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PARTICIPATORY RURAL APPRAISAL

FATO & BUEE ZURIA PAs
SODO WEREDA
GURAGE ZONE
SOUTHERN NATIONS, NATIONALITIES & PEOPLES REGIONAL STATE
ETHIOPIA

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June, 1996

PARTICIPATORY RURAL APPRAISAL

Fato and Buee Zuria PAs
Sodo Wereda, Gurage Zone
Southern Nations, Nationalities & Peoples Regional State
Ethiopia

PRA team composed of staff from

- Cher Ethiopia
- SEPDA(indigenous NGO)
- DIPSAP(indigenous NGO)
- CRDA
- Wereda Social Affairs Sector
- Wereda Council
- Wereda Agriculture Office
- Wereda Education Office
- Wereda Health Office

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Trainer/Facilitator: Wim de Regt

Report compiled by Alemayehu Fulas
Edited by Wim de Regt

Cher Ethiopia - Society for Humanitarian & Development Assistance (Cher)

Christian Relief & Development Association (CRDA)

June, 1996

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1. INTRODUCTION

Cher - Ethiopia (Society for Humanitarian & Development Assistance) is an Ethiopian NGO which was established in 1993 by a group of professionals who have a common interest of assisting development efforts of rural communities in Ethiopia. Cher - Ethiopia's initial project area is in Sodo Wereda (district), Gurage Zone of the Southern Nations, Nationalities & Peoples' Regional State.

While Cher has based its programme on community initiatives and formulated an overall programme of assistance in the field of infrastructure development, water supply, soil conservation and afforestation, primary education and basic health care for the whole Sodo district, it was deemed necessary to make a thorough study of some key communities in the district in order to identify site-specific, effective development intervention, to encourage participation of the communities in this process, and to equip Cher's staff and its collaborators with participatory development skills. Therefore, it was decided to make a diagnostic study of two communities in the district, using PRA (Participatory Rural Appraisal) techniques.

The specific objectives of the study were formulated as follows:

- to build the capacity of Cher and other participating NGOs and GOs in participatory needs assessment and development planning
- to collect baseline information about typical target communities in Cher's area of operation for needs assessment and planning of small-scale community - based development projects
- to strengthen relations between Cher, the community, the local government offices and other NGOs for coordination of activities and sharing of experiences
- to motivate and empower the local communities to work for their own development

The survey was undertaken from June 10 to 21, 1996. It started with three days training in Participatory Rural Appraisal techniques, including practical exercises. The actual fieldwork, on which the findings of this report are based, took seven days, including presentation of the results to the communities.

The training workshop was held in Buee, the capital of Sodo Wereda, in the local high school. For the fieldwork, the 14 participants were split up into two, whereby one group stayed in Buee and studied Buee Zuria PA and the other went into the highlands, and studied Fato PA.

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The following were the participants in the training and fieldwork.

1. Ato Bahru Muktar – Wereda Council, Head of Social Affairs Sector
2. Ato Tsegaye Tabor – Wereda Council
3. Wzo. Masresha Awol – Wereda Agriculture Office
4. Ato Bizuayehu Asrat – Wereda Agriculture Office
5. Wzo. Almaz Melka – Wereda Health Office
6. Ato Nigatu Tarekegne – Wereda Health Office
7. Ato Abiy Mulugeta – Wereda Education Office
8. Ato Tilahun Sine – Wereda Education Office
9. Dr. Yitfesah Alemu – Cher - Ethiopia, volunteer
10. Ato Alemayehu Fulas – Cher - Ethiopia, project officer
11. Ato Argaw Alemu – Cher - Ethiopia, Water Technician
12. Ato Teketel Mekiso – Southern Ethiopia Peasant Development Aid (SEPDA), agriculturist
13. Ato Ermias Ersulo – Development Initiatives Promotion & Sustainability Assuring programme (DIPSAP-Eth.)
14. Mr. Wim de Regt – CRDA Advisory Unit, PRA trainer/facilitator

This report is produced out of daily process reports made by all these participants, including maps, graphs and diagrams initially drawn by the villagers. As with all PRAs, the survey has been carried out with the full and indispensable cooperation of the local people.

After an initial chapter on the methodology (the PRA techniques used and the organization of the fieldwork), the findings of the survey are presented separately for Fato PA and Buee Zuria. Each section contains a general profile and some chapters with specific information on agriculture, social services, etc. and on the major problems and opportunities identified.

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2. METHODOLOGY

2.1 Participatory Rural Appraisal

The methodology used to get insight into the communities' livelihood systems and their needs and capacities is called Participatory Rural Appraisal (PRA).

The survey team was first trained in PRA. The training included an explanation about the nature of PRA, the origins of both PRA and RRA (Rapid Rural Appraisal), about the key features of PRA, a brainstorming discussion on community participation, and some guidelines for undertaking successful PRA fieldwork.

The participants learnt and practised the following basic PRA techniques, which were also used during the fieldwork to obtain the actual information included in this report.

