

**Land Resources and socio-economic report of
Bonga, Boginda, Mankira and the surrounding areas
in Kaffa zone, SNNPRS, Ethiopia**



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Acronyms and abbreviations used

⁰ C	degree centigrade
ARC	Agricultural Research Center
BLT	Branches, Leaves and Twigs
BoFED	Bureau of Finance and Economic Development
CSA	Central Statistical Authority
DoFED	Department of Finance and Economic Development
DRMAS	Digital Radio Multi-Access System
EDRI	Ethiopian Development Research Institute
EEPFE	Environmental Economics Policy Forum for Ethiopia
EfD	Environment for Development
EIAR	Ethiopian Institute of Agricultural Research
FAO	Food and Agriculture Organization of the United Nations
FARM-Africa	Food and Agricultural Research Management - Africa
FUG	Forest User Group
GIS	Geographical Information Systems
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation)
ha	Hectare
HH	household
HIV/AIDS	Human immunodeficiency virus / Acquired Immunity Deficiency Syndrome
IBC	Institute of Biodiversity Conservation
JARC	Jimma Agricultural Research Center
KAs	Kebele Administrations
KFCU	Kaffa Forest Coffee Farmers Cooperative Union
KZARD	Kaffa Zone Agriculture and Rural Development Department
m.a.s.l	meters above sea level
M.W.	Micro Wave
mm	millimeter

MoA	Ministry of Agriculture
n/a	not available
NABU	Nature and Biodiversity Conservation Union
NARS	National Agricultural Research system
NERA	Nera Telecommunication Ltd.
NGO	Non-Governmental Organization
NMSA	National Meteorological Service Agency
NTFP	Non-Timber Forest Product
PFM	Participatory Forest Management
PPP	Public–Private Partnerships
RARIs	Regional Agricultural Research Institutes
SCRP	Soil Conservation Research Project
SNNPRS	Southern Nations Nationalities and People Regional State
SOS-Sahel	Save Our Souls - Sahel
sq.km.	square kilometer
SRMA	Southern Region Meteorological Agency
SUPAK	Sustainable Poverty Alleviation in Kaffa
TLU	Tropical Livestock Unit (250 kilograms live weight)
UA	Units of Account
USAID	United States Agency for International Development
VSAT	Very small aperture terminal
WARDO	Woreda Agriculture and Rural Development Office
WBISPP	Woody Biomass Inventory and Strategic Planning Project

Executive Summary

As part of the data basis for the planning process of the proposed Coffee Biosphere Reserve in Bonga Region, a land resource and socio-economic study was undertaken through the initiative and financial support of PPP.

The study area includes Chena, Decha, Gimbo, Gewata, Menjiwo and Tello Woredas of Kaffa Zone, SNNPRS and covers an area of 7,167.8 ha of land. Bonga, Boginda and Mankira forest areas are included within the study area.

The land use and land cover assessment identifies thirteen land cover types, and of these, five are of natural vegetation whilst the remaining eight had an anthropogenic characteristic.

Land use activities in the natural vegetation areas are for various purposes ranging from NTFP collection to regulated extraction of wood for farm implements and construction of houses. Part one of the report gives details of the land resource assessment.

The population of the study area is about 657,780, and is growing at a rate of 2.9% per annum. Of these, 91.68 % reside in rural areas and 8.42 % in urban areas. The majority of the population in the study area are found in the age group of 15 to 64 years, constituting 52.08% followed by age group 0-14 making up 45.19% of the total population. Gross enrollment ratio for both sexes is about 85%, and the student enrollment ratio is 40% females and 60% males.

Percentile potential health coverage of the zone in 2005 was 57.24 percent, whilst the percentage coverage of family planning service in the zone is about 50 percent in the year 2006.

Major source of livelihood in the study area are agricultural production, which is rain-fed and traditional, livestock rearing and the collection of NTFP, where such is available.

Severely marginalized groups are the Manjiwo's and Mano's who mainly subsisted on hunting and tannery, respectively. The number of Manjiwo households living in pockets among the farmer Kafecho is very small and occupy marginal lands considered to be the habitat of wild

animals that destroy crops. These groups will not intermarry nor eat together with farmer Kafecho.

Investment activities were increasing in the study area from year to year. Between the years 1998 to 2006, an average of 5 investment activities per year were granted permission, while in 2006/07 the figure rise to about 30. Overall, over the past 10 years an estimated number of 75 investment projects were granted permission to work in agricultural investment activities, most of which are located in the identified forest areas.

FARM-Africa, FAO and PPP with the support of SNNPRS had established 14, 2 and 3 PFM cooperatives respectively found in the forest and mixed (agriculture) lands of the study areas.

Chapter four through eleven of Part two of this report give details of the socio-economic assessment.

The study area has a high potential and many opportunities for establishing and development of a biosphere reserve, nevertheless, there is a need to put in place a proper coordination and collaboration at institutional level and formulation of appropriate incentive mechanism at community level.

I. Introduction

1.1 Background

Kaffa is located in the south western part of Ethiopia in between 6° 24' to 7° 70' N and 35° 69' to 36° 78' E, some 460 km south west of Addis Abeba. Administratively the zone is found under the SNNPRS and is divided into 10 woredas. The total land area of the zone is 10,602.7 sq.km. Six woredas, namely Chena, Decha, Gimbo, Gewata, Menjiwo and Tello are encompassed in the study area.

The project was realized through the initiative and financial support of PPP on the establishment of a Coffee Biosphere Reserve in Bonga Region. This report is, therefore, part of the data basis for the planning process for the proposed Coffee Biosphere Reserve in Bonga Region.

Chapter one of this report discusses the background and objective of the study and chapter two the methodology used. The rest of the report is divided into two parts, in which part one (chapter 3) deals with the description of the land use and land cover classification and part two discuss the socio economic set up. In part two, chapter four discuss the socio-demographic characteristics, chapter five the agriculture, chapter six the land tenure, chapter seven institutions, chapter eight trends and recommendations and finally chapter nine lists the references.

1.2 Objective

The Major objective of this study was to carry out detail assessment of the land use and socio-economic features around Bonga, Boginda and Mankira forests and surrounding areas as to provide the data basis for the planning process for the proposed Coffee Biosphere Reserve in Bonga Region.

Within this frame work the specific objectives were:

- to identify the existing land cover types and land use practices in the study area.
- to assess and compile all relevant information on:

- the general characteristics, description including topography, rainfall agro-climatic zone, geology, etc. of the study area;
- demographic information, including various ethnic groups, indigenous groups and immigrants, magnitude and reasons of conflicts among the ethnic groups if any, main human impact on conservation of natural resources and related management practices, etc
- related to existing land use practices, land cover types and major economic activities,
- to identify and document prevailing and potential main conflicts between investment activities and the surrounding communities, if there is any;
- to assess and compile information on the structure of governance prevailing in the area and a description of mandate institutions responsible for running of government, civil society and private sector activities;
- to provide a detailed information on the land use history, land use regulations at present and current and potential conflicts stemming from the land tenure system in place at the moment in the investigation area.

1.3 Data Sources

Primary data: Primary data were collected through data gathering formats, questionnaires administered at household level and discussions with key informants and focus groups.

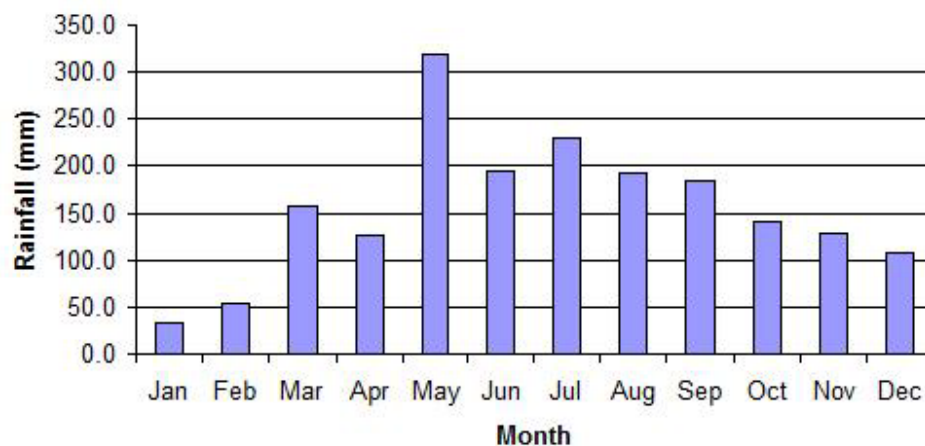
Secondary data: The report used CSA data for most of the demographic information. Data from different SNNP Regional Bureaus (in statistical abstracts, KZAFEDD, 2005) were analyzed as to describe the resources of the area. Further more, published and unpublished findings of different federal, regional, zonal and woreda offices, NGO's and as well different research works were also used as appropriate.

1.4 The physical environment

1.4.1 Climate

Rainfall:

The area receives rainfall almost all the year round. From March to September the mean minimum rainfall received is 100mm. The mean monthly rainfall in mm as observed in Bonga station, is shown in figure 1.

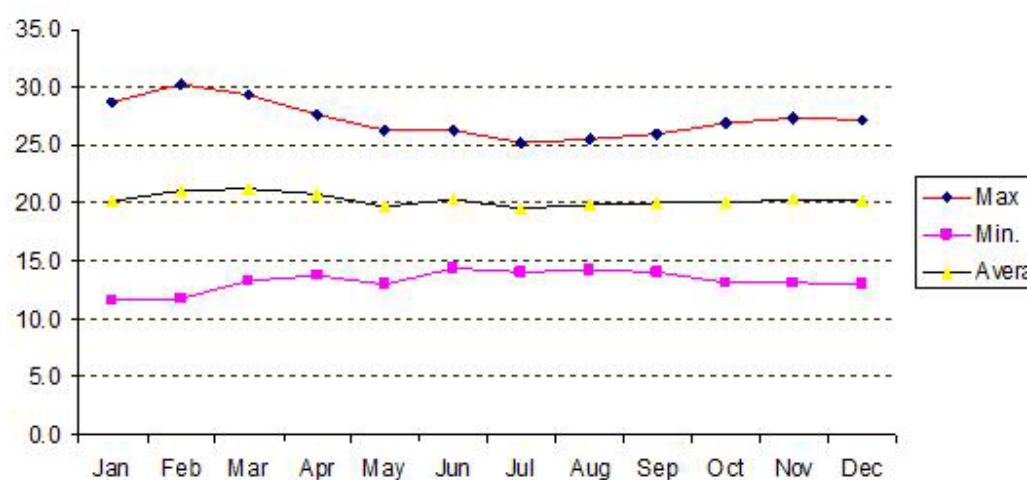


Source: SRMA

Figure 1. Mean Monthly Rainfall in mm

Temperature:

The mean monthly temperature ranges between 18 – 21 °C. From January to March the difference between mean minimum and mean maximum temperature received increases to gradually lower in April. The mean monthly Minimum, Average and Maximum Temperature, as observed in Bonga station is presented in figure 2.



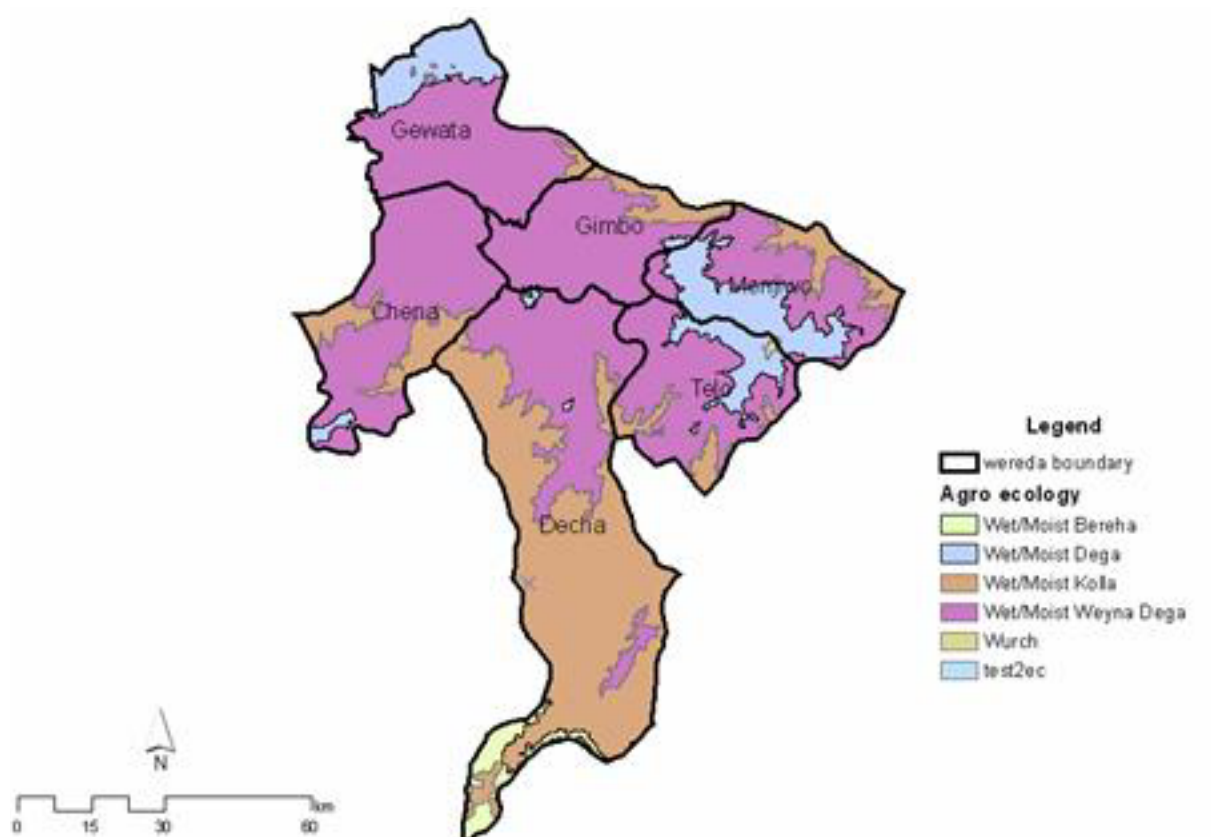
Source: SRMA

Figure 2: Mean Monthly Minimum, Average and Maximum Temperature in °C

Agro-Ecological Zones:

WBISPP has mapped the agro-ecological zones of the study area by adapting the SCRP classification of agro-ecological zone and further categorizing by the overlay with three classes of Digital Rainfall Model (dry, moist and wet). Based on this, almost all studied woredas, with the exception of Southern Decha which is wet moist kolla, falls in the wet moist woina dega regime.

