kosa, Limu Seka, Goma, Gera;
- Jima awaraja including six woredas;
- Kullo Konta awaraja including six woredas;
- Kaffa awaraja (now Kafetcho zone) including ten woredas;
- Gimira awaraja including three woredas;
- Magi awaraja including nine woredas.

Totally, Kaffa province covered thirty-eight *woredas* grouped into six *awarajas*, and Jima was the capital of the province. There were up to ten *woredas* by *awaraja*.

Before DERG ended, during three to four years, *woredas* were abolished and disappeared, becoming new *awarajas* or getting included in new *awarajas*. At most, a single new *awaraja* included two *woredas*. These *awarajas* were parts of administrative regions. Kaffa province split and got distributed into:

- Kaffa administrative region: Magi, Gimira and Kaffa ex-awarajas;
- North Omo administrative region: Kullo Konta ex-awaraja;
- Ilubabor administrative region: Jima and Limu ex-awarajas.

Limu Kosa and Limu Seka woredas became two new awarajas with Genet (or Limu Genet) and Atnago as respective capitals. Goma and Gera woredas became a single awaraja with capital Agaro. From four woredas belonging to a single awaraja, they became three new awarajas. The DERG regime created new administrative units called kebele suffering comparison with soviets. These kebele, named farmers' or peasants' associations in rural areas, divided the new awarajas into many units and still organize the country as the smallest administrative units.

¹⁸ DERG means the military regime lead by Colonel Haile Maryam Mengistu from 1974 to 1991.

After opposition defeated the DERG regime, creating a new government lead by its Prime Minister Meles Zenawi, the ex-administrative system was replaced by regions, zones and *woredas*. *Awarajas* disappeared. Limu Kosa, Limu Seka and Goma/Gera *awarajas* returned as the four *woredas* they were, parts of the new Jima zone, the latter included in the Oromiya Region.

The last changes occurred three years ago when large *woredas* split into two *woredas*. New formed *woredas* in Jima zone are:

- Limu Kosa woreda split into Limu Kosa and Cooraa Botor woredas;
- Limu Seka woreda split into Limu Seka and Nono Benja woredas;
- Goma woreda split into Goma and Gumay woredas.

The new seventeen Jima zone's woredas (maqaa aannoolee ¹⁹)						
Cooraa Botor Limmuu Saqqaa Shabee Somboo						
Deedoo	Maanaa	Saaxmma				
Geeraa	Naanoo Beenjaa	Sigmoo				
Gommaa	Omo Naadda	Sokoruu				
Gumaay	Qaarsaa	Xiroo Afaataa				
Limmuu Kossaa	Saqqaa Coqoorssa					

Table 5: The new seventeen Jima zone's woredas (data: Jima Zone Agriculture and Rural Development Office, 8th July 2009, prod: Bossolasco, 2009)

The *Home Gardens of Ethiopia* project chose for its investigations to focus on Limu Kosa *woreda*, all *kebele* including. Indeed this district seems to better correspond to geographical indication prospects: first because it regroups more coffee infrastructures and institutions (service cooperatives union head office, state farms, investors' modern plantations), higher coffee production levels and shelters protected forests which are the potential wild coffee environment. Anyway, even I also focused in Limu Kosa, I also extended my investigations, in a lesser way, to Limu Seka, Chore Botor and Nono Benja *woredas*. These four *woredas* are parts of the old Limu-Ennarea kingdom defeated by Amhara conquerors in the second half of 19th century, then were include in the old Limu *awaraja* during the Haile Sélassie regime before forming the two ex-Limu *awarajas* during Mengistu

¹⁹ Maqaa aannoolee litterally means "name woredas" in Oromic. In the table, names are written in Oromic.

regime renamed Limu woredas by the current Prime Minister last century. Nowadays this *Limu region* is dominated by the Limu Kosa *woreda*, not only concerning coffee production but other infrastructures.

2.3) Limu region and Limu coffee traded boundaries

But the *Limu coffee traded* boundaries are larger. For example, the Orominia Coffee Farmers Cooperative Union (OCFCU) sells *Limu coffee* in domestic and export markets which is produced out of the *Limu region* boundaries we defined:

	Oromia Coffee Farmers Cooperative Union List of cooperative members and area of coffee								
	Name of	Districts	Type	of coffee	House	holds/Me	mbers	Area	Production
No.	Cooperatives	(woredas)	Washed	Unwashed	Male	Female	Total	of coffee	in tonnes
1	Yukiro	Gera	Limu-2	Jima-4/5	253	0	253	556.6	333.9
2	Nanno Challa	Gera	Limu-2	Jima-4/5	21	0	21	42	25.2
3	Haro	Mana	Limu-2	Jima-4/5	785	106	891	1890	1134
4	Afata Wanja	Mana	Limu-2	Jima-4/5	1150	70	1220	1133	679.8
5	Dawa	Mana	Limu-2	Jima-4/5	549	29	578	947	568.2
6	Kenteri	Mana	Limu-2	Jima-4/5	729	56	785	1034	620.4
7	G/Mazoriya	Mana	Limu-2	Jima-4/5	554	5	559	1670	1002
8	Kore	Mana	Limu-2	Jima-4/5	957	57	1014	2304	1382.4
9	Aneso Lami	Mana	Limu-2	Jima-4/5	641	32	673	1545	2575
10	Kokollaq	Mana	Limu-2	Jima-4/5	88	8	96		
11	Doyo	Mana	Limu-2	Jima-4/5	612	3	615	876	525.6
12	Babu ²⁰	L/Kosa	Limu-2	Jima-4/5	1983	100	2083	814	488.4
13	Ambuye	L/Kosa	Limu-2	Jima-4/5	2151	144	2295	1984	1190.4
14	Chadaro Suse	Goma	Limu-2	Jima-4/5	552	10	562	1187	711.9
15	Kaso Dabu	Goma	Limu-2	Jima-4/5	666	15	681	2981	1788.6
16	Choche Guda	Goma	Limu-2	Jima-4/5	976	47	1023	4320	2592
17	Dalacho	Goma	Limu-2	Jima-4/5	505	13	518	1085	651
18	Ilbu	Goma	Limu-2	Jima-4/5	787	13	800	1100	660
19	Ododaru	Goma	Limu-2	Jima-4/5	984	12	996	2282	1369.2
20	Goga	Goma	Limu-2	Jima-4/5	607	100	707	1172	703
21	Limu Sadacha	Goma	Limu-2	Jima-4/5	890	16	906	1120	672
22	Limu Sapa	Goma	Limu-2	Jima-4/5	771	14	785	4050	2430
23	Bulado Choche	Goma	Limu-2	Jima-4/5	322	8	330	1480	888
24	Kota	Goma	Limu-2	Jima-4/5	509	45	554	2330	1398
25	Omo Bako	Goma	Limu-2	Jima-4/5	401	10	411	2110	1266
26	Sineso	Dhidesa	Limu-2	Jima-4/5	299	2	301	1283	770

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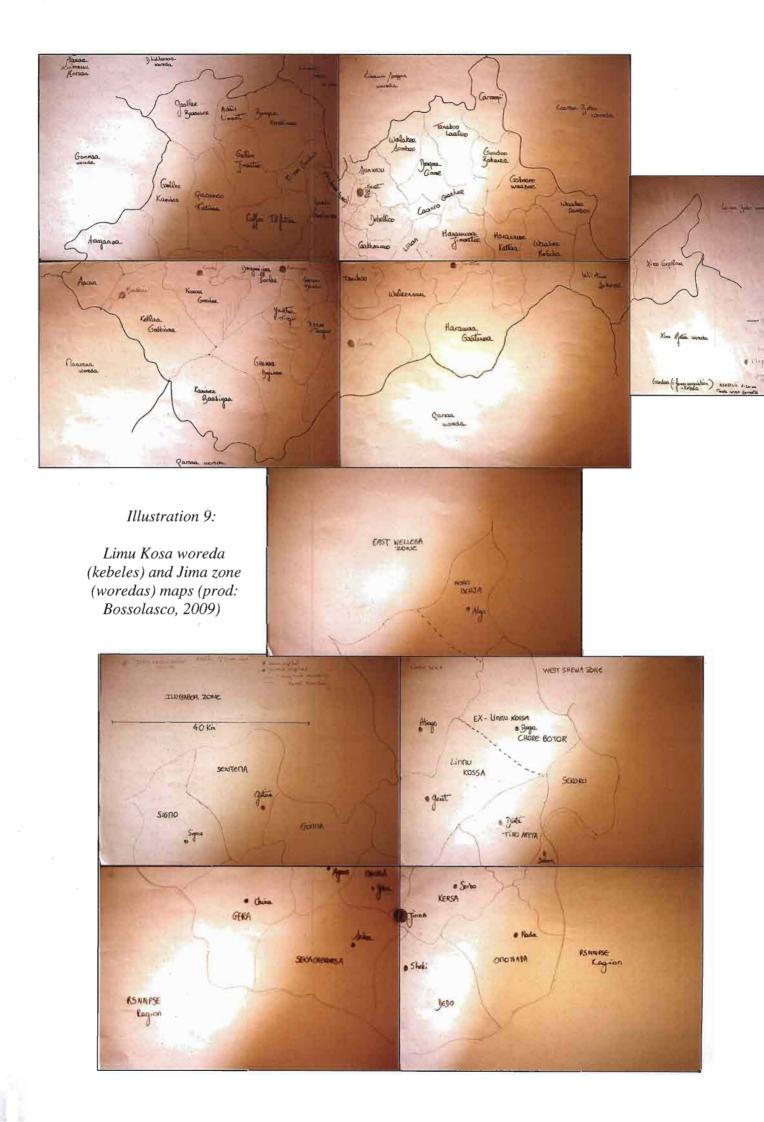
27	Yembaro	Dhidesa	Limu-2	Jima-4/5	343	4	347	867.5	520.5
28	Dambi	Dhidesa	Limu-2	Jima-4/5	179	2	181	685	411
29	Kampi	Gachi	Limu-2	Jima-4/5	167	2	169	764	458.4
30	Bidoo	Gachi	Limu-2	Jima-4/5	230	15	245	1320	792
31	Sekka	Gachi	Limu-2	Jima-4/5	201	30	231	640	384
32	Asandabo	Gachi	Limu-2	Jima-4/5	343	0	343	950	570
33	Gole	Gachi	Limu-2	Jima-4/5	274	2	276	975	585
34	Bedele Union	Bedele	Limu-2	Jima-4/5	5744	159	5903	2400	1440
35	Tulube	Matu	Limu-2	Jima-4/5	489	31	520	1361	816.6
36	Dizi	Matu	Limu-2	Jima-4/5	278	6	284	481	288.6
37	Bilo Kara	Matu	Limu-2	Jima-4/5	289	6	295	1146	687.6
38	Allebuya	Matu	Limu-2	Jima-4/5	105	0	105	1206	723.6
39	Sorgaba Union	Matu	Limu-2	Jima-4/5	789	153	942	1884	1130.4
40	Ungudi Shangala	Chora	Limu-2	Jima-4/5	140	20	160	540	324
41	Alelu Adesu	Chora	Limu-2	Jima-4/5	144	0	144	652	391.2
42	Kundi fi Gagi	Aledida	Limu-2	Jima-4/5	206	22	228	1512	907.2
43	Dika Gabe	Aledida	Limu-2	Jima-4/5	117	1	118	431	258.6
44	Arami	Darimu	Limu-2	Jima-4/5	145	7	152	811	486.6
45	Adami	Darimu	Limu-2	Jima-4/5	221	19	240	360	252
46	Wixate	Yayu	Limu-2	Jima-4/5	123	1	124	631	378.6
	Total				29269	1395	30664	60912.1	38205.7

Table 6: Oromia Coffee Farmers Cooperative Union, list of cooperative members and area of coffee (OCFCU offices, Nefasilk, Addis-Abeba, 2009)

Jima zone woredas	Ilubabor zone woredas

¹Only Babu and Ambuye cooperatives are found in *Limu region*. Concerning OCFCU activities, *Limu region* represents 2/46, approximately 4%, of *Limu coffee traded* boundaries.

Who is right? The OCFCU currently sells coffee produced in Goma and Gera woredas as Limu washed coffee on the Ethiopian Commodity Exchange and in Europe, Japan, etc. These two districts were part of the Limu named administrative divisions until the early 1980's. Therefore an expert of the Jima Agricultural Research Center breeding department told me that a known place for Limu coffee is also Mana woreda. Moreover, the actual coffee board, the Ethiopia Commodity Exchange Authority, also defines its Limu coffee traded boundaries. But nowadays the term Limu is locally and regionally employed to mention Limu Genet, the district capital of Limu Kosa. As explained me a Genet dweller: "The term Limu pointed and still points out different entities according to people and times. At its evocation, it reminds Limu Genet town, and therefore Limu Kosa and Limu Seka woredas come after in mind. Whereas for external people (out of local woredas up to Jimma), they maybe come first." In this report, Limu region and Limu coffee traded boundaries will be distinguished in this way. The terrain of investigations required for geographical indication will be more restricted: Limu Kosa woreda.



3) Environment and biodiversity

3.1) General description of the environment

Ethiopia is both the centre of origin and diversification of the crop. Studies have shown that Ethiopia possesses a range of environments for cultivation of coffee. The following map illustrates the distribution of these environments in the country:

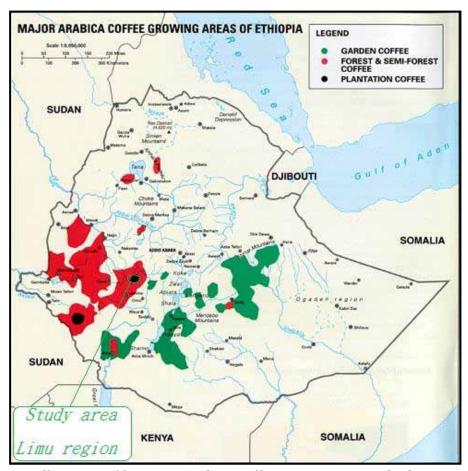


Illustration 10: Major Arabica coffee growing areas of Ethiopia

In this range, rainfall, temperature, elevation and soil are major factors influencing the economic production of coffee (CPDE, 2005): Coffee is found between 350 and 2,600 masl (the ideal being 1,400-2,200 masl), temperatures ranging between 10° and 30°C (the ideal being between 15-25°C), which rainfall suitable for its production are between 800-2,500 mm. Relative humidity ranges between 30-85% (the ideal being 43-75%) and a deep soil (>150cm), friable, porous and rich in organic matter is essential with pH slightly acidic (4.6-6.5) whereas a gentle to moderate slope is preferable.

3.2) Limu Kosa climate and physical characteristics

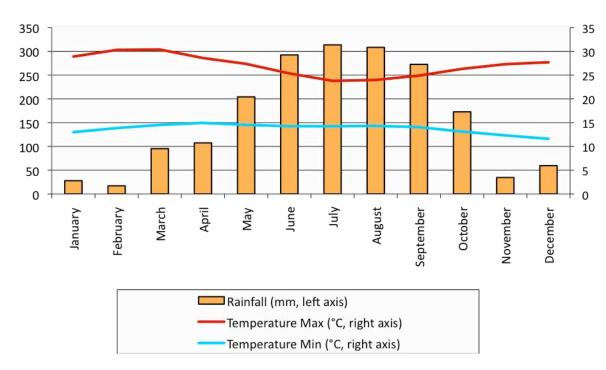


Illustration 11: Monthly average rainfall and temperature²¹ (highest, lowest) of Limu Genet station (calculated upon the five years monthly data from 2004 to 2008, Ethiopian Meteorological Agency)

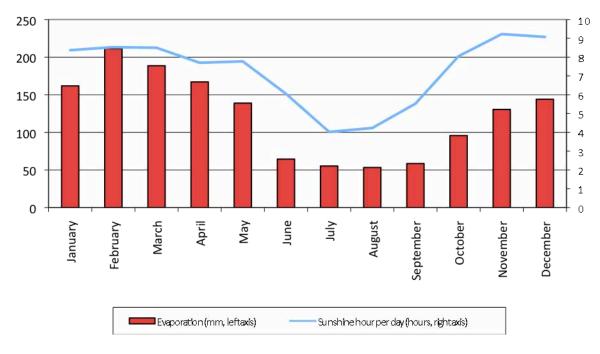


Illustration 12: Monthly average evaporation (calculated from the five years monthly data from to 2000 to 2005) and sunshine hours (calculated from the five years monthly data from to 2002 to 2007) of Limu Genet station (Ethiopian Meteorological Agency, 2009)

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 $^{^{21}}$ Minimum temperatures are an average of daily temperatures taken at 6 AM. Maximum temperatures were measured at 6 PM.

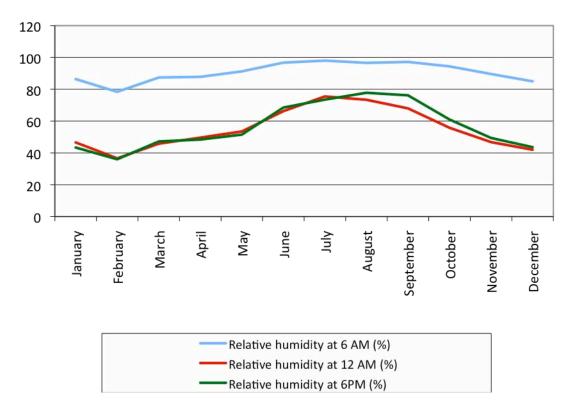


Illustration 13: Monthly average relative humidity (calculated from the five years monthly data from 2000 to 2005) of Limu Genet station (Ethiopian Meteorological Agency, 2009)

Ex-Limu Kosa woreda²², that means current Limu Kosa and Chore Botor woredas, lies in the northern part of Jima zone, between 7°50' and 8°36'N, 36°44' and 37°29'E geographical grids. It had an area of 2,770.5 km² and has three urban centres²³, including Limu Genet, the district's capital. It is bordered on the south by Kersa woreda, on the southwest by Mana, on the west by Goma, on the northwest by the Didessa River which separates it from the Ilubabor zone, on the north by Limu Seka, on the northeast by the Gibe River which separates it from the West Shewa zone and the Southern Nations, Nationalities and Peoples Region, on the east by Sekoru woreda and on the southeast by Tiro Afeta woreda. Topographically characterized by dissected plateaus (Agelo, Menta, Budo Bekere, etc.), plains (Tolay, Kara Inchini, Golu, etc.) and valleys (Didessa, Gibe, etc.). Altitudinally, the woreda lies between 1,200 and 3,020 masl. Several perennial rivers (Gibe, Awetu, Dembi, etc.), intermittent streams, springs and Cheleleki Lake are found there. Climatically, Limu Kosa woreda is classified into dega (10%), woïnadega (65%) and kola (25%) zones²⁴. High

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²² The <u>Socio-economic profile of the Djimma Zone</u> from the Government of Oromia Region only refers to the ex-Limu Kosa *woreda*, 2006.

²³ Then Babo and Ambuye.

These altitudinal zones vary according to scientists but, in the classification of the Jima Research Center, high lands (dega) are > 1750 masl, mid lands (woinadega) > 1550 masl and low lands (kola) < 1550 masl.

forests²⁵, and man made forests are available in the district. Tiro Boter Becho (in current Chore Botor *woreda*) and Babiya Folla (in current Limu Kosa *woreda*) natural forests are protected by the government and cover 93,822 ha in ex-Limu Kosa. Chromic and Pellic Vertisols, Orthic Acrisols and Dystric Nitosols are the major soils found there. And even if there is no wildlife conservation area, ape, antelope, lion, panther, warthog, pig, civet cat and hippopotamus are found in the district (Government of Oromia Region, 2005).

In 2005, about 34.9%, 20% and 39.7% of the district area were respectively arable (24.6% under cultivation), grazing and forest lands (including bush and shrub). The most widely cultivated crops are still maize, sorghum, teff, finger millet, barley, horse bean and haricot bean. And of course coffee is also widely spread: it covers 6,234.5 ha in current Chore Botor *woreda* whereas it covers 26,554.6 ha in current Limu Kosa *woreda* (Coffee experts of both *woredas*' WARDO, 2009).

3.3) The biodiversity of Limu Kosa forests and home gardens²⁶

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.)).1) Vernacular	Hailies	OI LIIIIU	NUSA	TOTEST	SUCCICS

Botanical name	Amharic name	Oromic name	English name
Rhoicissus tridentata	Aba woldu	Gale lala, Hida refe, Dangogo siyaka	Bitter grape
Terminalia brownii	Abalo		
Erica arborea	Adale		Giant heath
Dichrostachys cinerea	Ader, Ergett dimmo	Adesa	
Myrtus communis	Ades		Myrtle bush
Zizyphus mucronata	Ado kurkura, Foch	Ado kurkura	Buffalo thorn
Carissa edulis	Agam	Agamsa	
Salix subserrata	Ahaya, Wonz admik	Alatu, Barodo	Wild willow
Trichilia dregeana	Bonga	Konu, Luya, Shego	
Markhamia lutea	Botoro	Buturu	
Manilkara butugi	Butigi	Gajo, Butugi	
Nuxia congesta	Chocho	Amfare	
Premna schimperi	Chocho	Hadad, Hurgessa, Urgessa	

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²⁵ It is interesting to note that in Oromic, high, mid and low lands are respectively named *Baddaa*, *Bidaree* and *Gamoojii*. Indeed, the word *Baddaa* means both "high land" and "forest" in Oromic.

²⁶ This list has been written upon my translator knowledge, who is an expert of the Limu Kosa WARDO, and my observations referring in the book: "Useful Trees and Shrubs for Ethiopia: Identification, Propagation and Management for Agricultural and Pastoral Communities" from the Regional Soil Conservation Unit and the Swedish International Development Authority, 1993.

Maytenus undata	Chucho, Kombolcha, Geram atat, Ilka	Ilka	
Syzygium guineense	Dokma		
Schefflera abyssinica	Kokora, Geteme, Gittem		
Ximenia americana	Kol, Inkoy	Awre-mudube, Hudi	Hog plum
Grewia ferruginea	Lenkoata	Bururi, Dokenu, Lensa	
Grewa villosa	Lenquata	Ogomdi	
Maytenus senegalensis	Nech atat, Yedega atat, Gulo		
Acacia asak	Sebansa		Wait-a-bit thorn
Grewia bicolor	Sefa, Teye	Haroresa	
Ficus sur	Shola	Harbu	Cape fig
Olea welwitschii	Sigida weira		Elgon olive, Elgon teak
Prunus africanus	Tikur inchet	Buraya, Homi	Iron wood, Red stinkwood
Calotropis procera	Tobiaw, Ghinda, Qimbo		Dead sea fruit
Rhamnus staddo	Tsedo	Qadida	
Otostegia fruticosa	Tunjit		
Combretum aculeatum	Ungoi, Zenfok	Totofe	
Piliostigma thonningii	Yekolla wanza	Kora	Camel's foot tree, Monkey bread
Bridelia micrantha	Yenebir tifer	Galalo, Riga-arba	
Rhus vulgaris	Yeregna kolo, Qmmo	Tatess	
Polyscias fulva	Yezingero wonber, Kariu		
Rosa abyssinica	Kega	Enqoto, Goro	Abyssinian rose
Spathodea campanulata		•	African tulip tree, Nandi flame
Prosopis juliflora			Algarroba, Mesquite
Tamarix aphylla			Tamarisk, Athel tree, Leafless tamarisk
Hyphaene thebaica	Zembaba		Egyptian doum palm, Doum palm
Podocarpus falcatus	Zigba	Birbirsa	Podo
Pinus radiata	Radiata		Radiata pine, Monterey
			pine
Acrocarpus fraxinifolius			Red cedar
Annona senegalensis	Giishta	Komate	Wild custard apple
Phoenix reclinata	Selen		Wild date palm
Berchemia discolor			Wild almond
Fagaropsis angolensis		Dergi, Dero, Muke, Shapindi	
Psydrax schimperiana	Seged	Galo	
Balanites aegyptiaca	Jemo, Kudkuda	Bedena, Baddane	Desert date
Trichilia emetica	Mahogani	•	Cape mahogany
Aningeria altissima	Keraro		

3.3.2) Vernacular names of species met in both forests and home garden of Limu Kosa

Botanical name	Amharic name	Oromic name	English name
Combretum molle	Agalo, Avalo	Bika, Didessa, Dandamsa	Velvet-leaved combretum
Acacia saligna	Akacha saligna	Akacha siligna	Port Jackson willow, Weeping wattle, Willow wattle
Acacia decurrens	Akacha, Mimosa		Green wattle, Sydney black wattle
Discopodium penninervum	Ameraro	Mararo	
Hypericum quarantinianum	Amerja	Rigaganze	
Hypericum roeperianum	Amija		Large-leaved St. John's wort
Celtis Africana	Amlaka, Kawoot	Amalaqqa, Cheke, Meteqamma	
Croton machrostachyus	Bisana	Dogoma, Makanissa	
Rhus natalensis	Chakema, Takamu	Debobosso	
Acacia brevispica	Kontevl, Mezazign, Qanter, Qwentr	Amezaze	Wait-a-bit thorn
Acacia senegal	Kontir	Sabansa dima, Sapessa	Gum arabic
Erythrina abyssinica	Korch, Korra, Kuara	Anka, Bero, Wolensu	Flame tree, Lucky-bean tree
Acacia mearnsii	Mimosa		Bitter leaf, Black wattle
Acacia melanoxylon	Omedla		Australian blackwood
Albizia schimperiana	Sassa, Sembaru	Ambabessa	Large-podded albizia
Juniperus procera	Tid		
Acacia seyal	Wachu	Wakko dimo, Wosiya wajo	White-galled acacia, Whistling thorn
Cordia africana	Wanza	Diho, Odesa, Wodesa	
Acacia lahai	Wttie	Burquqqe, Derot, Garbi, Lafto, Sondi	Red thorn
Boswellia rivae	Ye-Sidamo etan zaf	Qura	Black incense
Boswellia papyrifera	Ye-Tigre etan zaf, Kererrie	Galgalem, Kafal	Bitter frankincense
Caesalpina decapetala	Yeferenji kitkita		Mauritius thorn, Mysore thorn
Psidium guajava	Zeituna		Guava
Acacia nilotica	Cheba		Egyptian thorn
Acacia tortilis	Deweni grar	Lotoba, Tedecha	
Olea europaea	Weira		African wild olive
Acacia brevispica		Sokeusa	
Diospyros	Ayeh		African ebony

mespiliformis			
Dalbergia melanoxylon	Zobbi	Moghano	African ebony, African blackwood
Acacia albida	Grar	Derot, Gerbi	Apple-ring acacia
Acacia polyacantha	Gmarda		Falcon's-claw acacia
Acacia senegal	Sbansa girar	Sapessa, Sabansa dima	
Albizia gummifera	Sesa	Ambabessa, Chatto, Gorbe, Karchofe	Peacock flower
Eucalyptus vinimalis	Key bahir zaf		Manna gum, Ribbon gum
Ficus elastica	Ye goma zaf		India rubber tree, Rubber plant
Acacia abyssinica	Bazra girar	Ambo, Gerbi	Umbrella thorn
Bersama abyssinica	Azamir	Boko, Dolkiss, Gessa	Winged bersama
Albizia lebbeck	Lebbek		Siris tree, Women's
			tongue
Cordeauxia edulis			Yeheb nut
Millettia ferruginea	Birbira	Asra, Dedatu, Ingidicho, Sotellu	
Ocotea kenyensis		Gigicha, Deressa	
Galiniera saxifraga	Solie, Yetota kula	Adamo, Didu, Mito, Sarbandai	
Allophylus abyssinicus	Embus, Qequewe	Abar, Areje, Diruba, Kekayi, Seho	
Ekebergia capensis	Lol, Sombo	Duduna, Sombo	
Hypericum revolutum		Edera, Garamba, Hendi	Curry bush
Albizia grandibacteata		Alele, Emele, Halele, Kofale, Shawo	Large-leaved albizia
Pittosporum viridiflorum	Ahot	Amshika, Talas, Bocho	
Ficus vasta	Shola, Warka		Oat
Olea capensis	Damot weira		East African olive
Ficus sycomorus	Shola, Bamba	Harbu, Lugo, Oda	Sycamore fig
Salvadora persica	Yeharer-mefaqya, Aday		Toothbrush tree

3.3.3) Vernacular names of Limu Kosa home garden species

Botanical name	Amharic name	Oromic name	English name
Persea Americana	Avocado		Avocado
Catha edulis	khat	khat	Chat
Trilepisium	Chai	Yuga	False fig
madagascariense			
Delonix regia	Dire dawa zaf, Gorade		Flamboyant
Ensete ventricosum	Enset, Guna-guna	Koba, Weke, Wese	Wild banana

Eucalyptus	Key bahir zaf		Red river gum, Murray
calmadulensis			red gum
Eucalyptus grandis	Key bahir zaf		Rose gum, Flooded
			gum
Euphorbia tirucalli	Kinchib		Finger euphorbia
Dodonaea anguistifolia	Kitkita	Etacha, Tedecha	Hop bush
Mangifera indica	Mango	Mango	Mango
Arundo donax	Meka, Shembeko		Reed grass
Citrus reticulata	Menderin		Mandarin, Tangerine
Ilex mitis	Misir gemfo	Hamsika, Miesa, Titto, Wolkile	African holly
Eucalyptus globulus	Nech bahir zaf		Tasmanian blue gum
Tamarindus indica	Roka, Humer	Roka	Tamarind
Eucalyptus saligna	Saligna bahir zaf		Sidney blue gum
Citrus medica	Tiringo		Citron
Parkinsonia aculeata	Ye eyerusalem eshoh, Filfile		Jerusalem thorn
Cupressus lusitanica	Yeferenji tid		Mexican cypress
Cassia siamea	Yeferenji digita		Ironwood, Kassod tree
Morus alba	Yeferenji injori		White mulberry
Jacaranda mimosifolia	Yetebmenja zaf		Jacaranda
Phoenix dactylifera	Yetemir zaf		Date palm
Stereospermum kunthianum	Zana, Washta	Botoro, Buturu, Utro	•
Ficus carica	Beles		Adviction fine Common
Ficus carica	Beles		Adriatic fig, Common fig, Smyrna fig
Azadirachta indica	Kinin		Neem
Citrus sinensis	Grawa	Ebitcha	Orange, Sweet orange
Apodytes dimidiata	Cheleleqa, Donga	Danissa, Qumbela	Pearwood, White pear
Schinus molle	Qundo berbere		Pepper tree, Peruvian mastic
Cajanus cajan	Yewof ater, Yergib ater		Pigeon pea
Akocanthera schimperi	Gararu, Merenz	Karachu	Poison-arrow tree
Eucalyptus citriodora	Shito bahir zaf		Lemon gum, Spotted gum
Chamaecyticus palmensis	Tree lucerne		Tagasaste, Tree lucerne
Melia azedarach			Persian lilac
Grevillea robusta	Tabanja enchet	Muqaqawe	Silky oak
Sesbania sesban	Girangire	- 1	River bean
	Tenadam	Tenadam	Ethiopian rue

Most spread shade trees	Shade trees for young coffee trees	Most observed garden species
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3.4) History of the study area and demographical data

This section leans against Bayon and Placet (2000), Hassen (1994) and Abir (1968) works.

Oromo people came from south of Ethiopia (Bale, Sidamo) and since 1540 began to quickly conquer half of southern Ethiopia. They finally conquered a third of current Ethiopia, and took control of Gibe River region around 1750. Natives got assimilated to the different Oromo tribes. Huge forest areas were cleared around Jima allowing agricultural practices of polyculture/livestock since 1770. At the beginning of the 19th century were created the Gibe states and kingdoms: Limmu, Gomma, Guma, Gera and then Jimma in 1830. The powerful Abba Jiffar monarchy of Jima kingdom became quickly dominant in the region. On the high plateaus were cultivated wheat and orge whereas valleys sheltered teff, sorghum, maize, cotton, enset and peas. In the mid 19th century, Hirmata (Jima market) was one of the most important merchant cities of southern Ethiopia, linking Kaffa (providing slaves, coffee and ivory) to northern Ethiopian territories. The bulk of the trade passed through the hands of Muslims²⁷ traders who mainly contributed to increase the coffee production. Unlike Kaffa, Limmu and Gera kingdoms, coffee didn't grow naturally in Jimma and Gomma. The increasing traders' demand incited Jima's king and landowners to plant coffee in forests. Fifty years after, Jimma production exceeded Gera one. This growth was even more significant for

Goma kingdom becoming the biggest coffee producer of the region. Before Menelik II conquests in the end of the 19th century, these territories were still states kingdoms (sultanates more exactly). The last king was Abba Jiffar from 1878 to 1932. But since 1884, Jima kingdom was paying an annual tax to Menelik II who took control of southern kingdoms. By this way, this kingdom kept some autonomy and the king of Shewa forbade building churches in this Muslim territory, then the landowning (unlike the other Gibe kingdoms).

Gera

Jimma

Käfa

Wällägga

Choa

Choa

Choa

Choa

Choa

Jimma

Jirán

O

Känbata

Schéma: LES ETATS GIBE A LA FIN DU 19EME SIECLE

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²⁷ Since Muslims were forbidden to own lands until the end of Haile Selassie regime in 1974.

The kingdom of Limmu-Ennarea was a continuation of the older kingdom of Ennarea, which successfully resisted for many decades the Oromo conquerors. Despite this, Ennarea kingdom drifted into an extended civil war and lacked leadership during the second half of 17th century. In 1825, the lord of war then king Bofu transmitted power to his son Abba Bagibo under whose rule the kingdom reached the peak of its existence. Due to wars in the neighbouring Jima kingdom, merchants used the trade route through his kingdom to gain access to Kaffa. Abba Bagibo made a concerted effort to promote this trade, both with beneficial policies (offering security from bandits to traders, and lower tariffs) and with coercive ones (requiring traders from Gondar, Adwa, Derita and Dawe to meet their counterparts from Kaffa and further south at Seka). Seka was the capital of Limmu-Ennarea sultanate. During his reign, the kingdom converted to Islam. Then Jima's success to open the Badi-Folla in 1847 reopened the trade route between Kaffa and Shewa, which merchants preferred, and brought an end to Limmu-Ennarea prosperity. Abba Bagido's son hastened the kingdom's decline.