1. Social mapping
2. Resource mapping

3. Farm sketch
4. Transect
5. Historical profile: time line
6. Trend diagram
7. Seasonal calendars
8. Matrix ranking
9. Pair - wise ranking
10. Wealth ranking
11. Venn - diagram

These techniques were combined with semi - structured interviewing on basis of checklists, direct observation and information collection from secondary sources. Most of the techniques were first practised in role-play situations around the classroom.

2.2 Site selection and fieldwork arrangements

In order to get a representative overview of the agro - ecological variety in the Wereda, it was decided to study one PA in the Weina Dega ("semi highland") area around the main road passing from Addis Ababa to the south (Hosanna), and one PA in the highlands (Dega) to the west of the main road. Secondly, Cher would have to commit itself to start some interventions in the PAs to be studied, and therefore PAs which were included in Cher's overall plan were considered. Because of logistical reasons the PA around Buee town, i.e. Buee Zuria, was chosen as the Weina Dega PA. The Dega PA immediately to the west of Buee Zuria, i.e. Fato PA,. was chosen because Cher had assisted in constructing an access road to that PA, so that the community was already motivated, and had planned some other interventions. Although close to Buee, the PA was difficult to reach because the Meki River was already swollen as the kremt rains ("big rains") had started at the time of the fieldwork.

After the training, the participants were split up into two groups each of whom went to a different PA:

Fato PA: Tsegaye, Alemayehu, Dr. Yitfesah, Almaz, Bizuayehu, Abiy and Wim

Buee Zuria PA: Bahru, Masresha, Nigatu, Tilahun, Argaw, Teketel, Ermias

Each group was again divided into two subgroups, and each subgroup studied half of the villages in each PA.

At the end of the fieldwork, a one - day meeting was held in Buee town to gather, analyze and compare the results (using a problem tree), and to draw up preliminary recommendations for possible development interventions.

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3. FATO PA

3.1 A PROFILE OF FATO PA

3.1.1 Location and climate

The Gurage Zone is situated in the Southern Nations, Nationalities & Peoples Regional State. Sodo is one of the 11 Weredas (district) in the zone. It has 32 peasants' associations (PAs).

The following agro- climatic zones can be used to describe places in Ethiopia.

HARUR(arid):- 1 m - 500 m above sea level
KOLA(lowland):- 501 m - 1500 m above sea level
WEYNA DEGA ('semi highland'):- 1501 m - 2500 m above sea level
DEGA (highland):- 2501 m - 3500 m above sea level
WOORCH (frost):- above 3500 m

The altitude of Sodo Wereda ranges between 1700 m and 3600 m. However, 99% of its area falls in the Dega or Weyna Dega ('wet' and 'dry' Weyna Dega) agro climatic zones. Buee, the wereda capital, is located 100 km south west of Addis Ababa on the Alem Gena - Welayita high way.

Fato is one of the PAs in Sodo Wereda, and is about 10 kms to the west of Buee town. It has nine villages (*sabugnets* as they are known locally), namely, Fato, Gedri Jido, Weserbi Jido, Nyia, Aymela Zer, Geyet Gereno, Getagie, Waran Wacho and Abeyi. It is bordered by six PAs.

Fato PA lies at alititudes between 2500 m and 2600 m, and is thus in the Dega part of the wereda. Ethiopia has two rainy seasons and a dry one. The 'short rains' occur between February and May, while the 'big rains' run from June to September. The period from October to January is marked as being a dry season. Fato is one of the areas which enjoys both rainy seasons.

3.1.2 Population

At various meetings with groups of farmers from different villages, it was learnt that the number of households in the PA was in the neighbourhood of 714 and about 90 (around 13% of the total) of them were headed by females. There were about 40 heads of household who were living in other places. They join their families during the Christmas, Easter or Meskel (the Finding of the True Cross) celebrations, or saints' days. Extended families were few in number. From the approximate average family size of 5.9, the population of the PA was estimated at about 4212.

The population is divided into various clans (tib). The majority are Kistane Gurages, and Oromos constitute a minority group. Apparently the medium of communication is

Kistanigna, which is a derivative of kistane. The people, with the exception of a small number of Muslims and 4 Protestants, were found to be adherents of the Ethiopian Orthodox Church.

3.1.3 Soil, land use and natural resources

The soil in Gedri Jido and Getagie villages is red. Red soil and clay soil was observed in Fato village, and in Niya it is a combination of red and brown.

The resource maps suggest that much of the land in the PA is allotted to farming. The crops are subject to attack by baboons, porcupine(Amharic-Jart) and bush pigs. Other wild animals in the PA include hyena, fox, rabbit, bush buck (Amharic-Dikula), Gent (Amharic-Shelemitmat) and bush duiker (Amharic-Midako). Clusters of scattered homesteads are the next important features of the PA. They are made from wood, mud and thatch.

Pasture is scarce. Only a small portion of the land in the PA is left for grazing, which is communal. The area covered by trees is quite insignificant. One can discern a variety of trees surrounding the churches in the PA, and a small number of eucalyptus trees grown around homesteads. Rivers, brooks, springs and ponds are the key sources of water for the community.

3.1.4 Infrastructure and services

The PA office is located in Fato village.