The traditional agro-ecological zone of the study area is presented in figure 3.



Source: WBISPP, 2004

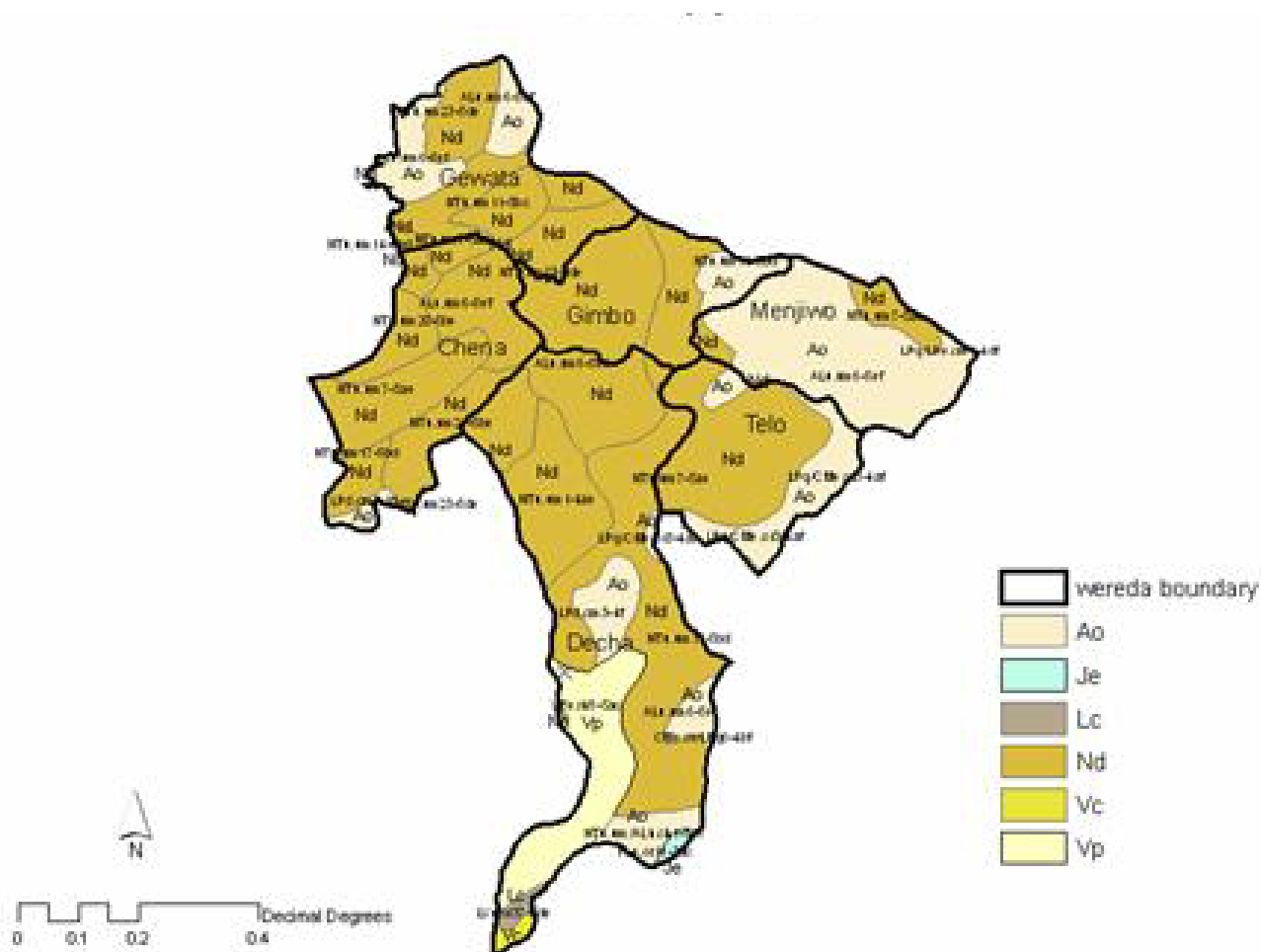
Figure 3: Traditional agro-ecological zones

1.4.2 Topography and Soil

The different relief features of the zone are the results of the geological episodes of the tertiary period and the subsequent geomorphic processes. The relief of Kaffa is generally characterized by a highly dissected rugged highlands in northern and central majority and undulating lowlands in southern part.

In the zone, altitude generally varies from less than 500 m.a.s.l. in the undulating plains of the south such as in Decha woreda (lowest 500 m.a.s.l. near Omo river) and to about 3000 m.a.s.l. in the highlands of Menjiwo and Tello woredas (peak 3348 m.a.s.l. at mount Shetra).

The soil map produced by WBISPP (2004), shows that the dominating soil unit in the study area is Dystric Nitosol (Nd). Menjiwo, SW part of Telo and N and NW part of Gewata woredas are dominated by Orthic Acrisols (Ao). Eutric Fluvisols (Je), Chromic Luvisols (Lc), Chromic Vertisols (Vc) and Pellic Vertisols (Vp) are also found within the study area to a certain extent. Figure 4 shows the soil types of Kaffa zone.



Source: WBISPP

Figure 4: Soil types of the study area

1.4.3 Drainage

Kaffa is endowed with rivers. One of these major rivers is Gojeb and flows from the North toward the North-eastern part of the zone to join Gibe river and form the Omo River. There are also other rivers such as Woshi, Baro and Beko that flows toward Omo and Gilo Rivers.

II. METHODOLOGY

2.1 Land use and land cover description

2.1.1 Pre-field work

Available published land use/cover studies of the study area had been examined prior to embarking on the field activity. Moreover, a relevé data sheet was also developed at this stage for collection of data on the land use/cover type.

2.1.2 Field work

Based on the unsupervised classification map produced by the GIS expert, (for methodology and materials used in image interpretation, please see the GIS report) a reconnaissance survey was conducted in the proposed study area and a preliminary land use land cover legend was developed.

Using a relevé sheet, data on percentage composition of the existing cover types, land use pattern, degree of disturbance, and other related information (please see annex 1) on the natural vegetation was recorded by field observation. Further more, the species composition and abundance within a quadrant of 40 * 40 meters were also recorded on randomly located sampling points. During the period of the field work a total of 24 relevés were filled.

Within the cultivated land units, percentage composition of existing tree, shrub and herbaceous layers, as to determine the intensity of cultivation and other relevant information related with the unit were registered by direct observation. Moreover, information on the crop types grown in the unit was also collected by interviewing farmers. See Annex 2 for agricultural land data gathering form. Furthermore, all identified units were discussed on the spot with the GIS expert.

2.1.3 Post-field work

All the collected data were collated and analyzed. Based on this, the preliminary mapping units were modified and a final land unit was produced.

2.2 Socio-Economics

To collect the needed information as set by the objective, the following methods were used:

- Questionnaires (having both open and close ended questions) were administered at household level,
- Formal and informal discussions with inhabitants, concerned governmental, non-governmental and community based organizations, private sector and research institutions and researchers,
- Focus group discussions
- Field observations and
- Compiling of published and unpublished socio-economic data from different sources.

Thirty-two households from 14 kebeles, were randomly selected for a structured interview. Focus group discussion was also held in selected four kebeles using basic socio-economic variables such as age, sex and wealth rank nominated through consultation with concerned Development Agents and Kebele Administration cabinet members. Quantitative data from the structured interviews were analyzed using descriptive statistics.

A check list was developed and used as a guide for interviews with key informants to ensure key issues and questions were addressed during discussions. List of persons contacted are listed in Annex 4.

PART I:

LAND USE / COVER CLASSIFICATION DESCRIPTION

III. Land use and land cover classification

3. 1 The identified land units

Based on a satellite image classification and of ground verification, thirteen land cover types were recognized. Table 1 depicts the identified land cover types and their area coverage. Percentage distribution of mapped units is also shown in Figure 5.

Table 1: The identified land cover types

Cover type	Mapping symbol	Area in ha
Dense forest	F1	87500.8
Disturbed forest	F2	24828.5
Highly disturbed forest	F3	45557.5
Bamboo forest	F4	5421.9
Marsh land	F5	3879.9
Man-made forest	F6	N/A
Commercial farms	C1	N/A
Intensively cultivated land	C2-1	12459.1
Moderately cultivated land with few scattered trees	C2-2	N/A
Moderately cultivated land with dense scattered or clustered trees	C2-3	38136
Sparsely cultivated land	C2-4	N/A
Built-up areas	T	N/A
Exposed surface	B	606.5
TOTAL		218390.2

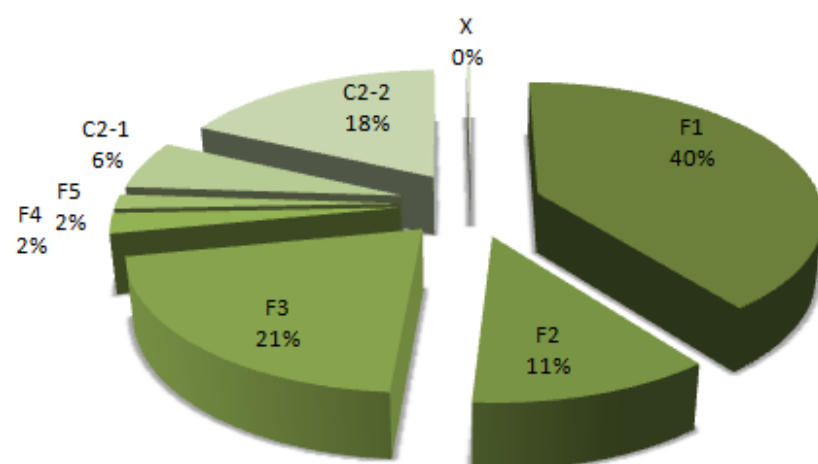


Figure 5: Percentage distribution of mapped units

Furthermore, the distribution of the land cover types by woreda is also shown in table 2. Figure 6 also presents the extent and distribution of the identified three forest stratum in the studied woredas.

Table 2: Area¹ (in ha) distribution of land cover types by woreda.

Woreda	Mapping unit												
	F1	F2	F3	F4	F5	F6	C1	C2-1	C2-2	C2-3	C2-4	T	B
Chena	6489.7	905.8	2229.3	0.0	109.3	N/A	N/A	743.3	3643.5	N/A	N/A	N/A	2.1
Decha	32632.9	7665.1	18380.6	14.8	0.0	N/A	N/A	3838.7	14341.0	N/A	N/A	N/A	218.9
Gewata	12502.4	5166.3	10972.6	0.0	3123.1	N/A	N/A	1747.7	6465.3	N/A	N/A	N/A	100.6
Gimbo	10784.8	3915.5	7794.7	21.5	647.5	N/A	N/A	2075.9	7498.6	N/A	N/A	N/A	49.7
Menjiwo	12448.8	1737.2	3544.6	1188.0	0.0	N/A	N/A	2819.4	4742.5	N/A	N/A	N/A	34.4
Tello	12642.2	5438.6	2635.7	4197.6	0.0	N/A	N/A	1234.1	1445.1	N/A	N/A	N/A	200.8
Total	87500.8	24828.5	45557.5	5421.9	3879.9	N/A	N/A	12459.1	38136.0	N/A	N/A	N/A	606.5

Source: GIS expert outcome

¹ Areas include Bonga, Boginda and Mankira areas only

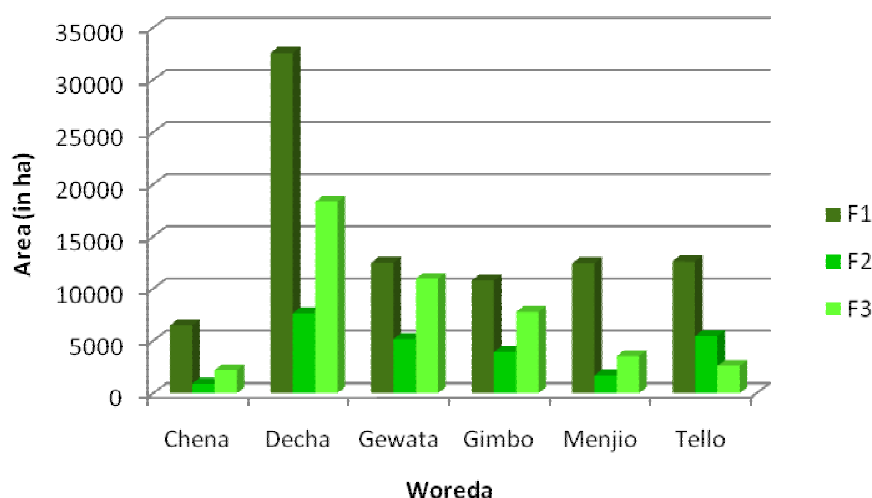


Figure 6: Extent and distribution of the identified forest stratum by woreda.