All Gibe sultanates felt successively under Amhara rules, Menelik II conquering them: Guma kingdom felt in 1885, Gomma in 1886, Gera in 1887, Limmu-Ennarea 1891 and Jima in 1932 (spontaneously abiding this latter kept advantages). Coffee production got progressively intensified while the world coffee demand increased, after Italian especially invasion (1936-41).

Schéma: ROUTES MARCHANDES EN ETHIOPIE, FIN 18eme SIECLE to Egup Mitsis and India ABYSSINIA & SULTANATES TURKANA Y AMWEZI CHAGA 0 100 200 300 m 6 KEFA Major states Minor states and MASAI stateless peoples YAO Direction of expansion Major trade route © 1994 EB. Inc

Nowadays Limu Kosa is one of the 180 *woredas* of <u>Oromia Region</u>, and got named in part after the former kingdom of <u>Limmu-Ennarea</u>, whose territories included the area this *woreda* now covers. In 2005, the ex-Limu Kosa *woreda* had an estimated total population of 254 911, of whom 128 770 were men and 126 141 women; 19 932 or 7.82% of its population were urban dwellers, which is less than the zone average of 12.3%. With an estimated area of 2 880 square kilometers, it had an estimated population density of 88.5 people per square

kilometer, which is less than the zone average of 150.6. The 1994 national census gave that the five largest ethnic groups reported in the district were the Oromo (80.94%), the Amhara (11.33%), the Kullo (1.61%), the Kafficho (1.02%), and the Tigray (1.01%); all other ethnic groups made up 4.09% of the population. Oromic was spoken as a first language by 81.07%, 14.81% spoke Amharic, 0.92% spoke Kullo, and 0.85% spoke Tigrigna; the remaining 2.35% spoke all other primary languages reported. The majority of the inhabitants were Muslims, with 70.03% of the population having reported they practiced that belief, while 28.31% of the population said they professed Ethiopian orthodox christianity (monophysism), and 9.72% were protestant (Central Statistic Authority, 2005).

4) Production

4.1) Coffee production systems: the coffee space

In their article "From local food to localized food", G. Holt and V. Amilien (2007) emphasize differences between place and space dimensions of the term "local food", with "a place aspect that often underlines the historical, cultural and social features, while physical space obviously focuses on the typicality of the products from this special place." In order to define the Limu coffee place, it is indispensable to describe the production spaces it involves. These spaces are a stone of the Limu coffee place building. What are these systems of coffee production?

Local agronomists, national and regional researchers, administrative bureaus, peasants, even foreign journalists or agricultural development organizations are thrown into a semantic struggle concerning the different spaces in which coffee gets produced. As a sample, we can mention: forest coffee, wild coffee, small-holder coffee, garden coffee, semi-domesticated forest coffee, semi-forest coffee, modern coffee plantation, home garden coffee. Some of these terms mean the same spaces, and often reflect confusion in words and concepts. We can quote as the best example wild coffees and forest coffees, considered as synonyms, which are in fact semi-forest coffees that we better name agro-forest coffees. What is disturbing our semantic framework is the degree of anthropisation met by the coffee environment. A recurrent error remains on the use of terms as wild or forest coffees associating the vision of undiscovered

virgin forests of which the local inhabitants would pick the holly fruits given by a generous nature. This kind of analysis emerge in the mind of foreign depressed journalists who to escape their routine find their inspiration in publicity spots posted in bus stations and metropolitan walls and developed by fair trade companies showing them an happy and proud farmer picking coffee or presenting us a basket of full ripened coffee berries.

This confusion gets increased by the land property rules dividing the coffee producing actors into another semantic world. What is suitable for our understanding is to fix production systems' definitions according to the main and most recognized meanings and according to the common sense, considering that reality doesn't limit itself into fixed definitions but mainly stands between those.

The Ethiopian coffee world agrees that coffee is grown under four different systems:

4.1.1) Forest or wild coffee

The crop tree in the rain forest is grown from the self-sown seedlings having been crudely transplanted to give an irregular but dominant under-storey. The forest is sometimes thinned. There is no cultivation or pruning and operations are confined to:

- An annual slashing of the under growth to facilitate harvesting;
- Picking cherries from the ground or striping all stages of fruits at once;
- Drying entirely under uncontrolled conditions.

Under this system yields are certainly low and quality is inevitably poor. To improve its productivity, it needs pruning, rejuvenation, fertilization, shade regulation, selective picking and controlled drying (Bantte, 1995).

4.1.2) Semi-domesticated forest coffee or semi-forest coffee

It differs from forest coffee in that plants are usually raised in a nursery and are planted at a more or less regular spacing. The planting often appears to have been badly carried out, and as a result there could be many gaps. Cultivation and pruning are not generally practiced. There is sometimes attempt at processing by the wet method which

necessitates selective picking. For increased yield it requires correct spacing and appropriate planting without root twisting, regular slashing of weeds during and just after rains, good processing and suitable pruning (Bantte, 1995).

In fact forests and semi-forests tend to be similar to the observer sight. Wild coffee is a paradox because it can't preserve its wild feature once it is exploited. Let consider coffee forests as the environment of an organized under-storey of coffee trees which, unlike semi-forest coffee trees, are made of a bulk of local varieties (whose origin is a mother bird-planted tree, likely to be wild, which has given seeds planted by farmers in some plots or directly transplanted by the past). Whereas semi-forest coffee trees are made of a bulk of selected varieties, lead by the Jima Agricultural Research Center and provided to peasants in extension programmes by the WARDO. Here, the difference's criterion lays on the external influence, out of the only peasant influence transplanting trees by the past. We will designate these coffees as agro-forest coffees to prevent confusion. Because, as an expert of the Jima Agricultural Research Center's breeding department told me, wild coffee exists but wild coffee trees are rare and generally found in deep forest, out of any human exploitation. Therefore this is not a system of coffee production.

Agro-forests are differently named because of different degrees of anthropisation:

- They could be totally constructed by introducing shade trees on previously cleared lands but most of time they are simplified forests by elimination of trees (as *Croton machrostachyus* in state farms which is considered as a bad shade tree, or as other trees cut for shade regulation) and conservation of others (*Albizia gummifera*, *Acacia abyssinica*, *Cordia africana*, *Ficus vasta* are the most common shade trees).
- Fauna and flora diversities are fluctuating qualitatively and quantitatively speaking. People tend to name agro-forests in which shade trees, weeds and fauna diversity/number of individuals is high as coffee forests, even if coffee trees are planted in rows and regularly spaced, and as semi-forests in a lower case of diversity. For example, in Baddaa Kalloo (Kalloo forest, Limu Kosa *woreda*), which is said a coffee forest, trees are planted in rows, slashing is annually done. Coffee trees are local varieties more or less rejuvenated (stumped) or remained mother trees (never been stumped). Oldest trees are lichen covered and 200 years old estimated (what doesn't have any sense in the absence of written sources). We can say

that they were the property of Haile Sélassie Prime Minister, Ras Mesfin, who expropriated its owners at the times of Northern domination. Visiting this agro-forest, you will meet a lot of shade trees and weeds species²⁸, even forest without coffee between coffee plots in which a lot of monkeys (*tota* and in Amharic), birds (in Oromic) and antelopes (*midako* in Amharic) coexist. Some say lions and leopards close to the bottom of valleys' rivers. Whereas Dino forest, qualified as a semi-forest, only contains five to seven shade trees species, a regular weed stratum and only *tota* as monkeys. Coffee trees hold the same appearance: a high canopy with low yields on the top of three to five meters-trees old and lesser than more rejuvenated.



Illustration 16: Kalloo Forest fauna as hadhagayyee and Gurezza (Bossolasco, 5th July 2009)

- According to the same expert of the Jima Agricultural Research Center's breeding department, in forest most of time farmers are not even the owners of the trees. No shade regulation, no planting. Just collecting. These forests are characterised by the number of primary trees. This is the undisturbed, original forest (primary trees like *Shefflera abyssinica*, *Aningeria altissima*). Whereas semi-forests contain houses near even inside the forest. People plant coffee trees. There are less primary trees, some secondary forest (*Croton machrostachiyus*, *Albizia gummifera*, *Cordia africana*) because of these human interferences (agricultural practices, firewood, construction wood). Light intensity is higher than in forests. In secondary forest, compared to primary forest, wood is softer, leaves bigger, trees grow faster and are richer in potassium. In third forest appear thorn trees as *Acacia abyssinica* which could be also a primary tree (in Kossa State Farm, there are natural acacias). *Albizia gummifera* also is sometimes a primary forest tree. Especially *Croton machrostachyus* is a secondary forest tree (never primary).

²⁸ Shade trees met: Anunuu (Oromic), Bosoqaa (Oromic), Zanbaba (Amharic), Kironton Bisannaa (Amharic), Wankaa (Amharic), Sasaa (Amharic), Lolchisa (Oromic), Laftoo (Oromic), Wadessa (Oromic), Ebicha (Oromic), Langessa (Oromic), Mango, Orange tree, Ensete, Muqaqawe (Oromic). Refer 3.3) The biodiversity of Limu Kosa forests and home gardens.

Anthropisation's degree differentiates agro-forests into forests and semi-forests. Not to be confused and tempted to use inappropriate words, it seems right to use the term *agro-forest*. *Forest* suits to point out wild coffee, which is very rare. In Jima zone, there are five protected forest areas, and forest coffee could be found only in two forests (because of their favourable altitudes range):

- Babiya Folla (coffee forest): in Limu Kosa, Mana, Kersa woredas. 33,000 ha;
- Belete Gera (coffee forest): in Gera, Shabe Sombo woredas. 112,000 ha;
- Sigimo Setema (honey production): in Sigimo, Toba, Setema woredas. 61,000 ha;
- Abalti Gibe: in Sokoru woreda. 10,000 ha;
- Sisima Kedo: in Dedo, Omo Nada woredas. 9,500 ha.

As Bayon and Placet (2000) wrote in their "Study of Jima zone agrarian systems", different coffee varieties are exploited in agro-forests:

- Old varieties, *Malo* and *Orome*, were used in plantations since the beginning of the 20th century up to the socialist government period. These trees are not planted in rows but are regularly spaced (1 m to 1.5m).
- Hybrid varieties, selected by the Jima Agricultural Research Center, whose plantation was promoted by the socialist government. Nowadays, only these selected varieties are planted through extension programmes.



Illustration 17: Kalloo forest, a wild appearance but a human management under-storey (Bossolasco, 5th July 2009)

4.1.3) Small-holder or garden coffee

In Ethiopia, coffee is essentially a family crop for which contribution to national production is estimated around 95% of which 50% in home gardens. Generally these coffee crops are not taller than three fetchassa (1 fetchassa = 0.25 ha).

It is a type of coffee management which is indeed located in the vicinity of the owner's dwelling. There is usually some cultivation and water and soil conservation tendencies, intercropping with annuals (maize, vegetables) or perennials (*enset*, fruit and shade trees), deposition of refuse under trees. Systematic pruning is unknown, competition with perennial weeds is severe and spacing is irregular. Yields are high.

These farmers-owned-trees are inside or surrounding houses, but could mean farmers coffee plots located far away from home in which cultural practices are well accomplished. New varieties are planted in the framework of extension programmes. There is no primary forest, or it is rare. Often two or three cultivars (improved or local selected trees) are met, coffee trees planted in lines and soil kept clean. It could be situated in forest. But it doesn't belong to the agro-forests' system because of the higher human interferences. Semantically speaking, we could say that garden coffee regroups home garden coffee and these coffee plots.



Illustration 18: Model farmer of Caakaawoo kebele 2) private nursery, 4) coffee and honey, 5) shade trees: Croton machrostachiyus, Cordia Africana and Albizia gummifera (Bossolasco, 28th June 2009)

4.1.4) Modern coffee plantation (state farms and advanced investors)

This system is the smallest production unit in Ethiopia. The plantation is usually established on previously cleared lands. Some indigenous trees are allowed to stand in the field either to serve as shade or windbreak or both. The planting site is usually selected based on some standardized criteria according to the coffee environmental requirements, by a coffee expert team. Planting materials are obtained from a superior mother tree in all production components, seedlings are produced under a well managed nursery. It follows an appropriate way of site preparation, planting method, young plantation maintenance, bearing-tree maintenance, harvesting and processing. Generally, it is the production system which is guided by plan and programme of production. These plantations are said modern because all inputs and practices are used, and washeries owned.

The state farms which are found in Limu woredas stand also in Bebeka, Teppi and Arbagugu. The total area occupied by these plantations is approximately 20 000 ha which accounts only 3-5% of the total coffee production in the country.





Illustration 19: Suntu and Kossa state farms of Limu Kosa woreda (Bossolasco, 2009)







Illustration 20: Smallholders agro-forest and state farm production systems contrast (Bossolasco, 27th August 2009)

English	Amharic	Oromic			
Home garden	Yeguaro atikilt	Midhaan mana boroo			
Semi-forest	Kafiil chakaa	Baddaamakaa			
Forest	Chakaa	Baddaa			
Table: Phonetic translations of the different coffee production systems					

However, the terms kafiil chakaa and baddaamakaa are not used. At woreda level, the distinction is made only between home garden and forest. The third actors recognized are the modern state farms: Suntu state farm, Kossa state farm, Gumer state farm, Cheleleki state farm in Limu's woredas for example. The many modern coffee plantations met in the region are a specificity of Limu, Teppi and Bebeka places. Therefore the term garden isn't so used. It seems to be obvious. Indeed just forest is used to precise a remote location where people are not obviously growing coffee. That is why a precision is here welcome. Moreover, peasants use the world baggaajjaa to mean forest coffee, whereas it should just refer to the age of trees, improved or not improved varieties. This means old. Confusion indeed exists and associates forest coffee trees with baggaaijaa which meaning given by farmers is local variety and consequently wild coffee. The problem is that local varieties are not only wild coffees; it could be, in absence of written sources, varieties introduced by the past like Malo or Orome. Baggaajjaa means wild coffee. This confusion is even spread by local and regional agricultural offices. We can say that vocabularies coexist, between agricultural research centers and peasants & agricultural ministry offices. The latter is the most influencing foreign journalists' vocabulary. To sum up, roughly speaking:

- Coffee genotype variability and primary forest: forest > semi-forest > garden;
- Cultural practices and human interferences: forest < semi-forest < garden < modern plantations.

The repartition of coffee production systems is estimated (Urich, 2005):

- Forest: 10%;

- Semi-forest: 35%;

- Garden: 50%:

- Plantation: 5%.

4.2) Agricultural practices

4.2.1) State farms

State farms are the more modern plantations and are the coffee producing units the more accurately applying agricultural practices. Some investors tend to their practices planning but generally join garden management rules. They play an important role in the *woreda* spreading as a model for all producing coffee units considering their *book of practices* as a whole to reach. The Coffee Plantation Development Enterprise (CPDE) in charge of coffee state farms regularly publishes a coffee production manual. The Limu Coffee Plantation, a branch of the CPDE, is applying the current one which is given in annex. But state farms and modern investors applying their practices are implied in environmental issues, concerning contamination due to DAP and urea as fertilizers.



Illustration 21:

Suntu State Farm row organisation of trees (Bossolasco, 1st July 2009)



4.2.2) Agro-forest coffee

As T. Stellmacher (2007) described in "Prospects and challenges of forest coffee certification in Ethiopia" most peasants transplant coffee seedlings within the forest and slash competitor plants. In general agro-forest management intensities are minimal with low labour and almost no cash input. This coffee grows entirely organic simply because peasants can not afford pesticides, herbicides or other chemical inputs. The yields fluctuate tremendously from year to year with even no yield in some seasons due to the natural coffee cycle, poor management and sometimes unfavourable weather conditions. These figures are extremely low in comparison to more intensively managed garden production or modern plantation systems. The agro-forest production system, or forest production system roughly speaking, implies considerable low yields and high fluctuations from year to year and from one forest plot to another. The coffee cooperatives in South-western Ethiopia consist of around 100 to

300 members. The average production per individual member was assessed with 596 kg of dry forest coffee per year. These results obtained from cooperative chairmen in Gzmeret, Michiti, Medfegna and Chiri in the research project "Conservation and use of wild populations of coffee Arabica in the montane rainforest of Ethiopia" (conducted from 2003 to 2007 by the Center for Development Research, Bonn, Germany) can be applied to the agroforest system met in Limu Kosa. In total, it is estimated that only 6-10% of the total Ethiopian coffee production is gained from forest production systems (Abebaw and Virchow, 2003). But, even if the agro-forest production data seem low, only 7% of the farmers interviewed in the same project in Bonga region are not producing forest coffee. Reasons are loss of forest land to spiritual leader or death of all coffee plants due to disease affection (Urich, 2005).

4.2.3) Small-scale farmers

Coffee is associated to subsistence crops as maize, *enset*, avocado, ginger or tomato. Familial crops constitute ecosystems sheltering many animal and vegetal species. Coffee trees roots dive deeply and prevent soil erosion. Few inputs are used (less than 10% of farmers use it) just to control perennial weeds (coach grass, Cyprus species). The vast majority of production comes from smallholder production, especially from their home garden. Trees are rain fed and these are indeed low input-output farming systems. Coffee management is minimal with coffee generally grown under forest trees canopies with little pruning, field hygiene or stumping. The low input characteristic of farming in many coffee growing areas means that much of Ethiopia's production can be considered organic, although little certification has taken place yet. Lack of management means harvests occur in a regular fluctuating cycle: peak/high-medium-low (Urich, 2005). For better yields this system calls for proper pruning, cultivation to destroy perennial weeds, selective picking, controlled drying, shade and suitable spacing ratio between interplants and the coffee trees (Bantte, 1995).



Illustration 22: Mulching, animal dung, stumping, tillage (Bossolasco, 2009)

	Baggaajjaa or baggaajjaa + improved varieties or improved cultivars only. Yields differ. For
Coffee trees	baggaajjaa: 5-8 q/ha without resting time (that means production is year to year regular), whereas for
	new varieties: 40 q/ha but one year is high yielding whereas follow three to four years resting. For
	baggaajjaa, management is weak and generally gets reduced to slashing and shade regulation.
Land	From 0.125 to 2.25 ha. Common unit: fetchassa=0.125 ha. The vast majority owns one to three fetchassa.
	Intensification system of selected cultivars = double row system with 3600 plants/ha in lines (4 000 seeds
Planting	= 1 kg = 35 birr to the WARDO, 1 st July2009). Seedlings stay 11 months in nursery (state nursery or
system	farmer nursery) before getting planted in home garden or semi-forest. First yields will appear in third
-	year of planting.
Slashing	From June to September. Indeed slashing occurs during rain season: from June up to July, there is a first
	slashing; from August to September, there is the second slashing.
Shade	From June to September. Regulation is made by cutting or practicing a ring around the basis of the trunk
regulation	which will dry then kill it. Heavy shade is not recommended because of competition with coffee trees and
	lack of light.
	Cordia Africana, Croton macrostachyus, Albizia Gummifera, Acacia abyssinnica and Ficus vasta are the
	most used shade species. Croton species is not recommended because its broad leaves are shattering
Shade trees	during dry season. Then associated productions as mango and orange trees could be also used as shade
	trees. Therefore, Gravilea robusta, Sesbania sesban and Luciana species are used as temporary shades
	between five and seven years whereas Typhosia species is used at the south of the district (at the south of
	Kossa town) up to the first four years.
Other home	Maize, avocado, mango, ensete, tomato, pepper, ginger, gesho (cash crop sold at the market and
garden	processed to produce talla and arake), eucalyptus, onion, honey, poultry, chat, papaya, cassava,
productions	lumbering trees, oxen farming in maize and dung.
Intercropping	Monocropping is problematic because of diseases. Intercropping is recommended: leguminous, ginger,
(association)	cassava, lumbering trees as shade trees, orange, mango, etc
Mulching	During dry season (dried grass, annual crops straws, and shade trees leaves).
Tillage	From February to June.
Foutilizing	Organic practices using compost and animal dung, no commercial fertilizer. No uniformity on compost quantities applied. Fertilizing with animal dung occurs after harvesting, in March. All year long, animal
Fertilizing	dung is stored in a hole in the garden.
Harvesting	There are three pickings according to full ripened berries times from October to February, the bulk of it
Trai vesting	happening between October and December.
	Drying on maize straws from 10 to 25 days: tables 1 meter above soil, 10 meters long and 1 meter wide.
Drying	Farmers agree to point out concrete cement and mesh wire as the best drying material (mating) acting on
Dijing	quality but expensive. Farmers still dry coffee directly on soil, what is not recommended for quality.
	All family members participate on coffee management, especially during harvesting time, children
Gender work	helping once school is finished in the afternoon. There are no identified works according to the gender.
	This difference only concerns state farms where there is a bulk of female workers. Children typical work
	could be climbing in the trees at picking time to harvest <i>out-of-hands</i> cherries.
Production	Unanimously, individual production is said to be the best for the management and to increase incomes.
rules	Individual production is really the best to keep quality. Collective production rules are not wanted.
	Coffee extension is often not allowed because of a lack of farm land. Land limitation is really
	problematic and the first constraint. Each generation lands are divided into sons and consequently
	reduced. Then another problem is a lack of labour force while children are learning during harvesting
Constraints	time. Thirdly some diseases on coffee berries (called CBD) like the ones caused by fungus lower yields.
	And some practices lack as rejuvenation (stumping), pruning and taking lichen away despite pruning is
	very important. Indeed if dead branches and other parasites are not taken away, it reduces aeration and
	yields can decrease 60% (Suntu state farm manager, 30 th June 2009).
	Home garden production allows better yields because of the short distance (managed on time, prevents
Coffee	animal attacks, compost, animal dung and household waste) but fronts land scarcity. And the taste of
production	agro-forest coffees is said to be better than the home garden one because of flora diversity (different
system	leguminous shades as Albizia and Acacia species fixing nitrogen). Two agro-forest coffees are said of
characteristics	articularly good quality by farmers of the Caakkaawoo farmers' association and are located in places
	called Ajanoo and Giito.

Table 8: Limu Kosa woreda small-scale farmer profile and practices (data: interviews, prod: Bossolasco, 2009)

4.3) Land property rules

4.3.1) Agro-forest possessions

Even if forests are often considered as common or collective property and have been owned by the regional governments since 1974, previous institutional framework and traditional management systems that used to define access and use rights are still implicitly working and they are tolerated in most areas (Stellmacher, 2005). As a consequence, forests are divided among the households living in the area. Individual plots are managed by households, individually (as in Kalloo forest) or in groups (as in Dino forest market group). Products are harvested by householders that hold right over the plot but these rights are more or less exclusive. High value products as coffee tend to be appropriated on a more exclusive basis by specific people. From three modalities of access to forest, two come from the past:

- Exclusive usufruct: only one person has access to the concerned plot. All resources can be used without restriction: spice and coffee, wood and cutting trees. Access to this plot is regularised by the tenant for life. Often he enlarges the access to his family, neighbours. But a stranger penetrating without permission is considered as a thief (Avril, 2008).
- Partial usufruct: governmental forests non distributed are used by farmers who have fields just next to the forest. Owners of these fields have an officious right for utilisation. They can gather coffee, spices, wood but they can not cut trees (Avril, 2008).

As an example, Dino forest situated in Sunxxu farmers' association shelters a twenty hectares semi-forest coffee plot which is divided among twenty five smallholders. They constitute the Dino market group, member of the Limu Inara Farmers Multi-Purpose Cooperative Union²⁹. And as a member of this market group, the Sunxxu *kebele* chairman owns one hectare. Farmers own their trees, even if there is no boundary or any kind of delimitation between those. These trees were planted during Haile Selassie regime, fifty years before and are probably *Malo* or *Orome* varieties.

²⁹ Refer 6.2.2) The Limu Inara Multi-purpose Cooperative Union, an initiatives' leader?





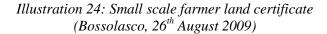
Illustration 23: Dino forest semi-forest trees (Bossolasco, 26th August 2009)

- This situation gets complicated by the coming of new coffee actors, the investors, who obtain their land in usufruct from the regional government (Oromic regional government). The government encourages the plantation in forest by giving large lands of forest to investors for a limited time and with conditions. Investors can manage the forest for 40 years. These lands were before used by partial usufruct but were considered wrong managed (Avril, 2008). But sometimes investors obtain their land from smallholders too. It is forbidden to send land, but illegal agreements exist between investors purchasing land to peasants as told me a Jima investment office worker with who I visited some investors' land in Debacon forest (Limu Kosa woreda, Caffee Ilfata and Gallee Jimaatee kebeles) to adjust the boundaries with an another investor. As it occurred in this forest, violent conflicts happen between investors.

4.3.2) Home garden property

The government policy is that each farmer has to be certified on his land, even if land remains an Ethiopian property. Land certificate provides usufruct lands to farmers. Peasants want it, are very interested: "The land is mine". The land certificate makes them care more about the management. Through this land certification the government aim is to catch taxes, fixing populations by the way. Before certification, farmers didn't feel that the land was theirs. During DERG regime, little farmers inherit lands from state but where afraid because state could take it for public associations or other redistributions. The certificate makes farmers plant coffee trees. The property on land gives them safety about the holding of the land, and so of perennial crops such as coffee, if they keep on paying taxes. To pay these taxes, they have to generate incomes, to intensify their production. That's why certification incites farmers to well manage their crops. Each farmers' association has its own land (or

field) committee which is a measurement committee. Its mandate is to measure each farmer land to deliver a description of his holdings (size of land). This step is realized on demand of farmers, but free of charge. Then peasants take this small description to WARDO that certify them, reporting weekly or monthly to Jima's ZARDO which reports to Oromia Region Government. This latter sends certification cards back to WARDO giving to farmers (from a WARDO expert, 30th June 2009).





4.3.3) An insight to the study area agrarian history

This section exclusively lays on Markakis and Ayele (1978) then Bayon and Placet (2000) works and aims to give light on the current framework of rural activities:

Ethiopia is historically divided into two distinct regional profiles: North and South³⁰. Roughly speaking, the north sheltered the Christian kingdom whereas the south, where were found the five Gibe sultanates, under Oromo territories were Muslim territories which have been progressively conquered at the end of 19th century by the king of Shewa, then Emperor, Menelik II. Let us first give a brief insight of north rules to better understand south ones as the southern mode of production came into being as the result of Amhara conquests and spoliation during the last quarter of 19th century:

The foundation of the feudal system was the peasant's right to a share of land derived from his membership in the kinship group. Land held under this right was known as rist³¹ and the holder as *ristegna*. *Rist* was hereditary, inalienable and inviolable, therefore highly valued. Ristegna didn't forfeit his right even through permanent absence from his native land. The aristocracy and the ecclesiastical hierarchy, not engaged in any productive activity, were

 $^{^{30}}$ Separated by a curved line formed by the Blue Nile and Awash rivers with Addis Abeba at the centre. 31 Amharic.

maintained through the gult³² system. Similar to the medieval fief, the gult conveyed rights over land, the cultivators who worked it and their produce. Gult rights were acquired through a formal grant from the monarch, or provincial rulers. Permanent gult was granted to members of the aristocracy and higher clergy, to churches for the living of their members and to retired officials as a reward for service. *Gult* served as the medium of surplus appropriation. The gultegna was entitled to collect the tribute from the land within his gult. The tribute was paid by the ristegna and the gultegna might keep all or part of it according to his grantee, passing the remainder to the superior level. Moreover, the gultegna was entitled to labour service from the peasant, and being a *rist* holder himself, utilized it to cultivate his own fields. Furthermore, he was exempted from taxation on his own land whereas a plethora of other taxes were imposed on practically everything that lived or grew on the land to peasants, and on many forms of activity engaged in by peasants. In this way, the surplus was systematically drained from the producers reduced to living on the borderline of subsistence and under the menace of periodic famine.

After the conquest (Limu-Ennarea kingdom felt in 1891), the northern rulers divided the southern lands into three parts according to the principle known as sisso³³ meaning one third. Two thirds were confiscated, the third left to the indigenous population. The warrior aristocracy was rewarded with massive grants of land. The warlords who governed the occupied regions subdivided the land among their officers, soldiers and retainers according to rank. Subsequently, all officials and agents of the state who served in the south were given land. The shares were substantial, the smallest being no less than forty hectares. Vast estates were set aside for the imperial palace and royal family members. The church hierarchy claimed its share and was rewarded in the same manner as aristocracy. Settlers from the north followed the army to obtain land on condition of paying tax on it. The undistributed part of the confiscated lands remained state land and grants continued to be made on it until the final days of the regime in 1974. Whereas the left third given to indigenous people was in fact given to local defeated chiefs. They were given gult rights becoming gultegnas over their own people. In this way the majority of the southern population found themselves on land confiscated by the state and redistributed to northerners. They became tenants of the new landlords. Anyway the new landlords rarely undertook to cultivate the land themselves, and the value of a grant was measured in terms of the number of families settled on it.

³² Amharic.
33 Idem.

Consequently eviction was rare and no population displacement accompanied this confiscation. The effect on southern peasants was the realm of tribute. Consequently the issue of possession remained hazy for several decades. The system imposed in the south represented an advance over the form of feudalism practiced in the north since the ruling class enlarged the privileges of *gult*, progressively eliminating the safeguards associated with *rist*. Generally, the landowners congregated in newly established towns that served as garrisons and administrative centres (as Limu Genet), and had little social intercourse with their tenants whom they regarded as their subjects.

At the end of 19th century, during the Abba Jiffar II reign, lands belong to big landowners (called *Abba Lafa* in Jima kingdom, which means land master). Those received their estates from the defeated king who remained the absolute owner. An estate represented fifteen to twenty hectares, up to forty hectares (one *gasha*). Land masters employed tenants (*chisanna*, which points out the one landless). They were given a little plot, half a *fetchassa*, they cultivated keeping all production. They had to work one day per week (the chore) in land master estate (coffee harvest, transport), and to cultivate a two *fetchassa* plot for him of which they kept one third to half production. Tenancy in the north was a minor phenomenon, the burden of oppressed minorities, especially Muslims³⁴. Moreover, land masters could be absentee land masters; in this case, they pointed out a tenant or family member as *kapo* and gave him a salary or a supplementary plot of which he kept all production. *Abba Lafa* also own slaves. Therefore, a little land proportion was exploited by peasants, from one to three hectares plots. Those could be land masters' descendants whose estate got divided. They used to keep their whole production, and often owned slaves.

Jima kingdom was the exception of the five Gibe sultanates, because the local leadership allied itself with the invaders and avoided expropriation in return for an annual tribute.

³⁴ Historically, trade has also been the occupation of minorities in Ethiopia. It became particularly associated with Muslim communities who were barred from landholding.

In 1891, Limu-Ennarea kingdom also felt under Amhara control. Menelik II used to settle conquered territories installing an Amhara governor and delegations of officers and soldiers as written before. The latter were given estates all around the conquered kingdoms. After, during the Haile Selassie I regime (1930-1974), land masters became landowners beginning to pay annual taxes to the Emperor (fifty cents per *fetchassa*). In this way, some owners began to sell their land to merchants or other growers. When the owner couldn't pay the annual taxes to the emperor, he was expropriated and his possessions given to Haile Selassie I circle of close people. The number of peasants increased because of estates divisions and the sale of lands. Anyway, relations between landowners and tenants remained the same. Amhara emperors tried to abolish slavery in order to satisfy European will and to be member of the former United Nations Organization. But this was accomplished by Italian intrusion up to 1936. And freed slaves became tenants on their landowners' former estate or kept their own land as owners. After Italian invasion, Haile Selassie I turned back to Ethiopia and promised to give a land to each Ethiopian and changes on land taxation. He didn't and respected deputies and senators' pressure, the bulk of them being landowners.

Foreign pressure, capitalism and centralisation of power *killed* the feudal plant. Land had to be freed from the remaining feudal constraints to enter the market as a commodity. In 1966, *gult* was finally eliminated. Nevertheless the *gultegnas* of the southern provinces were claiming large portions of their former *gult* as personal property. In 1967, an agricultural income tax replaced the former tithe. The landowning class was to be taxed on its income (including rent) for the first time. While the retreat of feudalism left the northern peasant essentially a smallholder, the majority of southern peasants became landless proletarians. In the 1960's the capitalist advance of commercial agriculture exposed tenants to precariousness. Indeed as soon as a district was opened up through improved infrastructure, credit and other facilities, landlords began to evict their tenants in order to undertake cultivation themselves or to rent the land to outside entrepreneurs who moved in with machinery. Kaffa coffee was cultivated in owner-tended plantations and was also picked in its "wild" state in the estates of absentee landlords. The most dynamic capitalist agricultural enterprise was a neo-colonial plantation system with foreign ownership and management. Its growth required the transformation of the poor peasantry into a rural proletariat.

In 1974, a revolution overthrew Haile Selassie I and feudal rules then felt into military hands which committee was known as DERG, lead by Colonel Haile Maryam Mengistu. This

socialist government in military dictatorship hands lasted until 1991, and the URSS collapse. One of the first political measures was the proclamation of the agrarian reform, on 4th March 1975. The whole rural lands became the Ethiopian people collective property. Land sale and renting became forbidden. Lands were divided between all peasants according to family size. In this way, farmers or peasants' associations (kebele) were created in less than 800 hectares territories to oversee this land reform, villagisation and social programmes (education, health). Farmers' associations were in charge to distribute the land to farmers. All adult growers were allowed to ask plots. Each married peasant was given four fetchassa, and often supplementary lands (four to six fetchassa). According to farmers' associations, landowners could keep important estates and former peasants their land (at most ten fetchassa). Plots given to farmers were not of one block but scattered on different ecosystems as agro-forests and forests. Simultaneously villagisation happened, farmers were employed to build roads, schools, shops, grinders and houses in the new villages. In 1983, they had to install in these villages and received half a fetchassa to build their house and for their garden. They kept their fields at their former place. This landscape organisation still remains. Farmers' associations then organized cooperatives in order to promote new skills (coffee pulperies implementation) and crops, and to sell it to government at fixed prices. Fertilizers and selected seeds were bought to the ministry of agriculture then sold to farmers by these farmers' associations. Some land and production means collectivisation appeared, dividing harvests to the pro rata work of each peasant. All peasants had to pay an annual tax to government, depending on land size and fertility.