The Buee-Aymelel gravel road, which was under construction and 28 km in length crosses the PA. Although there is a lane in each village, the lack of foot paths is a chronic problem in all the nine villages.

Abeyi and Nyia have market places. Monday is the market day in Abeyi, and the one in Nyia is held on Wednesdays. However, information has been received saying that the two markets have been amalgamated in September 1996, and that it is taking place in Weserbi Jido on Mondays and Wednesdays. Privately owned mills exist in Waran Wacho, Weserbi Jido and Aymela Zer.

There is one church each in Abeyi, Gedri Jido, Nyia and Fato. These churches offer burial ground for the residents of the PA, and that of the adjoining PAs.

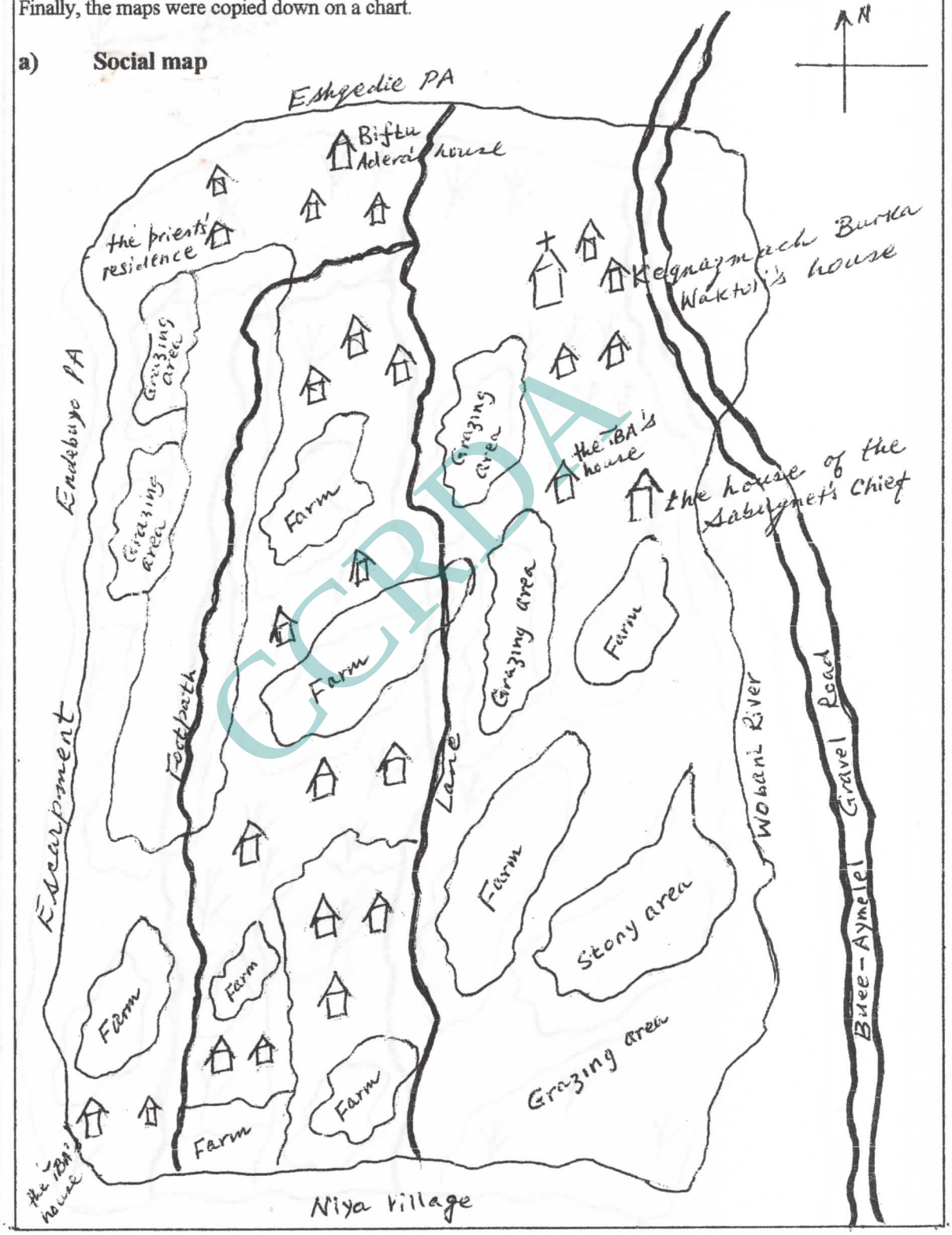
There is neither a school nor a clinic in the PA. Nevertheless, a primary school (grades 1-4), and an office of agriculture were under construction in Fato village. A development agent is already stationed in the PA, and he was following up the provision of fertilizer. He was also involved in demonstrating optimal yield at the right amount of inputs. It was also learned that there were two traditional birth attendants (TBAs) in Gedri Jido at the time.