3. 2 Description of the land units

Dense forest (F1)

Main characteristics species of this unit include *Albizzia gummifera*, *Syzygium guinnennense*, *Allophyllus abyssinicus*, *Schefflera abyssinica*, *Dracaena afromontana*, *Celtis africana*, *Chionanthus mildbraedii*, *Erythrococca trichogyne*, *Olea welwitschii*, *Vepris dainelli*, *Grewia ferruginea*, *Cyathea manniana*, and *Ficus* spp.

Major land use activity includes limited grazing, collection of “hareg” (lianas and climbers) and regulated extraction of wood for farm implements and construction of houses. Coffee berry and spices (notably, “kororima”, *Aframomum corrorima* and “timiz” *Piper capense*) are also collected in areas where it occurs. In most places of this unit it is common to hang traditional beehives.

The real cover ranges 90 percent and above and the area coverage is 87,500.8 ha.



Plate 1: Dense forest (Mankira area)

Disturbed forest (F2)

The disturbed forest is mainly located in the central part of the study area and encompasses an area of 24,828.5 ha. The real cover ranges between 65 and 90 percent.

Same with the Dense forest, the major land use activities includes limited grazing and regulated extraction of wood for farm implements and construction of houses. Coffee berry, *Aframomum corrorima* “kororima” and *Piper capense* “timiz” are collected in areas where it occurs. In most places of this unit, as is in the dense forest, it is also common to hang beehives.



Plate 2: Hanging traditional beehives (extreme left-middle, yellowish) at Boginda forest

Highly disturbed forest (F3)

Main characteristics species of this unit include *Croton macrostachyus*, *Polyscias fulva*, *Syzygium guinnennense* and *Millettia ferruginea*. The highly disturbed forest covers an area of 45,557.5 ha.

Most of this unit is located in the periphery of the dense and disturbed forests. Major land use activity includes peasant livestock grazing mainly cattle, extraction of wood for fuel, farm implements and house construction, and in some places hanging of beehives. Real coverage of the unit is less than 65 percent.

In some places the unit represent areas where once agricultural activities have been undertaken and now abandoned for one thing or another.

Bamboo forest (F4)

Bamboo is the dominant land cover of this unit. *Hagenia abyssinica* is also intermingled (<5 percent) with the forest. The unit covers an area of 5,421.9 ha.

Major land use activity is extraction of bamboo culms for house construction and utensils.



Plate 3: Bamboo forest (foreground) and dense forest (background)

Marsh land (F5)

Animal grazing is the major land use activity of the unit. The area coverage of the unit is about 3879.9 ha.

Man-made forest (F6)

The man-made forest is mainly located around Bonga town, south of Kobeche town and near Wushwush commercial farms. Eucalyptus and Cupressus species are the dominant species planted in this unit.

Commercial Farms (C1)

Included are the existing Wushwush tea plantations and other commercial farms. Tea, coffee and limited fruit trees are the only crops found in the unit. In tea plantations there are no tree on farms whilst the percentage cover of trees in the coffee plantation differs from place to place.

Intensively cultivated land (C2-1)

Major land use activity of this unit is the cultivation of crops. The percentage cover of trees and shrubs is less than 5 percent each and grasses up to 10 percent. 80 percent or more of the unit, on the other hand, is under cultivation. This unit covers an area of 12,459.1 ha.

Moderately cultivated land with few scattered trees (C2-2)

The unit is characterized by a moderate cultivated land with few scattered trees. Percent area coverage of trees is less than 10 percent; shrub ranges from 5 to 8 percent and grassland 12 to 20 percent. The latter is mostly located at valley bottoms and side slopes. Cultivated land coverage ranges between 65 to 79 percent.

Moderately cultivated land with dense scattered or clustered trees (C2-3)

The total area coverage of this unit is 38,136 ha. and is characterized by a moderately cultivated land with dense trees which are found either scattered or clustered. Tree covers 15 – 25 percent, shrub less than 5 percent and grasses 8-15 percent. Cultivation unit ranges between 55 to 73 percent.

Sparsely cultivated land (C2-4)

The unit is mostly located along the boundary of the forest areas. The percentage cover of trees is greater than 20 percent and that of shrubs and grasses between 10 and 15 percent each. Cultivated land coverage is less than 55 percent.

Built-up areas (T)

As the interpreted areas focus on NFPA's, no built up areas are shown on the current map.

Exposed surface (B)

Areas devoid of or with very low vegetation cover are included in this unit and have an area of 606.8 ha.

PART II

SOCIO–ECONOMICS

IV. SOCIO-ECONOMIC CHARACTERISTICS

4.1 Demography

Population

Based on the projection of CSA 1994 census, the total population of Kaffa zone in 2007 was estimated 858,600, constituting about 5 percent of the SNNPRS. Of these, the population of the six woredas in the study area was estimated to be 657,780 amounting to 602,396 (91.68 percent) residing in rural areas and 55,384 (8.42 percent) in urban areas. The population size and the crude population density of the studied woredas are presented in table 3 below.

Table 3: Population distribution by woreda

Woreda	Population size			Area in Sq.km	Crude density (per km 2)
	Male	Female	Total		
Chena	79,469	81,937	161,406	900.1	179.32
Decha	65,329	69,287	134,616	2929.8	45.95
Gimbo	50,053	50,626	100,679	812.7	123.88
Gewata	32,957	33,688	66,645	978.6	68.10
Menjiwo	50,890	53,381	104,271	1054.1	98.92
Telo	33,284	34,257	67,541	472.7	142.88
Bonga	10,606	12,016	22,622	19.8	1145.30
Total	322,588	335,192	657,780	7,167.80	1,804.35

Data source: projection of 1994 CSA Census

The Statistics and Population Team, DoFED, demographic and health survey results of 2000-2005 shows that the region had a crude birth rate of 42.6 and a crude death rate of 13.4 per thousand. The same study also shows the infant and child under five mortality rate as 107 and 157 per thousand, respectively. The life expectancy was estimated at 51.35 and 53.45 year for males and females, respectively.

Population growth rate per annum was estimated at 2.9 percent. The average number of persons per household was approximately 4.4 persons for the same year.

Age and sex distribution

The graphs in figure 7 shows the age and sex distribution of the studied population by woreda.

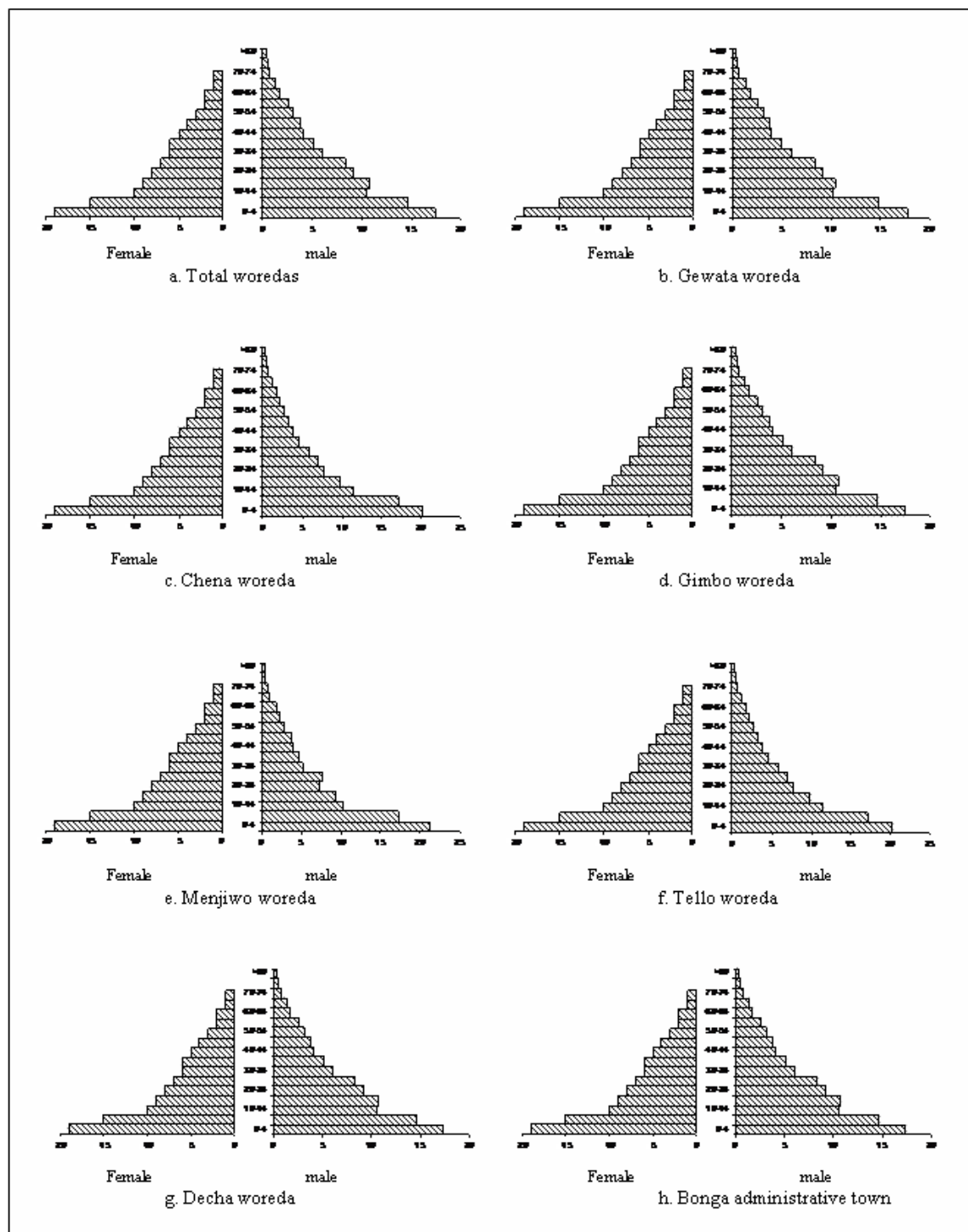


Figure 7: Age distribution of the studied woredas population

Dependency

Age group 0-14 and those with age 65 and above are considered as dependants. Active and dependant population by sex is given in table 4. Figure 8 also depicts same by woreda and age group.

Table 4: Active and dependent population by sex and woreda

Woreda	Age group	male	Female	Total	Dependency
Gewata	0-14	13,703	13,765	27,468	82.42668
	15-64	17,388	18,110	35,497	
	>65	935	856	1,791	
<i>Total</i>		32,026	32,731	64,757	
Chena	0-14	37,751	36,292	74,043	98.98282
	15-64	37,538	41,407	78,944	
	>65	2,055	2,042	4,098	
<i>Total</i>		77,344	79,741	157,085	
Gimbo	0-14	21,373	21,172	42,545	81.36774
	15-64	27,446	28,238	55,683	
	>65	1,435	1,328	2,763	
<i>Total</i>		50,254	50,738	100,991	
Menjiwo	0-14	24,071	23,347	47,417	97.78645
	15-64	24,115	27,115	51,230	
	>65	1,272	1,408	2,679	
<i>Total</i>		49,457	51,869	101,327	
Telo	0-14	15,735	15,013	30,747	101.6583
	15-64	15,470	17,093	32,563	
	>65	1,158	1,198	2,356	
<i>Total</i>		32,362	33,304	65,667	
Decha	0-14	26,900	25,980	52,880	92.21985
	15-64	29,060	31,452	60,513	
	>65	1,394	1,531	2,925	
<i>Total</i>		57,355	58,963	116,318	
Bonga town	0-14	3,536	4,035	7,570	70.59237
	15-64	5,244	6,134	11,378	
	>65	192	269	462	
<i>Total</i>		8,972	10,438	19,410	

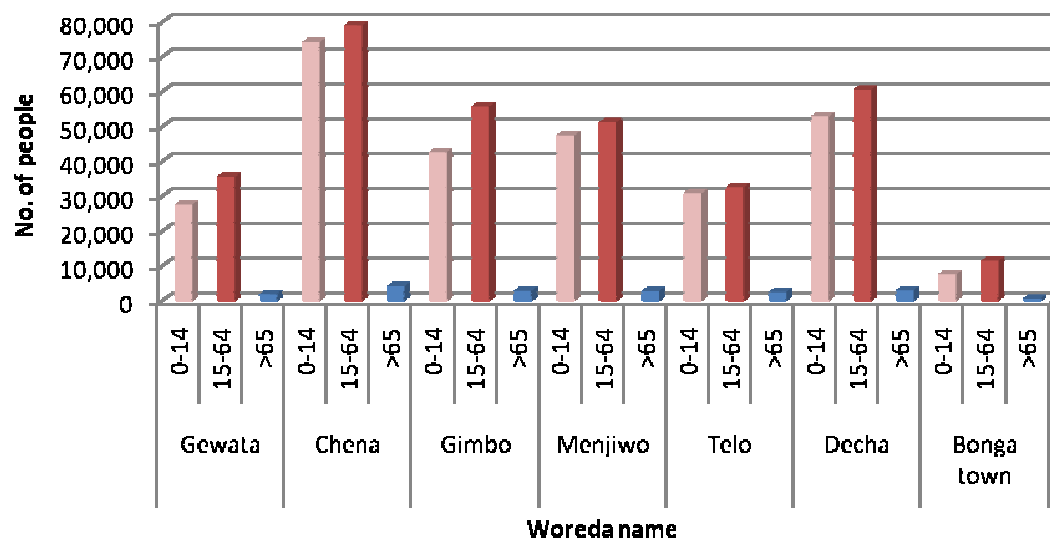


Figure 8: Active and dependent population by woreda

4.2 Social organization

4.2.1 History

During the nineteenth century, the Kaffa kingdom ruled by the Manjo clan was the most powerful in the area and held supremacy over the neighboring peoples. The king headed the government and was the nominal owner of all land under his rule. However, most state affairs were controlled by the council, *mikrecho*, comprised of several nobles. (Gezahegn P., 2001)

The kingdom had 18 regions which in turn were divided into units called *gudo* and further subdivided into *tatestes*, and finally into *tugo* (Kochito, 1979: 26; cited in Gezahegn P., 2001). After the devastating conquest by Emperor Menelik's army at the end of the nineteenth century the area was incorporated into the Ethiopian state.