Since the socialism government fall and further liberalisation, land property rules roughly remained the same. Indeed socialism foundations didn't collapse and let its prints to the current Ethiopian rural framework: land is still an Ethiopian collective property; land sale is forbidden; farmers' associations are still the basic administrative unit in charge of peasants' issues. Changes are that land renting is now allowed; also labour force employment; that sale is dressed up as long time renting contracts (forty years); and that collectivisation obviously disappeared letting behind service cooperatives which nowadays play an important role in coffee production.

4.4) Smallholders' typology

The household is seen as a single decision maker (Ellis, 2000 and Upton, 1996). The bulk of households are male headed, but, as it appears in various data, few female headed households exist³⁵. The term "smallholders" tends to be abusive pointing out a single producer's category whereas some are actually *smaller* and others *bigger*. One of the different factors revealing farmers poverty level is the farmers' dependency and focus on coffee production, as a sign of strategies' diversification of income generation. Sources of income could be differentiated in three categories (Urich, 2005):

- Farm activities and incomes: crop, livestock and chat production;
- Off-farm activities and incomes: coffee and honey production;
- Non-farm activities and incomes.

According to the distribution of these activities and the disposable income³⁷, studies agree to differentiate small-scale farmers into poor, middle and better-off farmers in order to remind the multiplicity of farmers' types rather than to give objective concepts. Anyway, coffee production remains of highest importance even for better-off households and the great majority of the farmers concentrate on the production of crops, livestock and coffee. It has to be considered that incomes differently generated are differently contributing to the household economy. For example, livestock is the farmers' bank account and a security as animals can be capitalized very fast at any time of the year in case of urgent need for cash. Whereas all other agricultural productions accrue at one time of the year only. The single event of income generation doesn't go in line with the all year demand for cash. And coffee or chat is income oriented. A great deal of cash earned through coffee production is invested in livestock enlargement (Urich, 2005). So, accumulation of livestock is bank account oriented whereas crop intensification is mainly subsistence oriented. Coffee, not subsistence oriented, is the typical surplus production. Some households are much diversified, as model farmers³⁸, facing coffee crisis through the development of their other activities while coffee prices decrease

³⁵ Refer 6.2.1) Woreda's coffee rules: Limu Kosa woreda.

³⁶ Refer Annex Sources of income.

³⁷ Remaining income after the household has met its food needs.

³⁸ Pointed out as *model farmers* by the *woreda* agricultural extension services because they take the innovation applying Ministry policies of diversification and extension and spread it to their farmers' environment.

whereas poorer households difficultly satisfy their food needs and consequently are unable to invest in other activities.

Among the 27,004 coffee producing households of Limu Kosa³⁹, 3,762 are members of the Limu Inara Farmers Multi-purpose Cooperative Union 40. That means they sell their coffee to the service cooperative they are members, this latter selling it to the union of which it is member. Thus the most exhaustive list of producers is in the hands of the union's staff. To prevent any confusion, it is important to consider that they mainly are better-off farmers. Anyway they constitute an organized basis for the implementation of any project. Currently actors of the Limmuu Organic Coffee Project⁴¹ implying Oxfam GB, they could be the introducing gate for geographical indication.

Refer 6.2.1) Woreda's coffee rules: Limu Kosa woreda.
 Refer 6.2.2) The Limu Inara Multi-purpose Cooperative Union, an initiatives' leader?
 Idem.

Kebele	No. households	Total farm area ⁴² (ha)	Coffee farm area ⁴³ (ha)	Number of coffee plots	Red cherries 2000 EC harvest (kg)
Mixxo Gundub	284	483.25	239.3	286	136 450
Burqaa Guddinaa	54	149.15	40	54	151 631
Gaallee Jimaatee	71	350	109.25	140	93 114
Gaallee Busaasee	60	373.75	122	72	464 593
Qacawoo Tirtiraa	59	164.25	107.75	66	235 244
Gaallee Kamisee	120	507.5	226.55	120	378 080
Caffee Ilfataa	79	93.25	47.85	79	166 168
Dambii Gaabanaa	150	356.85	172.6	450	318 800
Kossaa Geeshee	60	97.25	73.35	60	58 430
Dangaajjaa Soolee	85	149.35	62.37	113	263 420
Kamisee Baabiyaa	84	185.52	137.1	107	355 406
Geenaa Dujumaa	52	211	65	83	57 719
Yaatuu Tirgii	87	274.9	167.19	258	118 400
Dirree Toogoo	73	174.75	60.62	98	93 600
Geenaa Dambii	142	447.75	85.53	174	318 935
Carraqii	79	175.95	43.2	80	49 250
Tanaboo Laaloo	138	296.5	70.25	139	47 050
Guudoo Bakaree	120	287.25	185.4	193	210 952
Daaqaa Cimme	145	223.5	107.27	161	282 050
Waabee Somboo	60	282	42.39	60	126 197
Walakee Somboo	193	218.9	90.25	193	345 735
Sunxxuu	108	236.05	82.8	108	138 035
Caanco Geeshee	147	254.12	73.66	147	38 690.5
Waabee Koticha	168	430.75	107.77	434	294 685
Harawwaa Jimaatee	148	219.5	128.95	148	210 392
Liiban	77	225.8	24.25	77	40 158
Mandaraa	83	113.95	39.13	83	115 270
Harawwaa Kattaa	113	257.75	116.31	113	605 862
Caakkaawoo	125	226	107.5	190	70 750
Debelloo	141	224	57.25	145	17 905
Tanchoo	240	479.2	275.51	456	1 114 458
Waleensuu	127	513	67.28	127	248 760
Harawwaa Gaatiraa	90	274.4	147.15	90	236 778
Total	3 762	8 957.14	3 482.78	5 104	7 402 967.5 ⁴⁴

Table 8: Coffee producing features by kebele (calculated from Limu Inara Farmers Multi-Purpose Cooperative Union data, 27th August 2009)

⁴² Rounded to hundredths.

Rounded to hundredths.

43 Rounded to hundredths.

44 Compared to the whole *woreda* data (4,834.158 t), whatever is the supply channel, these quantities sold to the compared to the whole woreda data (4,834.158 t), whatever is the supply channel, these quantities sold to the compared to the whole woreda data (4,834.158 t), whatever is the supply channel, these quantities sold to the compared to the whole woreda data (4,834.158 t). But these quantities are related to red cherries whereas those of the woreda are concerning dry coffee. A quotient has to be applied to adapt these data. A crossed multiplication is not suitable because it would suppose an identical profile of peasants whereas the union covers better-off farmers.

Kebele	Average farm area ⁴⁵ (ha)	Average coffee farm area ⁴⁶ (ha)	coffee area ⁴⁷	Number of plots ⁴⁸	Red cherry harvest 2000 EC ⁴⁹ (kg)	Yields ⁵⁰ (kg/ha)
Mixxo Gundub	1.7	0.84	49.4	1	480.46	572
Burqaa Guddinaa	2.76	0.74	26.8	1	2 808	3 795
Gaallee Jimaatee	4.93	1.54	31.2	2	1 311.46	852
Gaallee Busaasee	6.23	2.03	32.6	1.2	7 743.22	3 814
Qacawoo Tirtiraa	2.78	1.83	65.8	1.1	3 987.19	2 179
Gaallee Kamisee	4.23	1.89	44.7	1	3 150.67	1 667
Caffee Ilfataa	1.18	0.61	51.7	1	2 103.39	3 448
Dambii Gaabanaa	2.38	1.15	48.3	3	2125.33	1 848
Kossaa Geeshee	1.62	1.22	75.3	1	973.83	798
Dangaajjaa Soolee	1.76	0.73	41.5	1.3	3 099.06	4 245
Kamisee Baabiyaa	2.21	1.63	73.8	1.3	4 231.02	2 596
Geenaa Dujumaa	4.06	1.25	30.8	1.6	1109.98	888
Yaatuu Tirgii	3.16	1.92	60.8	3	1 360.92	709
Dirree Toogoo	2.39	0.83	34.7	1.3	1 282.19	1 545
Geenaa Dambii	3.15	0.6	19	1.2	2 246.02	3 743
Carraaqii	2.23	0.55	24.7	1	623.42	1 133
Tanaboo Laaloo	2.15	0.51	23.7	1	340.94	669
Guudoo Bakaree	2.39	1.55	64.6	1.6	1 757.93	1 134
Daaqaa Cimme	1.54	0.74	48	1.1	1 945.17	2 627
Waabee Somboo	4.7	0.71	15.1	1	2 103.28	2 962
Walakee Somboo	1.13	0.47	41.6	1	1 791.37	3 811
Sunxxuu	2.19	0.77	35.2	1	1 278.1	1 660
Caanco Geeshee	1.73	0.5	28.9	1	263.2	526
Waabee Koticha	2.56	0.64	25	2.6	1 754.08	2 741
Harawwaa Jimaatee	1.48	0.87	58.8	1	1 421.57	1 634
Liiban	2.93	0.31	10.6	1	521.53	1 682
Mandaraa	1.37	0.47	34.3	1	1 388.8	2 955
Harawwaa Kattaa	2.28	1.03	45.2	1	5 361.61	$5\ 205^{51}$
Caakkaawoo	1.81	0.86	47.5	1.5	566	658
Debelloo	1.59	0.41	25.8	1	126.99	310
Tanchoo	2	1.15	57.5	1.9	4 643.57	4 038
Waleensuu	4.04	0.53	13.1	1	1 958.74	3 696
Harawwaa Gaatiraa	3.05	1.63	53.4	1	2 630.87	1 614
Woreda profile	2.6	1 00 0	40.8	1.3	2 075.45	2 174

Table 9: Average profile of the small-scale coffee farmer by kebele (calculated from Limu Inara Farmers Multi-Purpose Cooperative Union data, 27th August 2009)

 $^{^{45}}$ Rounded to hundredth.

⁴⁶ Rounded to hundredth.
47 Rounded to tenth.

⁴⁸ Rounded to tenth.
49 Rounded to hundredth.
50 Rounded to unit.

⁵¹ Yields also can seem overestimated for the ones exceeding 4 ton/ha in regard to state farms modern plantations' ones reaching 4 ton/ha. However, the average yield calculated for the average union member's profile (2 174 kg/ha) suits to observations. As an example, the Sunxxu farmers' association chairman produced 20 quintal the same production year.

In Limu Kosa, the average better-off smallholder owns one hectare of coffee located in its home garden (and agro-forest plots in a lesser way) and in which he produces approximately 20 quintals (a bulk of selected varieties). This coffee represents less than a half of his total farm area. The non-coffee area is dedicated to other crops, especially maize. That corresponds to model farmers I could meet around Genet in Sunxxu farmers' association. This average profile has to be considered as the upper limit of the whole peasants' profiles. Whereas poorest households are characterized by a lack of land reducing their farmland around home, and by some agro-forest trees producing low yields. In Limu Kosa, they represent the bulk of producers ⁵².

Our sample represents 14% of the whole Limu Kosa producers (3,762 on 27,004). Made of better-off producers more or less *taking the innovation* and representing the upper limits met by the whole producers (concerning land property and yields), this sample reveals the motions and trends defining Limu Kosa producing framework.

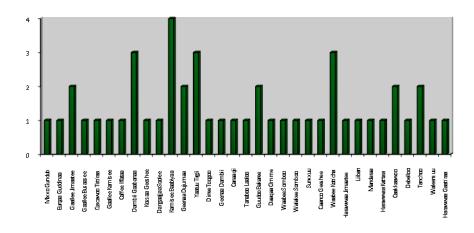


Illustration 25: Average number of coffee plots per member household according to the kebele⁵³ (prod: Bossolasco, 2009)

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⁵² Refer 4.2.3) Agricultural practices of small-scale farmers

Decimals don't have any sense regarding to plots number. These numbers have been rounded to unity. For example, 1.2 plots mean that farmers of the *kebele* tend to own 1 plot even if few ones own more.

What do coffee plots mean in the Limu Inara Farmers Mutli-Purpose Cooperative Union framework?

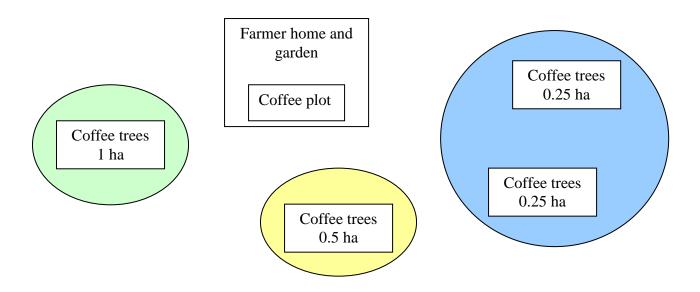


Illustration 26: Coffee plot? (prod: Bossolasco, 2009)

A single farmer owns one or more coffee plots: in his garden, around his house and in agro-forests in a one-km-radius generally. Here, plots mean units. But according to union standards, one plot is 0.5 ha of coffee. That means one plot could be the sum of two coffee units of 0.25 ha. In our example, the blue corresponds to one coffee plot (in fact two distinct coffee units), the yellow also to one coffee plot (in fact one coffee unit) and the green to two coffee plots (in fact one coffee unit). This space measurement allows the union staff counting and registering plots in a realistic method. Otherwise it would be very difficult to register each coffee place, and to consider its relative importance. Anyway, this representation of coffee space spreading is the best existing model to reflect the reality, and is correlated with the real and especially relative number of coffee units per grower. Another example: if the coffee area of a single grower is 2 ha and its number of coffee plots is 3, it means that 0.5 ha are not registered by the union.

Kamisee Baabiyaa is the *woreda* farmers' association where can be found the more coffee plots per farmer: a four-average coffee plots per better-off peasant. Why? Because this *kebele* is the most forest covered one and shelters a part of Babiya Folla protected forest which is a potentially wild coffee space. Baabbuu is the closest town.

Dambii Gaabanaa, Yaatuu Tirgii and Waabee Koticha: a three-average coffee plots per better-off peasant. These kebele are found around Ambuye town except the latter one.

Gaallee Jimaatee, Geenaa Dujumaa, Guudoo Bakaree, Caakkaawoo and Tanchoo: a two-average coffee plots per better-off peasant. These kebele are found around Ambuye and Genet towns, and also cover important forest areas as Debacon forest in Gaallee Jimaatee, not protected but similar to Babiya Folla.

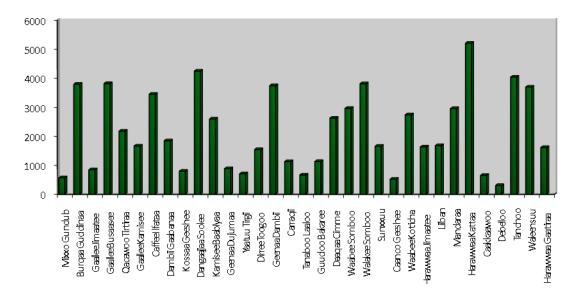


Illustration 27: Average coffee yields per member household according to the kebele in kg/ha (prod: Bossolasco, 2009)

Harawwaa Kattaa appears to be over yielding compared to other kebeles. Is it a mistaken data? All yields up to three tonnes look like overestimated. But what is interesting is to remark that these kebeles characterized by important yields are correlated to one-average coffee plot per better-off producer kebeles. Indeed a tendency often observed is a better management in garden plots, especially when producers only own one. All efforts and animal dung are concentrating on this plot increasing yields consequently.

Another interesting point is that whatever is the coffee production system characterizing *kebeles*, practices are similar. Actually, *Kamisee Baabiyaa* yields of agro-forest plots supposed to be located in a *wild forest* are higher to *Sunxxu* yields which is the *kebele* surrounding the most inhabited area of the *woreda* consequently less forest covered. That reveals that agro-forest management tends to the same practices and yields, mixing step by step the difference existing between forest and semi-forest systems.

A third remark could be the existing correlation between very low yields and the proximity of state farms which are applying fertilizers as urea and DAP and other chemicals since four decades. Are these low yields caused by eventual contaminations? *Mixxo Gundub*, *Debelloo* and *Caanco Geeshee kebeles* are for example surrounding Limu Genet, principal town, and Suntu State Farm.

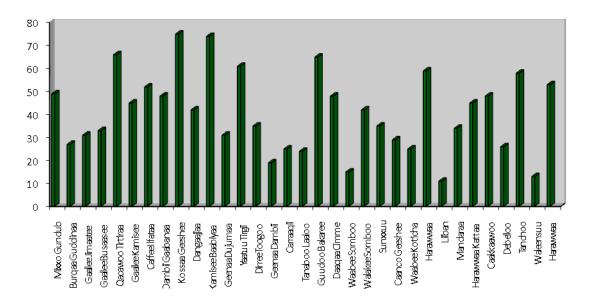


Illustration 28: Coffee proportion in total farm area per household according to the kebele in % (prod: Bossolasco, 2009)

This graph shows that *Kossaa Geeshee* and *Kamisee Baabiyaa*, then *Qacawoo Tirtiraa*, *Guudoo Bakaree*, *Yaatuu Tirgii*, *Harawwaa Jimaatee*, *Harrawwaa Gaatiraa and Tanchoo* are *kebeles* in which better-off farmers are mostly dependent on coffee production. Why? These peasants' associations are characterized by their important forest coverage area. As Urich (2005) noted, the non-existence of livelihood diversification towards activities observed could be provoked by having only included farmers with access to forest coffee, if coffee has a negative effect on aspects of livelihood diversity. Actually peasants with forest access tend to keep it at the expense of other activities. The landscape is creating coffee dependency in a way. Not to be determinist or fatalist, it appears that landscape favours coffee production rather than crop as maize production for example, in *Kamisee Baabiyaa* especially. But it is obviously not the main reason explaining the coffee dependency.

5.) Coffee tradition

Instead of mentioning innovations, tradition better reflects Ethiopian and Limu coffees typicity. Moreover wet processing could be considered as the only innovation at production level, since it appeared in the 1970's⁵⁴.

5.1) Cultural inscription and uses of the product

The relationship between Ethiopians and coffee is deep-rooted, and production and consumption are closely linked to Ethiopian history and culture. Consequently, national production is estimated but never exactly known since national consumption reaches high levels, distinguishing Ethiopia as a single coffee producing country. Nowadays, these links are valorised and used by foreign development agencies and commercial publicities since Fair Trade and Organic markets grew and became more important. Legends giving light to the coffee origin are digging up and sometimes improved. The most famous is undoubtedly Kaldi's one, this young shepherd surprised by the excitation coffee trees provoked to his goats. This section proposes to give a brief Ethiopian history and sample of legends concerning coffee and a look into its different national and Kaffa/Limu uses and ways of consumption; it leans against the works of Mercier (1980-2), my observations and interviews of old Limu Genet Muslims traders and peasants. It must be considered that the woreda history and consequently the woreda coffee past can not be easily reconstituted because of the absence of written documents, and due to the fact that its population is the result of successive immigrations where native people are rare.

5.1.1) The Ethiopian coffee ceremony

Even in modern Ethiopia, from *Kebena* or *Casanchis* condominiums of Addis Abeba to Jima city center buildings, women commonly prepare the traditional coffee ceremony which can last for hours aiming to bring people closer in a comfortable atmosphere. This ceremony especially takes place in private homes, but is part of the daily routine of *buna bets* (coffee houses, drinking bars) and hotels. In this way coffee ceremony is first of all a social

⁵⁴ Refer 1.2) Description and distinctiveness of the product: two ways of processing coffee, the dry and wet methods.

phenomenon linking friends and neighbours, then is deeply rooted in Ethiopian culture and beliefs.

Women are responsible for the ceremony, prepare all items and lay them out in front of their guests. A daughter or another female member of the family (even the youngest son) often helps them mainly brewing the coffee while the owner of the house and her guests enjoy the ceremony and conversation (Mdahoma, 2007). Items needed are a small charcoal burner (*yekasal mandeja*⁵⁵), charcoal, a clay coffee pot and its stand (*jebena*), mortar and pestle, a ladle with a long handle, an incense burner (*machesha*) and incense, small coffee trays and cups without handles, sugar, milk and obviously green coffee beans. In the meanwhile snacks are served with the coffee as roasted barley (*qollo*), pop-corn, peanuts or bread (*dabo*).

The coffee ceremony corresponds to the called Amhara way of consumption: a triple decoction of the coffee bean. Beans are never roasted previously; the woman leading the ceremony put the required beans quantity after washing it on a ladle (large and flat in Jima and surroundings, hollow and smallest in Tigray) over the charcoal burner. While roasting, coffee emits its aroma as incense does. The roasted coffee beans are shaken turning a dark brown, and passed around to individuals driving coffee emanations with a gentle wave of the hand to smell its aroma. Then roasted beans are crushed within a mortar and coffee powder boiled into the *jebena* (clay coffee pot). Coffee powder is thrown in the *jebena* where water is boiling, and after few minutes the jebena is removed from the charcoal and put on a special round stand to let the coffee grounds settle to the bottom. Coffee is finally poured into small coffee cups without handles, which are laid on a big tray containing up to 50 cups. This first preparation is served to the guests in priority. Water is after added on the remaining ground coffee inside the *jebena* for a second and weaker preparation, and then for a third preparation. Sugar is added on the cups and sometimes but in a lesser way salt or butter. Spices are used and added as Ethiopian rue (tenadam), ginger (zengebel), cloves (garamfud) or false cardamum (kororima). The first one, tenadam, is the most common in Jima and Limu places. While the ceremony takes place, people engage in conversation eating different snacks (qurs) as *qollo* (roasted barley) and pop-corn, even *injera*. The environment is made of a grass bed spread in the floor and on the cup tray, people setting on three-legged wooden stools

⁵⁵ Words are written in phonetic Amharic.

(*berchuma*, *duka*) and of an incense smoke. This way of consuming coffee could be interpreted as a ceremony because of ritual elements and gestures. Which ones?

The Amharic names of the three successive preparations are *Abol, Tola* and *Baraka*. *Abol* of Arabic origin *awwal* means "first, ancient, former"; *Tola* of Oromic root means "harmony, perfection, quality"; *Baraka of Arabic* origin means "blessing". In Jima and Limu, the first decoction is called *Abol, Awwal* or simply *buna* whereas the second is named *baraka*, *sambo* or *lamaffa* (means second in Oromic). There is no third coffee drinking. Unlikely, coffee can be boiled four times in Tigray and in north part of Wello. What does the number three means? Its origin refers to legends' characters or could be that, when Amhara began to consume coffee taking it from Ethiopian Muslims influence at the end of 19th century, *Abol, Tola* and *Baraka* used to refer at the morning, midday and evening collations. Or that *Abol, Tola* and *Baraka* used to refer at the morning, midday and evening coffee drinking times. This origin birth could have been during the great famine (1886-92) people starting boiling coffee successively three times.

Coffee ceremony is closely linked to *zar* worship: fresh grasses spread on the cup tray and on the floor, and incense spreading its smoke all around coffee drinkers would have been asked by *zar* spirits, protecting gods. They are said to follow people and to protect them. Muslim *zar* would have asked this incense and grasses use. Whereas incense gets burned in whole Ethiopia, the use of grasses is not common as it appears in Jima and Limu. It happens that soil gets covered by grasses in *buna bets* and private homes owned by Amhara and Tigrean people but this custom is getting urbanized and for esthetical purposes. Nowadays, grasses are used in holy days or for special guests whereas incense is daily burned. Grasses are a symbol of the bush from which *zar* are coming, in this way they feel at home. Similarly, presenting the coffee smoke to each participant to sniff roasted aroma is linked to *zar* worship because *zar* love this smell; or high pouring coffee in cups to splash the tray in order to give it to drink to *zar*⁵⁷; or not leaving after the first cup because *zar* love coffee and will stay to drink it giving up their protected without protection if he/she goes. Moreover it is not recommended to arrive after the first cup because if respectable *zar* came to drink the first cup, the following *zar* are quarrelling and diseases carriers' spirits.

⁵⁶ Refer to 5.2) Ethiopian legends about coffee origin.

The cup tray Amharic name: *gända* means trough.

Coffee can also be used in other ceremonies as Muslim exorcism sessions or Christian zar evocations at night, both called *wädaga* (Mercier, 1980-2).

5.1.2) Other consumption ways

The coffee part the most commonly consumed is the bean, as in western countries, and since the Amhara domination most of traditional coffee preparations tend to disappear or yet disappeared.

As in Limu region, and Kaffa historical province globally, Oromo people used and still use (but rarely and in exceptional purposes, in remote areas) to consume a typical preparation: *Buna Qalaa* which is coffee cooked with butter, melt with different species and salt. A Genet farmer told me this preparation appeared approximately during the 17th century in Oromo culture. Is there a link between this preparation and the ones, as Mercier noted, Grühl and Bruce observed? In the 1920's, Max Grühl described the traditional Kaffa way of coffee preparation as a boiling spices with pellets made of roasted coffee powder mixed with butter and honey. Before, in the second half of 18th century, Bruce already noted that Oromo people living in Amhara kingdom used to eat roasted coffee powder pellets mixed with butter.

Another preparation currently found in Oromo regions, and very spread in the whole Limu region, is the coffee husk decoction called *hogga* or *qasara*. Afar people also consume coffee in this way, even more commonly.

 $\mathit{Mahl\acute{e}}$, Omo people, infuse coffee with parchment. It is interesting to note the similar between this people name and the old introduced coffee varieties one $(\mathit{Mal\acute{e}})$ in Limu region.

5.2) Ethiopian legends about coffee origin

Mercier (1980-2) mentions in his *Ethiopian myth of coffee and chat origin* four legends:

- A camel shepherd observed an energizing effect on his animals after they grazed on coffee leaves and berries. He tried to taste these berries but got unpleasantly surprised by their bitterness and threw it on the fire: the smell arising pleased him a lot. In this way coffee roasting began.
- Sheh Abol, Sheh Tola, Sheh Bäräka were the coffee discovers. They were Muslims. They left retiring themselves in the bush looking for Allah where instead of God they were finally going to die because of hunger and food absence. But they refused to turn back ashamed of failure. They decided to follow three different ways in three different countries, and to write what will happen to them as a proof if they got killed by wild animals then to meet after seven days. So they followed their way. The third day, Allah talked to Sheh Abol: "What are these problems you are disturbing me with? Eat this plant (chat) and this bean (coffe) roast it then drink it! ". And he showed coffee and chat. Sheh Abol wrote it. The fifth day, it happened to Sheh Tola: "I already told it to Sheh Abol. Leave me alone! This plant is made for eating and this one for drinking! It will calm hunger! ". And Sheh Tola wrote it. The sixth day, Sheh Bäräka wrote: "I told it to Sheh Abol and Sheh Tola! This plant, eat it! This one, drink it!". The seventh day, they met. Sheh Abol first showed his paper and related his vision, then Sheh Tola and Sheh Bäräka. Surprised and filled with wonder, they thanked God. They wondered what they were going to do and decided that Sheh Abol who has been firstly chosen had to roast coffee beans. He did so then boiled its powder in the morning of this seventh day. They ate chat, and then thanked Allah. Sheh Bäräka prepared also what he wrote in the evening. And then they kept this custom enjoying conversation, and so on... Their descendants added the triple decoction, and other elements of the coffee ceremony.
- In a bush similar to Jima's one, three ermites: abba Awäl, abba Atona and abba Bäräka firstly eating red coffee cherries decided to prepare a triple coffee decoction drinking each one according to their hierarchy degree. In this way, these decoctions are called *abol*,

tona and baraka. In this myth, characters are named in the same way but are Christians, prepare coffee in the Amhara way of consumption and chat is not mentioned.

- Bäträ Maryam, living Lake Tana banks in the 17th century, was praying in Zagie Island and went into transe. Long time passed and when he got out of his praying condition, he couldn't get back his stick of rhythm. This rooted and wore coffee fruits.

5.3) Limu Kosa legends of coffee origin

Through different interviews lead with old Muslim traders and peasants, different hypothesis emerged looking at coffee plant and coffee production origins. But, nowadays delimitating fixed boundaries in relation with zones and *woredas*, as told me an expert of the Jima Research Centre, coffee origin became a political game (Bonga and Agaro birthplaces). The most accurate would be to recognize south western Ethiopian Kaffa belt where forests are connected as the birthplace. Ethiopian Muslims ensuring the commercial and consuming past of coffee are the main source of information since oral legends and explanations passed through generations and because written sources are not available. In this way, some facts are intertwined with historical proved facts and other have to be considered as legends.

- A peasant living in the south of Genet told me that coffee got originated in the following Limu Kosa forests:
 - Baddaa Dallachaa
 - Baddaa Kalloo
 - Baddaa Miyaa (in Tanaboo Laaloo farmers' association)
 - Baddaa Gejib (Uursa Gotaa river) in Limu Seka woreda

Not as a proof of origin but of old introduction, three unique old coffee trees still stand in Gejib forest, in Seka *woreda* Suntu State Farm branch, of which I could see one specimen: 11 meters high, 72 cm of circumference and 130 years-old estimated

In *Kalloo* forest I could see very old coffee trees (*baggaajjaa*) and their owners told that: "Even our grand father didn't know about the origin of these old trees. In the past, the

Prime Minister of Haile Selassie, Ras Mesfin, forced farmers to leave their trees stealing the ownership of these already existing trees and of the whole forest during the first half of 20th century. Now this forest is divided into small-cale farmers.

And coffee was only drunk for religious purposes or eaten as *buna qalaa*, from 17th century.

- An 82 years-old peasant (Limu genet) told me that origin of coffee is around Suntu State Farm (what corresponds to the first interviewed story of Gejib forest). This land was taken by force to Oromo people by a land owner at Menelik time, called Kabire, from Gondar at the end of 19th century. At these times, coffee was swapped locally. People couldn't go as far as Agaro because of lack of accessibility. First opening on external trade appeared at Italian invasion (1936-41) and 1 feresulla (17kg) of coffee = 1 madre teresa (current money). Before, coffee was not considered as a commodity. Local markets existed as in Seka, but coffee was not sold. Intensification began during the Amhara domination after Italian invasion through renting lands belonging to land owners.
- This third and most complete explanation has been written by a Suntu State Farm worker, I translated it as it follows:

"The origin of the true coffee with the original taste is found in Limu Suntu. However, segments that have had the chance to be in power have mixed up the taste of the coffee and are engaged in falsified trade. Accordingly, I would like to bring to your attention the accurate origin of coffee, meaning Limu Suntu and Enaria⁵⁸ area, which are considered as "motherlands of coffee" since the ancient times and with the right taste.

- Tenebo Bedea'a with coffee production of special taste;
- Mito the peasant association where Gundib State farm (Suntu State Farm) is located;
- Bedelelech up to Mencho Debni Buria;
- Min Mdenbi Buria state farm (Suntu State Farm);
- Geenaa Dujumaa and Yaatuu Tirgii Gubecho peasant associations up to Gumer State Farm;

-

⁵⁸ Former Limu Enarea kingdom boundaries.

I kindly request you to make sure that these places are known to the organizations that are in search of the truth. From where was coffee discovered and how?

Consequent to the fertile land and suitable climatic conditions, coffee began to grow in the dense forests found in our region. The coffee product was not cultivated and began to grow spontaneously. The coffee product began to grow in the same manner as other plants with similar history of origin. The dense forests that sheltered coffee in the ancient times are those of *Bedo Kelo*⁵⁹, *Bedo Mia*'a⁶⁰, *Dalecha*⁶¹, *Gejib*⁶² and *Hursa Gotu*⁶³. These coffee plants grew without having been cultivated by mankind. These forests are also known as *Bedo Moti*.

How and when did coffee begin to be used?

People used to hunt animals to be used as food. They sat fire to cook their food. Because they needed to use plants as fuel to set the fire, and hence cook they food, they collected the coffee plant for this purpose. As the coffee was burnt, people began to get used to the aroma. Both men and women were attracted with the smell of the coffee being burnt. Then they began to collect grains of coffee as they hunt animals and began to eat roasted coffee grains on metallic tray and utensils. Many women and men with superstitious beliefs began to add butter when consuming coffee. They also began to make their ceremonies of worship vivid by the side of rivers and below the tree. They also invited their guests to consume coffee mixed with milk. The coffee they consumed gave them strength and stimulation. Later, they began to drink coffee having mixed the powder in water. They began to make the powder without pealing of the cover. Those persons with special commitment to superstitious beliefs began to introduce other people to coffee. In such a manner coffee began to be famous among the society and everyone started to enjoy its benefits. Coffee was highly famous at worship places where people got together. People used to bring the coffee plant for domestic cooking purposes. Eventually, the plant began to grow in the vicinity of the households of the society. As such, it was rendered with care. The economic benefit of coffee was not realized and it was rather being wasted in the forest.

⁵⁹ Corresponds to first interviewed peasant story. *Bedo Kelo* is here *Baddaa Kalloo*. Remember that Oromic vocabulary is not fixed.

⁶⁰ Idem : *Baddaa Miyaa*.

⁶¹ Idem: Baddaa Dallachaa.

⁶² Idem

⁶³ Idem: *Uursa Gotaa*.

Coffee ripens only once a year and vanishes after wards. Then after, it became customary to dry the coffee and to use it on daily basis. People began to be addicted to coffee and even used the leaves of the plant when it was not possible to get the coffee cherry. At the time various traditional medicines were mixed with coffee to be consumed. Especially persons with flue, malaria and common cold began to add pepper in the coffee in search of remedy. It was believed that the body temperature increasing after consuming the mixture would heal the disease. Even today, when modern medical services are not available, coffee is used to treat diseases related to the throat. Coffee is roasted without pealing off the cover. The coffee grain is mixed with butter to be eaten. In addition piper and butter are mixed together in order to be consumed.

Therefore, people boil the leaf of coffee plant and drink the juice. This is called *Chembo*. Alternatively, it is named *Kuti* in Harar and *Chemo* in the south.

The equivalent of the word coffee (*Buna*) has its roots in the Oromic language. It signifies considerable respect. Children are called after this product. Coffee began to be used in this society at least in the 4th century. Coffee in the ancient times was exported from Enaria to other border areas. At the time, people who consumed coffee were free of diseases as it had healing effect. It is similar as that of incense, civet and others."

These three stories agree to recognize as a potential coffee origin site the current Suntu State Farm covered area. A fourth one completely breaks this tendency:

- A 70 years-old peasant (Limu Genet) told me that an Algerian trader, Nasser Allah, imported coffee in Limu which is not the place of coffee origin. He imported coffee plants from Godjam and planted it in *Miyaa* forest, in *Tanaboo Laaloo kebele* area now under Suntu State Farm authority. He couldn't mention any date but situates it long time before Menelik. After planting in *Miyaa* forest, Nasser Allah repeated it in Gumer (Limu Kosa *woreda*) then Agaro forests (Goma *woreda*).