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Figure 1 - Social and resource maps of Gedri Jido

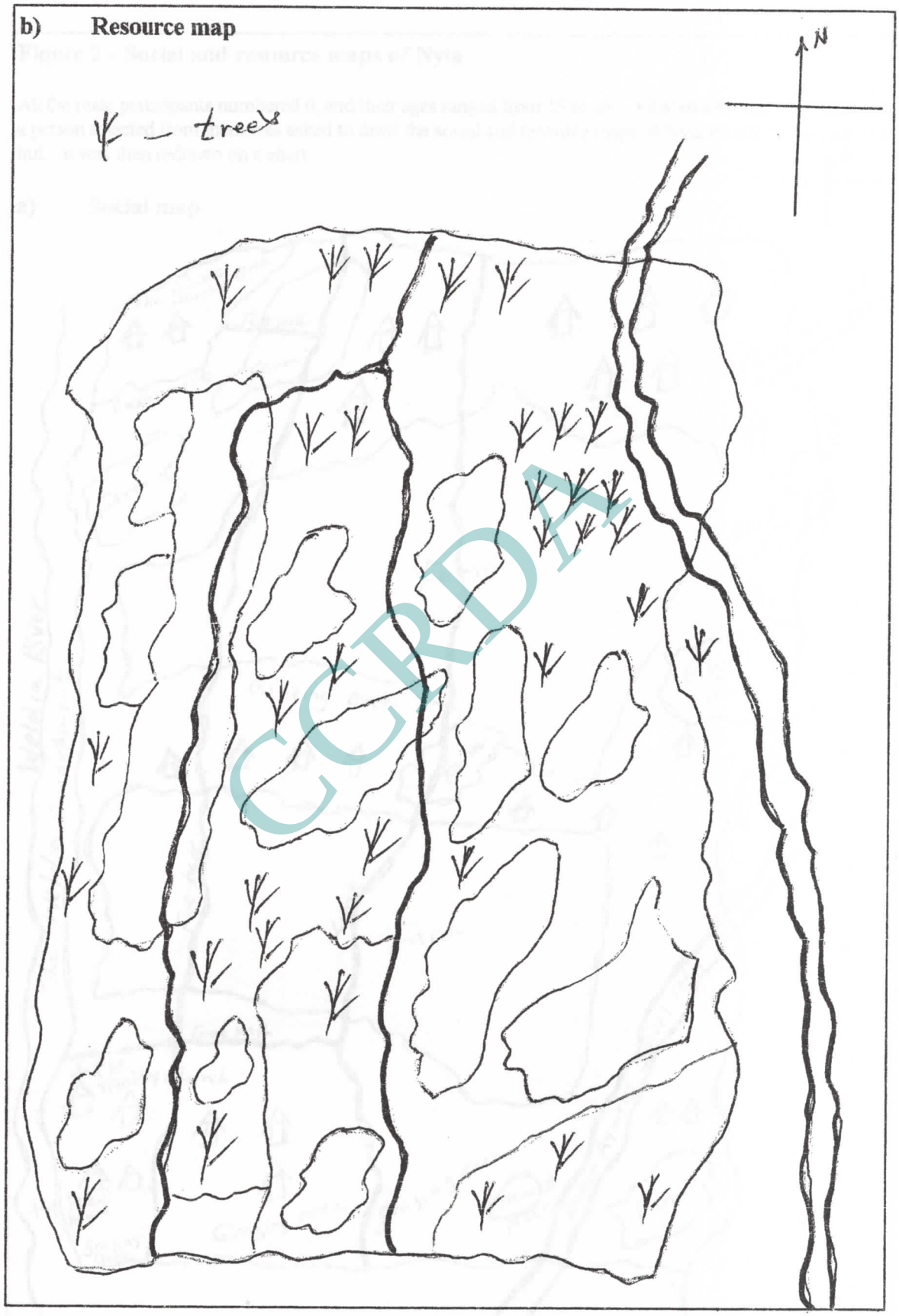
There were 10 participants, of which 3 were women. Their ages ranged from 25 to 61. The PRA subgroup briefed the participants on the purpose of the visit in Kistanigna. One person was selected from them, and he drew the social and resource maps of Gedri Jido on the ground with the help of the other participants. Finally, the maps were copied down on a chart.