4.2.2 Marriage

Informal discussions reveals that Muslims and Orthodox religion followers (though the frequency being minimized to date) practice polygamy.

4.2.3 Ethnic composition

SNNPRS has more than 80 ethnic groups. The major ethnic groups found within the study area constitute 81.04 percent Kefficho, 5.72 percent Amhara, 5.5 percent Bench, 2.35 percent Oromo and about 5.38 percent of other ethnic groups. Figure 9 shows percent composition of major ethnic groups (see also annex 7 for detail of number of people by ethnic composition by woreda).

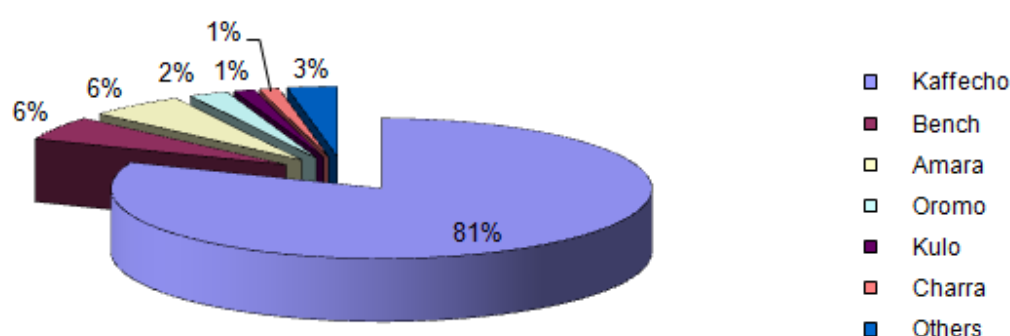


Figure 9: Major ethnic groups found in the study area

Marginalized groups

In the time of the kingdom of Kaffa low-status occupation groups included gold and silver smiths, black smiths (k'emo), weavers (shaman), potters (k'ejea), tanners (Mano), and hunters (Manjo) (Gezahegn P., 2001)

The position of smiths and weavers has changed dramatically during the twentieth century. Though smiths were among the low-status occupation groups in the past, they currently live among the farmers and do not face severe marginalization. Weavers too, are not currently despised. The Mano and the Manjo, however, are still severely marginalized. They still occupy the outskirts of settlement considered by the Kaffechos susceptible to wild animals that destroy crops, and farmers still refuse to eat with them or treat them as equals. (Gezahegn P., 2001)

Mano men work as tanners and Mano women work as potters. Their social status relates to their identity as Mano or Manjo and not to their occupation. The Manos seem highly mobile. For example, they migrate constantly between Shapa and Modiyo villages. The Manos are an endogamous group, and Kaffa farmers consider them impure. Manos are severely marginalized

by other Kaffa and live separately on the edge of settlements. Farmers will not intermarry with them or eat with them. (Gezahegn P., 2001)

The Manjo's are skilled hunters, using traps, hunting nets, and spears. They are also skillful tree climbers, make and hang hives and are the main suppliers of fire wood and charcoal to Bonga town. Before 1974 revolution they were landless and move from one area to another along the edges of forest. The Manjo used to live mainly on hunted animals notably porcupines, colobus monkey and wild pig. However, owing to the dwindling number of wild animals and government prohibitions against hunting, this is no longer the Manjo's main diet. (Gezahegn P., 2001)

Rate of migration among the Manjo's is higher than among the other minority groups in Kaffa (when wild animals become scarce and search for another area where there are more numerous). The focus of Manjo attention is the denser forest where they hunt animal and burn charcoal. The Manjo are an endogamous group. The number of Manjo households living in pockets among the farmer Kafecho is very small and occupy marginal lands considered to be the habitat of wild animals that destroy crops. Kafecho considered the Manjo to be 'unclean' and 'stinking'. (Gezahegn P., 2001)

During the Derg regime there were different efforts, but the practices fell in to disuse and did not bring fundamental changes as they were imposed and directed from above. (Gezahegn P.)

4.2.4 Religion

MoA (2002) survey in some 16 KA's of Chena, Decha and Gimbo woredas found number of believers to each religion as 66.5 percent Orthodox Christians, 19.74 percent Protestants, 10.26 percent Catholics, 3.18 percent Muslims and 0.32 percent atheist.

4.2.5 Language

Kefficho is the most widely used language in the study area, spoken by about 80 percent of the population. Benchigna, Amharic and Oromiffa are also some of the major mother tongue. See figure 10 for major mother tongue in the study area. See also annex 8 for detail number of people by major mother tongue by woreda.

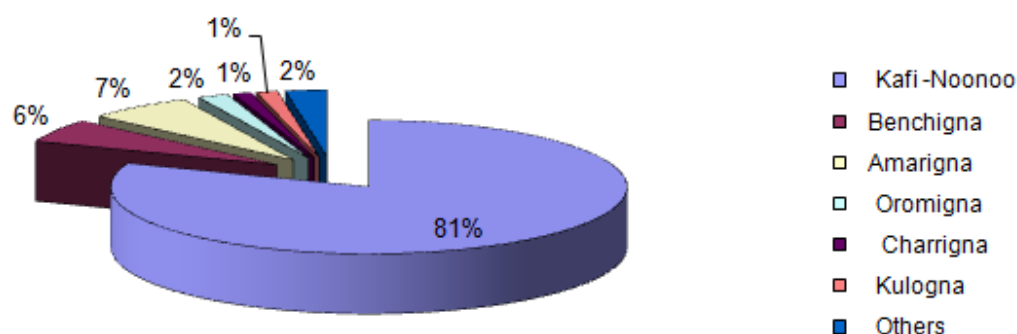


Figure 10: Number of people by major mother tongue in the study area

4.2.6 Social group

Major traditional groups found in the area include “Dafo” “Dadoo” and “Idir”. “Dafo” is a community level voluntary participation of about 15 persons to assist in agricultural related or house construction activities (roof thatching, fencing, etc.) for one full day. Food and drinks will be served during these activities. “Dadoo” is also same as “defo” with the exception of the time duration (about half a day), number of participants (approximately 5 persons) and as well only drinks are served. “Idir” is a social grouping in which members share the grief of those who lost their loved ones and / or assist in kind, finance or moral the sick or with other problems.

4.3 Social Services

4.3.1 Health

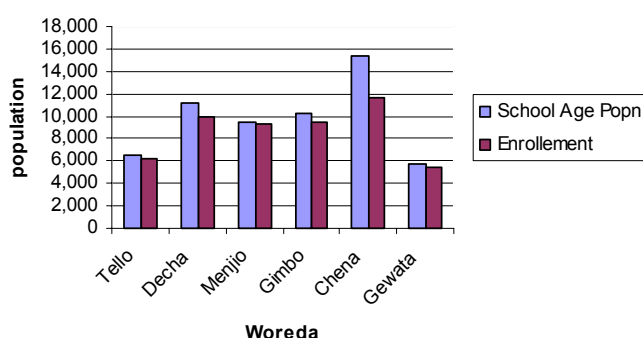
Each of the studied woredas has one health center each, except Chena, which has two. Moreover, Menjiwo and Tello woredas has one health post whilst Gimbo, Gewata, Decha and Chena have six, two, five, and three health posts, respectively. Percentile potential health coverage of the zone in 2005 was 57.24 percent. There also exists one hospital for the zone and is located in Bonga town. A family planning service was provided for about 80,000 people making the percentage coverage of the service in the zone to about 50 percent in the year 2006.

3.2 Education

There were 125 first level primary and secondary schools (grades 1-8) and 4 second level primary schools (grades 9-10) within the woredas of the study area as of year 2005/6. In Bonga town there is also a teachers training college with 10+1 and 10+3 programs.

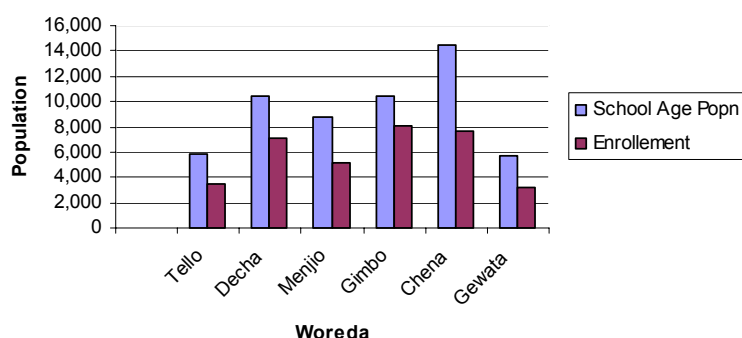
The average student teacher ratio in the study area was 1:57.48, 47.48, and 70.73 for grades 1-4, 5-8 and 9-10, respectively. In the preparatory classes (grade 11-12), which is found in Bonga town, the student teacher ratio was 1:14.18 for the year 2005/6.

Student section ratio for cycle 1-4 and 5-8 was around 1:65 whilst for cycle 9-10 was 1:75 and a ratio of 1:39 for the preparatory school at Bonga for the year 2005/6. School age population and Enrollment ratio in the primary schools of the studied woredas are presented in Figure 9 (for males) and Figure 10 (for females)



Source: Regional Bureau of Education, 2005/6

Figure 11: School age population and Enrollment ratio in primary schools: Male



Source: Regional Bureau of Education, 2005/6

Figure 12: School age population and enrollment ratio in primary schools: Females

Projections for 2008 indicate the total school age population in the studied woredas could increase from 160,182 to 173,474, an increase of about 13,292.

4.3.3 Communication

4.3.3.1 Transport network

The road network within the study area consists of gravel and earth road. See Annex 5 for existing road map of Kaffa Administrative Zone. Of these, currently works are underway at a cost of 101.53 million UA (as of August, 2006, 1 UA equals approximately US\$ 1.4548) to upgrade the road from Jimma to Mizan-teferi to asphalt standard. Of the 225 km of the road project 95 km is within the Kaffa Administrative zone, the road is expected to be finalized in the coming three years. Leading off these main roads are many trails in which the only means of transport is on foot or pack animals.

During the rainy seasons, accessibility to Mankira area on foot is also non-permitting, as there is no bridge over the river. Road distance from the capital of the country to and within the study area is shown in table 5.

Table 5: Road distance from the capital Addis Ababa, passed towns, to and within the study area (in km)

Depart from	Arrival at	Distance in Km	Distance at arrival from Addis (Cumulative)
Addis Ababa	Weliso	116	
Weliso	Welikete	42	158
Welikete	Jimma	188	346
Jimma	Gojeb	70	416
Gojeb	Diri	15	431
Diri	Ufa	9	440
Ufa	Bonga	18	458
Bonga	Wushwush	14	472
Wushwush	Dimbira	24	496
Dimbira	Sheshinda	16	512
Sheshinda	Chena (Washa)	16	528
Ufa	Kobech	24	
Kobech	Konda	40	
Bonga	Chiri	24	
Bonga	kobech	42	
Bonga	Kaka edget	60	
Bonga	Ada	45	

Source: DoFED, 2006

4.3.3.2 Telecommunication and Postal services

Bonga, Gimbo and Chena towns have digital telephone services. Table 6 shows types of telephone services available in the towns of the studied woredas as of 2006. Internet services are also available on these towns and on areas with VSat links.

Table 6: Type of telephone services in towns of studied Woredas

Woreda	Name of Telephone Station	Transmission (Link)	Exch. Capacity
Chena	Chena	Automatic	500
	Shishinda	DRMAS	500
Dacha	Chiri	VSat	not applicable
Gewata	Kobech	VSat	not applicable
	Konda	Vsat	not applicable
Gimbo	Gimbo	Automatic	500
	Gojeb	VSat	not applicable
	Wush Wush (No.1&2)	DRMAS	500
Bonga Town Admin	Bonga	Automatic	1780
Menjiwo	Adi-Akaka	VSat	not applicable
Telo	Felege-Selam	VSat	not applicable

Source: DoFED, 2006

There is a post office at Bonga town. Departmental or sub-post offices are also found at each of the studied Woreda towns.