It has to be considered that Bruce in 1790 mentioned that coffee trees got introduced close to Lake Tana in the 17th century by Almeida in Azazo and that at the beginnings of the 19th century the main coffee plantations in Christian kingdoms were on these Lake Tana banks (Mercier, 1980-2). Ethiopian Muslims were in charge of its production, and it was essentially exported. Why wouldn't be possible that traders and trees travelled from Gondar to Kaffa, passing by Gojam?

It is probable that coffee plant origin is found in Kaffa forests where wild coffee began to be consumed maybe around 9th century but that coffee production and intensification had been brought there from abroad after long time during 19th and 20th centuries by Arabic and Ethiopian Muslims. Coffee had been taken there during 13th and 14th centuries by Arabic traders, travelled all around the world from Yemen to India, India to Indonesia, Indonesia to Netherlands, then to France and its colonies, from its Antilles colonies to Brazil, etc. where its production got intensified then finally turned back to its motherland since Menelik II remarked its increasing value on western markets and then began its intensification. The Emperor Menelik II and *Abuna* Matheos played an important role for the adoption of coffee consumption in Christian kingdoms which was considered as a Muslim and heretic custom. Indeed even if coffee consumption is now well rooted in Amhara customs, it is not since immemorial times but the end of the 19th century.



Illustration 29: An estimated 130 years-old coffee tree in Gejib forest, Seka *woreda, located in* Suntu State Farm: 11 meters high, 72 cm of circumference (Bossolasco, 2009)

6) Value chain recent mutations of a political crop

6.1) Presentation of the value chain

Since the beginnings of Starbucks' struggle in 2005 and the recent changes met by coffee institutions in August 2008, questions arose concerning the Ethiopian state motivations. Anyway it occurred that investors, appeared in the early 90's, are given more and more forest lands through the country and that all kinds of producers are now permitted to export directly⁶⁴, even if *sebsabies* (ex-licensed collectors) are now qualified as thieves and some exporters accused of speculating, keeping stocks meanwhile the country is facing difficult currency times, in jail. First analysis agree to asset an increased state control that some accused of nationalization whereas others applause that initiatives a strong state took in front of a wild world market. Anyway structures mainly remain the same:

Coffee market includes many participants as small-scale farmers picking coffee from their gardens or owned agro-forest trees, small-scale farmers as cooperatives members, investors valorising forest spaces through modern plantations skills used in the modern state farms, even PLC producing coffee.

State farms and investors easily export directly through Germany, Japan, United States or Saudi Arabia, the main buyers. In the contrary if they don't find any export market they will sell their production on the Ethiopian Commodity Exchange. This latter replaced exauctions in Addis Abeba and Dire Dawa, and is in charge of classifying coffee at its arrival in the capital (what used to do the Coffee Liquoring Unit under the Coffee and Tea Authority then the Ministry of Agriculture and Rural Development). Whereas smallholders, allowed but unable to export, sell their coffee to collectors such as *akhrabies* (suppliers), forbidden but still existing *sebsabies* (ex-primary collectors), service cooperatives or by themselves to local markets. Except the latter case and the small quantities sold to local consumers (bars or *buna*

From Coffee Quality Control and Marketing Proclamation No. 602/2008 of the Federal Democratic Republic of Ethiopia (2008).

⁶⁴ "Any coffee producer shall without prejudice to Article 6(1) of this Proclamation, have the right to directly export coffee from his own farm, only after submitting the same to the coffee quality liquoring and inspection center for grading before and after processing for export; sell coffee by product in auction centers or the Ethiopia Commodity Exchange only upon examination and approval of the coffee quality liquoring and inspection center."

bet, groceries, dwellers), all coffee should arrive to the Ethiopia Commodity Exchange. Whoever produces coffee, it has to be tested on a sample basis at the *woreda* MoARD liquoring unit/quality control⁶⁵ then checked through the WARDO (*Woreda* Agriculture and Rural Development Office) before getting out of *woreda*'s boundaries.

Once in the Ethiopian Commodity Exchange warehouses located in Saris (South of the capital), whoever provided it, all coffee beans are tested on their provenance and quality on a sample basis. Grading standards are set according to the number of defects and the type of processing. A first test, the arrival test, qualifies coffee according to its provenance and its quality (number of defects): Sidama A2, B5 or C3 for example, each letter meaning different and defined areas whereas numbers are quality grades. Then for export coffee, once coffee is bought to the Ethiopian Commodity Exchange, coffee has to be "normalized" through export standards: the export standards processing plants are located in Addis Abeba; these are private machines but, commonly, exporters and unions rent it to the Coffee Processing and Warehouse governmental Enterprise. The latter owns the sophisticated German Bülher machine upgrading coffee according to export standards. Then a second test only concerning export coffee is realized to control the number of defects after coffee got reprocessed by exporters.

At this stage grades are given in an international coffee classification: the Ethiopian exports grades are grade 2 for washed coffee and grades 4 and 5 for unwashed coffee. For example, washed coffee supplies are often dominated by Sidamo 2, Yirgacheffe 2 or Limu 2 while the most common unwashed coffees are Jima 5, Sidamo 4 or Harar 5. These graded coffees belong to the nine Ethiopian cup profiles:

Harar (sun dried)	Yirgacheffe (washed)	Sidamo (sun dried/washed)
Exported as Harar 4 or 5	Exported as Yirgacheffe 2	Exported as Sidamo 2
Limu (washed)	Jima (sun dried)	Ghimbi-Lekempti (sun
Exported as Limu 2	Exported as Jima 4 or 5	dried) Exported Nekemte 4/5
Lekempti-Ghimbi (washed)	Bebeka (washed)	Teppi (washed)
Exported as Nekemte 2		

Table 10: Ethiopian cup profiles (data: Ethiopian Commodity Exchange Authority and OCFCU, prod: Bossolasco, 2009)

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⁶⁵ Refer 6.1.3) A global Ethiopian coffee quality through the Ethiopian Commodity Exchange Authority establishment.

The new Ethiopian Commodity Exchange standing up on auction ruins, still working in an auction system, is divided into Saris site and Mexico Square: In Saris, the Ethiopian Commodity Exchange Authority rents warehouses for arrival and export coffee, the arrival coffee test CLU laboratory, and the export standards processing machine to the governmental Coffee Processing and Warehouse Enterprise. Whereas the auction place, the Ethiopian Commodity Exchange, is found in a modern building around Mexico Square.

After being criticized, Ethiopia emphasizes on keeping consignments from different regions separated in order to maintain the distinctive flavour of the different regions. Even if difficulties appeared for the specialty market.



Illustration 30: Ethiopian cup profiles (except Yirgacheffe and Ghimbi, Bossolasco, 2009)



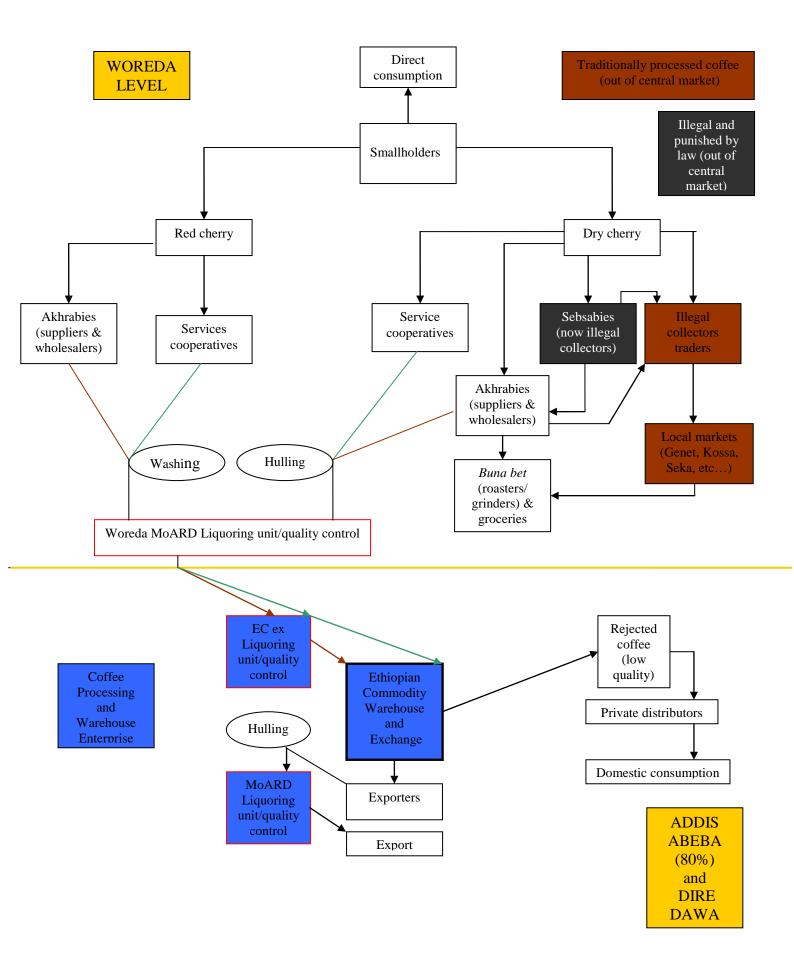


Illustration 31: From smallholders' farm gate to export, the main Ethiopian coffee supply channel (adapted from Coffee Quality Control and Marketing Proclamation No. 602/2008 of the Federal Democratic Republic of Ethiopia, 2008 and Petit, 2007)

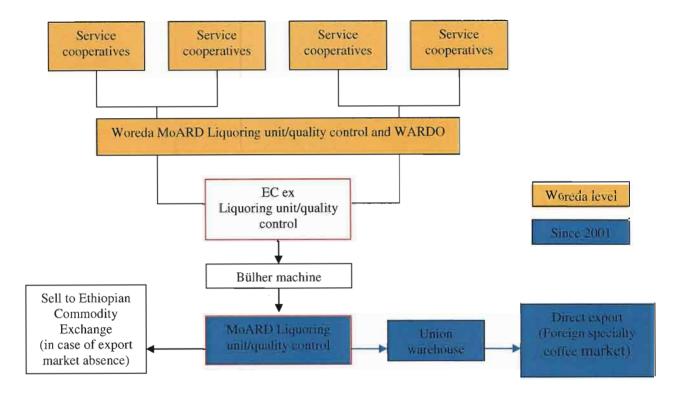


Illustration 32: Cooperative Unions supply channel (adapted from Dempsey, 2005)

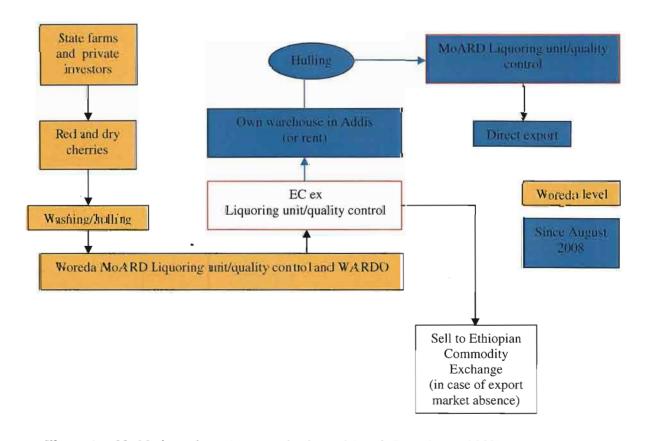


Illustration 33: Modern plantations supply channel (prod: Bossolasco, 2009)

6.1.1) Function and role of each actor of the value chain

Ministry of Agriculture and Rural Development (MoARD)

Established in January 2004 by proclamation No. 380/2004 and now responsible for the full agricultural value chain, it took over the functions of the ex-Coffee and Tea Authority in March 2004. It supervises the sector with responsibilities for coffee research, marketing, quality control, handles policy matters and provides technical services such as extension and training to coffee growers. At regional (Oromiya and SNNP regions), zonal (ZARDO: Zone Agriculture and Rural Development Office in Jima for example) and woreda (WARDO: Woreda Agriculture and Rural Development Office in Limu Genet for example) levels, it is responsible for implementing extension services (Petit, 2007). Concerning coffee growers, its influence especially appears through state nurseries providing them selected seedlings in an extension framework, Farmers Training Centres and Demonstration Sites for training even if the latter tend to disappear.

Ethiopia Commodity Exchange Authority

The new institution got proclaimed in its Ethiopia Commodity Exchange Proclamation No. 550/2007 (4th September 2007), then began trading operations in April 2008 and adds coffee among its commodities in December 2008. This accompanied the new Coffee Quality Control and Marketing Proclamation No. 602/2008 (25th August 2008). It is working as a classic exchange place through members acting for users. Members buy seats that allow them to trade; only they can trade on the exchange. That means non members must use their services. Members are exporters, buyers, producers, etc. As told me members, the exchange purpose is to ensure quality, delivery and payment by guaranteeing the product grade, quantity; operating a system of daily clearing and settling of contracts where buyers and sellers coordinate on the basis of standardized contracts; disseminating market information in real time to market actors; and offering contracts for future delivery providing sellers and buyers a way to hedge against price risk. But none of the members could answer about what happened to the specialty market, proposing to meet the respective superiors. Indeed quality has been improved through traceability and allows to guarantee that a Sidamo 2 is a Sidamo 2,

an Harar 4 an Harar 4, etc. but as it is explained further⁶⁶ traceability of accurate lots has become impossible.

Coffee quality liquoring and inspection centre

Coffee quality liquoring and inspection centre means an institution under the Ministry⁶⁷, that inspects, liquors and issues certificates for coffee locally supplied from production areas, export coffee, and coffee by product delivered to consumer areas.⁶⁸

The coffee and tea quality control and liquoring unit (CLU) was a government agency responsible for liquoring, classifying by taste and appearance, washed and unwashed coffee as it arrives at the auction and was also giving clearance to exporters prior to export. Nowadays, since August 2008, the *coffee and tea quality control and liquoring unit* in charge of coffee arriving to Ethiopia Commodity Exchange Authority warehouses is under the Ethiopia Commodity Exchange Authority. This quality control is called *Arrival test*, done by the *EC ex*⁶⁹ *Arrival CLU* as it could be said. Whereas the *coffee and tea quality control and liquoring unit* in charge of export coffee is still under the authority of the MoARD. This quality control happens once exporters processed again according to export standards the coffee they purchased to the Ethiopia Commodity Exchange or from their farm, and is called *Export test*, done by the *MoARD Export CLU* as it could be heard. An another *coffee and tea quality control and liquoring unit* is found at *woreda* level, called *quarantine place;* and under the authority of the MoARD it checks and gives a first description of coffee on its production area allowing by the way coffee traceability.

Ethiopian Institute of Agricultural Research

It is in charge of selecting disease-resistant varieties, establishing national coffee collection and protecting the genetic resource base of the crop. It has several research stations

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⁶⁶ Refer 6.1.3) A global Ethiopian coffee quality through the Ethiopian Commodity Exchange Authority establishment.

⁶⁷ And now also under the Ethiopia Commodity Exchange Authority concerning the arrival coffee laboratory in Addis Abeba.

⁶⁸ Coffee Quality Control and Marketing Proclamation No. 602/2008 of the Federal Democratic Republic of Ethiopia (2008).

⁶⁹ Ec ex, or ECX, is the short name given to the Ethiopian Commodity Exchange, and used commonly by Ethiopian coffee actors.

in the country, as the Jima Research Center responsible for the national coffee research programme (Petit, 2007). The latter is leading coffee selection all around Ethiopia.

Producers

Coffee producers include small-scale coffee farmers, coffee farmers' service cooperatives, private investors, and state coffee producing enterprises.

Small-scale coffee farmers are estimated at 1.3 million producing 95% of total Ethiopian coffee and are divided into poor, middle and better-off households. These households are men headed but can be women headed. Some works, lead in Limu Kosa woreda in the framework of a general coffee activities report (12th June 2009), illustrate that for 16,200 male households, 11 are female households.

Coffee labourers/workers (in pulperies, hulleries, transport, plantations, etc...) are a heterogeneous category which doesn't appear in any data. As it is in Mana and Goma woredas (neighbouring Limu Kosa and which coffee is traded as Limu coffee through the Ethiopia Commodity Exchange or by the Oromia Coffee Farmers Cooperatives Union), during at least the period September to November, harvests of red coffee beans, maize, teff and sorghum all take place generating a high labour demand. Migrant labourers from areas to the south of Jima zone, particularly of the SNNPR come for work, as well as the local poor (Save the children UK, 2003). Especially local students work as coffee labourers slashing during school holidays in investors or state farms plantations. State farms labourers are almost exclusively women and teenager girls (planting seedlings, slashing, pruning). Most of agroprocessing employees are also women. During harvesting time, children are also picking cherries in state farms. In Suntu State Farm, the daily labourer salary was 0.35 birr per kg of red cherries picked in 10th October 2009. One single labourer works about eight hours per day, and harvests approximately 30 kg per day in October whereas, during high season in November/December, the labourer picks between 50 and 60 kg per day.

Illustration 34: Daily labourers in state farm and investor farm (Bossolasco, August & October 2009)



Investors are new comers in the Ethiopian coffee value chain, since the early 90's and increasing since 2008, who obtained their land in usufruct from the regional government (here Oromiya government). The government encourages the plantation in forest by giving large lands of forest to investors for a limited time and with conditions. Investors can manage the forest for forty years. These lands were before used by partial usufruct but were considered wrong managed (Avril, 2008). Generally they don't use fertilizers. Why? Ignorance is the first thing. The second case is when they want to sell organic coffee, often complaining that they work for certifiers. If investors don't get classified alone, they would be modern plantations or garden coffee classified, explained me a Jima Research Center officer.

Akhrabies

Coffee supplier means a person who, upon meeting the required criteria, collects coffee with pulp or red cherry coffee from producers or from his own farm for delivery to the Ethiopia Commodity Exchange.⁷⁰

They buy red or dry cherries from producers (since 1999, because it was forbidden to purchase directly from producers before) or illegal collectors (*sebsabies*). Then they process it in pulperies and/or hulleries they own or rent before sending it generally to the Ethiopia Commodity Exchange. There are currently 82 *akhrabies* in Limu Kosa, commonly called *taha*⁷¹ or *chagn*. *Taha* is generally employed to point out Muslim *akhrabies*, and *chagn*, which is an Amharic word as *akhrabie*, means the whole *akhrabies*. These two terms are used in Limu Kosa woreda, and in the other districts of Jima zone, instead of *akhrabie* which is rarely used.

Illustration 35: Genet akhrabie huller (Bossolasco, 25th August 2009)



⁷⁰ Coffee Quality Control and Marketing Proclamation No. 602/2008 of the Federal Democratic Republic of Ethiopia (2008).

⁷¹ Arabic.

The *akhrabie* type could be characterized as follows: Dealing coffee in two ways which are processing washed coffee buying red cherries to farmers or buying dried coffee to those ⁷². In the latter situation, he will dry it again on mesh wire during one or two days before submitting coffee to huller; working with about ten *sebsabies*, illegal and not employees, he orients on quality: that means full ripened and correctly dried coffee, both characterized by a bright appearance; owning or renting means as a pulpery, hullery and trucks (Isuzu and Iveco) to collect coffee or send it to Addis Abeba; paying three different taxes: the income tax (1,000 birr per 150 coffee bags in June 2009), the annual government tax which reaches 30% of total transaction paid after trading time on a grade classification ⁷³, and 0.2 % of transaction value paid to the ECX; actually selling his coffee to the ECX at Limu-2 and Jima-4/5 grades for washed and unwashed processed coffees respectively.

But all *akhrabies* are not acting as simple coffee suppliers. A lesser part of them are more vertically integrated. As an example, the *akhrabie* whose huller is rent by the Limu Inara Farmers Multi-Purpose Cooperative Union trades coffee in two ways: as a simple coffee supplier even if his higher means allow him to cover a bigger area, he sells washed Limu-2 and unwashed Jima-4/5 to the ECX; directly exporting coffee produced in its own farm (105 ha) since 2009 under the arbitrary name "*Limu Special 3*" to an Addis Abeba agent of Travoca foreign importer. This coffee passes through the ECX arrival coffee laboratory, is stocked in his own warehouse, then processed in the rented ECX Bülher machine, passes through the MoARD export coffee CLU before getting sold to the agent (Genet *akhrabie*, 25th August 2009).

Some *akhrabies* are just coffee suppliers whereas others are both producers and exporters, the first using the main coffee supply channel whereas the last uses both the main and the third supply channels⁷⁴. The current trend for *akhrabies* is to invest in coffee plantations, then to export coffee since it has recently become possible.

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⁷² Farmers were paid between 8.8 and 11.2 birr per kg by *akhrabies* in June 2009 for dried coffee, and 3 to 4.5 birr per kg for red cherries. Then coffee was sold by *akhrabies* to the ECX at prices varying between 17.6 and 23.5 birr per kg for sun dried coffee and between 20.6 and 26.5 birr per kg for washed coffee at the same period (Genet's *akhrabie*, 3rd July 2009). The latter mentioned *akhrabie* sold 1,500 to 2,000 sun dried coffee 85 kg-bags and 1,000 washed coffee 60 kg-bags to the ECX he brought renting an IVECO paid 7,000 birr per trip, and needed 17 trips to bring all its 2001 EC processed coffee.

⁷³ Refer 1.2) Quality seen by the value chain actors.

⁷⁴ Refer 6.1) Presentation of the value chain.

Sebsabies

Their role was to bring coffee from remote areas to the market purchasing it to farmers, as the first middle men in the value chain, then transferring it immediately to *akhrabies* who own warehouses. In August 2008, their license has been cancelled. *Sebsabies* are now punished by law as illegal traders out of the central market. Their role has been transferred to *akhrabies* who are now the only legal traders allowed to deal with farmers, except service cooperatives. But *sebsabies* still exist ensuring the bulk of *akhrabies* purchase. In regard to coffee quality defects, they carry all responsibility and are judged guilty as well by agricultural office workers than coffee farmers or *akhrabies* for whom they work.

Illegal traders

Two types of illegal traders are distinct on local markets:

- A minority of farmers, surrounded by family members, bring dried coffee with husk, locally called *janfal*⁷⁵, on market days (Thursday and Saturday in Genet) depending on their cash needs. Their illegality is due to the absence of any quality control or any trade license.
- A bulk of women traders (and rare workless men), doing black market, buying dried coffee with husk to farmers, *sebsabies*, *akhrabies*, neighbours (sometimes picked on their trees) all around the woreda then selling it to market. They are tolerated even out-of-law because of the low quantities they represent. At home, they separate the coffee bean from the husk using a tool named *mokocha*⁷⁶. Then they bring and sell coffee on its three forms: *bean*, *bean+husk*, *husk*, prices decreasing respectively. They keep on cleaning and separating coffee from its husk all market day long.



Illustration 36: Woman traders in Seka and Genet markets (Bossolasco, August 2009)

⁷⁵ Oromic.

⁷⁶ Oromic.



Illustration 37: Mokocha and woman trader sorting its coffee (Bossolasco, August 2009)



Local consumers

These local consumers are not purchasing coffee from central market; they buy it to local collectors (*akhrabies*, illegal *sebsabies* and illegal traders on local markets) or collect it on their garden/forest plot. They are groceries (shops), *buna bet* (bars) and dwellers.

Service Cooperatives

Coffee farmers' service cooperatives regroup many farmers' associations (*kebeles*) and play a crucial role in finding markets for farmers. Cooperatives own or rent processing plants (pulperies/hulleries) and warehouses. Buying red or dry coffee to farmers, they process then sell it to central market, even export markets through cooperatives unions. In Limu Kosa *woreda*, there are thirteen service cooperatives dealing with coffee of which only two are really active: Ambuye and Babo ones that have their own pulpery and export through the Oromia Coffee Famers Cooperative Union.

Agricultural Service Cooperatives were established in the 1970's by the DERG government in the framework of the enactment of the "Proclamation to Provide for the Nationalization of Rural Land No. 71/1975". They served as a vehicle for the mass collectivisation policy but were characterized by mismanagement. Dismantled in 1990, a lot of cooperative offices and shops got looted and destroyed. Since the 1990's, the EPRDF government restructured the cooperative system and created the coffee cooperative unions (Stellmacher, 2007). These cooperatives are far from their first purpose, and now just buy the coffee from their members, process then transport it. They are in charge of processing and finding markets for farmers who just sell them their production.

Cooperative Unions

Cooperative unions work as exporters developing linkages between remote producers and buyers, even foreign buyers by facilitating organic and fair trade certifications for example (Petit, 2007). Since 2001, unions can bypass the auction and export coffee directly, as the first alternative coffee value chain, parallel to the conventional market chain. Since August 2008, all producers can export directly. That generated a polemic about the role of unions, since producers don't need anymore to pass through their channel. But actually small-scale farmers are still following this way, because they are obviously unable to find export markets, even the better-off ones. Among the four main Ethiopian unions (Oromia Coffee Farmers Cooperative Union, Sidama Coffee Farmers Cooperative Union, Yirgacheffe Coffee Farmers Cooperative Union and Kaffa Forest Coffee Farmers Cooperative Union), the Oromia Coffee Farmers Cooperative Union appears as the most dynamic. Coffee produced in Limu Kosa and whole *Limu region* are marketed by this union, and by another recent union: *Limu Inara Farmers Multi-purpose Cooperative Union* based in Limu Genet which net covers the two ex-Limu *awarajas* (now four *woredas*: Limu Kosa, Limu Seka, Chore Botor and Nono Benja).

Domestic consumption coffee wholesaler

Domestic consumption coffee wholesaler means a person who, upon being licensed to trade coffee by the appropriate government organ and fulfilling the requirements set by the Ministry, and upon purchases domestic consumption coffee from auction centre or the Ethiopia Commodity Exchange, for sale in the designated market.⁷⁷

In our study area, *chagn* assume this domestic consumption coffee wholesaling role. These domestic consumption coffee wholesalers are mainly found in Addis Abeba and other important towns providing retailers and roasters.

⁷⁷ Coffee Quality Control and Marketing Proclamation No. 602/2008 of the Federal Democratic Republic of Ethiopia (2008).

Exporters

Coffee exporter means a person who, upon being licensed to trade coffee by the appropriate government organ and fulfilling the requirements set by the Ministry, and upon purchasing coffee from the Ethiopia Commodity Exchange or collecting from his own farm, prepares, processes and exports coffee in compliance with the export quality and standards [...] Any exporter shall have the contract and the correct sale price registered at the National Bank of Ethiopia not exceeding 24 hours after the conclusion of a contract for sale of coffee, and notify the same to the Ministry and other concerned authorities within 15 days [...] shall export coffee before the next harvest [...] shall except in cases of mixing processes registered under special permission of the Ministry, export coffee, without mixing different types and maintaining the name of place of origin [...] shall sell coffee by product leftover from export coffee in the auction centres or the Ethiopia Commodity Exchange [...] shall not resubmit for sale to auction centres or to the Ethiopia Commodity Exchange once he purchased the export coffee from the auction centre or from the Ethiopia Commodity Exchange and graded by the coffee quality liquoring and inspection centre.

Exporters must be Ethiopian nationals and are not allowed to cup taste the coffee before buying it at the auction (Stellmacher, 2007). Since the 2008 proclamation, exporters had to change their former license by the new export certificate of competence and a lot of them bought lands to own their coffee trees or became PLC members. This to keep exporting their localized coffees and to control their certification tools in some cases⁷⁸. Since producers became potential exporters, former exporters willing to keep on exporting specific coffees had to turn into producers too.

The government seized 17,000 tonnes of coffee in March 2009 and revoked the licenses of six exporters it put in jail and accused of hoarding their stocks and waiting for prices to rise. These exporters were the biggest ones, ensuring 40% of national export last year, of which the famous Mulugeta, Nestlé supplier, who went to jail. This fed and still feed the current coffee polemic. Coffee accounting for 60% of Ethiopian's foreign exchange revenue in 2007/2008 earned more than \$525 million from exports of 170,888 tonnes. ECX

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 $^{^{78}}$ Refer 6.1.2) The August 2008 value chain changes' principal loser: the Specialty Market

chief executive Eleni Guebre Madhin said that coffee earning will be \$300 million this year and estimations announce that coffee exports will fall by 30-40% in 2009/2010. Reasons officially announced are the global economic slowdown (Starbucks closing of 600 stores around the world has implications for demand of premium coffee that Ethiopia exports, she said) and bad weather. Moreover, in summer 2008, Japan complained and insisted on testing Ethiopian coffee beans on arrival after it found coffee bags contaminated with pesticides. Japan bought 20% of Ethiopia's beans. Then Ethiopia halted export for a while ⁷⁹ (Reuters, 22nd may 2009).

Ethiopian Coffee Exporters Association (ECEA)

This private organization is promoting exports as one of the main contacts with the world market. It provides coffee trade information, lobbies on policies, and supplies technical support to its members (Petit, 2007).

Coffee roaster

Coffee roaster means a person who, upon being licensed by the appropriate government organ purchases coffee from the Ethiopian Commodity Exchange, or a domestic consumption coffee wholesaler, roasts or roasts and grinds coffee for export or sale in the domestic market. 80

6.1.2) The August 2008 value chain changes' principal loser: the Specialty Market

Specialty coffee has become a generic label covering a range of different coffees, which either command a premium price over other coffees or are perceived by consumers as being different from the widely available mainstream brands of coffee. The term gourmet is also used. Even if the term specialty or gourmet is now applied to so many coffees that it has lost all relevance, they suggest some degree of exclusivity and appear through niche markets. A niche combines a set of conditions that enable a single product to thrive within the greater

Refer 6.2.2) The Limu Inara Multi-purpose Cooperative Union, an initiatives' leader?
 Coffee Quality Control and Marketing Proclamation No. 602/2008 of the Federal Democratic Republic of Ethiopia (2008).

ecological or commercial environment. While much of global coffee production consists of mainstream type coffees, there are many other coffees, often of limited availability, with greatly varying taste characteristics that appeal to different groups of consumers, and which sell at a premium over mainstream coffees. Simply put, where the producers or exporters of such a coffee and such a group of consumers get together, a niche market is created (ITC/UNCTAD/WTO, 2002). The licenses' organization system changes within the August 2008 coffee proclamation amputated this specialty market from its suppliers, mainly out growers.

Out growers owned akhrabies' and exporters' licenses, and processing plants (pulperies/hulleries). They collected coffee from defined groups of producers working as service cooperatives, even more rigorously, and then processed it. They brought this coffee to auctions where they bought it to then export it. It was possible to buy coffee lots you provided. By this way out growers ensured the specialty market, sometimes promoting it through organic or fair trade strategies, which total amount reached 8,000 tonnes per year in Ethiopia before the new coffee proclamation.

Before the 2008 coffee proclamation, one ex-out grower told me that he used to export selected coffees to Intelligentsia (an important specialty market American company). He didn't own any plant but made contracts with 1 500 farmers representing 200 ha certified by BCS Okö German organic certifying company. He shared 20% of his profits with farmers and Intelligentsia 60%.

"Since the new coffee law has been applied you need to own coffee trees to export, at least 30 ha" told me this ex-out grower. But to get the exporters' license, now called certificate of competence, you have to own (or rent) processing plants according to export standards. That's why the three competence certificates (producer, supplier and exporter) are now needed to do export. Out growers who didn't have any producer's license had to stop and to choose only one activity: supplier or exporter. Another solution was to invest in land, this explaining the new investors' boom. Even if the latter hasn't been lead by specialty marketers but by new coffee arrived (trip organizators, beer suppliers, etc... foreign investors and especially Ethiopian diaspora investors). But the easiest and more adequate solution for out growers was to create PLC considered as producing units allowed to export in which ones farmers bring their coffee and ex-out growers their processing plants. Anyway the main

reaction of these frustrated actors has been to choose one of the two ways: akhrabie or exporter giving up the other one. The bulk of them now acts on the mainstream coffee market exporting Sidamo 2, Yirgacheffe 2, etc. they bought to the Ethiopia Commodity Exchange. Some chose to keep on processing with a supplier competence certificate as the ex-out grower I met. But he plans to 'pass from down to up" exchanging his akhrabie's competence certificate for an exporter's competence certificate. This example illustrates how specialty market is getting melt in a global Ethiopian quality market where accuracy disappeared and coffee bags are stocked at random piled according to their region of production. Specialty market disappeared with the possibility to purchase exact coffee bags at auction even if global traceability improved.

6.1.3) A global Ethiopian coffee quality through the Ethiopian Commodity Exchange Authority establishment

Quality according to origin could be distinguished into a small-scale quality ensured by special marketers and a *large-scale* quality ensured by the new auction system. Currently the national coffee strategy lays on the second one at the expense of the first. Now let see how this global quality is built:

The woreda quarantine place, Limu Genet

Before coffee goes out from the woreda to travel to Addis Abeba, chagn, cooperatives and investors have to bring it to the Woreda MoARD Liquoring unit/quality control, or local CLU, locally called quarantine place or Bufata qorannoo fi Galma Bunaa 81 in Limu Kosa.

Trucks bring the coffee. Using two spears, three kg are taken for 120 bags. These three kg are put on a table, mixed by hand then divided in four parts. Two handfuls of each part are laid in a balance totally weighting 300 g. After, coffee defects are separated according to defects categories⁸². Once isolated, defects proportions are evaluated using a test tube (that's why the word "grading" is also used to qualify quality system and operations). The defects proportion a truck is carrying is then estimated, and mustn't exceed 6 to 7%. Moisture content is measured on the arrival day. At this woreda level, only unwashed coffee is tested whereas

⁸¹ Oromic name.82 Refer Annex *Defects*.

washed coffee gets only tested on its moisture content. Then coffee bags are packed with wire and lead sinkers stamped by pincers attesting the coffee origin: In Limu Kosa, these sinkers are "Limu" stamped. Even the number of the local quality station is stamped on the sinker (here number 5, for Limu Genet station). Traceability is ensured. All bags of the truck are not packed with these sinkers but eleven bags per truck are. Then a clearance paper (description paper) is filled: date, station, owner of coffee, area of production (*kebele*), owner and place of processing plant (pulpery, hullery), number of trucks (immatriculation), quantity of coffee (kg, number of bags), washed or unwashed coffee, number of sinkers sampling room, bags travelled on trucks: 85 kg for unwashed coffee bags, 60 kg for washed coffee bags. At this moment of the *quality chain*, the grade has not been given yet. It will be in Addis Abeba, then the result will be communicated to WARDO then quarantine place.