a) Social map



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b) **Resource map**

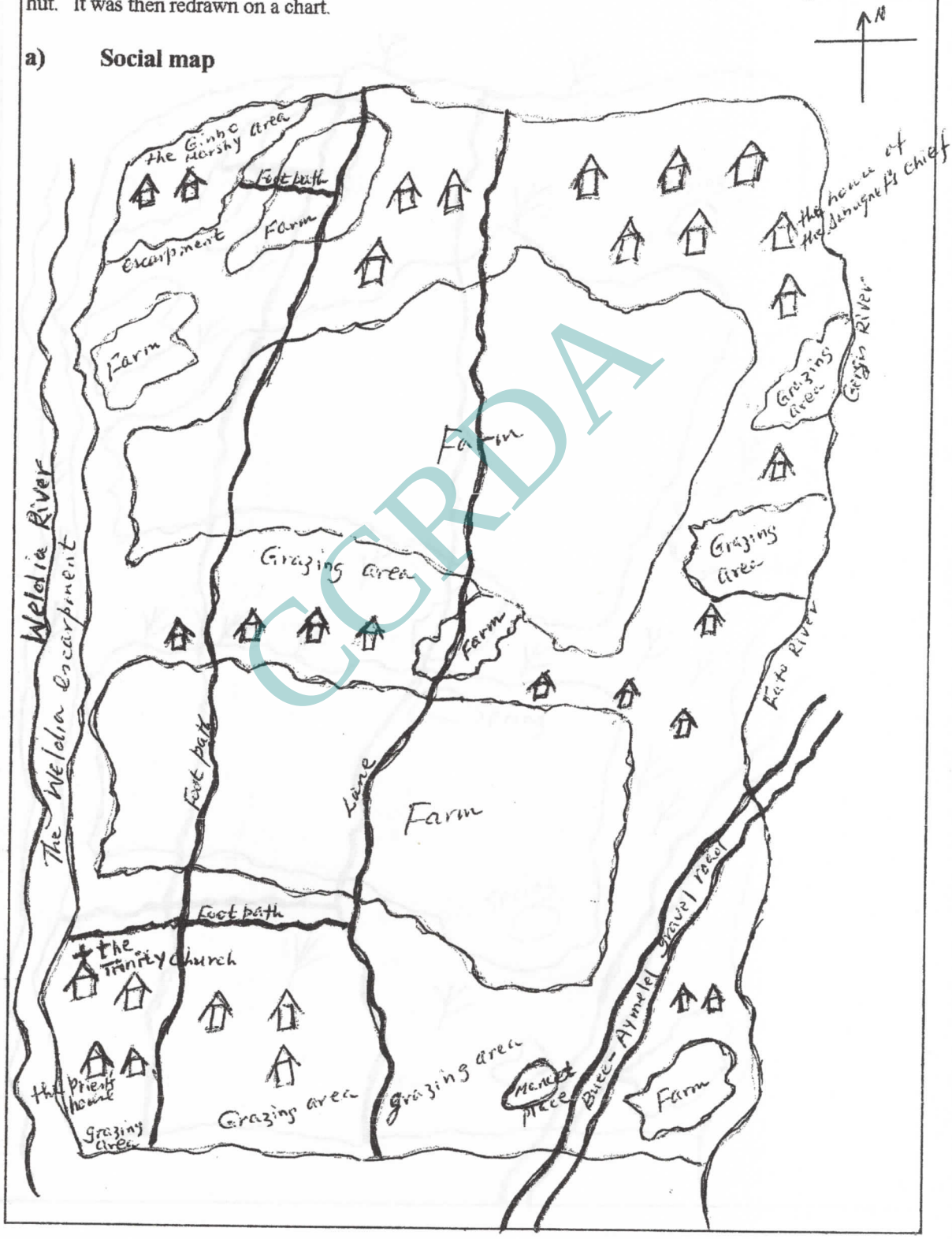


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Figure 2 - Social and resource maps of Nyia

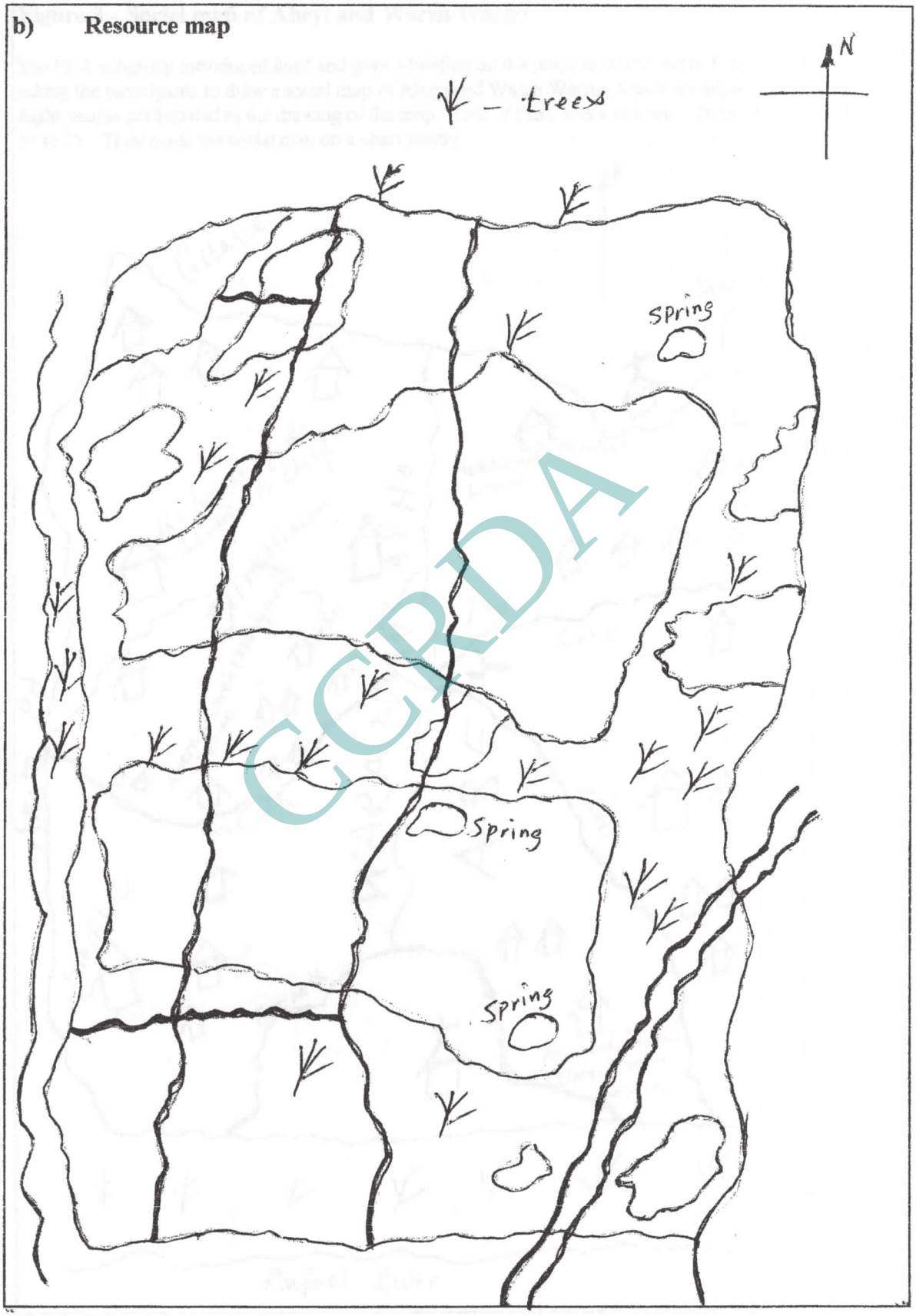
All the male participants numbered 6, and their ages ranged from 18 to 66. After an introductory statement, a person selected from them was asked to draw the social and resource maps of Nyia on a large mat inside a hut. It was then redrawn on a chart.