4.3.4 Settlements

Rural house type and location

Houses are usually made of local materials of wood and mud with thatched roof. A study by MoA, 2002, shows that the service year of this houses range from 8-15 years. The thatched roof should have to be changed every other 3 or 4 years. The average diameter of the circular cottage is about 8 meters, but this mostly depends on the wealth and family size of the house head. Here and there, it is common to find houses with corrugated iron roof.

Most of the houses are surrounded by perennial crops such as Enset (false banana) and /or other horticultural crops. Most houses are located nearest to the owner agricultural lands, but on areas with existing satellite villages, agricultural lands are located far from the houses and in such cases corrugated iron roof type houses dominate.

Towns

Bonga town is the capital of the Zone Administration and has a population of 22,622 people. The town has a digital semi automatic telephone, postal, and a 24 hour hydro-electric service. The town also has a hospital and polyclinic.

Bonga and Shishinda towns have detail town plans. The location of major towns in and around the study area is depicted in Annex 6. Population size and plan status of towns within the study area is also shown in table 7.

Table 7: Population size and plan status of towns in the study area

<i>Woreda</i>	<i>Town</i>	<i>Total population</i>	<i>Rank</i>	<i>Plan status</i>	
			<i>Growing</i>	<i>Growth</i>	<i>Detail</i>
Chena	Wacha	7,203	Growing	✓	✓
	Dimbira	1,577			
	Shishinda	6,151	Growing		
Decha	Chiri	2,999			
Gewata	Konda				
	Kobech	988			
Gimbo	Bonga	22,622	Medium		✓
	Ufa	4,436	Growing		
	Wushwush	2,498			
	Gojeb	2,979	Growing		
	Diri	1,526			
Menjiwo	Adiya kaka	2,723			
Telo	Oda	2,782			

Source: DoFED, 2006

Resettlement

During the previous Derg regime, around 1985, people drawn from the northern part of the country were made to settle in Decha and Gimbo woredas of the zone. As the existing settlement policy encourages settlement within regions, starting from 1996 onwards, about 5000 households drawn from Kembata & Timbaro, Sidama and Gurage Zones of SNNPRS, were settled in lowland areas of Decha woreda. In the current year, only a replacement of those who abandoned the area for one reason or another is intended to be made.

To rehabilitate the destruction of the bush land, tree seedlings, including fruit trees, had been distributed to settlers free of charge for the last three consecutive years.

4.3.5 Utilities**4.3.5.1 Drinking water**

All interviewed HH use springs nearby as their drinking water sources. Hand, medium and deep dug wells and developed springs with water point distribution are the other existing water supplies in the study area. Clean water coverage ranges from 12 -15 percent in Decha, Menjiwo and Gewata, 38 percent in Tello and Chena, and 57 percent in Gimbo woredas. (DoFED, 2005/6).

4.3.5.2 Energy

4.3.5.2.1 Fuel

WBISPP, 2002, estimate of total annual energy consumption is shown in table 8. The total wood consumption during this period was 802,994 tons and includes round/split, charcoal as wood and BLT. MoA, 2002, study in Bonga forest area, show that the average wood consumption per HH per day was 25-30 kg.

Table 8: Total annual energy consumption by Bio-fuel type (in tons)

woreda	Total Wood (tones)	residues	Dung as fuel	charcoal	Kerosene (liters)	electricity (kWh)
Chena	256,400	48,362	97	113	41	0
Decha	124,907	31,499	12	15	5	0
Gimbo	159,439	28,241	199	158	47	20 ²
Menjiwo	128,518	32,719	9	10	4	0
Telo	133,730	34,156	15	17	6	0
Total	802, 994	174977	332	313	103	20

Source: WBISPP

4.3.5.2.2 Electric power

Currently all woreda capitals and a substantial amount of other towns found in the study area have a 24-hour hydro-electricity supply.

4.3.6 Tourism

Attractions

Most authorities agree that the coffee plant originated in the forests of tropical Africa. Kaffa is the origin of *Coffea arabica* L., the species that has been known for the longest time and as the most widespread throughout the world (approximately 90 percent of the total world production). Mankira, a place to the south west of the study area, is considered as origin of natural forest coffee. Other identified tourist attractions sites include:

- water falls (about 14) at different locations including Wushi, Guma, near Bonga town and Kaya-kela,
- caves (at Telo, Decha, Cheta, Gewata and Chena woredas),

² Ufa and Bonga towns

- natural bridges: Gurguta, locally known as “God’s bridge”,
- hot springs at Dadiben (Gimbo woreda – on the road to Gewata), Gora, and Kechi (Decha woreda);
- long-aged worshipping places: St. Michael church (est. 1529 A.D) in Decha woreda, Anderacha Medhan-Alem (mid 18th century) St.Georgis, a 16th century monastery some 5 km from Bonga town, Tengola Mosque (13th century), and a Catholic church (16th century) in Decha woreda, about 15 km from Bonga;
- war-time artifacts of the Kaffa king: ditch like pits for trap in almost all woredas, (zonal tourism experts claim that the like of which is available only in China).
- the scenic fauna and flora (preliminary studies were conducted to establish a wildlife reserve and/or control hunting area at Chocha Bereha [Decha woreda] and at Cheta Kola [Cheta woreda])

Coffee museum

The Ethiopian Millennium Celebration Office has planned to build a Coffee museum where coffee and coffee related indigenous plants and animals are to be preserved. Within the compound there will also be a coffee garden. The place shall have research laboratories, outreach sites with ex-situ conservation works and more. The first phase of this project will come to an end in December 2008. To date, detail design plan have been prepared and stakeholders are identified. There are also intentions to celebrate “Coffee day” probably at the end of May or early June 2008.

Coffee Ceremony

It is the culture of the Kaffa people to invite a guest, even to a meal by saying “please drink a cup of coffee”. Almost all inhabitants have made it a tradition as not to leave their home without drinking coffee, as not doing so is believed to bring bad luck.

Facilities

Currently there is one guest house, with 12 bedrooms, and a breakfast service at Bonga town. Available are also few local hotels with bedrooms (some with common shower services). During

the survey period two hotels were under construction with relatively better facilities. There are also two meeting halls, one with a capacity of 500 and the other about 2000 persons.

The tourism industry

Currently, local tourists are the major visiting tourists. There is also a steady growth in foreign tourists that came to the area. Of the 10,095 tourists that visited the area in the first two quarters of the fiscal year 2008, around 198 were foreigners.

4.4 Income and expenditure

The major sources of cash and non-cash income in the study area are agricultural crops, livestock, honey production and collection of coffee and spices (such as cardamom and long pepper) from the forest. The latter depends by virtue of their nearness to a forest where such is available.

Difference in household income is thus attributed to nearness and access to NTFP and beyond to the availability of off-farm jobs (e.g. investment activity). Yihenew (2003), drawing from research and case studies from six forest villages in Gimbo woreda, found the level of income from non-wood forest product to vary from household to household but averaging at least a third of the annual cash income of the rural households.

Studies made by MoA, 2004, in Bonga forest area shows that the average household income was 2653.29 (highest income 3422.4 and lowest 2098.40) and expenditure 2383.30 (highest expenditure was 2832.30 and lowest 2073.33). Household major expenditures were for clothing, children's education, tax and health care.

V. AGRICULTURE

5.1 Crop

The subsistence crop production of the study area is traditional and rain-fed. Depending on the prevailing agro-ecological conditions, different crops are grown, and of these, maize, sorghum, barley, wheat and teff are the main cereal crops. Pulses grown are field pea, horse bean and haricot bean. From perennial crops “enset”, *Ensete ventricosum* is found in abundance and mostly around homestead, and sugar cane.

Fruits like banana, avocado, mango, and papaya, vegetables such as Ethiopian cabbage and root crops like carrot, beet root, onion, “Anchote” *Coccinia abyssinica*, “Godere” *Colacasia esculanta* L., *Colacasia esculanta* L., and potato are also planted nearby homesteads.

Agricultural inputs are not widely practiced, nevertheless, in some places fertilizer is applied for maize and teff and improved seed varieties of maize, wheat and barley are used. Pesticides are also applied for sorghum and teff in certain localities.

5.2 Livestock

Cattle rearing are one of the sources of livelihood in the studied woredas. It is a source of draught power, milk, meat, and income. Equines are used as means of carrying load or personal transport. The livestock population in the studied woredas includes 40,830 cattle; 218,188 sheep and 8,932 goats. Summary of the livestock population is given in table 9.

Table 9: Summary of livestock population

<i>Woreda</i>	<i>Cattle</i>	<i>Sheep</i>	<i>Goat</i>	<i>Poultry</i>	<i>Horse</i>	<i>Donkey</i>	<i>Mule</i>	<i>Equines</i>
Bonga Town	2,973	295	215	6,262	120	147	55	322
Chena	103,479	51,234	19,372	133,057	4,169		1,109	5,278
Gimbo	57,810	18,965	13,900	93,732	1,174	747	402	2,323
Menjiwo	66,714	42,519	11,248	74,738	5,564		1,758	7,322
Tello	45,457	36,416	13,535	56,127	6,419	281	1,206	7,906
Decha	79,064	48,750	17,159	125,714	3,037		1,605	4,642
Gewata	51,333	20,009	11,503	52,682	3,465		285	3,750
Total	406,830	218,188	86,932	542,312	23,948	1,175	6,420	31,543

Source: DoFED, 2007

Grazing constitutes the bulk of the livestock feed (70-100 percent), with crop residues making only a minor contribution. Livestock densities in these woredas are generally low (18-52 TLUs/km²). One animal health clinic exists at each of the studied woredas. Table 10 summarizes the livestock feed supply by type.

Table 10: Livestock feed supply

WEREDA	Grazing percent	Aftermath percent	Residues percent	Enset percent	Density TLUs/km ²	Stocking/Carrying capacity percent
Chena	98percent	0percent	2percent	0percent	54	60percent
Decha	100percent	0percent	0percent	0percent	18	37percent
Gimbo	100percent	0percent	0percent	0percent	43	57percent
Menjiwo	95percent	0percent	5percent	0percent	47	61percent
Telo	82percent	7percent	10percent	0percent	41	66percent

Source: WBISPP, 2001

5.3 Agricultural supporting services

In each kebele administration there are three development agents who provide extension works to the farming community at large. Of these agents, one dwells on forestry activities, another one in livestock and the third in crop development. One of these three agents acts as a supervisor and is in charge of the coordination and reporting of activities.

5.4 Agricultural investment activities

There are about 24 mini-investors engaged in coffee plantation development and about 53 major investors who are engaged on large scale investment activities. Of the major investment activities, all except two are engaged in agricultural activities. These include 19 each in coffee plantation development and coffee and spice development activities, one in spice processing, two in agricultural crops development, one each in beekeeping and wax and honey processing and another one in sugar cane plantation. Annex 9 and 10 give details of these investors.

VI. LAND TENURE

6.1 Land tenure – the past and present

Pre 1975 land tenure

Before the agrarian reform in 1974, Ethiopia had a complex land tenure system, (Philippe L., 2003) and the tenure system was different in the north and in the south of the country. The tenures in application in the north were the ‘rist’ – that is kinship or communal, church and state tenures while in the south, there were church, state and private tenures. (Rahmato, 1985; cited in Philippe L., 2003)

Private tenure was recognized as the most dominant system during the final days of the Imperial regime, affecting some 60 percent of peasants and 65 percent of the country's population. (B. Nega, *et al.*, 2003) and virtually all lands under private tenures were originally state property. In the south, landlords, official and loyal servants of the crown, were allowed to use these lands and employed peasants to work on them. Few farmers owned the land on which they worked. (Philippe L., 2003)

B. Nega *et al.*, 2003, states that under this system land was sold and exchanged; however, given that all the land was originally state property and that private holders had no absolute rights, this was different from the general concept of a freehold system.

Land tenure during the Derg period (1974 - 1991)

The 1975 land reform by the Derg was designed to alter fundamentally the then agrarian relations, (B. Nega, *et al.* 2003). Proclamation No. 31 (1975) “Public Ownership of Rural Lands”, prohibited private ownership of land; transfers of land by sale, lease and mortgage; as well as hiring of labor. It acknowledged only use rights to land and set a maximum farm size of 10 hectares (Holden S. *et al.* 2001)

The Peasant Associations (PA) were formed at the kebele level to be in charge of the land distribution. But since everyone above 18 years was entitled to have a farmland, frequent redistribution of lands were necessary to accommodate the growing population. The PAs, however, failed to redistribute land to accommodate young families and new households.