Then the coffee travels up to Addis Abeba and, concerning Limu Kosa coffee, met successively the following check points: Limu Genet, Ambuye, Babo, Jima, Gibe valley (before Welkite), and then Karra-Koree (Addis entrance). Each time only the former document delivered by quarantine place has to be presented.



Illustration 38: Limu Kosa Quarantine place 1) sorting defects 2) clearance paper 3)4)5) Limu Kosa station pincers and sinkers 6) akhrabies' book (Bossolasco, 6th July 2009)

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⁸³ Traceability is ensured. Moreover, the quarantine place officer keeps a descriptive book of each *chagn:* date and coffee type of each collect, sales to central market. In case of black marketers arrested at the different *woredas'* boundaries (Genet, Ambuye and Babo in Limu Kosa), the quarantine place officer is called to clarify the situation identifying the coffee and its owner.

The arrival coffee test, Addis Abeba

The Ec ex, in Saris' Coffee Processing and Warehouse Enterprise facilities,

approximately deals with 45 trucks/day during the summer (keremt or heavy rain season) and

between 100 and 200 during harvesting time up to the next heavy rain season. Each truck

loads one grade.

First room: the sampling room. Samples are made; in each bag, beans are taken from

the top, the middle and the bottom. For each truck, a three-kg-sample is realized and has to be

representative for 10 000 kg. The woredas' clearance paper data are registered in the

computer. Then, using these data, a SAMPLING TICKET is printed (place, owner, number of

bags, etc.) as an identity card of each truck. All samples pass through this room.

Second room: the coding room. The sampling ticket is translated into the CODING

TICKET which is added to the sample. Sampling ticket data are registered in a data base. This

data base recognizes the coffee and its series meanwhile sampling ticket data are registered

then orient the EC ex staff to the concerned cuppers; those specialized in different Ethiopian

regions (Sidamo, Harar, etc.)

Third room: the sample preparation room. Here the coded coffee sample is mixed.

Unwashed coffee is directly mixed in a kind of hoper whereas washed coffee is first relieved

of its parchment, an operation which is mixing it at the same time. The three-kg-samples are

distributed as follows:

300 g for raw evaluation (defects are picked by women then classified and

measured as it has been formerly described)

> 300 g for cup evaluation (roasted, infused the cupped)

300 g for physical analysis (moisture content)

> 300 g: client sample

300 g : witness sample for the owner

Fourth room: the roasting and boiling room. For cupping, a medium roasting is used.

Water is 96°C boiled.

Fifth room: the laboratory of cupping. Cupping is made on five cups.

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Illustration 39: From coffee arrival to cupping (Adrien, 16th June 2009)

Once these five steps accomplished, origin and grade are awarded to each coffee bag stocked in the EC ex warehouse: for example *Limu A2*. Origin is given as it follows:

	Washed coffees					
Type/Name	Origin	Symbol	Grades			
Yirgachefe A	Yirgachefe, Wenago (partial), Kochere, Gelana	WYCA	1-9			
	Abaya (partial)					
Yirgachefe B	Yirgachefe, Wenago (partial), Kochere, Gelana	WYCB	1-9			
	Abaya (partial)					
Sidama A	Borena, Benssa, Guji, Arroressa,	WSDA	1-9			
	Arbigona, Bale and West Arsi					
Sidama B	Aleta Wendo, Dale, Chiko, Dara, Shebedino,	WSDB	1-9			
	Borena, Wensho and Loko Abaya					
Sidama C	Kembata, Timbaro, Wellayta, South Omo and	WSDC	1-9			
	Gamugoffa					
	Limmu Seka, Limu Kosa, Manna, Gomma,					
Limmu A	Gummay, Seka Chekoressa, Kersa, Shebe and	WLMA	1-9			
	Gera					
Limmu B	Bedelle, Loppa, Chorra, Yayu and Alididu	WLMB	1-9			
	Dedessa					
Тері	Mezenger (Godere) and Sheka	WTP	1-9			
Bebeka	Bench Maji	WBB	1-9			
Lekempti	Kelem, East and West Wellega	WLK	1-9			

Table 11: ECX washed coffee contracts classification (Ethiopia Commodity Exchange Authority)

	Unwashed coffees				
Type/Name	Origin	Symbol	Grades		
Jimma A	Limmu Seka, Limmu Kosa, Manna, Gomma, Gummay, Seka Chekoressa, Kersa, Shebe and	UJMA	1-9		
	Gera				
Jimma B	Bedelle, Loppa, Chorra, Yayu	UJMB	1-9		
	and Alididu Dedessa				
Sidama A	Borena, Benssa, Guji, Arroressa and Arbigona	USDA	1-9		
	Wenago, Yirgachefe, Kochere, Dale Zuria, A.				
Sidama B	Wendo, Dale, Chiko, Dara, Shebedino, Amaro,	USDB	1-9		
	Wensho and Loko Abaya				
Sidama C	Kembata, Timbaro, Wellayta, Derashe, West	USDC	1-9		
	Arsi (Nonsebo), South Omo and Gamugoffa				
Harar A	East Hararge	UHRA	1-9		
Harar B	West Hararge, West Arsi and Bale (Berbere)	UHRB	1-9		
Lekempti	East and West Wellega and Kelem	ULK	1-9		
Forest	Sheka zone, Bench Maji zone, Mezenger zone,	UFR	1-9		
	Kaffa zone				

Table 12: Unwashed coffee contracts classification (Ethiopia Commodity Exchange Authority)

Once the origin registered, how is given the grade?

	Washed coffee	Unwashed coffee			
	The moisture content of both	processed coffees shall not be			
Moisture content	more than 11.5% by weight an	nd minimum 85% by weight of			
	beans remained on top o	f screen 14 after sieving.			
Raw value	The sum of points of shape &	The sum of points of defects			
	make, colour and odour	and odours			
	Under washed; cracked; over				
Defect on shape and make	fermented; loss beans;	Foxy; immature; black;			
for washed coffee	brownish; dull pods; mixed white; solid; broken; wanza				
& defect for unwashed	fermentation; under	stone; stick; grains; jenfel;			
coffee	fermentation; discoloured; stinkers.				
	nipped; long cont.				
Cup defect	The number of cup defects out of five cups.				
Cup quality value	The sum of points of cup defect, acidity, body and flavour.				
	The organoleptic examination of brewed coffee by				
Liquoring (cup testing)	professional cuppers to determine acidity, body, flavour,				
	defects and characters.				
A note is given according to	A note is given according to the raw value (40%) and cup quality value (60%). This note				
	corresponds to a grade.				

Table 13: Coffee test definitions (Ethiopian Commodity Exchange Authority)

Washed coffee graduation

Raw value (40%)						
Shape & M	Shape & Make (15%)		(15%)	Odour	(10%)	
Very good	15	Bluish	15	Clean	10	
Good	12	Greyish	12	Fairly clean	8	
Fairly good	9	Greenish	9	Trace	6	
Average	6	Coated	6	Light	4	
Fair	3	Faded	3	Moderate	2	
Small/fixed	1	White	1	Strong	1	

	Cup quality value						
Cup cleanness	(15%)	Acidity (15%) Body (15%)		cidity (15%) Body (15%) Flavour (15		Flavour (15	(%)
Clean	15	Pointed	15	Full	15	Good	15
Fairly clean	12	Medium pointed	12	Medium full	12	F. good	12
1 cup defect	9	Medium	9	Medium	9	Average	9
2 cup defects	6	Light	6	Light	6	Fair	6
3 cup defects	3	Lacking/dull	3	Thin	3	Commonish	3
> 3 cup defects	0						

Table 14: Washed coffee graduation (Ethiopian Commodity Exchange Authority)

Unwashed coffee graduation

	Raw value (40%)					
Defect dis	stribution (30%)		Odour	(10%)		
Very good	< 71	30	Clean	10		
Good	71-90	25	Fairly clean	8		
Fairly good	91-120	20	Trace	6		
Average	121-140	15	Light	4		
Fair	141-160	10	Moderate	2		
Poor	> 161	5	Strong	1		

	Cup quality value						
Cup cleanness	(15%)	Acidity (15%	,)	Body (15%)		Flavour (15%)	
Clean	15	Pointed	15	Full	15	Good	15
Fairly clean	12	Medium pointed	12	Medium full	12	F. good	12
1 cup defect	9	Medium	9	Medium	9	Average	9
2 cup defects	6	Light	6	Light	6	Fair	6
3 cup defects	3	Lacking/dull	3	Thin	3	Commonish	3
> 3 cup defects	0						

Table 15: Washed coffee graduation (Ethiopian Commodity Exchange Authority)

Both coffees graduation

Grade	Total value (Raw value + Cup quality value)
Grade 1	91-100
Grade 2	81-90
Grade 3	71-80
Grade 4	63-70
Grade 5	58-62
Grade 6	50-57
Grade 7	40-49
Grade 8	31-39
Grade 9	20-30

Table 16: Corresponding grades (Ethiopian Commodity Exchange Authority)

Coffees which do not meet these requirements are considered as substandard:

		This coffee b	pasically do	esn't fit to	any of the	
	known Ethiopian exportable coffees because of					
Under grade coff	ee	the presence	of defects	. Bean size	es are not	
		uniform.				
		This coffee is	s very inferi	or in qualit	y and even	
		cannot fit to	under grade	coffee beca	ause of the	
		presence of	presence of impurities. Sometimes less			
Local/domestic co	ffee	impurity coffee can be classified in this group				
		if the coffee is stored for a long period and				
		loses its flavour.				
	Under	Local/domestic use				
	grade	Grade 1	Grade 2	Grade 3	Grade 4	
Total value	15-19	< 15	< 15	< 15	< 15	
Sound beans (% of weight)	< 50	> 15	11-15	5-10	< 5	
Flavour	Fair	Commonish	-	-	-	

Table 17: Lower grade coffees (Ethiopia Commodity Exchange Authority)

The Ethiopian Commodity Exchange Authority warehouse(s) and exchange places

ECX warehouse location is in Addis Abeba, and the concerned authority plans to construct other ones, among those one in Jima. What about the transactions?

Standard lot size	150 bags with a net weight of 64 kg for
	washed coffee and 85 kg for unwashed.
Maximum order size	Maximum number of contracts a member can
	transact in a single transaction: 20 lots.
Daily position limit	Maximum number of lots a member may
	transact in a single day: 200 lots for himself
	and all his clients, and 50 lots for him or a
	single client.
Quotation factor	Birr/feresulla
Daily price filter	Maximum percentage range relative to the
	previous day's closing price outside of which
	offer and bid prices may not fall or rise: 5%.
Warehouse receipt	All coffee must be under the supervision and
	control of ECX warehouse before trade can
	be done. Such warehouse receipt can be
	traded only once between coffee supplier and
	exporter.
Warehouse receipt expiration period	Available for trading for a period on 90 days
	from the day of deposit. Once traded the
	warehouse receipt will expire on the
	execution of the trade.
Pay-in of funds	Time when funds will be withdrawn from
	buyer pay-in accounts: on T+1 (Trade + one
	working day).
Pay-out of funds	Time when funds will be deposited into
	seller pay-out account: on T+1
Exchange transaction fee	0.2% of transaction value
Handling and product certification fee	Sampling and grading, weighting, loading

	and unloading fees: 3.25 birr/bag
Warehouse storage charge	0.04 birr per bag and per day
Delivery notice	On T+1
Pick up notice (PUN)	Member must fill out a pick up notice with
	the exchange before picking up goods to the
	warehouse. After delivery notice is issued
	and before T+4.
Delivery period	T+4 calendar days.
Failure to pick up	If the buyer doesn't pick up coffee within the
	delivery period, there will be a 1% charge
	per day of the value of the trade.

Table 18: ECX transaction rules (Ethiopia Commodity Exchange Authority)

The buyers then take the coffee bags they bought, presenting their pick up notice, and according to the FIFO method (First In First Out) bags are taken from the corresponding bags piles. This step is the reason why specialty market is dead. It is not possible to follow each bag or truck; they get mixed because of this FIFO method. Even if there is a data base where traceability of each truck is registered, the last traceability steps are not realized.

Illustration 40: ECX arrival coffee warehouse (Adrien, 16th June 2009)

Then coffee for export gets commonly reprocessed in the Bülher machine in the same warehouse that exporters rent to the Coffee Processing and Warehouse Enterprise. Some exporters own the required processing plants. Then export coffee is stocked in the ECX export coffee or exporter warehouse. Then, export coffee goes to the second test CLU, the export CLU.

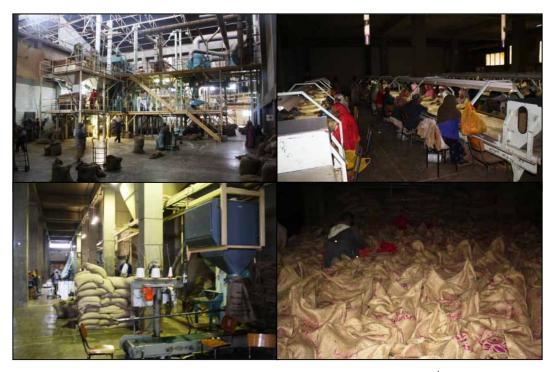


Illustration 41: From Bülher machine to export warehouse (Bossolasco, 24th September 2009)

Coffee stocked in arrival warehouse is then divided in three piles, which correspond to the three processing lines: two for unwashed coffee and one for washed coffee. A single line of Bülher machine processes coffee as steps follow: 1) hoper 2) elevator 3) pre-cleaner (to separate overscreen and underscreen coffee) 4) magnetic separator (to separate metal parasites) 5) distoner (to separate stones) 6) elevator 7) huller (to separate parchment) 8) polisher (to smooth the bean) 9) grader (to separate elephant size, peaberry, C-grade and under screen 13 coffee) 10) C-grade separator 11) Catadors for C-grade and normal beans (to separate light coffee) 12) elevator 13) colour separator (to separate hand picked coffee) 14) three silos for normal coffee and one silo for C-grade coffee (capacity: three exporters, but if they own more than one container, they will pass turn by turn) 15) sorting belts (women sorting remained defects) 16) final silo 17) export warehouse: balance (weight according to importing countries: 50 kg for washed coffee addressed to Saudi Arabia and 60 kg to USA).

The export coffee test, Addis Abeba

Exporters bring their coffee from their warehouse or the ECX export warehouse. Samples are then tested as they are during the arrival coffee test. The difference is that even if this CLU is included in the same Coffee Processing and Warehouse Enterprise facilities, it is under the Ministry of Agriculture and Rural Development authority.

First room: the coding room. The exporter certificate of competence and his sample are presented, and a CODING TICKET printed.

Second room: the sampling room. The former ticket follows the sample, and mentions its export market (final export destination). Defects are classified then measured; moisture content is measured. Samples of 300 g are prepared for cuppers.

Third room: the roasting room. Here 250 ml of boiled water are mixed with 10 g of roasted/grinded coffee per cup.

Fourth room: the laboratory of cupping. Many cuppers cup the same coffee to give a collective profile. The number of cups used during the test is not the same as for the arrival test. Here seven cups are used for washed coffee cupping and eight for unwashed coffee.

Once the export test is accomplished, two documents are filled:

- The "Coffee & Tea Quality Control & Liquoring Center washed/unwashed coffee export classification report"
- The "Ethiopian washed/unwashed coffee export certificate" which is added to the export certificate of competence. Both permit the exporter to send his coffee to Djibouti.

The arrival coffee CLU and the Ethiopian Commodity Exchange point out coffees according to their origin using letters and processing quality using numbers from 1 to 9. This vocabulary disappeared at the benefit of quality grading numbers used by the international export classification as Limu 2 or Harar 4. Indeed the processing quality gets the better of origin in the long term, and definitely due to the behaviour of conventional coffee importers

as explained me a French importer: "The grade is more significant than the origin. Indeed traceability plays for buyers and not consumers in the way that buyers generally don't mention their coffee origin. What they expect is a neutral coffee, regular in its supply and quality: a zero defect coffee. Not mentioning the coffee origin allows buyers to communicate that is not Limu coffee which is good, but Malongo coffee for examples. Therefore, the origin and consequent quality knowledge stops at buyers."

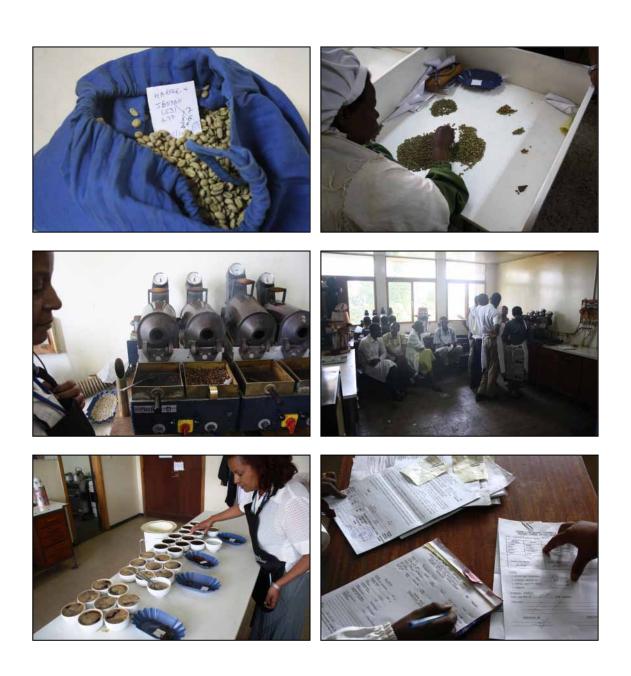


Illustration 42: From sampling to the delivering of the export certificate in the MoARD export CLU (Bossolasco, August 2009)

6.2) Limu Kosa coffee organization

6.2.1) Woreda's coffee rules: Limu Kosa woreda

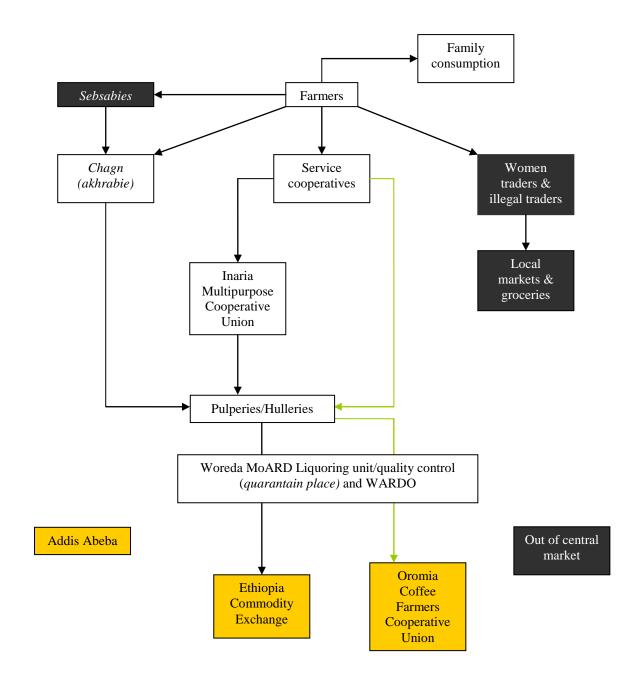


Illustration 43: Limu Kosa supply chain (prod: Bossolasco, 2009)

Each coffee producing *woreda* presents differences in coordination between its local production and marketing actors but a three-poled organization seems recurrent: the villagers themselves, the government extensions services and the local traders (Save the children UK, 2003). That means small-scale farmers, WARDO (*Woreda* Agriculture and Rural Development Office) and *akhrabies*. This organization constitutes the main supply channel the bulk of coffee production takes. However the one observing has to be careful into not generalizing because, depending on the *woreda*, service cooperatives are more or less active. And in Limu Kosa these ones are not so influencing coffee farmers' activities. They are generally not active but initiatives are leading a new drive. Ones of which are Limu Inara Farmers Multi-Purpose Cooperative Union goals through linking farmers within market groups with export markets, and the Babo and Ambuye cooperatives which are members of the dynamic Oromia Coffee Farmers Cooperative Union. Except these two channels, state farms and investors make up a third way they lead independently. Indeed, they own or rent all production means, from pulperies to trucks, linking them directly to central and export markets. They only collaborate with the WARDO for quality and administrative purposes.

The WARDO acts on coffee producers through model farmers who are innovation vectors, the link between WARDO and other farmers; through farmer training centres (FTC) and declining demonstration sites they oversee; and through their development agents (DA). Each "three farmers' associations" has one supervisor who oversees nine DA (three DA per *kebele*). Development agents are divided into animal production, plant production and resources conservation agents. The last two specialized agents act on coffee production, and live in the production site. A direct influence is the sale to farmers of seeds or seedlings grown in the six state nurseries of the district: in a state nursery, located eight km at south of Genet, 142,700 seeds (38 kg) of highland (>1900 masl) 74-165 variety were planted in April/May 2009. Once the seedlings reached a three-pairs-of-leaves stage between June and August 2009, they will be picked and transplanted in coffee fields. Then farmers purchase it 0.16 birr per seedling, while seeds cost is 35 birr per kg (state nursery manager, 29th June 2009).

This production year (October 2008-September 2009), corresponding to 2001 EC⁸⁴, farmers faced weak yields:

- It is part of coffee nature to give irregular yields: coffee is genetically characterized by a high/low/medium cycle. Since last year was a high yielding year, this year was a resting year for coffee. After an overbearing season⁸⁵, trees can die drying from the top (yellow leaves) if nutrient are not provided to those. This disease called die-back and CBD (Coffee Berry Disease) are the main threatens for coffee growers.

- Agricultural practices: Such character of coffee is "give me and I will give you" (Limu Kosa WARDO expert). When the productive year is a low yielding season, farmers consequently minimize the management and don't fertilize as recommended.

- Climate conditions: The most spread cause claimed by Ethiopian authorities as the ECX president to explain why Ethiopian production decreases is drought. Rains of 2000 EC are accused to not have felt regularly, causing a low 2001 EC production.

Once ten to fifteen years, when coffee prices fall, producers neglect their trees, and some uproot those. Nowadays, world coffee prices are rising and Limu Kosa households plant more and more coffee trees, even in grazing land (Limu Inara Farmers Multi-Purpose Cooperative Union president, 28th May 2009).

means to the processing and selling year. This is, in the Ethiopian calendar, the 2001 EC coffee year.

85 Overbearing happens when the leaf ratio exceeds eight to nine berries per leave. Due to overprodu

⁸⁴ The production year is the harvesting year, and not the coffee growing year: For example, coffee fruit grew from February to October 2008, gets picked between October 2008 and February 2009, and is finally dry processed in hulleries between February and August 2009. This coffee corresponds to the coffee year 2009, that

⁸⁵ Overbearing happens when the leaf ratio exceeds eight to nine berries per leave. Due to overproduction leaves turn yellow and the tree progressively dries from its periphery up to its trunk, and then dies. This could be prevented if the tree gets artificially fertilized (Suntu State Farm manager, 2nd September 2009).

ee producing households	27,004					
ers' associations (kebele)	40					
State farms	3					
Service cooperatives	13 (2) ⁸⁶					
Investors	21 (4,090.5 ha for 17 of them)					
Pulperies	18					
Hulleries	13					
State nurseries	6					
ning and demonstration centers	15					
fee coverage areas (ha)						
Whole	26,554.6					
lanted (selected varieties)	14,374.25					
mother trees: wild and selected)	9,298					
d (or rejuvenated old trees)	2,882.35					
un dried coffee sold to central	Washed coffee sold to central					
market (ton)	market (ton)					
3,283.191	234.489					
3,515.5115	522.799					
3,163.595	333.634					
4,834.158	675.287					
2,023	428.6					
	State farms Service cooperatives Investors Pulperies Hulleries State nurseries ning and demonstration centers The coverage areas (ha) Whole clanted (selected varieties) mother trees: wild and selected) d (or rejuvenated old trees) un dried coffee sold to central market (ton) 3,283.191 3,515.5115 3,163.595 4,834.158					

Table 18: Limu Kosa coffee production & market participants profile (data: Limu Genet WARDO, coffee expert, 5th September 2009, prod: Bossolasco)

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⁸⁶ Active cooperatives owning processing plant(s). Refer 6.2.4) *Technoserv and service cooperatives*.

1.a) 1.b) 1.1.	Coffee seeds sown for plantations of 2001 EC at nursery sites By state nurseries By small scale farmers nurseries				
1.b)					
ĺ	By small scale farmers nurseries	No	2,376,000	2,163,000	
1.1.		No	13,284,000	12,952,800	
	Coffee seeds germinated				
1.1.a)	By state nurseries	No	2,019,600	1,832,569	
1.1.b)	By small scale farmers nurseries	No	9,963,000	9,714,600	
1.2.	Coffee seedlings died after germination				
1.2.a)	By state nurseries	No	475,200	90,213	
1.2.b)	By small scale farmers nurseries	No	1,992,600	588,423	
1.3.	Coffee seedlings established				
1.3.a)	By state nurseries	No	1,544,400	1,742,356	
1.3.b)	By small scale farmers nurseries ⁸⁷	No	7,970,400	9,126,177	
1.4.	Coffee seeds prepared (processed) for 2002 EC	kg	3,500	670	
1.5.	Coffee planting activities of the woreda sites				
1.5.a)	Staking (means new coffee sites)	На	2,710.2	2,710.2	
1.5.b)	Stakings	No	9,033,120	9,033,120	
1.5.c)	Pitting (holling)	No	9,033,120	9,033,120	
1.5.d)	(after 1 to 2 months) Refilling	No	9,033,120	9,033,120	
1.5.e)	Planting (after 1 month)	No	9,033,120	9,033,120	
1.6.	Area of productive trees	Ha	22,102.4	22,102.4	
1.7.	Amount of coffee yield harvested in 2001 EC	Tone	14,336	10,752 ⁸⁸	
1.8.	Area of coffee stumped in 2001 EC ⁸⁹	Ha	320	115.75	
1.9.	Different coffee site management activities				
1.9.a)	Slashing	На	23,954.4	23,241	
1.9.b)	Tillage of under coffee	На	2,395	2,131.5	
1.9.c)	Mulching	На	2,395	289.5	
1.9.d)	Applying compost fertilizer (organic) ⁹⁰	На	2,395	2,131.5	
1.9.e)	Total farmers participated for the total work	No	17,808	16,211	
	Male headed households		17,763	16,200	
	Female headed households		115	11	

Table 19: General coffee activities report (MoARD of Limmu Kossaa woreda, 12th June 2009)

⁸⁷ On 3,112 male headed households and 30 female households.
⁸⁸ In 2001 EC, Limu Kosa production is 10,752 t whose part sent to central market is 2,451.6 t. That means that 22% of Limu Kosa coffee went out of Limu region, whereas 82% of it was consumed in Limu region.
⁸⁹ On 7,465 male headed households and 3 female households.
⁹⁰ On 212 male headed households.

Name of sector	Kind of	2 nd	3 rd	4 th	5 th	6 th	7 th	Total (kg)
	coffee	grade	grade	grade	grade	grade	grade	
Cooperatives	Washed	9,030	28,152					37,182
Limu Inara					33,150	45,900		79,050
farmers Multi-	Unwashed							
Purpose Union								
Private traders	Washed	92,753	271,422	13,759	9,750			387,684
(akhrabies and		30,600	26,860	112,200	196,350	214,200	10,200	590,410
investors)	Unwashed							
Sub total	Washed	101,783	299,574	13,759	9,750			424,866
	unwashed	30,600	26,860	112,200	229,500	260,100	10,200	669,460
Total								1,094,326

Table 20: Coffee from the woreda sent to the central market according to its standard from 01/11/2000 to 29/8/2001 EC (MoARD of Limmu Kossaa woreda, 12th June 2009)

The cooperative unions' coffee supply channel is a shorter coffee value-chain and allows a framework where transparency, traceability, ecological and social responsibility facilitate product upgrading by certification and quality improvement. A lot of moneys was invested by NGOs and international donors in physical and institutional infrastructure and training (Stellmacher, 2007). Currently Oxfam GB and Technoserv (which principal donor is Bill Gates Corporation) are acting on Limu Kosa, Limu Seka and Chore Botor service cooperatives and especially on Limu Inara Multi-Purpose Cooperative Union members.

6.2.2) The Limu Inara Multi-purpose Cooperative Union, an initiatives' leader?

Presentation

The *Yuuniyeenii Limmuu Innaaraa*⁹¹, or Limu Inara Farmers Multi Purpose Cooperative Union, was created in 2005 by seven service cooperatives. It covers the two ex Limu Kosa and Limu Seka *woredas*, the current four Limu Kosa, Limu Seka, Chore Botor and Nono Benja *woredas*. Among their forty nine cooperatives, twenty eight are members of the union and twenty four are dealing with coffee. And seven cooperatives are candidates:

- Limu Kosa: 8/28 and 3/7

- Limu Seka: 11/28 and 2/7

Chore Botor: 5/28 and 2/7

- Nono Benja: 4/28

⁹¹ Oromic.

Limmuu Kossaa service cooperatives are Babo, Ambuye, Shogelle, Mito, Tencho, Debelo, Suntu, and Chime. That represents 3,782 households (3,762 in Limu Kosa), 13,700 men and 337 women implicated in coffee production. Coffee is their main product. Cooperatives are in a fifty km radius around Limu Genet. The annual general assembly takes place in September. One share to be a member is 5,000 birr. Each cooperative possesses at least one share ant at most 10% of union shares. In the union, there are eight employees and three future employees in September 2009.

The Limu Organic Coffee Project

The implementer of the project is the Oromiya Agricultural and Marketing Output Agency. It concluded agreements with Oxfam GB implied in the project, and the BCS Okö organic certifier. The pilot and planning project "Empowering Smallholder Coffee Producers of Limmu through Organic Coffee Production and Marketing" is converting coffee farming plants. Organic coffee market groups were established within cooperatives to produce their coffee under organic production rules only. There are six to seven market groups per cooperative, and thirty to forty households per market group. In July 2009, there were 3,468 farmers into 146 market groups. The agreement is signed between the union and these market groups. The union shall buy all organic coffee produced by the market groups and export, or facilitate market access with the private sector for the organic coffee which it coul not buy. The union shall transfer 80% of the net profit to the farmers, and bound to assure that the dividend reaches every household member according to its supplies. Indeed farmers dry their coffee; then the union buys it at the daily price of feresulla, and adds seven birr for the producer per feresulla plus five birr to the cooperative per feresulla. Last season, feresulla = 150 + 7 + 5 = 162 birr.

The market groups shall grow coffee in accordance to the internationally recognized organic methods including the following basic rules (Organic coffee production, inspection, certification and marketing agreement, September 2009):

- The use of any pesticides, chemical fertilizers or other substances is strictly forbidden in organic farming, inside the farm for coffee or any other crop;
- In case of neighbouring non organic farm plots, a sufficient buffer zone has to be established:

- Non organic substances are not allowed to be stored at the organic farm, including non organic fertilizers and pesticides or other toxic materials;
 - No littering is allowed at the organic farm area;
- No coffee from non approved plots, neighbours or relatives are allowed to be delivered or mixed in the organic coffee of the market group.
- Market groups are asked to maintain soil fertility with compost from organic materials such as grass cutting and tree leaves, coffee pulp, other organically produced plant materials, animal manure;
- Weed control has to be done by mechanical methods as cutting, tilling, hand weeding or mulching;
- Intercropping with other crops such as banana, *enset*, ginger, avocado, beans, etc... is recommended:
- Native plants and shade trees existing at the site shall be maintained and where applicable shading is improved.

Union's president: "Market groups are the smallest farmers units producing organic coffee. The purpose of these market groups is to control the organic production. This structure has been created by the union (no state recognition) for quality control. When the campaign starts, they invite certifier's company members then visit farmers together. This renews our contract, the agreement is prolonged. During the campaign, they make inspections directly to the farmers without telling union. When they inspect, they go to the market groups. In these market groups, farmers control each other. That means they advise each other and control by themselves the quality respect. There is a leader per market group. Registration documents in the unions' Genet offices and in Addis Abeba certifier's offices regroup these market groups. But last year we sold unwashed coffee only to EC ex. We wanted to export but we couldn't. We signed a project with the Oromiya Agricultural Output Agency, planned by Oxfam GB. We had to prepare coffee with organic coffee requirements and they had to find export markets for us. An agreement was signed. Finally they didn't find the market for us. Our coffee was blocked ten months. We finally sold it to EC ex without any premium price. Now we don't receive money from the project anymore. We use our own capital to pay farmers. We asked and obtained from Trade & Industry Ministry at regional level (Oromiya regional government) the general export licence. With a cooperative status, it was easy. Now we are planning to obtain two additional export licences for the specialty market:

- the organic coffee export licence
- the fair trade coffee export licence

To get it, we need the general export licence, then the certificate of organic coffee delivered by the certifying company. Since January 2008, we were certified by BCS Okö Company. We sent it to Trade & Industry Ministry. But to get the additional licences we had to find a market first. We expect these licences for the next production year, maybe in October-November of this year."

Oxfam GB officer: "After 2003 coffee crisis, the Oromiya Agricultural and Marketing Output Agency employed us to work on Limu coffee; the Limu Inara union was created, and we had find solutions to the crisis, and other export markets. Our intervention purpose is to find markets, to create linkages between the union and exporters/foreign buyers. We reached it, and had relations with French and Italian buyers but, in summer 2008, Ethiopian government banned organic coffee from export because Japan complained that coffee bags were not conforming. Since, the Ethiopian Quality Standards Authority has become the certifier of the certifiers and government stopped halting exports. The union is now looking for a new certifier. BCS Okö is no more certifying it."

Union and coffee quality

Union's president: "Quality is made step-by-step: 1- Preparing quality seeds (disease resistance, heavy productivity) selected from the mother tree (which productivity is known). 2-Preparing the seedlings. 3- Selecting a good, suitable site for coffee, planting seedlings. 4-Well-done management. After 3 years, we collect quality coffee. There is a management quality control made by DA and the union. And by market groups itself. At buying we operate by a physical examination by seeing the coffee beans. There is a difference between dried full ripened beans and dried no full ripened beans. We rent a hullery in Genet to process this coffee, and the quarantine place officer controls that process.