a) Social map



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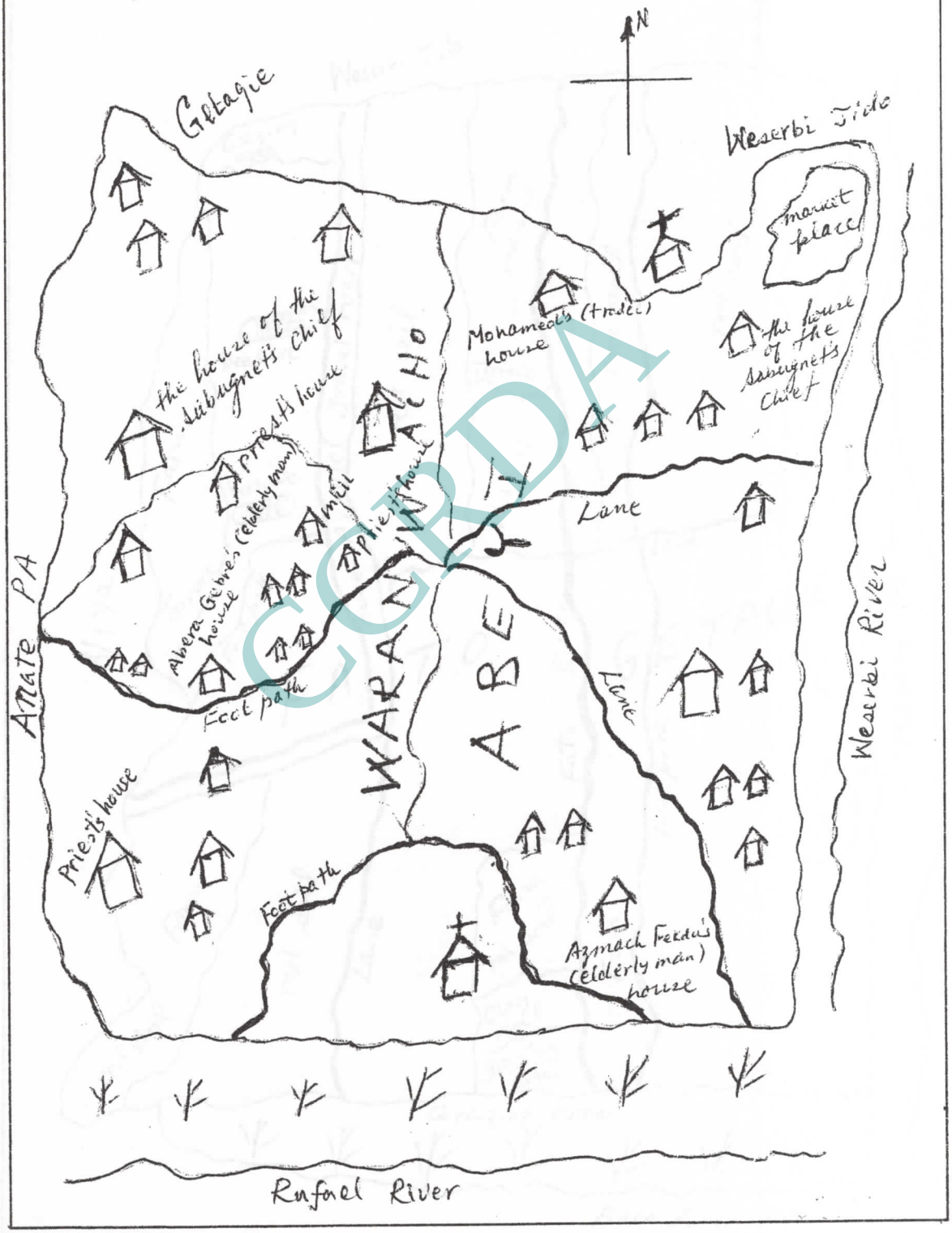
b) Resource map