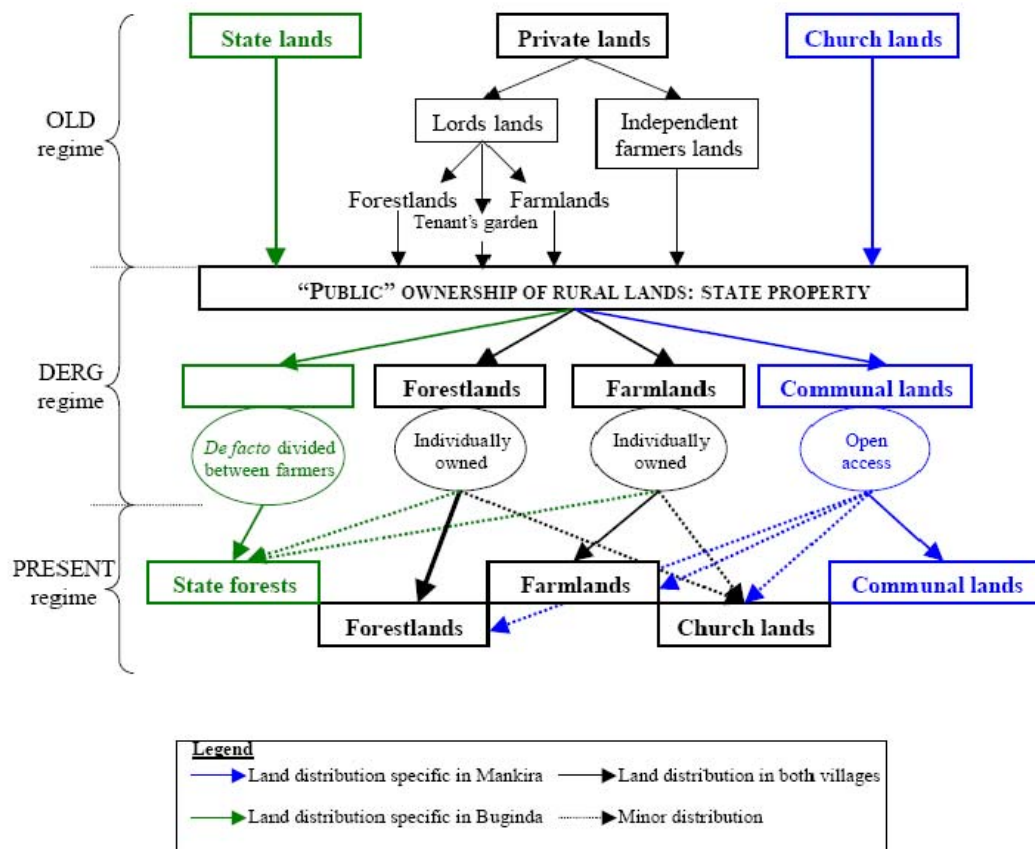
Farmers were also forced into collectivization and resettlement that further exacerbated the problem of tenure insecurity (Philippe L. 2003)

Current land tenure

The December 1994 Constitution of the Federal Democratic Republic of Ethiopia proclaimed that land remains vested in the State: *...the right to ownership of rural and urban land, as well as all of natural resources is exclusively vested in the state and in the peoples of Ethiopia. Land is a common property of the nations, nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of transfer.*' (Philippe L., 2003)

The constitution, under Article 51, also states that the Federal Government shall enact laws for the utilization and conservation of land and other natural resources. Article 52 also states that Regional Governments have the duty to administer land and other natural resources according to federal laws. Such law was enacted in July 1997 on "Rural Land Administration Proclamation, No. 89/1997". This law vested Regional Governments with the power of land administration, defined as "the assignment of holding rights and the execution of distribution of holdings"; (B. Nega *et al.*, 2003)

Philippe L., 2003 summarizes the changes in the land tenure between the three regimes, as depicted in Figure 13, as how the lands have been distributed among the different holdings for each regime.



Source: Philippe. L., 2003

Figure 13: Changes in the land tenure between the three regimes

6.2 The landless

Based on a 2008 data obtained from KZARD, 2008, the number of households with land holding at each of the studied woredas is shown in table 11. From the existing 124,620 households within the study area 91,347 (about 73.3 percent) households, have their own land holding.

Most HH who doesn't have their own land construct their houses on their parent's land, and cultivate their family's or others land either by share cropping or on rental basis. Some also works on nearby investment projects, if there is any.

Table 11: proportion of houses with land holding

Woredas	No. of kebeles	Total hh	No of hh with land holding	Total Proportion (percent)
Gimbo	31	25340	18715	73.86
Chena	36	30971	19966	64.47
Gewata	30	14019	9180	65.48
Decha	44	28298	22249	78.62
Telo	24	13485	10565	78.35
Audio	27	12507	10672	85.33
Total	192	124620	91347	73.30

source: KZARD

6.3 Conflict and conflict resolution

Existing and potential conflicts

Known conflicts within the study area mainly stemmed from boundary and resource (mostly NTFP) use as in the case between the agricultural investors and local inhabitants and conflicts stemming from the struggle to defend rights by minority groups. Most legalized agricultural investors, as shown in annex 9 and 10 are engaged in coffee development activities and obtained forest lands to same end. However, they are not provided with maps showing their actual boundaries. On the other hand, there had been customary use rights of these forests for NTFP by local inhabitants, thus causing boundary and resource use conflicts.

In 1994, there was a conflict between the minority group Manjos and Kaffas in the formers grief of being ousted from social groups. Concerning resettlement activities, with the exception of occasionally boundary based disagreements; no major conflict had been registered.

Conflict resolution

Boundary based disagreements between settlers are always settled simply either by meditation of local elders or by the intervention of woreda expert. Concerted efforts are currently underway by NGO's, Churches and the administration councils to improve the social integration of the Manjos.

Conflicts between agricultural investors and local inhabitants in forest use rights are resolved through the participation of Elders, ‘Eder’, or Kebele administration and sometimes with the involvement of pertinent woreda officials.

6.3 Forest tenure

Since nationalization of land holdings in 1975, stewardship for forest resources is a governmental matter. Nevertheless, forest use and conservation has been a low priority topic in the governmental framework of Ethiopia, facing drastic financial and personnel shortage.

Governmental forest policy in Ethiopia primarily focused on ‘rigid conservation,’ hence on exclusion of human interference, rather than on management of forest resources. In this understanding, Ethiopian governments tried to implement different forest conservation approaches over time, the most ambitious started in the early 1980s with the incorporation of primary high forest areas as ‘National Forest Priority Areas’, NFPA (Stellmacher T, 2005). However, communities continued to claim forest access through locally recognized customary channels. The principles informing customary forest access included geographical proximity to the resource, proven track record and ancestral claim of ownership.

Participatory Forest Management

PFM in Ethiopia has been started 10 years ago. Since then four forest priority areas namely, Chilimo, Bonga, Adaba-Dodola and Yabeloo forest areas are put under PFM Program and is financed by FARM-Africa and GTZ. Oromiya and SNNP Regional Bureaus of Agriculture and Rural Development have supported the two supporting agencies to achieve their goals and have worked closely with these two funding agencies to meet objectives of the program (EfD, 2008). Bench-Maji, Bale, Munessa and Wof-Wwasha forests are also being put under PFM.

The PFM project of FARM Africa was initiated in 1996 (now part of the FARM/SOS PFMP) and aims to ensure environmental sustainability, with improved efficiency and effectiveness of forest utilization and conservation, through participatory forest management system. One of the target areas, Bonga Natural Forest was designated as National Forest Priority Area (NFPA) in 1985 by the State Forest Development and Conservation Department of the Ministry of

Agriculture. Though the forest was designated as a NFPA, little has been achieved towards its protection, development and proper utilization due to limited government resources.

The PFMP program was designed to shift the management of forests from the government to the community through PFM, in an effort to end environmental degradation, increase production of forest related products on a sustainable basis, conserve the forest ecosystem, increase agricultural production and improve the welfare of rural communities, with the government providing technical support and an enabling environment. Since the initiation of the project in Kaffa, 14 cooperatives were established on 9,615.5 ha of forest and mixed (agriculture) land in Gimbo, Gewata and Decha Woredas. These cooperatives have 2,189 members, of whom 865 are women. Table 12 gives details of established FUG's by FARM/SOS PFMP. Moreover PPP and FAO projects in Kaffa had also established three and two user groups respectively in three woredas of the study area.

Table 12: Details of Forest User Groups developed by FARM-SOS

No.	organization	woreda	kebele	Locality	Status	Area (in ha)	Members		
							male	female	total
1	FARM-SOS	Gimbo	Keja-areba	Wacha	Cooperative	439	30	34	64
2	FARM-SOS	Gimbo	Keja-areba	Obera	user group	200	28	46	74
3	FARM-SOS	Gimbo	Michiti	Beka	Cooperative	602	49	52	101
4	FARM-SOS	Gimbo	Michiti	Matapa	Cooperative	215	44	29	73
5	FARM-SOS	Gimbo	Yibito	Ogama	Cooperative	1200	81	80	161
6	FARM-SOS	Gimbo	Bitachega	Bera	Cooperative	762	85	82	167
7	FARM-SOS	Gimbo	Maligamo	Sheka fofote	Cooperative	216	49	74	123
8	FARM-SOS	Decha	Gedam	Kahn	Cooperative	256	73	31	104
9	FARM-SOS	Decha	Shata	Kecha	Cooperative	364	58	63	121
10	FARM-SOS	Gewata	Odiyo	Nada	Cooperative	1158.5	145	47	192
11	FARM-SOS	Gewata	Odiyo	Goma	Cooperative	1934	150	56	206
12	FARM-SOS	Gewata	Kasha	Keji-kata-keba	Cooperative	628	198	101	299
13	FARM-SOS	Gewata	Gawamecha		Cooperative	536	179	72	251
14	FARM-SOS	Gewata	Kasha	Orora	Cooperative	1105	155	98	253
TOTAL						9615.5	1324	865	2189

Table 13: Details of Forest User Groups developed by FAO and PPP

No.	Organization	Woreda	Kebele	Locality
1	FAO	Gimbo	Keja-areba	
2	FAO	Decha	Oufa	
		Gewata	Gewamecha	
1	PPP	Decha	Mankira	Mankira
2	PPP	Gewata	Ogera	
3	PPP	Decha	Yanga	Budi

Forest Concessions

The project assisted the cooperatives to develop Forest Conservation and Development Plans, which also has provisions for forest utilization, forest development, rules, institutional arrangement, and monitoring and evaluation, among others. Cooperatives are certified by the Southern Nations, Nationalities and People's Region Cooperatives Promotion Bureau. (Taye B., 2003) and are handed over by the respective Woredas. To date, no other forest concessions are given for individuals or private companies.

Reafforestation

Currently tree plantation activities are undertaken on farmers' lands by the farmers, in state forests and on lands hold by PFM. Tree planted include indigenous and fast growing species.

Threats

Existing threats

As Carmen et al, 2002 noted, the settlement and land use pressure on the montane rainforest of Ethiopia threatens the wild population of *Coffea arabica*. The existing threats on the natural forest emanate from:

- The fact that almost all existing Agricultural Investment activities are taking place in the forest lands, and most of these have no demarcated boundary.
- Encroachment into the remaining forests, in reference to this, recently, a group of not negligible number of youths has been made to clear the forest lands and settle. This was made with a wrong conception of the state directive to try to absorb the coming labor force in areas that are open pocket areas.

- low risk of prosecution, and if so, with a small fine (few days imprisonment or small cash payment), and worsened by the fact that this is considered as securing their holdings.

Potential threats

- With the intended improvements in road infrastructure there might be an increase in the demand of tree products to nearby major towns, for example Jima, and thus might create a shift in the existing ranks (such as shown in the pair-wise ranking of the importance of forest products using economic criteria, conducted by Taye B., 2003) and leading to high illegal timber extraction.



Plate 4: Charcoal prepared for sale on the road to Bonga

VII. Institutions

7.1 Administrative Government

Ethiopia, a Federal State, has nine regions and two Administrative Areas. SNNPRS is one of the nine Regions and is in turn divided into fifteen Zones and six Special Woredas. Kaffa is one of these zones and have 10 Woredas and one town administration. Below the Woreda level there are Kebele Administrations.

The regional state has two councils, the elected regional council and a cabinet body called administration council. The Bureau of Agriculture and Rural Development at the regional level is the official body concerned with the issue of policies on rural land use planning and administration and laws on forest and wild animal protection and utilization and the implementation thereof. Environmental protection and land administration and planning authority is one of the organization organized under it to assist the implementation of its objectives.

The agriculture and rural development department at zonal level ensures the correct implementation of agriculture and rural development proclamations, directives and guidelines issued by the regional council/Bureau of Agriculture and Rural Development, and when asked gives support to woredas.

Land use, forestry and management of protected areas are under the auspices of the agriculture and rural development offices.

The tourism desk, under Commerce and Tourism Department at zonal level is the responsible authority for wildlife conservation and development. The Woreda Administration has offices for agriculture, health, education, rural primary road, domestic water supplies and local administration, which are responsible for agricultural extension, primary health care, basic/primary education, feeder roads and safe drinking water service delivery, respectively.

The Woreda Agriculture and Rural Development office is responsible for the planning, decision making and implementation of the Woreda's agricultural and rural development activities. To

execute its responsibilities the office has organized itself under six Desks. These are: Crop Development and Protection, Livestock Resource Development and Health Service and Training and Promotion of Agricultural Technology Desks, which are under one Deputy Head, and Agricultural Marketing and Cooperatives Promotion, Food Security, Disaster Prevention and Preparedness, and Natural Resource and Rural Land Administration Desks under another Deputy Head.

The Natural Resources and Rural Land Administration Desk within the Woreda Agricultural and Rural Development Office has two teams organized under it for the execution of its responsibilities: Land Use Planning and Administration and Natural Resources Development and Protection. At Kebele level, three development agents are in place to execute the agricultural development activities.

7.2 Non-Governmental Organizations

Many NGOs have worked and are currently working on different sectors, such as Health, Resource Conservation/Wise Utilization, Environmental Protection, Food Security, Good Governance, Women's and Girls' Rights, HIV/AIDS, Education and Capacity Building.