Limu coffee is particularly good because:

- Its aroma; the taste is good compared to other areas and countries because the coffee is grown in forests. The shade trees diversity is the reason why forest coffee is the best one. Coffee is by nature agroscopic; that means it looses its natural aroma and absorbs other odours surrounding it. At any place: in the forest (optimum coffee environment because it doesn't absorb any bad odour), farmer house, warehouse, etc... It looses its nature and absorbs its environment.
- Limu area has a lot of rainforests compared to other areas of Ethiopia, except Gore in Ilubabor zone. There is high humidity and we have continuous rains. Moisture content is also getting higher in the coffee environment and in coffee too. This is suitable for coffee because it allows coffee trees (different than in Eastern Ethiopia) to keep active leaves in the period which is the dried months (January and February). Leaves don't fall down like in Harar."



Illustration 44: Limu Inara Union office, warehouse and market group member in Dino forest of Sunxxu farmers' association (Bossolasco, 2009)

6.2.3) Technoserv intervention and service cooperatives

Limu Kosa *woreda* service cooperatives are not so influencing coffee farmers, except Babo and Ambuye ones. In this way, initiatives lead by the new Limu Inara union and Technoserv try to change it.

Name of cooperatives	Male headed households	Female headed households	Total	Number of farmers' association it holds	Establishment year EC
Baabbuu	1333	57	1390	3	1990
Tenchoo	350	10	260	1	1996
Shogellee	713	41	754	3	1996
Waleensuu	500	18	518	1	1996
Cimmee	600	20	620	3	1996
Suntu	625	19	644	1	1998
Dabbello	860	19	874	3	1998
Wabee	365	7	372	1	1996
Koticha					
Harrawwa	1450	83	1533	3	1996
Jimante					
Walakke	400	20	420	1	1998
Somboo					
Nix Gunduu	550	12	562	2	1995
Ambuyyee	1450	28	1478	5	1996
Harrawwa	150		150	1	2000
Gatira					
Total	9346	334	9680		

Table 21: Limu Kosa service cooperatives (Genet WARDO cooperatives office, 3rd July 2009)

Technoserv is an organization implied in coffee production of different east African countries since forty years, and currently funded by Bill Gates Corporation. Its workers are both business and technical advisers allowing guarantee funds to smallholders through bank loans⁹², and linking them with export markets. Farmers sell their coffee to pulperies; then upon quality, it will be exported to United States laboratories and market. The organization is currently implied in the establishment of twenty pulperies across south western Ethiopia in Jima, Ilubabor and Wellega zones, and of which four are located in Limu Kosa and two in Limu Seka *woredas*. The project includes three phases of four/four/three years, and is now beginning the first one (Technoserv worker, 27th August 2009).

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⁹² The Commercial Bank is the major rural bank, and has expanded since liberalisation. It generally provides credit through the service cooperatives. Some communities have experienced serious problems of indebtedness, following the collapse of prices in 2000 (Save the Children UK, 2003).

	Suntu	Kossa	Gumer	Cheleleki	Total
Area under	1395.5	1602.4	1861	445	7907.95
coffee plantation					
Matured coffee	1131.93	1364.27	1219.78	20	5574.98
area (ha)					
Young stumped	263.62	238.13	641.22	425	2332.97
coffee area					
Latitude	8°05'N	7°57'N	7°59'N		
Longitude	36°57'E	36°53'E	36°59'E		
Altitude (m)	1600-1800	1600-1900	1700-1800		
Max. Temp. (°C)	30	27	27		
Min. Temp. (°C)	10	12	13		
Rainfall (mm)	1626	1844	1677		
PH	4.5-5.9	4.5-6.9	4.5-6		
Distance - Jima	75 km	53 km	82 km		
Distance - Addis	410 km	385 km	417 km		

Table 22: State farms coverage area and physical characteristics in Limu Kosa woreda (Limu Coffee Plantation Main Office, 2009 and CPDE, 2005)

The Coffee Plantation Development Enterprise (CPDE) manages three state farms' sets in Limu, Tepi and Bebeka. Those mainly produce coffee but also maize, fruits (pineapple, mango, avocado), honey⁹³ and fatten oxen. Limu state farms are Suntu, Kossa, Gumer, Cheleleki, Goma 1 and Goma 2. Limu Kosa woreda shelters the three first of those whereas Cheleleki state farm is found in Chore Botor woreda.

Moreover, farm No. 3 of Suntu state farm and farm No. 6 of Goma 1 state farm are organic farms. In Suntu state farm, that represents 9.75% (123.92 ha) of all productive area (1270.36 ha) in 2001 EC. Limu Coffee Plantation officer: "We use compost and organic fertilizers "ORGA" produced in Addis. But yields are smaller because we can't use chemical

⁹³ In Limu Kosa state farms, honey is associated with coffee in small amounts. It is grown in Cordia, Croton, Millettia (birbira), Acacia, and Sesbania species (not in Shefflera one).

fertilizers (urea and DAP) or chemicals (Mamba and round-up) for weeding. No synthetic products. But quality is best." Yields are fluctuating between low yields in these organic and old trees plots and high yields that can reach 40 q/ha in trees which got stumped or in mother trees in productive years. 90% of their coffee is exported as Limu-2 for washed one, and Jima-4 for dried one. They don't pass through the ECX, and follow the third coffee supply channel: the modern plantations one 94. Washed coffee (60 kg-bags) represents 70% of Suntu State Farm production whereas sun dried coffee (85 kg-bags) is 30% of it 95. All farms and therefore coffee is certified by UTZ which code of conduct is directed to medium and large scale coffee plantations as a package of farm-level, brand-level and financial-level tools to bring social and environmental performance to the mainstream coffee market (Stellmacher, 2007).









Illustration 45: Suntu state farm drying tables (cement and wood), huller and washed coffee (Bossolasco, October 2009)

⁹⁴ Refer 6.1) Presentation of the value chain.

⁹⁵ Coffee is directly dried on the soil, lying on bricks. That is not recommended but is even done in state farms which are the leaders in terms of coffee practices.

6.3) A current and coming decentralisation of institutions

In Jima and other zonal towns, the Ethiopia Commodity Exchange Authority is building laboratories and warehouses. In Jima, facilities are yet constructed; it is going to be functional in November/December 2009. Roasting machine is yet installed in the new cupping laboratory. In this way, coffee coming from Jima surroundings will be stored in Jima ECX warehouse, then graded by the Jima ECX laboratory. This will concern coffee produced in Jima, Ilubabor and Kaffa (Bonga) zones. Then Ethiopia Commodity Exchange Authority will maybe build warehouses and laboratories in Bonga and Bedelle (Ilubabor zone).

Limu coffee will be consequently graded in Jima ECX arrival coffee CLU, and stocked in Jima ECX warehouse, and won't be in Addis Abeba anymore. Only export coffee will keep on going to the capital to get processed (Bülher machine), stored in ECX export warehouse then export graded and certified by the MoARD export CLU.

This decentralisation is a proof that Ethiopian government didn't realize the recent coffee value chain changes to maintain its control on regions, as it could have been claimed. In fact regions are given more control than before because, up to now, all coffee had to pass through Addis Abeba and its auction centre (except Harar coffee passing by Dire Dawa auction centre). Now, domestic consumption coffee is going to stay in the producing regions.

6.4) Prices

6.3.1) Price formation of Ethiopian coffees

Coffee prices are fixed in consuming countries commodity exchanges: Arabica coffee exchange places are United States (New York) and Germany; Robusta coffee exchange places are New York and Paris. The International Coffee Organization classifies coffee into four categories which share of each market place is as follows:

- Colombian Mild Arabicas: 45% New York 55% Germany;
- Other Mild Arabicas: New York 60% Germany;
- Brazilian Natural Arabicas: 23% New York 77% Germany;
- Robustas: 18% New York 82% France.

Ethiopian coffees are classified among Brazilian Natural Arabicas, which prices varied as follows (all prices are indicated in US\$ cents/lb):

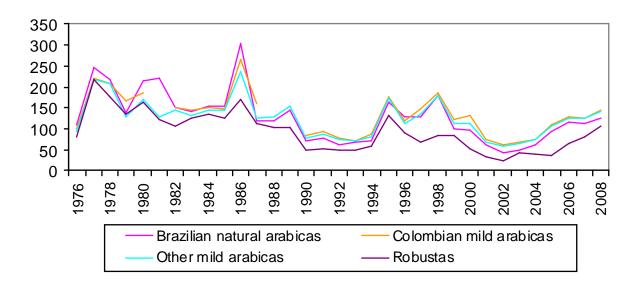


Illustration 46: Coffee commodity prices evolution from 1976 to 2008 (calculated from ICO website data)

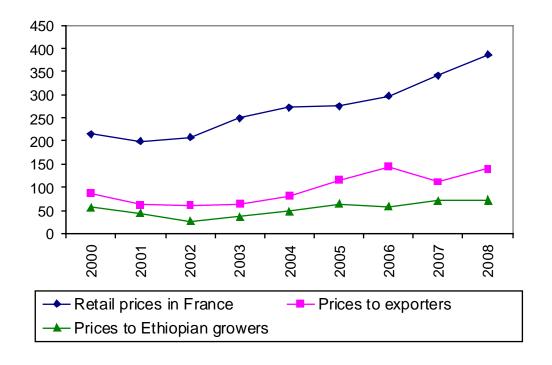


Illustration 47: Value-added distribution (calculated from ICO website data, 6th October 2009)

The Ethiopia Commodity Exchange Authority is electronically transmitting market data from the trading sessions to market centres in Addis Abeba, Adama, Shashamane Awassa, Nekempte, Mekele and plans to do it in Jima (Harar, Dire Dawa, Dessie, Bahar Dar and Gondar). In addition it has also developed a system of data dissemination using SMS and interacting voice response.

But prices mainly circulate from *mouth to ear* between peasants, who get the information in newspapers and especially from *akhrabies* linked to the central market.

6.3.2) Limu coffee prices

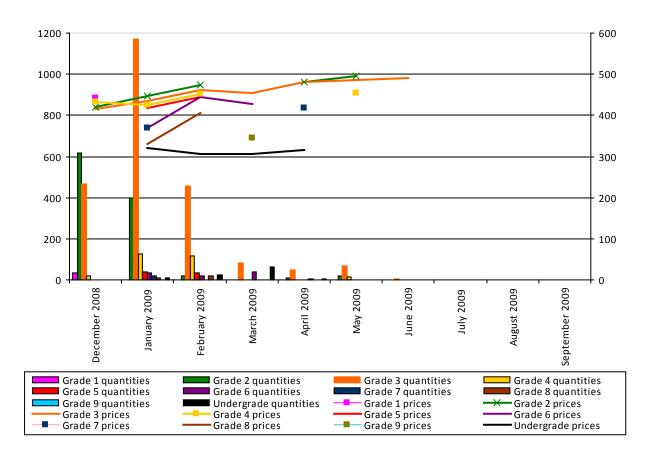


Illustration 48: Prices and quantities per month: WLMA grades 1 to 9 (data: ECX, prod: Bossolasco, 2009)

		WLMA Prices per month (birr/feresulla)											
		1		2	3	4	5	6	7	8	9	UG	Average
December 08		442.5	4	19.5	415	432.5							419
January 09			4	146	435	424	418.5	369	370	330		320	433
February 09			47	72.5	460.5	450.5	445	445		405		306	451
March 09					455			427.5			345	306	397
April 09			4	180	481				418			315	459
May 09			4	195	485	455							483
June 09					490								490
					W	LMA Q	uantitie	es per m	onth (Tonne	s)	•	
	1	2	,		3	4	5	6	7	8	9	UG	Total
Dec. 08	33.17	7 61	8	46	7.88	17.44							1 135.61
January 09		398	.41	1 10	58.61	124.31	36.94	33.03	19.38	9.69)	7.75	1 798.12
February 09		19.	52	45	8.25	117	35.09	19.5		17.55	5	25.35	692.26
March 09				80).98			39.61			1.8	64.81	187.18
April 09		10	.8	46	5.81				5.41			7.21	70.23
May 09		19	.8	68	3.41	12.6							100.81
June 09				7	.21								7.21
July 09													
August 09													

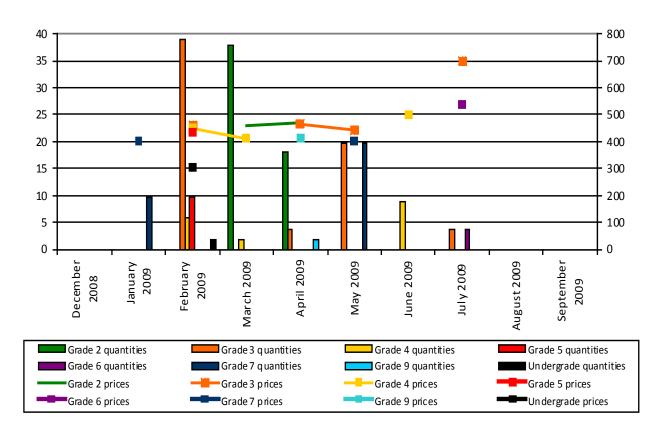


Illustration 49: Prices and quantities per month WLMB: grades 1 to 9 (data: ECX, prod: Bossolasco, 2009)

		WLMB Prices per month (Birr/feresulla)									
	1	2	3	4	5	6	7	8	9	UG	Average
December 08											
January 09							400				400
February 09			459	449	434					305	448
March 09		457.5		412							455
April 09		470	465						415		465
May 09			441				400				420
June 09				500							500
July 09			700			540					620
August 09											
September 09											
				WLM	IB Qua	ntities	per mo	onth (Tonnes))	
	1	2	3	4	5	6	7	8	9	UG	Total
December 08											
January 09							9.76				9.76
February 09			39.02	5.85	9.76					1.96	56.59
March 09		37.8		1.8							39.6
April 09		17.98	3.6						1.8		23.38
May 09			19.8				19.8				39.6
June 09				8.99							8.99
July 09			3.6			3.6					7.2
August 09											
September 09											

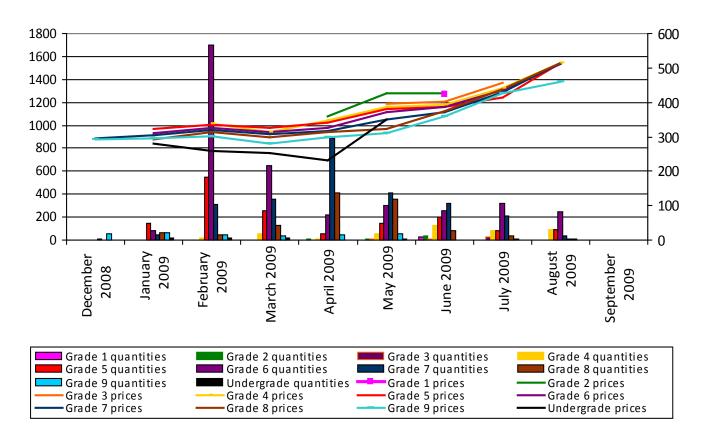


Illustration 50: Prices and quantities per month UJMA: grades 1 to 9 (data: ECX, prod: Bossolasco, 2009)

		UJMA Prices per month (Birr/feresulla)														
			1	2	2	3		4	5		6	7	8	9	UG	Prix moyen
December 08												294		294.5		294
January 09									324		312	306	293	293.5	279	308
February 09							3	39	333.	5	326	320	313.5	302.5	257.5	326
March 09							31	2.5	325		312.5	306.5	296.5	281	252.5	310
April 09				36	50		3	48	341		325.5	318	314	297	230	318
May 09				42	25	395	38	37.5	381.:	5	372.5	349	323	311.5	350	352
June 09		42	2.5	426	6.5	402	39	91.5	387.:	5	386.5	372.5	374.5	360		384
July 09						457.5	4	41	415		435	429	440	425		433
August 09							51	5.5	514.:	5	512	515.5	515	460		513
September 09																
								Į	JJMA	Q	uantiti	es (Ton	nes)			
	1		2		3		4		5		6	7	8	9	UG	Total
Dec. 08												10.2		53.5	5	63.75
January 09								1	42.8	-	86.71	48.45	66.3	63.7	5 17.8	5 425.86
February 09						1	5.3	5	45.7	1	698.3	311.1	45.6	48.4	5 15.3	2 679.75
March 09						5	8.65		255	6	550.25	359.55	124.9	5 38.2	5 20.4	1 507.05
April 09			10.2	2		1	0.2		51	2	216.75	889.9	410.5	5 45.9	2.5	5 1 637.05
May 09			12.7	'5	12.7	5 5	3.55	14	45.35	3	303.45	408	354.4	5 51	10.2	2 1 351.5
June 09	28.0	05	33.1	5	5.1	13	0.05	í	204		260.1	323.85	84.15	2.55	5	1 071
July 09					28.0	5 8	86.7	8	4.15	3	23.85	206.55	38.25	5.10)	772.65
August 09						8	9.25	9	91.8	2	244.85	35.7	12.75	5 12.7	5	486.25
Sept. 09																

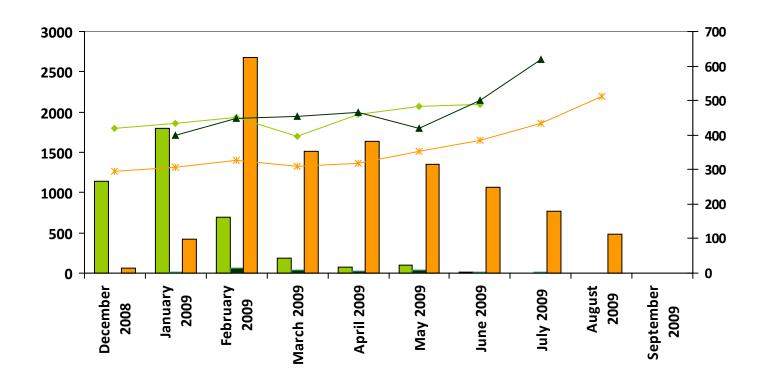




Illustration 51: Monthly average prices and quantities of WLMA, WLMB and UJMA (data: ECX, prod: Bossolasco, 2009)

6.3.3) Limu coffee prices and producers

Price variations at national levels

Prices internationally, nationally then consequently locally vary: During third week of August 2009, dried coffee 96 was sold 24 birr/kg in Genet groceries and 30 birr/kg next week (1 euro = 18 birr at this time). This because of world market evolutions, and as told me an Ambuye grocer, because of local coffee stocks decrease from July to September: "Coffee quantity and therefore availability decreases in the woreda three months before next harvest, and prices increase".

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⁹⁶ Domestic consumption coffee is exclusively sun dried coffee. Washed coffee, too expensive and not assimilated in local drinking customs, is only addressed to export, or central market. Locally, there is no quality control for this sun dried coffee. The client is just visually estimating the coffee he buys (Genet *akhrabie*, 26th August 2009).

During the first week of September 2009, one kg of green beans cost 30 birr in Limu Genet, 34 birr in Jima and from 50 to 60 birr in Addis Abeba (Mercato). This concerns coffee sold in groceries.

Price to producers and akhrabie

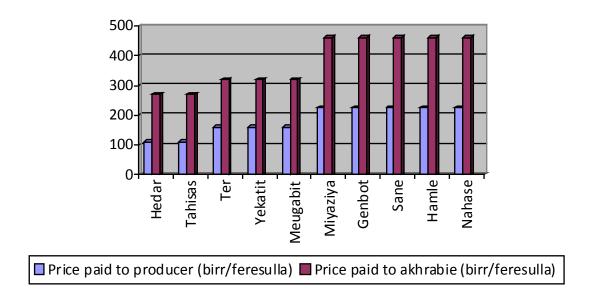


Illustration 52: Evolution of prices paid to producers for dried coffee with husk by a Genet akhrabie, and processed coffee prices to the ECX (Genet akhrabie, 5th September 2009)

Price and sale strategies for farmers⁹⁷

Farmer 1: He produced two 100 kg-bags in 2001 EC, one for self consumption and the other for sale. He sold that coffee at 150 birr per *feresulla*. He was informed on coffee prices through radio and newspapers, then negotiated his price with *sebsabies* and agreed if the difference between this and the *sebsabie* propositions was less than 6 birr. But he thinks that: "It would be better if I could sell to cooperatives but there is a communication problem. That means there is no strong linkage between farmers and cooperatives for colleting coffee. Cooperatives are not active, and buy a little." (Genet farmer, 27^{th} June 2009)

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⁹⁷ This sub-section considers three different profiles of farmers I could interview in Genet and Babo towns, respectively: a basic farmer, a model farmer and a farmer member of a service cooperative.

Farmer 2: He produced three bags in 2001 EC (and ten in 2000 EC), one for self consumption and two for sale. He sold that coffee at 150 birr per feresulla, which meant 600 birr per bag. He sold one bag of red cherries at 2 birr per kg to sebsabie for washed purpose, and one bag of dried coffee at 9 birr per kg to sebsabie. He was informed on coffee prices by farmers who already sold their coffee, then negotiated with sebsabies. But a part of his coffee was paid before harvest: he asked credit to sebsabie before picking coffee, 200 birr, and supplies him the corresponding quantity of coffee at daily price of transaction during harvesting time. By this way, sebsabies catch more and more clients among farmers. As a strategy for sale, he claims that: "It is better if we dry and sell coffee to sebsabies because pulperies' owners are oppressing us, exploiting us." (Genet farmer, 28th June 2009)

Farmer 3: He produced twenty bags in 2001 EC (thirty in 2000 EC), one for self consumption and nineteen for sale. That coffee was sold at 4 birr per kg concerning red cherries to Babo service cooperative and 3 birr per kg to *sebsabies*. Dried coffee was only sold to *sebsabies* at 180 birr per *feresulla* (10.6 birr per kg). He was informed on coffee prices through radio and *akhrabies*, and then negotiated with *sebsabies* while cooperative prices were fixed. He also thinks that: "There is some exploitation from sebsabies. There is a too big difference between what akhrabies give them to buy and how many they pay for our coffee." (Babo farmer, 2nd July 2009)

Local price formation

Roughly speaking, and not as an exact rule, the richer dwellers of coffee producing *woredas* purchase it in groceries whereas poorer ones buy it in local markets. People also buy it directly to *akhrabies*. Prices decreased this way: grocery, market, *akhrabie* because of middle men number with the respective prices: 30, 16 and 14 birr/kg of green coffee (Limu genet, 29th August 2009).

In local markets, as Genet one, women illegal traders sell coffee at different prices according to its form (dried coffee within its husk, husk, husk + beans or beans), quality and... their needs:

	Dried coffee within its	Husk ⁹⁹	Husk + beans	Green beans
	husk ⁹⁸			
Woman trader 1		8 birr/kg	11 birr/kg 12 birr/kg ¹⁰⁰	16 birr/kg
			12 birr/kg ¹⁰⁰	
Woman trader 2		1 birr/kg		
Woman trader 3				30 birr/kg
Woman trader 4				27 birr/kg
Woman trader 5		8 birr/kg	11 birr/kg	
Farmer				

Prices are translated into kg values, but coffee sold gets weight on glasses. Indeed one glass is the basic unit, as well as glass weights differ from the coffee form and transformation degree (beans are heavier than husk, and proportions differ in husk + beans coffee for example). Husk coffee is the exception and gets sold in bowls that serve as basic units:

	Husk	Husk + beans	Green beans
Woman trader 1	125 g/glass	180 g/glass	250 g/glass
		250 g/glass	
Woman trader 2	250 g/bowl		
Seka market woman	200 g/bowl (10		
trader	cent/bowl)		

Both tables: Limu Limu Genet and Seka coffee price on market days 28th 29th August 2009 (prod: Bossolasco, 2009)

There is no coherence in price formation. Prices depend on the woman trader supplier (increasingly quoted: own trees, neighbours and farmers, *sebsabies*, *akhrabies*). They are not informed on coffee price levels; they have an idea only if they bought their coffee to *akhrabies* or *sebsabies*. But, most of time, prices depend on their cash needs.

Few farmers also sell their dried coffee with husk to Genet market according to their cash needs. They often firstly sell red cherries to pulperies or dried cherries to *sebsabies*, while they keep a coffee part due to defects (not picked on time, bad odour, etc.). Then they sell this coffee to local markets between December and August. As explained me one of those farmers, strategies could differ: "In high yielding years, I sell my coffee to pulperies and keep

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⁹⁸ Not yet transformed. Women traders buy coffee under this appearance, locally called *janfal*.

⁹⁹ Husk coffee is said the poor man's coffee (not as French meaning), and some say it provokes cancers.

¹⁰⁰ There are different qualities of husk + beans according to the proportion of beans. The more there are beans the highest is the price. There are also different qualities of husk according to its freshness: the less the husks are fresh, blacker they turn whereas fresh ones are brightly brown.

the not picked on time and therefore not selected coffee to sell it in Genet and Seka markets all year long as janfal (dried coffee with husk). But in low yielding years as the current one, I only sell my coffee to the market in order to decide my prices according to my cash needs on the moment. If I need money, I sell my coffee on Friday to Seka market or Saturday on Genet one (farmer of Dora Gabana kebele of Limu Seka woreda, 29^{th} August 2009).

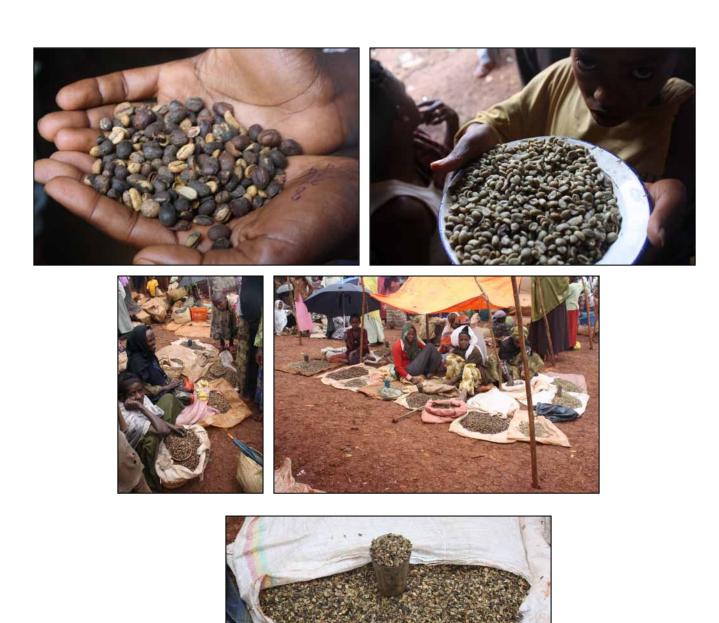


Illustration 53: Woman traders in Genet and Seka markets (Bossolasco, August 2009)

6.3.4) Price crisis needs alternatives

Nowadays since the liberal ideology dominates commodities exchanges, the International Coffee Organization, consuming and producing countries stopped considering the implementation of market intervention mechanisms, and coffee market suffers a lack of regulation in a supply/demand ruled system lead by New York exchange for Arabica coffee. Sale & purchase lay on term contracts serving as assurances against price variations: harvest is bought at a previously fixed price. These contracts are exchanged many times, from hand to hand, before the contract trading day. In this way, traders¹⁰¹ transfer the risks due to price variations to speculators. Those aim to realize benefits anticipating these variations. This speculation introduced between supply and demand increases price variations with its dramatic consequences on producers.



Illustration 54: Average coffee price variations within September 2009 (ICO website, 6th October 2009)

Save the Children UK (2003) investigated in two *woredas* of Jima zone: Mana and Goma, and measured the impact of the last coffee crisis on peasants disposable income. Prices decreases between 2000 and 2003 respectively reduced the disposable income by about 58% and 40%, the proportion of households falling below the poverty line turning from 30 to 53% and 30 to 67% in Mana and Goma *woredas*.

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 $^{^{\}rm 101}$ The six biggest coffee traders own more than a half of green coffee market shares.

7) Assessment of the product as a GI candidate

7.1) Market alternatives & differentiation tools

Nowadays, the gourmet/specialty coffee sector is growing in many countries, notably in the United States, an important Ethiopian coffee consumer, where the industry has enjoyed a 12% annual growth rate This trend is predicted to continue, and according to commentators, will account for as much as 40% of US coffee consumption (IPRIA, 2009). This sector offers many opportunities developed through different tools which are alternatives to the fluctuating conventional market. Indeed some consumers will be concerned about the price of a bag of coffee beans; others rather focus on flavour and fragrance in comparison to price while another section of consumers will give importance to the working conditions of the coffee growers. Moreover, these consumers might display characteristics of more than one category; this diversity allows differentiation tools to segment the coffee market.

The development of these tools accompanies the ongoing debate on the impact and relevance of intellectual property to development. Intellectual Property Rights (IPRs) have never been more economically and politically controversial than they are today: patents, copyrights, trademarks, industrial designs, geographical indications dealing with many areas of human activities as public health, food security, education, trade, industrial policy, traditional knowledge, biodiversity, biotechnology, internet, entertainment and medias, etc. In this context, promotional strategies of niche marketing and product differentiation might be possible locating products at the intersection of culture and geography. This section mainly lies on Rangnekar (2003) and IPRIA (Intellectual Property Research Institute of Australia, 2009) works.

7.1.1) Geographical Indications

The informational content of a GI name, symbol or word includes the following three points: product name, the area of geographical origin of the product, and its given quality, reputation or other characteristics that are essentially attributable to its area of geographical origin (TRIPs Agreement, Article 22.1). Geographical indications are functionally similar to trademarks but, as geographical names, they are descriptive and therefore unable to be registered as trademarks unless they have acquired distinctiveness. The owner of a registered GI has the exclusive right to prevent the use of geographical indications which mislead the public as the true geographic origin of a designated good, or which constitutes an act of unfair competition. GIs are seen as a form of collective monopoly right that erects entry barriers on producers either within or outside the area. In sum, GIs define who can make a particular product, where the product is to be made and what ingredients and techniques are to be used so as to ensure authenticity and origin. European Regulation EEC 2081/92 conceives of two categories of GIs:

- Protected Designations of Origin as names of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff where particular quality or characteristics are essentially due to a particular geographical environment with its inherent natural and human factors and the production, processing and preparation takes place in the defined geographical area.
- Protected Geographical Indications as names of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff where a specific quality, reputation or other characteristic is attributable to that geographical area of origin and where production and/or processing and/or preparation takes place in the defined geographical area.

- 1. To be eligible to use a PDO or a PGI, an agricultural product or foodstuff must comply with a specification.
- 2. The product specification shall include at least:
- a) the name of the agricultural product or foodstuff, including the designation of origin or the geographical indication;
- b) a description of the agricultural product or foodstuff including the raw materials, if appropriate, and principal physical, chemical, microbiological and/or organoleptic characteristics of the product or foodstuff;
- c) the definition of the geographical area and, if appropriate, details indicating compliance with the requirements in Article 2;
- d) evidence that the agricultural product or foodstuff originates in the geographical area, within the meaning of Article 2 or whichever is applicable;
- e) a description of the method of obtaining the agricultural product or foodstuff and, if appropriate, the authentic and unvarying local methods;
- f) the details bearing out the link with geographical environment or the geographical origin within the meaning of Article 2 or whichever is applicable;
- g) details of the inspection structures provided for in Article 10;
- h) the specific labelling details relating to the indication PDO or PGI, whichever is applicable, or the equivalent traditional national indications;
- i) any requirements laid down by Community and/or national provisions.

Table 24: Article 4 of the same European regulation (Rangnekar, 2003)

7.1.2) Trademarks

Indications of geographical origin are the earliest type of trademark used by traders as a means to exploit local reputation through the use of distinctive signs to evoke a particular geographical sign. A trademark is a sign capable of distinguishing the goods or services of one trader from those of another. This could include names, letters, numbers, figurative elements, colours, shapes, sounds and smells, and combinations thereof. The owner of a registered trademark has the exclusive right to use in the course of trade an identical or similar sign for goods or services which are identical or similar to those in respect of which the

trademark is registered. The justification for the exclusive right of trademark registration is to prevent confusion arising in the market place. The exclusive rights of trademark registration subsist so long as the trademark remains registered. To remain registered, the trademark owner must pay renewal fees, must use the trademark and must ensure that the trademark does not become generic being used as the name for the goods.

7.1.3) Certification Marks

A certification mark is a sign used to distinguish goods or services dealt with or provided in the course of trade and certified by the owner of the mark (or by another person or organization approved by the owner) in relation to quality, accuracy or some other characteristic including origin, material or mode of production. The owner of a registered certification mark has the exclusive right to control the use of the mark on the certified goods or services. The purpose of a certification mark is to inform purchasers that the certified goods or services possess certain characteristics or meet specific standards. The use of a registered certification mark conveys that the goods or services have been examined or checked by the registered certification mark owner, who is someone other than the producer of the goods or services, by methods determined by the registered certification mark owner.

7.1.4) Collective marks

Collective marks are not easily distinguished from certification marks. These are owned by a collective body like a trade association and serve to indicate that goods or services displaying the mark are produced by an enterprise that is member of the collective body. As membership to the association entails some qualifying standards, the collective mark is a distinctive sign conveying the said standards (quality, origin, etc.) of the trade association.

7.1.5) Similarities between GIs and trademarks

Trademarks act as mechanisms signalling a firm's reputation, thus helping consumers to overcome the information asymmetries in the market. This to protect consumers from fraud and to assist in decision making. The economics rationale for GI protection is also based on information asymmetries in the market and the role of reputation in ameliorating these asymmetries.

7.1.6) Differences between GIs and trademarks

At a fundamental level, there is a difference in terms of what the distinctive sign is signifying. Trademarks are distinctive signs identifying goods of an enterprise and thus not limited by any territorial link. In contrast, geography is at the heart of GIs. They are distinctive signs identifying goods as originating from a particular geographical area. GIs are not limited to any particular enterprise and thus enjoyed by all producers within the demarcated geographical area that qualify for use of the indication. It is also the general principle that trademarks must not be descriptive or deceptive; thus prohibiting the inclusion of geographical terms in a trademark.