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Figure 3 - Social map of Abeyi and Waran Wacho

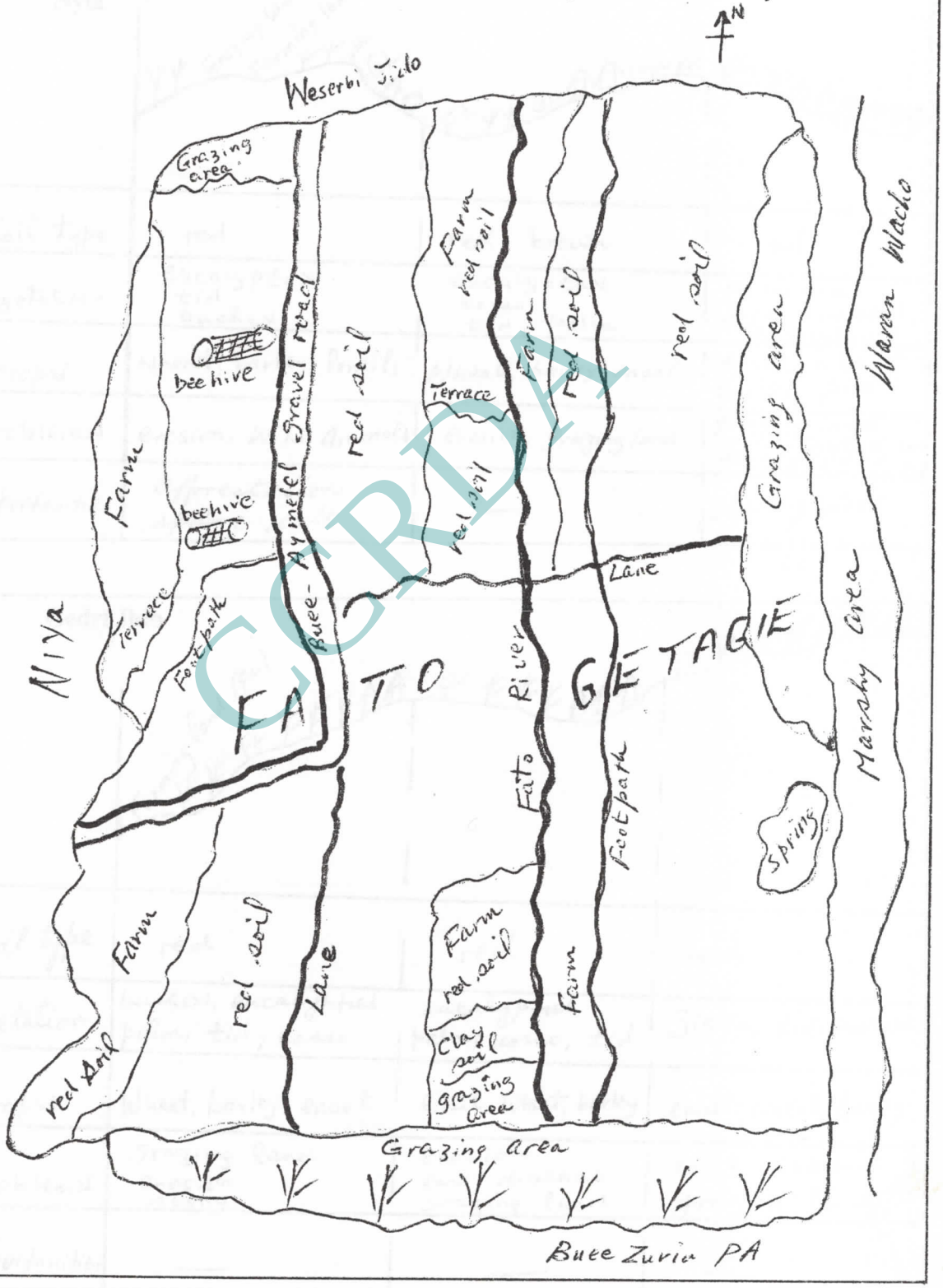
The PRA subgroup introduced itself and gave a briefing on the purpose of the vist in Kistanigna before asking the participants to draw a social map of Abeyi and Waran Wacho, which are adjoining villages. Eight people participated in the drawing of the map. One of them was a woman. Their ages ranged from 31 to 75. They made the social map on a chart jointly.