Some of these organizations are: FARM Africa, SOS Sahel Ethiopia, Action-Aid, World Vision, KDP Integrated Community Development Initiative, Catholic Church, Meserte Kiristos Church Relief & Development Association, USAID, GTZ PPP Project, and Action For Environment Public Advocacy. Of these, some organizations had established a forum at Woreda level to support the Woredas' development.

7.3 Community based institutions

KFCU was founded in March 2004, with a total of 3269 coffee-producer member farmers. By 2006, its membership has reached 5517. The major objectives of the Union are to integrate and improve coffee production and marketing. Its main missions are to determine and apply the best of possible options, generate and distribute net benefits to the members. In addition, the Union manages coffee project-funding. The union is financially and technically supported by PPP-Project (GTZ) to develop and introduce a scheme for sustainable coffee production and marketing at international quality standards using the natural resources of Ethiopia.

7.4 Research institutions

Agricultural research in Ethiopia was initiated in early 1950s. Since 1997, the NARS is organized at Federal and Regional levels with the apex body the EIAR. Currently, EIAR administers eight federal research centers distributed in different agro-ecologies of the country. Moreover, there are five regional agricultural research institutes (RARIs).

Established in 2002, the Southern Agricultural Research Institute has four research centers, which have their own thematic areas, these are, Awassa and Areca ARC for densely populated areas, Jinka ARC for lowland areas along the rift valley and pastoral areas and Bonga ARC on forest resources.

Established in April, 2005, Bonga ARC have socio-economic, research extension, natural resource, animal science, and crop science research division and its focus area are the south western moist and sub-moist areas (Kaffa, Sheka, Bench-Maji, partly Dawro Zone and Yem and Konta Special Woredas and currently conducts research activities listed in annex 11.

Different research activities are currently undertaken at the Federal and Regional Research Centers, and Higher Learning Institutions in the country which concern natural resource conservation. Annex 9 shows list of some of the ongoing and completed research sets conducted in the SW-Ethiopia, Kaffa area. There is also a spices demonstration site, Abech, run by Gimbo WARDO, and is located on the road to Bonga from Ufa.

The IBC in July 1998 with technical and financial assistance from the Federal Republic of Germany had initiated a genetic resource conservation project in Boginda-Yeba Forest. The purpose of the project is to protect and conserve the forest genetic resources of Ethiopia according to appropriate concepts and strategies. Different studies are intended to be conducted by JRC, EIAR and IBC.

VIII. Trends and Recommendations:

8.1 Trends

- In almost all forest areas where there are sufficient NTFP, there is a tendency to protect the forest;
- There is an increase in population growth and consequently an increment in number of people without land holdings;
- Efforts to halt the marginalization of Manjo community are not sufficient;
- Blooming of investment activities and the fact that it is causing significant amount of deforestation.

8.2 Recommendations

At community level

Livelihood diversification

- to stimulate NTFP production and trade as a diversification strategy (Bognetteau E. et al., undated) and to this end to provide training and assistance (technical, financial as for establishment and provision of tools, and market opportunities) in non-timber forest product utilization such as bamboo and medicinal plants;
- Technical assistance on credit schemes based on feedbacks from existing microfinance institutions and the community;
- Exploit new income generating schemes that benefit the local community, especially the landless households, based on existing conditions and their ranking preferences.

Marginalized groups

To change the inferior position and economic impoverishment of the Manjo and Mano communities,

- As Gezahegn P., 2001 noted, some Manos are observed to improve their social position by becoming economically sustainable. Thus it is recommended to assist these vulnerable

social group with economic activity rather than trying to address the social or cultural issues directly through:

- opening market to their products,
- introducing new low-cost technologies
- supplementing the most impoverished ones with low cost agricultural tools and oxen for plowing that would gradually leads to an improvement in their economic positions.

Forest protection

- To support the tree planting schemes in order to reduce the pressure on the natural forest
- To establish appropriate incentive mechanisms through either established or newly set community groups

At institutional level

Investment

As Dechassa L. et al., 2001 observed that there are cases where the provision of forested areas for commercial exploitation was effected without consulting the responsible official experts. Especially when experts are suspected of resisting such projects, they can be by-passed and the land contracted without their consent, thus there is a need to reinforce coordination between the agricultural and investment desks (at Zonal and Woreda levels) in order to enhance:

- Monitoring and evaluation of the existing investment activities in relation to natural resource conservation
- Impact assessment as to avoid long term damaging implication
- Demarcation of the previously allocated lands

Tourism

- To assist the tourism office in developing tourist attraction places
- To assist in the establishment of the proposed wildlife reserve and/or control hunting areas

Forest protection

- To support the tree planting schemes in order to reduce the pressure on the natural forests
- To assist the government in reallocation of farmers residing in the forest area

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ANNEXES

Annex 2: Field data collection format: Agricultural land

EWNHS-MAB - RELEVÉE

Land Use / Cover Data gathering format Agricultural land

Observation number _____ Date of observation ____/____/2000, observer: _____

Region: SNNPRS Zone: Kaffa

Woreda: _____ Kebele: _____ Locality: _____

GPS No. ____ N: _____ E: _____, Altitude _____

Land form type: _____ Slope class: _____ Rock outcrop: _____

Preliminary mapping unit _____

Cultivation: _____%, Percentage on farm of: Tree _____%, shrub _____%, grass _____%,

Tree species found on farm:

Minor land cover types _____, _____% _____, _____% _____, _____%

Crops grown

type												
Season planted												

NOTES _____

Annex 3: List of some important tree and shrub species and their use

Scientific name	Local name	Local name (Amharic)		Construction	Fuel	For hanging beehive	Fodder	utensil	Food	Medicine	Spice	Making Beehive	craft	bee forage	coffee shade
<i>Scheffleria abyssinica</i>	bhuto	geteme								x				x	
<i>Militia ferruginea</i>	bibiro	birbira		x						x		x			x
	bisana			x		x						x			
<i>Bersama abyssinica</i>	boko	azamir		x											
	butie														
<i>Ficus</i> spp	charo					x		x							
	chato	sesa													
	chebero			x	x										
	chego	kelewa													
	chichmo			x											
	buno	buna													
	dokma														
<i>Ritchiea steunderi</i>	gebo	dengai seber		x		x									
	getem				x									x	
<i>Euphorbia abyssinica</i>	gacho	kulkol		x		x									
<i>Rhamnus prenoids</i>	gecho										x				
<i>Vernonia amygdalina</i>	grawa	grawa												x	
	hygenia														
<i>Syzygium guinnense</i>	jino									x					
	karcho	korch													
	karyo														
	kercho	yezenjero wonber		x		x						x			
<i>Aningeria adolfi-friedrichi</i>	kerero			x		x									

Annex 3 (cont'd): List of some important tree and shrub species and their use

Scientific name	Local name	Local name (Amharic)		Construction	Fuel	For hanging beehives	Fodder	utensil	Food	Medicine	Spice	making Beehives	craft	bee forage	coffee shade
	kommo			x											
	kororima														
<i>Hagenia abyssinica</i>	kossho			x						x					
<i>Prunus africana</i>	omo	tikur inchet													
	phoenex			x									x		
<i>Phytolacca dodokanthera</i>	endod									x					
<i>Macaranga kilmandscharica</i>	shakaro			x											
	shaoo			x	x	x									
<i>Sapium ellipticum</i>	shedo	bosoka			x	x									
	sheko			x								x		x	
<i>Allophylus abyssinicus</i>	sheoo	embus		x										x	
	shola														
	shinato	kerkeha		x			x	x					x		
	timo	chocho													
	ufo					x									
	wagoo	bisana													
	washoo														
<i>Apodytes dimidata</i>	wondfo														
	weyra			x	x	x									
<i>Olea welwelitschii</i>	yahoo			x	x										
	yebo	zenbaba													

Annex 4: List of persons contacted

Governmental Organizations

Abebaw	Head, Natural Resource Desk, Gimbo Woreda
Ammanuel Lemma	Gewata woreda Coffee Development Expert
Asrat Mekuria	Chairman, Coffee Museum construction technical committee
Ayele W/Gabriel	Head, Kaffa zone Natural Resource Desk
Birhanu Gebre	Department Head, Commerce and Industry Bureau
Dawit Hailu	Supervisor, Dimbira Area, Chena woreda Agricultural Office
Hibist Mamo	tourism development officer
Kero Albeno	Head, Rural finance fund Service administration Office
Melesew Asfaw	Head, Planning and programming, Agriculture Bureau
Mengesha	Head, planning and programming, Gimbo Woreda Agriculture Office
Meseret Ayele	Head, Food Security DPP Desk
Tagaye Belay	Wuswush town municipality Development Agent, Kuti kebele, Gimbo WAO
Mengesha Ago	Development Agent, Mankira

community based organization

Firehiwot Getahun	Manager, Kaffa forest coffee farmers cooperative union
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Non-governmental organization

Luiza W/Gabriel	Deputy team leader, Farm Afrique
Mesfin Tekle	Officer, FAO Bonga
Solomon Medhane	Action Aid, Decha Community Center Program
Netsanet Bezabeh	Deputy Head, Boginda Yeba Biodiversity project
Gulema Tekeste	Manager, Gawata ADP, World Vision

Private sector

Feleke Abebe	Diamond Coffee Enterprise, Administrator and head of Agricultural dept.
Getaneh Bishaw	Tega tula special coffee farm Agro Industry

Tesfaye G/Meskel Planning and programming head, Wushwush Tea Development

Research Organization / Researchers

Getu Haile Bonga Agricultural Research Center

Sayuri Yoshida Ph.D. student

Annex 5: Existing road map of Kaffa Zone



Annex 6: Location of major towns in and around the study area



Source: SUPAK

Annex 7: Number of people by ethnic group by woredas

Ethnic group	Woredas						Total	percent
	Chena	Decha	Menjiwo	Tello	Gimbo	Gewata		
Kaffecho	115697	88588	90014	60888	89410	48326	492923	81.04
Bench	24726	8704	52				33482	5.50
Amara	4174	1217	1256	646	17854	9650	34797	5.72
Oromo	5351		1267	117	4910	2654	14299	2.35
Kulo			4976	1256	824	446	7502	1.23
Charra		6306		851			7157	1.18
Nao		5812					5812	0.96
Others	1362	548	211	146	898	485	3650	0.60
Me'en		2050					2050	0.34
Tigraway					931	503	1434	0.24
Kebata					854	462	1316	0.22
She	870	3					873	0.14
Konta			838				838	0.14
Meten	518						518	0.09
Siltie					307	166	473	0.08
Sebatbet Guregie					303	164	467	0.08
Welaita			29		258	139	426	0.07
Shekacho	12	3	6				21	0.00
SodoGuragie					89	48	137	0.02
Gamo			3		9	4	16	0.00
Timbaro					9	4	13	0.00
Alaba					5	3	8	0.00
Mer	1	5					6	0.00
Mello			4				4	0.00
Qebena					1	1	2	0.00
Bodi		2					2	0.00
Weji	1						1	0.00
	152712	113238	98656	63904	116662	63055	608227	100

Annex 8: Number of people by mother tongue by woredas

Mother Tongue	Woredas						Total	percent
	Chena	Decha	Gimbo	Gewata	Menjiwo	Telo		
Kafi -Noonoo	115195	89088	89119	48169	88091	61396	491058	80.74
Benchigna	25053	9225					34278	5.64
Amarigna	5503	1161	21163	11439	726	294	40286	6.62
Oromigna	4724		3620	1957	1238	41	11580	1.90
Shewigna	879						879	0.14
Meenitigna	498						498	0.08
Sheki -Noonoo	10	17				6	33	0.01
Merigna	1						1	0.00
Others	849	887	1326	717	112	92	3983	0.65
Charrigna		6229				849	7078	1.16
Naogna		5228					5228	0.86
Shegna		2					2	0.00
Merigna		2					2	0.00
Bodigna		2					2	0.00
Meenigna		1399					1399	0.23
Kebatigna			713	385			1098	0.18
Tigrigna			711	384	45		1140	0.19
Alabigna			4	2			6	0.00
Timbarogna			2	1			3	0.00
Kebenagna			1	1			2	0.00
Kulogna					6904	1222	8126	1.34
Kontigna					1530	3	1533	0.25
Welayitigna					4		4	0.00
Dorzigna					4		4	0.00
	152712	113240	116659	63055	98654	63903	608223	100.00