7.1.7) Comparing GIs and certification marks

	Geographical Indications	Certification Marks
	Protection of product's origin	Protection of the certification
	and its link with quality and	of a product's quality
Objective	reputation.	characteristics, which may
		include geographical origin.
	Mainly a public right; most	Mainly a private right owned
	often the indication is owned	by the trade association or
Ownership	by the State or parastatal	producer group.
	institution.	
	Protection is the result of a	Protection is the result of
Registration	mix of public and private	private actions by the trade
	actions.	association.
	The regulating council, often	The trade association who
	a consortium representing	own the certification mark
Administration	firms in the product's supply	administer the mark.
	chain, oversee administration	
	An independent agency or	Owner of the certification
	the government undertakes	mark oversees inspection of
Inspection	inspection of compliance	compliance to standards
	with standards stipulated in	stipulated in the mark.
	the indication.	
	Protection begins with	Protection begins with grant
	registration and continues	of mark and must be renewed
Duration of protection	until the conditions justifying	periodically.
	protection are upheld.	

Table 25: Comparing GIs and certification marks (Rangnekar, 2003)

How can developing countries us IP tools to advance their development strategy? The Ethiopian government faced the issue and had to choose which strategy best conforms to its needs and means, considering which ones are adopted by its foreign partners and most important coffee consumers.

7.2) Ethiopian ways: Why a trade marking strategy rather than a GIs' one?

This section exclusively lies on Intellectual Property Research Institute of Australia works (IPRIA, 2009).

In 2004, the Ethiopian government began working with partners to identify a scheme which would lead to a greater share of the high retail price obtained by coffee grown in the Sidamo region. First, it had to choose whether to register SIDAMO as a trademark in relation to the type of coffee grown in the Sidamo region, or to set up a national system of certification marks which would protect the coffee name as a geographical indication. The government finally opted to apply to register SIDAMO as a trademark rather than as a geographical indication in the form of a certification mark. It applied this registration in the European Union and in various countries as the US, Canada, China, Australia, Saudi Arabia. Brazil and Japan are still blocking the process (EIPO officer, 16th September 2009). According to the Director General of the Ethiopian Intellectual Property Office (EIPO): "Our coffee is grown on four million very small plots of land. Setting up a certification system would have been impracticable and too expensive. Trademarking was more appropriate to our needs. It was a more direct route offering more control."

Whereas if the government applied in the United States to register SIDAMO as a geographical indication in the form of a certification mark, it would face greater challenges than if it applied to register it as a trademark. A geographical indication registered in the form of a certification mark demonstrates a causal connection between goods or services and a place. Hence, if the government chose to set up a national certification system in the United States for SIDAMO as a geographical indication, every bag of coffee to which the SIDAMO mark was applied would have to be produced, processed or prepared in the Sidamo region and have a special quality that is dependent on that place of origin. In Ethiopia, due to that coffee gets produced in remote and several plots by independent farmers, certification would have

been difficult. Indeed, certification would require that the government oversee producers and distributors to guarantee that the coffee sold belong to a particular style or region. If it were possible to oversee the producers, it would require an onerous surcharge on farmers who are already often living below subsistence level.

Unlike a geographical indication registered as a certification mark, a trademark doesn't operate as a badge of geographical origin. It serves as an indicator of commercial origin to communicate a connection between a product and a retailer. Here the retailer is a country: Ethiopia. Moreover, trademark is an indication of geographical origin in the Ethiopian case through Sidamo name. Registered as a trademark, there is no need for SIDAMO to be produced in Sidamo region or have a particular quality in connection with the location Therefore, the government may produce greater quantities of coffee using the trademark SIDAMO as the coffee may be sourced from all over Ethiopia and need not to have a characteristic or quality that is specific to the Sidamo region. Trademark registration thus allows the government to earn increased revenue by exporting more goods, enabling prices to be raised and farmers to benefit.

Usually, the purpose of a trademark license agreement is to provide traders with permission to use a trademark in relation to specific goods in exchange for payments of a license fee. Rather than provide traders with permission to use the name SIDAMO by charging a license fee, the Ethiopian trademark license agreement compels traders, free of charge, to use SIDAMO on any product that consists 100% of Sidamo coffee. This form of trademark license agreement is unusual. In order to attract major coffee retailers as licensees, the agreement is royalty-free. In this way, the SIDAMO mark allowed on the label or packaging of all coffee made from Sidamo beans will increase Ethiopian coffee visibility in the market so that the export premium for the product could be increased. Licensees will *pay* by promoting Ethiopian coffees.

The World Trade Organization, Starbucks Company and Specialty Coffee Association of America points of view were that Ethiopian government should set up a national system of certification marks to enable Ethiopia to protect its coffees as geographical indications. EIPO Director General answer was: "Trademark registration confers rights that go beyond the scope of rights associated with certification marks. With all due respect, it is for Ethiopia to determine which form or ownership, trademark or certification mark, it wishes to pursue."

Ownership of names is the same strategy corporations like Starbucks, McDonald's and Disney used to build their brands and capture a fair return for the use of their name.

Moreover, the difference between trademarks and GIs emerges from the different legal traditions that are used. Thus, in some countries, the obligation under the TRIPS Agreement is implemented through trademark law as in the United States (common law tradition) whereas other countries have implemented these obligations through a *sui generis* legislation for GIs as the European countries (Roman law). And, due to the Ethiopian coffee most important consuming countries apply a trademark law, it might influence the Ethiopian choice.

The Ethiopian government is currently working with a stakeholder group, which includes coffee cooperatives, to decide how to manage ownership and the distribution of benefits associated with trademarks.

This Trademark Licensing Project lead by the EIPO was also applied to Harar and Yirgacheffe coffees, and was planned to be enlarged welcoming Limu and Lekempti coffees in 2009. But this process slowed down, getting reported to 2010, because of financial issues (lawyers, cabinets, etc.) and of difficulties currently met by Sidamo coffee which license is yet not filled by Japan and Brazil (EIPO officer, 16th September 2009).

Clearly, once Limu coffee will be registered as a trademark, its registration as a pure geographical indication will be impossible; but combinations remain possible and, in this case, trade marking already acts as an indication of geographical origin. In 2007, the EIPO Director General expressed the need to use other IP tools to cater for protection of trademarks and especially explored the use of GI as one of these tools.

7.3) Assessment of Limu coffee as a GI candidate

Among other arguments, the EIPO Director General exposed the following advantages and disadvantages of GIs for protecting Ethiopian coffees trademarks during the same 2007 seminar in China:

"Merits are that GIs allow collective ownership and use, help protecting quality and reputation of products developed by generations through years, can be maintained indefinitely, provide flexibility for innovation and improvement within traditional context, allow meaningful participation of local communities, help developing and consolidating niche markets, and can be used to localize control. Whereas demerits are that GIs protection does not prevent selling of similar products, extend to services, methods and process (limit to products and their indication), requires institutional infrastructure (association of producers, administrative and quality control, enforcement and control of misuse), requires strong promotion and marketing, and that international protection requires prior protection in the country of origin."(28th June 2007)

7.3.1) Constraints to a GI implementation in Limu

Excludability and rivalry

Excludability reflects the possibilities of excluding an individual from enjoying the benefits of a good. A non-excludable good means that everyone can enjoy and/or access the good without payment. Rivalry relates to the distribution of benefits between consumers of the good and whether an individual's consumption of the good rivals similar consumption by other individuals. Club goods are largely non rivalrous in consumption but excludable; thus being a local public good for those who enjoy membership of the club. Thus the specifications defining the GIs are the conditions that must be met to allow producers to use an indication (excludability) but allowing for the use of the indication by an additional producer does not involve significant additional costs (non-rivalry). In this way, GIs can be said club goods, which are public goods.

GI protection is premised on the condition that the product can not be produced in a different physical/human environment. The ambiguity linking a product to a defined area, as it is for Limu coffee, is likely to exclude producers that could benefit from it, and more consequently exclude producers that formerly benefited from the name. In this way, GIs products turn rivalrous clashing the former club of producers and excluding some producers

of the former benefits. The triple connection between product/origin/quality¹⁰² is very difficult to unambiguously define since there are significant socio-cultural dimensions to it. Protection of geographical names only requires institutional mechanism ensuring effective legal protection, whereas the inclusion of quality necessitates a technical definition of production method, product specifications and consumer understanding of these factors. This could provoke a wrong choice in the geographical area concerned by the indication as Limu differently named the coffee producing administrative units by the past.

Consequent value chain changes and premium distribution

The registration of GIs products implies a reorganisation and governance of supply chains. That reflects the dual requirements for GI protection: coherence in terms of the distinguishing characteristics between the products made by different producers and firms; and authenticity in that the production process is consistent with agreed codes. Registration entails some reorganisation of the existing supply chain, thus generating new opportunities for some while also creating problems for others.

Produce	rs	27,004				
		VI: 0				
Governance st	ructure	HF: +++				
Akhrabies	82	Cooperatives	13			
	VI ¹⁰³ : ++		VI: +			
Governance structure	HF ¹⁰⁴ : +	Governance structure	HF: ++			

Table 26: Limu Kosa coffee supply chain and governance structure (prod: Bossolasco, 2009)

¹⁰² Van der Meulen (2006) described an interesting methodological tool to scientifically define the link between a product and its place of production. This method lies on originality parameters which are territoriality, typicity, traditionality, communality and landscapeability.

¹⁰³ VI = Vertical Integration.

¹⁰⁴ HF = Hybrid Form.

Akhrabies represent a homogeneous class of traders and grocers having accumulated capital to invest on processing plants and warehouses even if their means vary from one to another. Whereas cooperatives are more heterogeneous: only two of thirteen possess processing plants and export coffee through the OCFCU; the eleven remaining are not so active and don't really influence smallholders' activities. In this way, akhrabies concentrate the bulk of the coffee production and are the main processors. For example, the Limu Inara Multi-Purpose Farmers Union rents its hullery from an akhrabie which plant is located in Limu Genet. Thus akhrabies are more vertically integrated in production process, even in central and export market linkages. This akhrabie for example exports coffee he produces in its own farm under the name: Limu Special 3 selling it to Travocca Company import agent in Addis Abeba.

Who will be the main beneficiaries of a GI protection? Firms of investors and PLC may attempt to pursue to vertically integrate while *akhrabies* may continue to buy coffee at the same prices through *sebsabies* that smallholders easily point out as exploiters.

Moreover, these local actors have to contend with the economic power of various intermediaries to reach the market that includes foreign distributors, roasters and retailers as Nestlé, Kraft Food, Carrefour, etc. In the case of coffee, a handful of processing companies control a very large part of global trade, more problematically in the retail market which is very concentrate. Therefore, higher demands for product standardisation might threaten the distinctiveness of the GI.

Trade restriction

Will the application of GI rules restrict trade? Nowadays, Limu coffee is among the nine Ethiopian cup profiles and is daily traded through the Ethiopia Commodity Exchange. What will happen to the coffee currently sold as Limu coffee originated in Bedelle, Loppa, Chorra, Yayu and Alididu Dedessa out of the Limu region we described for this study case? What will be the consequences for their producers which coffee is currently exported as Limu-2?

The geographical indication paradox

Do economy and ecology are compatible in the GI framework? As Stellmacher noted (2007), in forest coffee certification, the main objective is the economic one to increase farmers' income through the selling and exporting of their products. Accordingly, they foremost try to produce larger quantities of forest coffee and to obtain higher prices. This is likely to have negative impacts on the forest since yields can not be expanded beyond limited thresholds without degrading its natural habitat. Higher prices provide an incentive to produce more forest coffee by increased forest management at the expense of the forest ecosystem and biodiversity. Indeed primary forests would turn to secondary, tertiary, etc. forests and species of former forests would tend to disappear. The coffee forest landscape will tend to homogeneity with selected shade trees as Acacia, Albizia, Cordia, Croton and Ficus species while the other trees will be cut. The organization of these forests will be divided into two or three stratums. This phenomenon is already observable in Limu Kosa and surrounding woredas, and progressively spreads since the socialist government through extension programmes where farmers constitute a dispatched pioneer front, daily transforming primary forest in secondary forest. While farmers are colonising the forest borders, investors are clearing more deeply in these forests as it is in Debacon forest of Caffee Ilfataa and Gaallee Jimaate kebeles in Limu Kosa.

Debacon forest presents the same structure that characterized non exploited forests as protected Babiya Folla forest (including Kebena forest). That means dense vegetation distributed in several stratums: an inferior stratum made of weeds species up to 2 meters high, a shrubby stratum mainly made of coffee trees in forest borders, a medium stratum from 5 to 15 meters high, and then a superior stratum including species as Kararo trees (up to 30 meters high) characterizing south western Ethiopian forests. The recent development of investors threatens this structure: some plots 100 meters long and 30 meters wide are cleared in the middle of the forest. All stratums are cut down, and some trees of middle and superior stratums are maintained for shade purpose while temporary shades as Sesbania species are row planted with coffee seedlings. Debacon forest divided into eleven investors is step by step normalized and transformed as a common coffee agro-forest landscape.



Illustration 55: Debacon forest 3) an high weed stratum 4) kararo tree 5) smallholders coffee plots in the borders of the forest 6) 7) investor deforestation in the middle of the forest (Bossolasco, August 2009)

Traceability

The 1997 PDO for the Italian Tuscan olive oil was rejected because of heterogeneity in quality on account of existing features of the supply chain such as the mixing of farm lots at the pressing stage. Is a GI applicable to Limu coffee since coffee from forest plots said of better quality is daily mixed with coffee grown in home garden? Indeed, coffee grown in different ecosystems gets mixed in the bags then sold to *sebsabies*.

Existing quality matters

As mentioned in the first section of this study, quality goals are to normalise coffee production practices since farmers could seem careless. But no remuneration is done according to quality, except service cooperatives selling to the unions and the biggest *akhrabies*. Anyway the bulk of coffee growers is not paid according to quality, and thus keeps on focusing in quantity.

Moreover, in order to create a GI-book of requirements and practices, what would be the required cup profile? Roasters describe a lot of cup profiles corresponding to Limu coffee: winey, spicy, fruity, herbal, and lemon which differ according to their coffee production system and place in *Limu coffee traded region*. And it should be considered that coffees coming from the different production systems are mixed and sold in the same bags.

7.3.2) Positive effects and opportunities for a GI implementation in Limu

Existing institutions for a GI implementation

According to the new European Council Regulation No. 510/2006 on the protection of GIs and designations of origin for agricultural products and foodstuffs:

"The protection afforded by this Regulation, subject to registration, should be open to the geographical indication of third countries where these are protected in their country of origin." The Ethiopian Intellectual Property Office which lead seminars and reflected on geographical indications as complementary IP tools already wrote a draft on a potential geographical indications regulation; and in a fictive scenario, would be the most probable institution for GI registration.

"In respect of the geographical indications and designations of origin relating to a geographical area in a third country, verification of compliance with the specifications, before placing the product on the market, shall be ensured by: one or more public authorities designated by the third country and/or one or more product certification bodies." The Limu Inara Multi-Purpose Cooperative Union last production was certified by the international BCS Okö organic certifier, and recently appealed to other companies in order to renew its organic certification while the Suntu State Farm is currently certified by the UTZ certifier on all its farms. Moreover since the government banned coffee exports due to Japanese complaints in summer 2008 and entitled the Ethiopian Quality Standards Authority as the certifier of the certifiers, Limu coffee quality is both guaranteed by national and foreign certification bodies.

Adaptability

Conflicts can rise between IPRs systems and customary and traditional cultural property rights since GIs constitute an institution transfer from their original European framework to developing countries in this case. GIs as an instrument of IP protection have specific features which, in contrast to other IPRs, are considered relatively more amenable to the customary practices of indigenous communities. The GIs three points are a collective right, inalienability and imprescriptibly which could adapt to Ethiopian land property rules for example since land is considered as Ethiopian collective property and that sale is forbidden. Thus knowledge remains in the public domain and rights are potentially held in perpetuity.

Agro tourism

GIs act to publicise the localities and regions that they use for their names. Some agro tourism is already developing in Limu surroundings in places as Agaro (Choche), Bonga, etc. and more generally in the historical Kaffa forest belt dispatched into Kaffa, Ilubabor and Jima zones where birthplaces are claimed in a political game.

7.4) Foreign coffee producing countries experiences

Worldwide it appears that single-origin coffees are anyway succeeding in safeguarding specific niche segments as organic, fair trade or geographical indications:

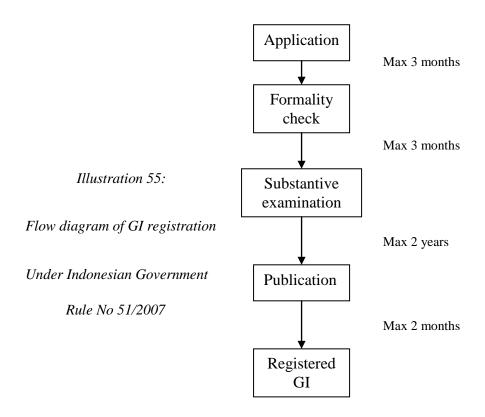
For example, geographical indications got successfully implemented in Indonesia which case is interesting. A pilot project in implementing GI protection system has been initiated at Kintamani highland of Bali on Arabica coffee in 2002. It was initiated by awakening up the Bali coffee quality as well as maintaining its consistency. The initiation involved several stakeholders such as local producer organizations, research institutions (ICCRI and CIRAD) and the government (district, provincial and central), private sectors (coffee exporters and local roasters). All that institutions are also found in the Ethiopian context of Limu coffee, since coffee value chain is also highly structured compared to other crops. A certificate of GI protection for Kintamani Bali Arabica coffee has been issued by the Directorate General for Intellectual Property Rights, Ministry for Law and Human Rights on 5th December 2008. The name of the product is "Kintamani Bali kopi arabika". This name is renowned as Bali coffee for a long time, as this coffee has been identified as good quality since the beginning of the 19th century. The GI protection will concern the green coffee or roasted and ground coffee obtained from the Kintamani fully wash processed Arabica. As it appears, this coffee presents similarities with Ethiopian coffee and framework since the concerned actors could be compared to Ethiopian ones previously described as smallholders' organisations like the Limu Inara Union or the GI delivering body as the EIPO, and by sharing a common past of quality renowned coffee. The Abyssinian coffee:



The average productivity is 700 kg per hectare. The area and production consisted of 96% smallholding farmers, 2% of government estate and 2% of private estate. Similarities. In 2006, Indonesia exported US\$ 497 million and among its main export destinations, there were USA and Japan. Similarities.

Kintamani Bali Arabica is thus described in its book of requirements:

The coffee bushes are grown under shade trees, combined with other crops, and managed as well as fertilized organically. The coffee cherries are hand picked and are carefully sorted, with a minimum of 95% of red cherries. The red cherries then are processed by using wet method. Fermentation period is 12 or 36 h, and clean washed coffee with parchment are sun dried. The Kintamani coffee beans size is generally bigger than the Arabica coffee beans in average from other origin in Indonesia. In average, 84% of the coffee beans retained by the screen 17 or 18. This means that the size grading which should be done in order to be in conformity with specialty coffee market requirements, which is coffee beans size superior to screen 16, is easily performed for Kintamani coffee. F>inally the main taste profile of Kintamani Bali coffee is: 1) medium to high acidity 2) good to very good aroma quality and intensity 3) a fruit taste (often lemony) 4) a medium body, a not too high bitterness 5) a very light astringency 6) a clean cup, free from defects.



When the pilot project was started, the price of arabica produced by the farmers was very low: US\$ 80 cents per kg of unsorted green coffee at the farmer gate. In 2008, the price at farmer gate was about US\$ 310 cents per kg of unsorted green coffee.

This sub section laid on Mawardi works.

Other single-origin coffees to be quoted because they now embody reputation through different strategies are:

The Jamaican Blue Mountain which has been registered as a certification mark in the USA in 1986 is produced in legally defined area and is processed by four mills. This coffee earns one of the highest premiums.

The 100% Kona coffee is a certification mark registered in the USA by the Department of Agriculture of the state of Hawaii.

The Juan Valdez and café de Colombia: The Federacion Nacional de Cafeteros which is a non profit association representing Colombia's coffee farmers programmed directed at maintaining quality standards for coffee exports. This was achieved through the designation of 86 Designated Coffee Growing Regions. They were precursor and launched an international campaign that focussed on single origin coffee through developing the brands of Juan Valdez and Café de Colombia.

Association of Genuine Antiguan Coffee Producers: The association developed the Genuine Antigua mark as means of identifying and distinguishing single-origin coffee. Using the French wine appellation system as a template the aim was to develop a coffee classification system using various pedoclimatic variables.

Brazil also developed its strategy and implemented the Cerrado coffee geographical indication.

Ethiopia opted for the trade marking system.

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Annexes

Home Garden Project pre study

Ethiopian calendar and seasons

Coffee production data of Limu Seka and Chore Botor woredas

CPDE state farms' book of practices

The new coffee proclamation

Coffee defects

Sources of income

US Trademark License Agreement

Glossary

Home Garden Project pre-study, name of the product: Ye-Limu Bunna

Name of the relevant provenance:

International: not identified National: Ye-Jima Bunna Regional: Ye-Jima Bunna Local: Ye-Limu Bunna

Description of the product

Nature of the product: Sun dried or washed coffee beans

Nature of transformation:

<u>Description:</u> In Limu area, coffee berries used to be sun dried, but because of the evolution of the market, most of the production is now washed in private-owned or cooperative washeries.

Evaluation of the originality: 3

<u>Justification</u>: Coffee beans processing methods are not original but production of sun dried coffee is maintained which is rather rare in the context of the coffee forest.

Area of production

Official:

Region: Oromiya Zone: Jima

Woreda: Limu Kosa

Kebeles: All kebeles in the woreda

Others:

Choche (taken to be one of the birthplaces of Arabica coffee)

Social characteristics

Producers associations: union, cooperatives, NGO

<u>Description:</u> Coffee farmers, private investors (traders, exporters), government coffee development organizations and farmers cooperatives, OCFCU.

Evaluation in relation to GI systems implementation potential: 4

<u>Justification:</u> The institutional conditions are favourable to develop specifications of the product and apply for protection through a GI system.

Relationship to cultural group: The Oromo people

<u>Social organization of the production:</u> The production system is family based and there is also employment of daily labourers during farm preparation, plantation and collection of ripened coffee berries.

Gender dimensions: Both men and women

Traditional characteristics:

Historical data on the product and production: Previously it was the forest coffee which was dominant but currently the plantation cultivated coffee becomes dominant. The traditional sun drying process tends to be replaced by the washing process.

<u>Recent innovations and adjustments:</u> Change from dry processing to wet processing. Introduction of new varieties.

Evaluation of heritage/traditionalism: ?

<u>Informants' perspectives:</u> it is one of the basic economic components of the community.

Observers' comments: The whole life of the community is directly associated with coffee production and marketing.

Strength of the link between the product and the society: 5

<u>Justification:</u> It is the basic product on which the whole community directly depends.

Environmental characteristics

General description: altitude, soil, ecosystem...

Altitudinal range is between 1200m and 3018m asl, average rainfall is 1516,3 m; diverse ecosystem like agricultural fields, forests, home gardens...

Evaluation of the strength of link between product and environment: 5

<u>Justification</u>: Almost all the environment is occupied by coffee plantation due to the suitability of the environment for coffee cultivation.

<u>Bio-cultural diversity</u> (Biodiversity generating the concerned resource)

<u>General description – genetic species, ecosystems and landscape:</u> Many local varieties may have a genetic variability that requires detailed study. In addition, many improved varieties in the research centers are released to the farmers. The topographic features are varied and include mainly mountains, gorges, valleys and plains.

Garden biodiversity

<u>Description:</u> High species diversity in the coffee gardens. Evaluation of the strength of the link between product and gardens: 5

<u>Justification:</u> High species diversity in the coffee based gardens and well managed gardens.

Evaluation of the biodiversity:

Quantitative: 4

<u>Justification:</u> On the average, species diversity (floristic richness) could be rated as medium.

Qualitative: 2

Justification: Most of the species are common and used as a shade for coffee

Related biodiversity

General description: The home gardens, field plantations and coffee forests bear considerable number of species. Some trees like Cordia Africana, Croton macrostachyus and Acacia abyssinica are used as shade trees for coffee.

Quantitative evaluation: 3

Justification: Considerable number of species

Qualitative evaluation: 2

<u>Justification:</u> Most of the species are common and used as a shade for

coffee

Sustainability evaluation

Links between the product and environmental sustainability:

<u>Description</u>: Coffee cultivation in home gardens has limited impacts on the environment. But the transformation process, since the wet process has been adapted, can have adverse effects on the environment (water pollution).

Score: 3

<u>Justification:</u> Currently, the coffee based home gardens, plantation fields and forests have high species diversity.

Gaps and needs: To pay more attention to coffee quality while buying from the producers otherwise good farmers will be discouraged the coffee quality.

Commercial and economic aspects

<u>Description at the local, regional level:</u> Coffee farmers have two possibilities to sell their coffee. They can send it to the OCFCU, through Limu Genet member cooperatives. The coffee is the identified as Limmu coffee and sold as such to the national and international levels. They can also sell it to private traders and investors then can either go themselves to

levels. They can also sell it to private traders and investors then can either go themselves to the auction or sell it on Jima market, where it is mixed with other provenances and sold as

"Jima coffee".

Description at the national level: Included within the Jima province and sold on the

domestic market (sun dried coffee)

Description at the international level: Limu washed coffee has a cup profile and an

Ethiopian standard and the main part is exported.

Evolution of production and commercialisation: There is high increase of production

and market demand for this coffee. However a new tendency emerges at the international

level.

<u>Labels and other signs of quality:</u> Cup profile and Ethiopian standard for Limu washed

coffee. No official sign of quality for Lim sun dried coffee.

Needs for implementation of a GI system:

<u>Description:</u> Limu farmers try to obtain a better recognition for their coffee and especially to prevent other coffee provenances from being mixed with theirs and sold under

Limu.

Score: 3

Synthethic scores

Originality: 3

Economic sustainability: 5

Social sustainability: 5

Environmental sustainability: 5

Ethiopian Calendar (EC) and seasons

English	Amharic	Oromic
9 th January - 7 th February	Ter	Amajjii
8 th February – 9 th March	Yekatit	Gurandhala (or guraandhala)
10 th March – 8 th April	Megabit	Bitootessa (or bitooteessa)
9 th April – 8 th May	Miyazia	Caamsaa
9 th May – 7 th June	Genbot	Ebla
8 th June – 7 th July	Sane	Watabajjii (or waxabajjii)
8 th July – 6 th August	Hamle	Adoolessa (or adooleessa)
7 th August – 5 th September	Nehase	Haggayaa (or agayya)
6 th September –10 th September	Pagume ¹	Qammee
11 th September – 10 th October	Maskaram	Fulbaana (or fuulbana)
11 th October – 9 th November	Tikimt	Onkolelessa (or olooleessa)
10 th November – 9 th December	Hidar	Sadhasa (or saadasaa)
10 th December – 8 th January	Tahesas	Muddee

Table: Ethiopian calendar

	English	Amharic	Oromic
March – May	Shower rains	Belg	Arfaasaa
June – September	Heavy rains	Kremt	Ganna
October - November	Wet/Dry season (transition)	Bira	Tsedayi
December - February	Dry season	Bega	Bona

Table: Limu Kosa woreda seasons

¹ The year starts on 11th September in the Gregorian Calendar or on the 12th September in leap years. The extra month, called *Pagume* in Amharic, lasts 6 days in leap years.

Limu Seka coffee production & market participants profile¹

	Coffee producing households	14,807				
F	Farmers' associations (kebele)	38 (34 coffee demarcated)				
	State farms	Suntu State Farm branch in Gejib kebele				
	Service cooperatives	2				
	Investors	9 (for 998.9 ha)				
	Pulperies	3				
	Hulleries	1				
	State nurseries	4				
Farmer	r training and demonstration centres	2				
	Coffee coverage areas (ha)					
	Whole	12,220.1				
N	ew planted (selected varieties)	-				
Old cof	fee (mother trees: wild and selected)	-				
Stu	umped (or rejuvenated old trees)	-				
	Sun dried coffee sold to central	Washed coffee sold to central				
	market (ton)	market (ton)				
1998	486.618	243.197				
1999	358.48	155.63				
2000	339.25	327.6				
2001	306	70.92				

Table: Limu Seka coffee production & market participants profile (Atnago WARDO, coffee expert, 3rd September 2009)

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¹ Nono Benja *woreda* data are not reproduced here, because this is not a coffee producing *woreda*. Only two *kebeles* neighbouring Limu Seka *woreda* produce coffee. Nono Benja consumes Limu Seka coffee.

Chore Botor coffee production & market participants profile

C	offee producing households	6,800				
Fa	rmers' associations (kebele)	31 (19 coffee demarcated)				
	State farms	1 (coffee activity since 1999)				
	Service cooperatives	0				
	Investors	1 (200 ha)				
	Pulperies	0				
	Hulleries	0				
	State nurseries	6				
Farmer t	raining and demonstration centers	13				
(Coffee coverage areas (ha)					
	Whole	6,234.5				
Nev	w planted (selected varieties)	4,197.5				
Old coffe	e (mother trees: wild and selected)	1,762.25				
Stun	nped (or rejuvenated old trees)	274.75				
	Sun dried coffee sold to central	Washed coffee sold to central				
	market (ton)	market (ton)				
20002	220.25	227 <				
2000^2	339.25	327.6				
2001	306	70.92				

Table: Chore Botor $\,$ coffee production & market participants profile (Bege $\,$ WARDO, coffee expert, $\,$ 4th $\,$ September 2009)

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 $^{^2}$ Refer 6.2) Limu Kosa coffee organisation for previous data because Chore Botor woreda was created only three years ago and was previously included in Limu Kosa boundaries.

		Months											
	Activities	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
1	NILIDGEDY ODED ATION												
1	NURSERY OPERATION												
	1.1 Soil heaping	X	X	X							X	X	X
	1.2 Soil and compost mixing	X	X	Λ							X	X	X
		X	X								X	X	Λ
	1.3 Peg preparation 1.4 Linning and pegging	X	X	X	X						Λ	X	X
_		X	X	X	X							X	X
	1.5 Sorting coffee seeds	X	X	X	Λ							X	X
	1.6 Cutting polythene tube			X									
	1.7 Filling polythene tube	X	X									X	X
	1.8 Arranging polythene tube	X	X	X	37							X	X
	1.9 Watering prior to sowing	X	X	X	X							X	X
	1.10 Sowing	X	X	X	X							X	X
	1.11 Mulch material	X	X	X								X	X
	Preparation	***	**		***							**	**
	1.12 Mulching	X	X	X	X		1					X	X
	1.13 Mulch removal	X	X	X	X	X							
	1.14 Shade material	X	X	X	X	X							
	Preparation												
	1.15 Shade construction	X	X	X	X	X							X
	1.16 Hardening of seedling									X	X	X	X
	1.17 Weeding and cleaning	X	X	X	X	X	X	X	X	X	X	X	X
	1.18 Watering	X	X	X	X	X	X	X	X	X	X	X	X
	1.19 Hoeing		X	X	X	X	X	X	X	X		X	X
	1.20 Fertilizing		X	X	X	X	X	X	X	X			
	1.21 Chemical spraying	X	X	X	X	X	X	X	X	X	X	X	X
	fungicide & insecticide												
	1.22 Sorting seedlings						X	X	X	X	X		
	1.23 Fertilizing spraying (urea)						X	X	X	X	X		
	1.24 Seedlings counting			X	X	X	X	X	X	X			
	1.25 Loading and unloading of									X	X	X	X
	seedlings												
	1.26 Seed collection and			X	X	X							
	preparation												
	1.27 Guarding	X	X	X	X	X	X	X	X	X	X	X	X
	<u> </u>												
2	NURSERY OPERATION												
	(SHADE TREES)												
	,						İ	İ	İ				
	2.1 Soil heaping						X	X	X	X			
	2.2 Soil and compost mixing						X	X	X	X			
	2.3 Peg preparation						X	X	X	X			
	2.4 Linning and pegging						X	X	X	X			
	2.5 Sorting shade trees seeds						X	X	X	X			
	2.6 Cutting polythene tube						† 	X	X	X			
	2.7 Filling polythene tube							X	X	X			
	2.8 Arranging polythene tube			1				X	X	X			
<u> </u>	2.0 manging poryment tube		<u> </u>	<u> </u>	1		1	/1	11	1			

		Months											
	Activities	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
	2.9 Watering prior to sowing							X	X	X			
	2.10 Sowing							X	X	X			
	2.11 Mulch material							X	X	X			
	preparation	37	37	37	37								
	2.12 Mulching	X	X	X	X				37	37			
	2.13 Mulch removal								X	X	37		
	2.14 Shade material								X	X	X		
	preparation								37	37	37		
	2.15 Shade construction								X	X	X	***	***
	2.16 Harding of seedlings								***	***	X	X	X
	2.17 Weeding and cleaning								X	X	X	X	X
	2.18 Watering								X	X	X	X	X
<u> </u>	2.19 Hoeing								X	X	X		
	2.20 Chemical spraying								X	X	X	X	X
	(fungicide, insecticide)												
	2.21 Sorting seedlings									X	X	X	
	2.22 Seedlings counting									X	X	X	
	2.23 Seed preparation						X	X	X	X			
	2.24 Loading and unloading of										X	X	X
	seedlings												
	2.25 Guarding							X	X	X	X	X	X
3	PLANTING OPERATION												
5	(coffee and shade trees)												
	3.1 Peg preparation							X					
								X	X				
	3.2 Peg transportation 3.3 Pegging							Λ	X	X			
									X	X	X		
	3.4 Holling								Λ	X	X	X	
	3.5 Refilling									Λ	Λ	Λ	
	3.6 Loading and unloading of												
	seedlings										X	X	X
	3.7 Planting										Λ	Λ	Λ
4	MAINTENANCE OF												
4	YOUNG COFFEE												
	TOUNG COFFEE												
	4.1 Handling and desuckering	X	X	X						X	X	X	X
	4.2 Reduce coffee tree		-	-			X	X	X	-	<u> </u>	-	
	verticals												
	4.3 Mulching	X	X	X	X						X	X	X
	4.4 Planting of mulch grasses	_	_	_	_						X	X	X
	4.5 Fertilizer application	X	X	X							X	X	X
	(ground)												
	4.6 Hoeing		X	X							X	X	X
	4.7 Mulching of red cherry			X	X	X	X	X			1		· -
	pulp	I	1	1	1 1	-	1 -	1	Ī		1	[1

		Months											
	Activities	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
		T	T				1	1	T				T
	4.8 Mulching of dry cherry	X	X	X						X	X	X	X
	(husk)												
	4.9 Cover – crop planting	X	X								X	X	X
	4.10 Shade regulation							X	X	X			
	4.11 Trimming of shade trees	X	X								X	X	X
	4.12 Manual weed control	X	X	X	X	X	X	X	X	X	X	X	X
	4.13 Chemical weed control												
	- Annual weeds	X	X	X	X					X	X	X	X
	- Perennial weeds	X	X	X	X					X	X	X	X
	- Pre-emergence (residual)	X	X	X									
5	MAINTENANCE OF MATURED COFFEE												
	5.1 Handling and desuckering	X	X	X							X	X	X
	5.2 Pruning							X	X	X			
	5.3 Reduce coffee tree							X	X	-			
	verticals												
	5.4 Stumping							X	X				
	5.5 Hoeing									X	X	X	X
	5.6 Mulching of red cherry			X	X	X	X	X					
	pulp												
	5.7 Mulching of dry cherry							X	X	X	X	X	X
	(husk)												
	5.8 Shade regulation							X	X	X			
	5.9 Trimming of shade trees	X	X								X	X	X
	5.10 Manual weed control	X	X	X	X	X	X	X	X	X	X	X	X
	5.11 Chemical weed control												
	- Annual weeds	X	X	X	X								
	- Perennial weeds	X	X	X	X								
	- Pre-emergence (residual)	X	X	X									
	5.12 Counting coffee tree							X	X	X			
	population every two years												
	5.13 Ridge maintenance							X	X	X			
	5.14 Yield estimation						X	X	X	X	X	X	X
	5.15 Picking red cherry	X	X	X	X	X	X	X					1
	5.16 Preparation of washed	X	X	X	X	X	X	X	X				
	coffee												
	5.17 Picking and drying dry	X	X	X	X	X	X	X	X	X	X		
	cherry												
	5.18 Hulling of dry cherry							X	X	X	X	X	X
	5.19 Pests and diseases follow-	X	X	X	X	X	X	X	X	X	X	X	X
	up												
	5.20 Yield loss assessment					X	X	X	X	X	X	X	
	5.21 Fertilizer application												
	- Ground	X	X	X						X	X	X	X

		Months										
Activities	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
- Foliar	X	X	X	X						X	X	X
5.22 Coffee drying table	X	X								X	X	X
preparation												
5.23 Irrigation									X	X	X	X
5.24 Lichen removal	X	X	X						X	X	X	X

Table: CPDE state farms' book of practices (CPDE, 2005)

Proclamation no. 602/2008: A proclamation to provide for coffee quality control and marketing, Addis Ababa, 25th August, 2008

Whereas, in order to efficiently supply quality and competitive coffee to the global market it has become necessary to establish and improved system for coffee quality control and marketing;

Whereas, it has been found necessary to make the coffee marketing system fast and cost effective, in order to enable coffee producers to earn better income from coffee transactions;

Whereas, it has become necessary to harmonize coffee marketing with the organizational work of the Ethiopian Commodity Exchange and the reorganization of the executive organs of the government; [...]

Part one General

[...]

2. Definitions

- 1) "Coffee" means the fruit of a coffee tree or part of such fruits in whatever form;
- 2) "Red cherry coffee" means the red fruit of a coffee tree picked after it is naturally ripened;
- 3) "Coffee with pulp" means a red cherry coffee picked and dried but not pulped;
- 4) "Washed coffee with parchment" means red cherry coffee which has been pulped, fermented, washed and dried with its husk;
- 5) "Washed coffee" means red cherry coffee which has been pulped, fermented, washed to remove its sticky mucilage;
- 6) "Sun dried" means a red cherry coffee which has been dried, hulled, cleaned and sorted;
- 7) "Semi-washed coffee" means dried and pulped red cherry coffee with its sticky mucilage;
- 8) "Supply coffee" means coffee processed in any form by industries located in the production area for delivery o auction centers or the Ethiopian Commodity Exchange;
- 9) "Export coffee" means coffee bought by exporters from auction centers or the Ethiopia Commodity Exchange or produced on their own farm (pour les coopératives, et les producteurs bien que ces derniers soient rarement exportateurs), prepared and processed, in accordance with the country's quality standard, for export;

- 10) "Coffee by product" means light, broken, underdeveloped or including any coffee with defects;
- 11) "Domestic consumption coffee" means coffee which is coffee by product, or coffee the taste of which has deteriorated due to mishandling or length in storage and with not more than 15% purity, which is not harmful to health but is not fit for export;
- 12) "Traditionally processed coffee" means coffee processed using outdated methods of wood or stone grinder;
- 13) "Coffee supplier" means a person who, upon meeting the required criteria, collects coffee with pulp or red cherry coffee from producers or from his own farm for delivery to auction centers or the Ethiopia Commodity Exchange;
- 14) "Coffee exporter" means a person who, upon being licensed to trade coffee by the appropriate government organ and fulfilling the requirements set by the Ministry, and upon purchasing coffee from auction centers or the Ethiopia Commodity Exchange or collecting from his own farm, prepares, processes and exports coffee in compliance with the export quality and standards;
- 15) "Executive body" means the Ministry, the Ethiopia Commodity Exchange or a regional executive organ authorized by law to implement the regulation and directive to be issued in accordance with this Proclamation for the proper execution of coffee marketing and quality;
- 16) "Coffee transaction" means the lawful buying and selling of coffee between a coffee supplier and a coffee exporter, a coffee exporter and a foreign coffee importer, or coffee exporter and a domestic consumption coffee wholesaler or a coffee supplier and a domestic consumption coffee wholesaler or a domestic consumption coffee wholesaler and retailers;
- 17) "Coffee quality control" means inspection and control of the picking, processing, storage and transportation of coffee, in accordance with acceptable norms, to ensure delivery of coffee to consumers in its natural state;
- 18) "Coffee processing" includes collecting and pulping red cherry coffee after picking, pulping and cleaning coffee with pulp, and processing export coffee in accordance with the country's quality and grade requirements and the buyers' needs as per the authorized technical procedures;
- 19) "Coffee producers" means any coffee producer, including small-scale coffee farmers, coffee farmers' cooperatives, private investors, and state coffee producing enterprises;
- 20) "Coffee quality liquoring and inspection center" means an institution under the Ministry, that inspects, liquors and issues certificates for coffee locally supplied from production areas, export coffee, and coffee by product delivered to consumer areas;
- 21) "Coffee transaction centers" includes local markets designated by the regional organ having legal power for trading of red cherry coffee and coffee with pulp; the auction centers and the Ethiopia Commodity Exchange;

- 22) "Coffee trade" means acts including collecting coffee from producers, processing an supplying to auction centers or the Ethiopia Commodity Exchange, exporting, roasting, grinding, distributing, retailing with license from the appropriate government organ;
- 23) "Domestic consumption coffee wholesaler" means a person who, upon being licensed to trade coffee by the appropriate government organ and fulfilling the requirements set by the Ministry, and upon purchases domestic consumption coffee from auction centers or the EC ex, for sale in the designated market;
- 24) "Coffee roaster" means a person who, upon being licensed by the appropriate government organ purchases coffee from auction centers, the EC ex, or a domestic consumption coffee wholesaler, roasts or roasts and grinds coffee for export or sale in the domestic market;
- 25) "Competence certificate" means a document that certifies the ability of a person to collect, process, store, transport coffee, and to engage in all other activities relaed o coffee trade:
- 26) "Manipulation" means any act that results or is likely to result in confusion or deception of market participants or the Government as to the price, quantity, quality, or type of coffee;
- 27) "Ministry" means the Ministry of Agriculture and Rural Development;
- 28) "Person" means a natural or juridical person;
- 29) "Region" means any regional state referred to in article 47 of the Constitution of the Federal Democratic Republic of Ethiopia and includes Addis Ababa and Dire Dawa city administrations;

[...]

Part two Coffee quality control and transaction process

4. Coffee Quality Control Process

- 1) Coffee shall be pre-inspected by the legally designated regional quality control organ in the locality of production and sent as closed with seal to a coffee quality liquoring and inspection center.
- 2) Supply coffee so sent to the coffee quality liquoring and inspection center shall upon verification that it has been properly sealed and delivered, be graded through an appropriate examination based on a representative sample.
- 3) In case of export coffee, before it is exported, it shall be certified by a coffee quality liquoring and inspection center and issued a certificate that it is prepared in accordance with the characteristics of the agro ecology of its production area and meets the required grade; then shall be sealed and sent to the port of consignment.

4) In the case of domestic consumption coffee, it shall only be sealed and sent to consumer regions upon verification and issuance of a certificate by a coffee quality liquoring and inspection center that it meets the grade requirements set by the law.

5. Coffee Transaction Process

Coffee transaction shall be executed as follows:

- 1) coffee transaction between a coffee producer and a coffee supplier; or where it is supply coffee intended for export, between a coffee supplier and a coffee exporter; where it is supply coffee and below an exportable grade, between a coffee supplier and a domestic wholesaler; or where it is not exportable, coffee by product, between a coffee exporter and a domestic wholesaler; shall take place in lawful coffee transaction centers:
- 2) supply coffee transaction in auction centers or the Ethiopia Commodity Exchange shall be carried out on the basis of the grade and representative sample certificate issued by coffee quality liquoring and inspection center in an open auction system;
- 3) coffee sold in auction centers and in the Ethiopia Commodity Exchange shall be sent to the processing warehouse for export preparation with the details of grade, quantity, place of origin and any other relevant information required by law;
- 4) coffee not sold upon presentation in the auction centers or in the Ethiopia Commodity Exchange may be stored in enterprises that provide only warehousing services until a better price is offered for it;
- 5) coffee for domestic consumption shall be traded in auction centers and in the Ethiopia Commodity Exchange.

Part three Obligations of transacting actors

6. Obligations of Persons Involved in Coffee Transaction

Any person involved in coffee transaction shall:

- 1) conduct coffee transaction only in transaction centers;
- 2) comply with all directives and regulations enacted by the appropriate body for the proper execution of coffee transaction;
- 3) acquire a certificate from the coffee quality liquoring and inspection center before submitting supply coffee to auction centers or the Ethiopia Commodity Exchange or consigning coffee to domestic or export market;

- 4) ensure, before loading coffee for transportation, than a vehicle and its driver conform to the provisions of this Proclamation and regulations and directives issued pursuant to the Proclamation;
- 5) own the proper coffee processing and storage facility as well as equipments and personnel, or submit a contract of hire of the same, in accordance with the competence certification process issued by the Ministry or regional agriculture bureaus;
- 6) submit a representative sample from the coffee prepared for transaction when so requested for quality inspection purposes;
- 7) have the appropriate executive seal and issue a letter of release when transporting coffee from the production area to coffee quality liquoring and inspection center or from coffee quality liquoring and inspection center to market centers and to the ports or to local consumption markets;
- 8) maintain a register of the daily coffee exchange quantity, grade, price and list of purchase and disclose such register to the relevant government organ on demand and cooperate when physical presence for site or inventorying is required;
- 9) abstain from all acts that may result the defamation of the good name of the country's coffee.

7. Obligations of Coffee Suppliers

Any coffee supplier shall:

- 1) within 24 hours, deliver red cherry coffee to a processing plant, for processing into washed parchment coffee, semi-washed coffee, or sun dried coffee using the technical process required by the Ministry;
- 2) within six month of processing, deliver processed supply coffee to auction centers or the Ethiopia Commodity Exchange for sale;
- 3) ensure that the coffee submitted to coffee quality liquoring and inspection centers conforms to the quality standards and has a moisture content of not more than 12%;
- 4) purchase, process and transport coffee only in the area designated to him and submit the same without mixing the coffee with coffee of other agro ecologies;
- 5) where it is export coffee graded by the coffee quality liquoring and inspection centers to be traded on the Ethiopia Commodity Exchange, store it in the warehouses designated by the Commodity Exchange or where it is coffee to be traded in auction centers and in case he is willing to wait for better price, store it in licensed commercial warehouses not involved in the coffee trading business.

8. Obligations for Coffee Exporters

Any coffee exporter shall:

- 1) process export coffee in accordance with the country's quality standard, for export;
- 2) not exceeding 24 hours after the conclusion of a contract for sale of coffee, have the contract and the correct sale price registered at the National Bank of Ethiopia, and notify the same to the Ministry and other concerned authorities within 15 days;
- 3) export coffee collected from his own farm or purchased from auction centers or the Ethiopia Commodity Exchange before the next harvest;
- 4) except in cases of mixing processes registered under special permission of the Ministry, export coffee, without mixing different types and maintaining the name of place of origin;
- 5) sell coffee by product leftover from export coffee in the auction centers or the Ethiopia Commodity Exchange;
- 6) without prejudice to the extension of a contract permitted by the National Bank of Ethiopia upon showing of sufficient reasons, perform the contract he concludes with the buyers on the due date;
- 7) not resubmit for sale to auction centers or to the Ethiopia Commodity Exchange once he purchased the export coffee from the auction center or from the Ethiopia Commodity Exchange and graded by the coffee quality liquoring and inspection center.

9. Obligations for Domestic Consumption Coffee Wholesalers

Any domestic consumption coffee wholesaler shall:

- 1) only purchase domestic consumption coffee from auction centers or the Ethiopia Commodity Exchange;
- 2) not purchase, sell or transport export coffee;
- 3) not sell domestic consumption coffee in coffee producing areas unless it is permitted by the concerned body;
- 4) transport and sell domestic consumption coffee purchased from auction centers or the Ethiopia Commodity Exchange to markets designated for the wholesaler, after having the same sealed by the appropriate executive body and obtaining a letter of release;

10. Obligations of Coffee Roasters

Any person involved in the roasting and grinding of coffee for selling shall:

- 1) purchase the coffee for such purpose only from auction centers, the Ethiopia Commodity Exchange or wholesalers;
- 2) ensure the description written on the packaging of the roasted and ground coffee conforms with the quality of the coffee.

11. Obligations of Coffee Producers

Any coffee producer shall:

- 1) without prejudice to Article 6(1) of this Proclamation, have the right to directly export coffee from his own farm, only after submitting the same to the coffee quality liquoring and inspection center for grading before and after processing for export;
- 2) sell coffee by product in auction centers or the Ethiopia Commodity Exchange only upon examination and approval of the coffee quality liquoring and inspection center.

12. Obligations of Service Providers

- 1) A body engaged in coffee processing shall properly clean and process the coffee received by it as per the terms of the contract he entered and deliver the same to the owner with evidence of appropriate cleaning for the quality and grade of the coffee.
- 2) A body engaged in coffee cleaning and pulping shall prevent the husk or any odor emanating from liquid waste produced by the cleaning and pulping process from causing any negative impact on the environment and community.
- 3) The owner of a vehicle that sustained malfunctions or against which a crime is committed while transporting coffee, shall promptly report the same to a lawful organ in the locality.
- 4) An owner or agent of a vehicle transporting coffee, shall before loading the coffee verify that the coffee has been prepared for transportation in conformity with this Proclamation.
- 5) A person engaged in providing coffee transportation service, shall transport the coffee he received from its place of consignment to its destination without breaking the seal and tearing the canvas and by preserving its quality.
- 6) A body engaged in coffee warehousing shall store coffee received for storage in accordance with the contract entered into.

Coffee defects

Defects on shape and make concerning dried coffee are: under washed, cracked, over fermented, loss beans, brownish, dull pods, mixed fermentation, under fermentation, discoloured, nipped, long cont.

Defects for washed coffee are: foxy (reddish coloured beans caused by harvesting either over-ripe, sometimes yellow or delays in pulping), immature (unripe coffee bean often with a wrinkled surface), black (coffee beans of which more than one half of external and/or internal surface is black), white (coffee beans white in colour and very light in weight, with a density well below that of a healthy bean), broken (fragment of coffee bean of volume equal to or greater than half a bean), wanza (a dry fruit of tree called Cordia abyssinica which looks like *jenfa*), stone, stick, grains (seeds like wheat, barley, maize), *jenfal* (dried fruits of coffee comprising its external envelopes and one or more beans), stinkers.

Sources of income¹

Coffee Chat

Coffee sales red Chat sale

Coffee sales dry

Chat middleman

Coffee gleaning

Coffee harvesting

Coffee trade Coffee sorting

Other production

Honey Sugar cane

Cow Milk sales

Cow Live sales

Ox/bull Live sales

Sheep Live sales

Chicken Egg sales

Chicken Live sales

Employment

Agricultural labour
Sale of firewood

Casual labour
Charcoal making

Full time trade

Roofing

Construction

Teff treshing

Ensete processing

Livestock trade

Processing plant worker

Sowing

Processing plant worker Sewing Handicrafts Broker

Butter making and sale Handicrafts, beehives, sieves

Baked goods sale

Transporting commodities

Leftover coffee sales

Spice and herb sales

Brewing and spirits

Enset processing and sale

Injera sales

Gifts

Food gift, maize Cash gift

Other

Remittance Rental income

Pension

¹ Upon Save the Children UK (2003) investigations in Mana and Goma *woredas* activities which can be compared to Limu Kosa *woreda* activities.

TRADEMARK LICENSE AGREEMENT

THIS AGREEMENT effective as of the date of signature by	by the Licensee or
Licensor, whichever is later, is between the Government of Ethiop	oia ("Licensor"), a
sovereign government with an Embassy in Washington, DC, and	
	_, ("Licensee"), a
corporation organized under the laws of	, having its
principal place of business in	

WHEREAS, Ethiopia has filed applications with the United States Patent and Trademark Office and foreign trademark offices to protect its rights in the coffee names SIDAMO, YIRGACHEFFE, HARRAR and HARAR (collectively the "Marks"). The purpose of these filings is to seek to maximize the benefits to farmers of the use of the Marks and the goodwill symbolized by the Marks worldwide, and to prevent misuse of the Marks.

WHEREAS, Licensor has committed itself to securing, enhancing and managing the rights associated with use of the Marks, including all right, title and interest in and to the Marks for the benefit of, and in collaboration with, up to 4 million Ethiopians engaged in the production and supply of coffees covered by the Marks as represented by farmer cooperatives and other organized stakeholders in the Ethiopian coffee sector.

WHEREAS, Licensor owns all right, title and interest in and to the Marks throughout the world, including registrations and applications for registration thereof as listed on Schedule A hereto, and common law rights in the Marks, together with the goodwill symbolized by the Marks worldwide; and

WHEREAS, the Licensee hereby acknowledges that the Marks have acquired distinctiveness as used to identify coffee offered by the Licensor.

WHEREAS, Licensee is desirous of using the Marks in the United States and worldwide in connection with its business; and

WHEREAS, Licensor is willing to grant a nonexclusive license to Licensee to use, or to license its Affiliates to use, the Marks upon the terms and conditions provided herein;

NOW, THEREFORE, in consideration of the foregoing and of the mutual promises hereinafter set forth, the parties agree as follows:

1. DEFINITIONS

For the purposes of this Agreement:

- 1.1 "Affiliates" shall mean each Person controlled by or under common control with Licensee.
- 1.2 "Blend" shall mean any coffee which does not consist entirely (i.e., 100%) of SIDAMO, YIRGACHEFFE, HARRAR, or HARAR as the case may be.

- 1.3 "Control," including the terms "under common control with" and "controlled by," shall mean the possession direct or indirect, of the Licensee to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities or otherwise.
- 1.4 "Marks" shall mean the United States and foreign trademarks, and the registrations and applications for registration thereof, listed on Schedule A hereto and any additional trademarks that may be added to Schedule A by Licensor during the Term of this Agreement as defined herein.
- 1.5 "Person" means any individual, partnership, limited liability company, corporation, association, trust, joint venture, unincorporated organization or other entity.
 - 1.6 "Products" means coffee.

2. GRANT OF NONEXCLUSIVE WORLDWIDE LICENSE

- 2.1 Subject to the terms and conditions specified herein, Licensor grants to Licensee a nonexclusive license to use, with the limited right as provided in paragraph 8 below to license others to use the Marks in the United States and worldwide in connection with the goods covered by the registrations and applications for registration, namely coffee (the "Products").
- 2.2 Licensee shall not use any Mark with respect to coffee that is a Blend unless otherwise required by applicable law. Licensee shall obtain Licensor's approval for such use where Licensee is required to use a Mark with respect to a coffee that is a Blend, which approval shall not be unreasonably withheld.

3. OWNERSHIP OF MARKS

Licensee acknowledges Licensor's ownership of the Marks, agrees that it will do nothing inconsistent with such ownership and that all use of the Marks by Licensee or its sub-licensees shall inure to the benefit of and be on behalf of Licensor, and agrees that nothing in this Agreement shall give Licensee or its sub-licensees any right, title or interest in the Marks other than the right to use the Marks in accordance with this Agreement.

4. **QUALITY CONTROL**

Licensee agrees that use of the Marks shall conform to standards under the control of Licensor. Licensee agrees to cooperate with Licensor in facilitating Licensor's control of such use and to supply Licensor with specimens of use of the Marks by Licensee or its sub-licensees upon request. Licensor has reviewed and approved specimens showing Licensee's use of the Marks as set forth in Schedule B. Licensee shall be solely responsible for its compliance with all applicable laws and regulations and for obtaining all appropriate government approvals pertaining to the sale, distribution and advertising of the Products displaying the Marks covered by this Agreement.

5. FORM OF USE

5.1 Licensee agrees to use the Marks on the label or packaging for any Products that contain 100% SIDAMO, YIRGACHEFFE, HARRAR, or HARAR coffee. Licensee agrees that use of the Marks shall appear separate and apart from any other words or marks.

5.2 Licensee agrees not to use, or to authorize its sub-licensees to use, any other trademark in combination with any of the Marks without prior written approval of Licensor, which approval shall not be unreasonably withheld. Licensee agrees that where Licensee's own trademark is used in combination with any of the Marks the packaging for the Products shall refer to the Marks and Licensee's trademark with equal prominence, and that the Marks shall be separate and apart from any other words or marks.

6. <u>ROYALTY</u>

No Royalty shall be required to be paid by Licensee.

7. <u>INFORMATION</u>

Licensee shall provide Licensor with such sales and other information as Licensor may reasonably request concerning sales of Products covered by the Marks by Licensee and its sub-licensees. Licensor shall hold such information in confidence.

8. <u>SUB-LICENSES</u>

Licensee may sub-license, by written agreement substantially in the form of Exhibit 1 hereto, any of the Marks solely to its Affiliates for so long as such entities remain its Affiliates. Licensee may not directly or indirectly sub-license or attempt to sub-license, whether orally or in writing, any other person to use the Marks without Licensor's prior written approval.

9. INDEMNIFICATION

Licensee shall indemnify and hold harmless Licensor, its employees and affiliates, from and against any loss, damage or expense (including reasonable attorneys' fees) arising from any claim, suit, judgment or proceeding brought or asserted by any third party arising out of or in connection with: (i) the manufacture, sale, marketing or other distribution of the Products in connection therewith, including but not limited to Licensee's sale or distribution of the Products that gives rise to any claim, suit or proceeding alleging bodily injury; (ii) the breach by Licensee or its sub-licensees of any of the terms of this Agreement; or (iii) any use of the Marks by Licensee or its sub-licensees that is not authorized by this Agreement. Licensee's obligations under this subsection shall survive the termination or expiration of this Agreement.

10. ADVERTISING

Licensee agrees to use its best efforts to undertake, either directly or through its sub-licensees, advertising, marketing and other promotional activities to enhance the value of the Marks.

11. STATUTORY NOTICE

Licensee and its sub-licensees shall use the Marks in conjunction with the statutory notice of trademark registration when appropriate, as requested by Licensor.

12. INFRINGEMENT

12.1 Licensee and Licensor agree to cooperate in their efforts to defend and protect the Marks and to maintain the Marks as valid marks. Licensee shall notify

Licensor of any potential or actual infringements of the Marks as may come to Licensee's attention. In the event of any potential or actual infringement, Licensor shall have the option, at its expense, to take any legal action or other measures to protect the Marks against such infringement. In the event Licensor determines not to take action to protect the Marks against infringement or to remedy any infringement, Licensee, at its expense, may undertake legal action or other measures to protect the Marks against such infringement. The Parties shall cooperate in protecting the Marks and, at their own expense, may participate in any legal action brought by the other Party.

12.2 In the event that any claim or lawsuit is brought against Licensee or its sub-licensees arising out of use of the Marks by Licensee or its sub-licensees, Licensee will promptly notify Licensor of any such claim or lawsuit.

13. TERMINATION

- Agreement shall be renewable each year thereafter on the same terms and conditions as provided herein upon the consent of Licensor and Licensee, which shall be deemed to have been received unless a Party notifies the other Party of its intent not to renew, or not to renew on the same terms and conditions, at least ninety (90) days prior to the scheduled expiration date. The renewed Agreement shall take effect upon expiration of the prior Agreement.
- 13.2 Upon termination of this Agreement for any reason, all rights and privileges granted to Licensee hereunder shall immediately terminate, and Licensee, its

trustees, receivers, successors or assigns shall have no further right to use or license others to use any of the Marks; provided, however, that Licensee may have one (1) year after such termination within which Licensee and its sub-licensees may use up all existing materials bearing the Marks. Licensee also agrees that within one (1) year after such termination it and its sub-licensees shall (i) destroy or return to Licensor all designs, stationery, labels, packaging and other promotional or written materials, and advertising of every kind using any of the Marks; and (ii) refrain from marketing, selling or otherwise disposing of any product bearing the Marks unless such Marks are first removed or obliterated.

14. MISCELLANEOUS

- 14.1 This Agreement shall be subject to and construed in accordance with the laws of the State of New York.
 - 14.2 Paragraphs 3 and 9 shall survive termination of this Agreement.
- 14.3 All notices, requests and other communication to any Party hereunder shall be provided in the manner set forth in Schedule C.
- 14.4 Any provision of this Agreement may be amended or waived only if such amendment or waiver is in writing and signed by the Parties hereto. No failure to exercise a right or delay in exercising a right shall be deemed to be a waiver of such right.
- 14.5 In case any provision of this Agreement is held to be invalid or unenforceable, the validity of the remaining provisions of this Agreement shall not be affected or impaired.

14.6	Headings and captions used in this Agreement are included for
convenience o	of reference only.

	14.7	This Agreement may be signed in counterparts, each of which shall
be an	original,	with the same effect as if the signatories thereto and hereto were upon the
same	instrume	nt.

By:
Name:
Title:
Date:
LICENSEE
By:
Name:
Title:
_

GOVERNMENT OF ETHIOPIA

SCHEDULE A

MARK	COUNTRY	APP. NO. FILING DATE	REG. NO. REG. DATE	STATUS
		1060586		
HARAR	Australia	06/16/2005		PENDING
				GRANTED
				OFFICIAL
		916799		SECTION 9
HARRAR	Canada	06/10/2005		MARK
	European	4348777	4348777	
HARAR	Union	03/18/2005	02/14/2006	REGISTERED
		781589319		
HARAR	United States	031/17/2005		PUBLISHED
HARAR	Brazil	(03/05/07)		PUBLISHED
HAKAK	Diazii	829093168		TODLISTED
		02/08/07		
HARAR	China	5898141		PENDING
114848	G d AC	2007/06/14/6/1		DITO IGHED
HARAR	South Africa	2007/06416/1		PUBLISHED
HADDAD	A 1*	1060557		DUDI IGUED
HARRAR	Australia	06/16/2005	4348736	PUBLISHED
IIADDAD	European	4348736	4348736 03/23/2006	DECICTEDED
HARRAR	Union	03/18/2005 78/589312	03/23/2006	REGISTERED
HARRAR	United States	03/17/2005		PENDING
HARRAR	United States	(03/05/07)		FENDING
HARRAR	Brazil	829093176		PENDING
		02/08/07		
HARRAR	China	5898140		PENDING
HARRAR	South Africa	2007106416		PENDING
HARAR	G 1: A 1:	118372		
(English)	Saudi Arabia	11/06/07		PENDING
HARRAR	Saudi Arabia	118373		PENDING
(English)		11/06/07		FENDING
HARAR	Saudi Arabia	118376		PENDING
(Arabic)	~	11/06/07		TENERIO
HARRAR	Saudi Arabia	118377		PENDING
(Arabic)		11/06/07		
SIDAMO	Australia	1060575 or 06/16/2005		PENDING
SIDAMO	Australia	00/10/2003		GRANTED
				OFFICIAL
		916800		SECTION 9
SIDAMO	Canada	06/10/2005		MARK
SIDIMIO	European Union	4348751	004348751	1/1/ 11/17
SIDAMO	Laropean Chion	03/18/2005	03/18/2005	PUBLISHED
	_	2005-084164	4955561	
SIDAMO	Japan	09/08/2005	05/26/2006	REGISTERED

MARK	COUNTRY	APP. NO. FILING DATE	REG. NO. REG. DATE	STATUS
SIDAMO in	Japan	2005-084167	4955563	REGISTERED
Japanese		09/08/2005	05/26/2006	
SIDAMO	United States	78/589307	3381739	PENDING
		03/17/2005	12/02/08	
SIDAMO	China	02/08/07		PENDING
	Cimia	5898139		TENDING
SIDAMO	Saudi Arabia	118374		PENDING
(English)	Suddi i i uoiu	11/06/07		
SIDAMO	Brazil	829093150		PUBLISHED
GID ANG		(03/05/07)		DIADI IGIED
SIDAMO	South Africa	2007106415		PUBLISHED
SIDAMO	Saudi Arabia	118378		PENDING
(Arabic) YIRGACHEFFE	Australia	11/06/07 1060583		PENDING
YIKGACHEFFE	Austrana	06/16/2005		PENDING
YIRGACHEFFE	Canada	916798		GRANTED
TIKUACHEFFE	Canada	06/10/2005		OFFICIAL
		00/10/2003		SECTION 9
				MARK
YIRGACHEFFE	European Union	4348744	4348744	REGISTERED
THEOTICIES I	Europeum Omon	03/18/2005	02/14/12006	REGISTERED
YIRGACHEFFE	Japan	2005-084161	4955560	REGISTERED
		09/08/2005	05/26/2006	
YIRGACHEFFE in	Japan	2005-084165	4955562	REGISTERED
Japanese	•	09/08/2005	05/26/2006	
YIRGACHEFFE	United States	78/589325	3126053	REGISTERED
		03/17/2005	08/08/2006	
YIRGACHEFFE	China	5898138		PENDING
		02/08/07		rending
YIRGACHEFFE	Brazil	(03/0507)		PUBLISHED
		829093133		
YIRGACHEFFE	South Africa	2007/06417		PENDING
YIRGACHEFFE	Saudi Arabia	118371		PUBLISHED
(English)	Suudi Anuoia	09/11/07		TODEIGITED
YIRGACHEFFE	Saudi Arabia	118375		PENDING
(Arabic)	Jaudi Alabia	09/11/07		121,211,0

MARK	COUNTRY	APP. NO. FILING DATE	REG. NO. REG. DATE	STATUS
SIDAMO in Japanese	Japan	2005-084167 09/08/2005	4955563 05/26/2006	REGISTERED
SIDAMO	United States	78/589307 03/17/2005		PENDING
YIRGACHEFFE	Australia	1185005 29/06/2007		PENDING
YIRGACHEFFE	Canada	916798 06/10/2005	916798 09/28/2005	REGISTERED
YIRGACHEFFE	European Union	4348744 03/18/2005	4348744 02/14/2006	REGISTERED
YIRGACHEFFE	Japan	2005-084161 09/08/2005	4955560 05/26/2006	REGISTERED
YIRGACHEFFE in Japanese	Japan	2005-084165 09/08/2005	4955562 05/26/2006	REGISTERED
YIRGACHEFFE	United States	78/589325 03/17/2005	3126053 08/08/2006	REGISTERED

SCHEDULE B

(Samples of licensees packaging incorporating the Marks or copies thereof)

SCHEDULE C

All notices and other communications related to this License Agreement shall be in writing and shall be deemed given upon receipt if delivered personally or by facsimile (answer back received), or one business day after being sent by Express Mail or courier, or three business days after being sent by registered or certified mail, return receipt requested, postage prepaid to the parties at the following addresses (or such other address for a party as shall be specified by like notice, provided that such notice shall be effective only upon receipt thereof).

Licensor

Government of Ethiopia Embassy of Ethiopia

Attn: Getachew Mengistie, Ethiopian Intellectual Property Office

3506 International Drive, NW

Washington, DC 20008 Fax: 202-587-0195

With a copy to: Arnold & Porter Att: Anna Manville, Esq. 555 Twelfth Street, NW Washington, DC 20004-1206

Fax: 202-942-5999

Licensee

With a copy to:

Glossary

Remark: Oromic has not yet fixed scientific terms even if local names exist. It is a new

phenomenon because during Haile Selassie I regime and DERG, Amharic was used. Oromic

was forbidden by land owners; peasants were oppressed by them during Haile Selassie I

feudal regime. That's why Amharic terms are still used about coffee, other crops and spaces

related to.

Oromic

Daldaltuubuna: coffee trader in Oromic;

Fetchassa: 0.25 ha:

Aannaa: Woreda:

Baddaa: Forest;

Amharic

Sebsabie: Coffee collector;

Woreda: district (department);

Akhrabie or chagn: Coffee supplier;

Awaraja: Former administrative unit;

Chaka: Forest;

Begeja (baaggaajjaa): Peasants use the world baggaajjaa to mean forest coffee, whereas it

should just refer to the age of trees, improved or not improved varieties. This means old.

Confusion indeed exists and associates forest coffee trees with baggaajjaa which meaning

given by farmers is local variety and consequently wild coffee.

Buna bet: Literally "coffee bar", but roughly speaking drinking bar;
Arabic
Feresulla (or frasleh): 17 kg;
Taha: Akhrabie;
English
Central market: both points out the legal coffee supply channels or Addis Abeba market level;
Coffee: bunna in Amharic and buna in Oromic;

 $Model\ farmer:\ They\ are\ innovation\ vectors,\ the\ link\ between\ WARDO\ and\ other\ farmers.$

They take the innovation and spread it through their farmers' environment.

Coffee tree: bunna enchet in Amharic, Muqabuna in Oromic;