Annex 9: List of Major investment activities in the studied woredas

No.	project owner	Wereda	Kebele	Locality	Sector	project goal	date ³		status	Area (in ha)			
							permission granted	agreement signed		allocated by assumption	surveyed	pledged	developed
1	Green Coffee				Agro-industry		23/11/1990	18/12/1990	production	1120	878.86	1000	
2	Kaffa Lem	Gimbo	Bonga	Sheta	Agro-industry		03/11/1990		service giving				
3	Wushwush Tea	Gimbo	Doshawush		Agro-industry	Tea production and export	27/09/1990	08/08/1992	production	3936.03	3936	3936	
4	Lem Keffa	Gewata	Wediyo		Agriculture	coffee plantation development	16/04/1990	22/07/1990	production	250	250	250	190
5	Daimond Enterprise	GimboGewata		chu/goma	Agriculture	coffee plantation development	21/09/1990	15/10/1990	production	300	299.98	300	
6	Alemu Ariti	Gewata	Bera	leloke	Agriculture	coffee plantation development	17/02/1993	25/10/1993	production	100	30.11	100	
7	Fiseha W/yes	Gimbo	Kicho	agewata	Agriculture	coffee plantation development	14/06/1994	17/06/1992	production	55	46.56	55	
8	Homeland organic coffee	Gimbo	weshi		Agriculture	coffee plantation development	16/10/1992	12/12/1992	production	500	500	500	
9	Tega Tula	Gimbo	Tega Tula		Agro-industry	coffee plantation development	06/05/1991	17/06/1992	production	700	482.13	482.13	
10	ZAT	Gimbo	Chula	chula	Agriculture	coffee plantation development	11/12/1993	23/01/1994	production	200	92.35	200	
11	Apinec	Gimbo-Decha	Chula Yibeto		Apiculture	coffee plantation development	20/08/1999	08/09/1995	production	50	34	34	
12	Apinec agro-industry	Gimbo	sehta/edu	industry zone	Agro-industry	Bee-keeping	08/07/1998		under establishment	1	1	1	
13	Ahmed beshir	Gewata	macha	Danamecha	Agriculture	Wax and honey processing	22/03/1993	08/05/1995	production	200	448.44		

³ All date are given in Ethiopian Calendar

Annex 9 contd.: List of Major investment activities in the studied woredas

No.	project owner	Wereda	Kebele	Locality	Sector	project goal	date permission granted	date agreement signed	status	Area (in ha)			
										allocated by assumption	surveyed	pledged	developed
14	Fiseha Mekonen	Gewata	medabo	Danamecha	Agriculture	coffee plantation development	14/06/1992	20/07/1992	production	450		450	
15	Boginda	Gewata	boginda		Agro-industry	coffee plantation development	05/08/1990	07/07/1990	production	450		450	
16	LH	Gewata	medabo		Agro-industry		21/05/1991	03/07/1991	production	750	612.5	612.5	
17	Dil International	Gewata	wodiyo	Yebo	Agriculture	coffee plantation development	24/02/1992	10/04/1992	production	250	250	250	
18	Ambachew Asefa	Gewata	wodiyo	Yebo	Agriculture	coffee plantation development	03/03/1991	28/03/1991	production	100	100	100	
19	Kasaye Haile	Gewata	medabo		Sugarcane	sugarcane plantation development	01/07/1997	10/02/1998	under establishment	1000	90.54	90.54	
20	Zeyneba Anbese	Gewata	konda		Agriculture	coffee and spice development	20/05/1997	06/02/1999	production	200	118.26	118.26	
21	Mebratu Kidane	Gewata	bonga	Sheta	Agro-industry		03/06/1998		under establishment				
22	Lem Kaffa	Gimbo	ufa		Agro-industry		05/12/1997		under establishment	1.4			
23	Worku Kochito	Decha	mej		Agriculture	agricultural crops development	28/05/1999		production	80			
24	Gimbo Bonga	gimbo	bonga	industry zone	industry	spice processing	07/03/1999		under establishment	3	3	3	
25	Tsehay G/Michael	Decha	shapa		Agriculture	coffee and spice development	05/06/1999	02/09/1999	under establishment	20			
26	Tadele Abraha	Decha	Melgewa			coffee and spice development	08/08/1999		under establishment	800			

Annex 9 contd.: List of Major investment activities in the studied woredas

No.	project owner	Wereda	Kebele	Locality	Sector	project goal	date permission granted	date agreement signed	status	Area (in ha)			
										allocated by assumption	surveyed	pledged	developed
27	Azemud	Decha	beha	behaboka	Agriculture	coffee and spice development	17/07/1999	02/09/1999	under establishment	1000	500	100	
28	Hailemichael Bersamo	Decha	beha	behaboka	Agriculture	coffee and spice development	17/07/1999	02/09/1999	under establishment	600	600	600	
29	Mesfin Ketessa	Decha	beha	behaboka	Agriculture	coffee and spice development	17/07/1999	02/09/1999	under establishment	600		600	
30	Bins International	Gimbo	yabekecha	yeyabe tula	Agriculture	agricultural crops development	19/04/1999	26/08/1999	production	250	491	491	
31	Yoseph Ashenafi	Gimbo	bonga		hotel	hotel			under establishment	0.8	0.25		
32	Negusse Tadesse	Gimbo	dedakit	Ejamo	Agriculture	coffee plantation development			under establishment	50			
33	Kifle Abasimel	Gimbo	sho/kicheb	Shomba	Agriculture	coffee plantation development	28/09/1999	01/10/1999	under establishment	30		30	
34	Tibebu Tamirat		beganasheda	Kalle	Agriculture	coffee and spice development	22/10/1999	29/10/1999	under establishment	500		500	
35	Asefa Dukamo		shada		Agriculture	coffee and spice development	22/10/1999	29/10/1999	under establishment	1000		1000	
36	Dedat agro-international	Decha	modiyo	gonbera	Agro-industry	coffee and spice development	22/10/1999	29/10/1999	under establishment	1000		1000	
37	Zelalem Gizaw	Bonga	bonga	mehalketema	hotel	hotel	11/10/1999		under establishment				
38	Zelalem Eshetu		beganasheda		Agriculture	coffee and spice development	22/10/1999	29/10/1999	under establishment	500		500	
39	Haile Kasa	Decha	yeba		Agriculture	coffee and spice development	05/11/1999	05/12/1999	under establishment	500		500	

Annex 9 contd.: List of Major investment activities in the studied woredas

No.	project owner	Wereda	Kebele	Locality	Sector	project goal	date permission granted	date agreement signed	status	Area (in ha)			
										allocated by assumption	surveyed	pledged	developed
40	Zena Markos	Decha	yeka		Agriculture	coffee and spice development	05/11/1999	05/12/1999	under establishment	500		500	
41	Abdurahaman Nur	Decha	awa/bola		Agriculture	coffee and spice development	05/11/1999	06/12/1999	under establishment	1000		1000	
42	Tefera Filate		beganasheda		Agriculture	coffee and spice development	10/11/1999	10/11/1999	under establishment	500		500	
43	Andualem Kasa	Decha	chocha		Agriculture	coffee and spice development	12/11/1999		under establishment	1000			
44	Mesfin Tekle	Decha	modiyo	gonbera	Agriculture	coffee and spice development	09/11/1999	11/11/1999	under establishment	100		100	
45	Tigist Demise	Gimbo	kekayakela		Agriculture	coffee and spice development	09/11/1999	11/11/1999	under establishment	35		35	
46	Negash Ashebir	Gimbo	kayakela		Agriculture	coffee and spice development	09/11/1999	10/11/1999	under establishment	15		15	
47	Chernet T/giorgis	Gimbo	bonga		Agriculture		13/11/1999		under establishment	6			
48	G/mariam Fitwe	Decha	yanga		Agriculture	coffee and spice development	07/12/1999		under establishment	1000			
49	Zelalem Mulatu	Gimbo	kuti	erognatana	Agriculture	coffee plantation development	10/12/1999	15/12/1999	under establishment	50		50	
50	Decha agro-industry	Decha	shapa		Agriculture	coffee plantation development	14/12/1999	28/12/1999	under establishment	100		100	
51	Taye Tekle	Gimbo	sho/kicheb		Agriculture	coffee plantation development	18/12/1999	28/12/1999	under establishment	35		35	
52	Anteneh Dersolegn	Gimbo	sho/kicheb		Agriculture	coffee plantation development	17/12/1999	29/12/1999	under establishment	60		60	
53	Seid Damtew	Gimbo	araba		Agriculture	coffee plantation development	02/12/1999	24/01/2000	under establishment	1000		1000	

Annex 10: List of small investment activities carried on in the studied woredas

No.	project owner	Wereda	Kebele	Locality	Sector	project goal	date permission granted	date agreement signed	status	Area (in ha)			
										allocated by assumption	surveyed	pledged	developed
1	Abebe g/yes		Yaga	wofasha	Agriculture	coffee plantation development	17/08/1994		production	30	46.8		
2	dukra wushi (Suleman Mohamed)		Dukrawushi	Echiwochi	Agriculture	coffee plantation development	18/11/1992	01/08/1993	production	31	39.9		
3	Degfu Haile		Shishinda	Wodiya Refadiya	Agriculture	coffee plantation development	13/07/1994	16/09/1999	production	30	71.3	71	
4	Demeke Haile		Kenech		Agriculture	coffee plantation development	20/05/1995		production	30			
5	Mengistu Mamo		Kutashora	Wakiganite	Agriculture	coffee plantation development	10/01/1994		production	31	72.9		
6	Alemayehu Gebabo		Begotana dosha	Dubyona olamo	Agriculture	coffee plantation development	23/02/1993		production	33			
7	Tiruwork Yirtachew		Kutashora	Minjila	Agriculture	coffee and fruits development	18/01/1994		production	10		15	
8	Saile Haile	Gimbo	Michit	Wushwush	Agriculture	coffee plantation development	25/11/1994		production	10			
9	Bonga	Gimbo	kayakelo	Araba-kasha	Agriculture	coffee plantation development	25/07/1992	01/06/1993	production	40			
10	Argaw (dadiben)	Gimbo	hamani	Wosha	Agriculture	coffee plantation development	01/08/1993	18/10/1993	production	33	73	73	
11		Gimbo	Beyemo	Yaho	Agriculture	coffee plantation development	04/11/1993	16/12/1993	production	20		20	
12	Haileyesus G/medhin	Gimbo	Keja araba	Shera	Agriculture	coffee plantation development	18/01/1994		production	10			
13	michit	Gimbo	Michit	Grawa	Agriculture	coffee plantation development	11/08/1993		production	33			
14	Haji Ahmed Adem (Golden Organic)	Gimbo	kayakelo	Araba-kasha	Agriculture	coffee plantation development	05/11/1993		production	10	8.4		
15	Birhanu Haile (Shawi buno)	Gimbo	Kicho	Birbirto-dei	Agriculture	coffee plantation development	14/07/1993	08/09/1993	production	31			
16	Wondimu Negatu	Gimbo			Agriculture	coffee plantation development	29/11/1995		under establishment	15			
17	Worku W/Mariam	Gewata	Wodiyo		Agriculture	coffee plantation development	14/01/1995		under establishment	20			
18	Andualem Tamiru	Decha	Shapa		Agriculture	coffee plantation development	14/04/1997		under establishment	45			

Annex 10 contd.: List of small investment activities carried on in the studied woredas

No.	project owner	Wereda	Kebele	Locality	Sector	project goal	date permission granted	date agreement signed	status	Area (in ha)			
										allocated by assumption	surveyed	pledged	developed
19	Gaworash Mohamed Abachibsa	Gewata	Meshamelo		Agriculture	coffee plantation development	15/06/1997		under establishment	30			
20	Mesfin G/selase	Gimbo	Hibret	Sheda	Agriculture	coffee plantation development			under establishment	14			
21	Gachebe	Decha	Shapa	Chata	Agriculture	coffee plantation development	06/07/1993	08/09/1993	production	40			
22	Abdela (Insha Allah)	Decha	Shapa	Chata	Agriculture	coffee plantation development	28/05/1993	24/09/1993	production	40			
23		Decha	Chiwa		Agriculture	coffee plantation development	14/03/1997		production	20			
24	Andualem Tamiru	Decha	Shapa		Agriculture	coffee plantation development	14/04/1997		production	45			

Annex 11: List of ongoing and completed research works

Ongoing

Bonga research Center:

Animal science division

- Four different studies on bee, beehives and quality of honey
- Socio-economic survey on sheko breeds
- Participatory indigenous sheep breed improvement
- Adaptation of different fodder spp.

Socio economics division

- Identifying agro-ecology based farming system on selected woredas of Kaffa zone

Research extension division

- Evaluation of extension system at Kaffa and Bench-maji zone

Natural resource division

- Participatory Selection of multipurpose fodder grass in Gimbo woreda,

Completed

Kumelachew Yeshitela and Simon Shibru, **Year**. floristic composition and phytogeographic comparison of moist montane forests of southwest Ethiopia

Feyera Senbeta, 2002. Patterns of floristic diversity and distribution in montane rainforests with occurrences of wild *Coffea arabica* L. populations in Ethiopia , PhD Thesis Proposal Center for Development Research (ZEF), Bonn,

Dereje Tadesse, 2007. Forest cover change and socio-economic drivers in south west Ethiopia, M.Sc. Thesis, München.

Yoseph Amaha et.al., 2006. Survey on Identification of Fast Growing Shade Tree Species for the Production of *Coffea arabica* L. JARC

Adugna Debela, 2007. Physiological effect of Shade on growth and production of Organic Coffee in Ethiopia Wageningen University, The Netherlands.

JARC, 2006. Assessment of Non-Timber Forest Products (NTFPs) and Their Socioeconomic Significance for Sustainable Natural Forest Management in Illubabor Zone

SUPAK-S, 2000. Natural Resource under threat

- Mesfin T., 1999. Land tenure and its impact on land resource utilization in Kaffa-Sheka administration zone (SW Ethiopia), Enschede, The Netherlands
- Gezahegne P., 1996. Land tenure and natural resource management in Bonga forest, SW Ethiopia – the case of Kafficho and Manjo, A.A, Ethiopia
- Admassu Alemayehu D., 2003. “Assessment of the effectiveness of soil and water conservation measures: a case study in Kaffa, Ethiopian highlands” Wageningen, The Netherlands.

Annex 12: Some of the existing agricultural investment areas