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Figure 4 - Resource map of Getagie and Fato

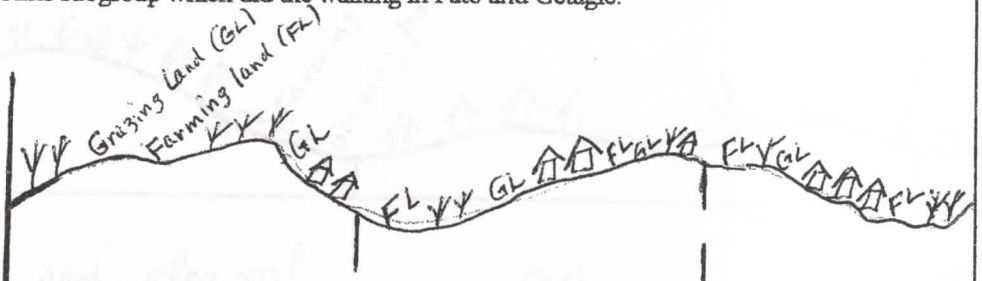
An introduction was made beforehand. There were 9 participants in Getagie, and three of them were women. The same composition of participants met with the PRA subgroup in Fato as well. One village adjoins the other. Their ages ranged from 20 to 75. They drew the resource map on a chart collectively.



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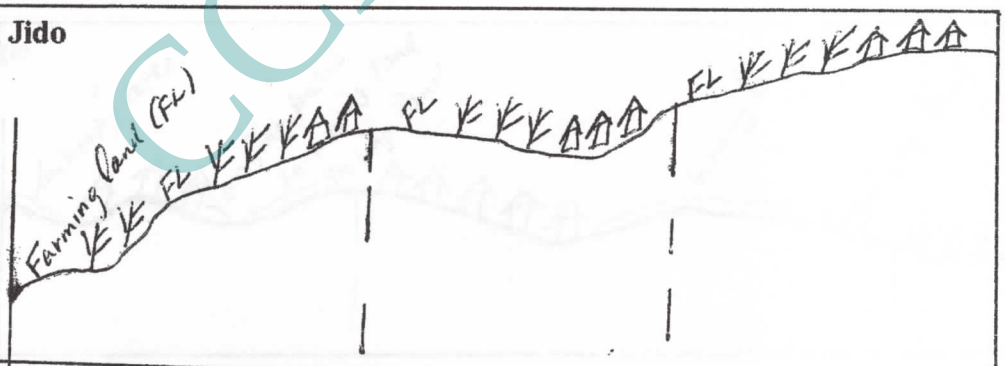
Figure 5 - Transect Walk, i.e. on a route from one end of the villages to an opposite end, in Nyia, Gedri Jido, Fato and Getagie. Each route was thought to divide a village into two halves. The PRA subgroup, which had its walk in Nyia and Gedri Jido talked to farmers whom it found on its way, and an elderly farmer accompanied the other subgroup which did the walking in Fato and Getagie.

a) Nyia



Soil type	red	red, brown	red
Vegetation	eucalyptus tid bushes	eucalyptus kossa tid, palm	palm, tid Zigba, bushes eucalyptus
crops	wheat, barley, lentils	Wheat, barley, enset	enset, wheat barley, peas
Problems	erosion, Wild Animals	erosion, Grazing land	grazing land erosion, waterlogged enset disease wild animals
opportunities	afforestation spring dev't	—	spring dev't

b) Gedri Jido

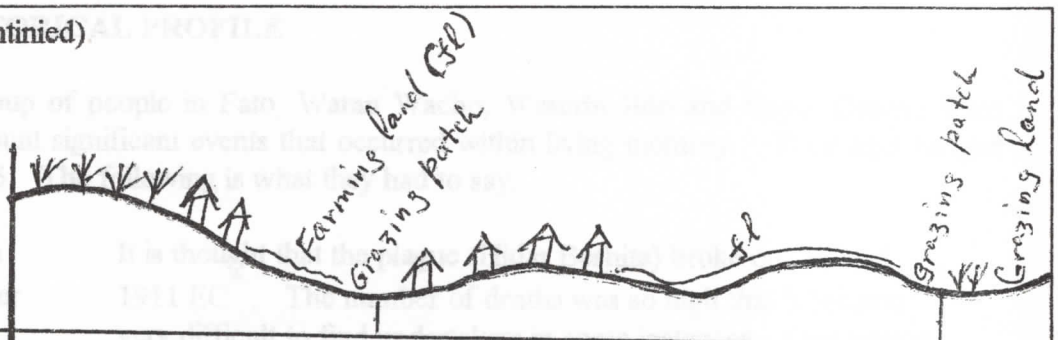


Soil type	red	red	red
Vegetation	bushes, eucalyptus palm, tid, kossa	eucalyptus palm, kossa, tid	Zigba, tid, bushes
Crops	Wheat, barley, enset	enset, Wheat, barley	enset, Wheat, barley
Problems	Grazing land erosion stony	erosion enset disease Grazing land	enset disease grazing land
Opportunities	—	—	—

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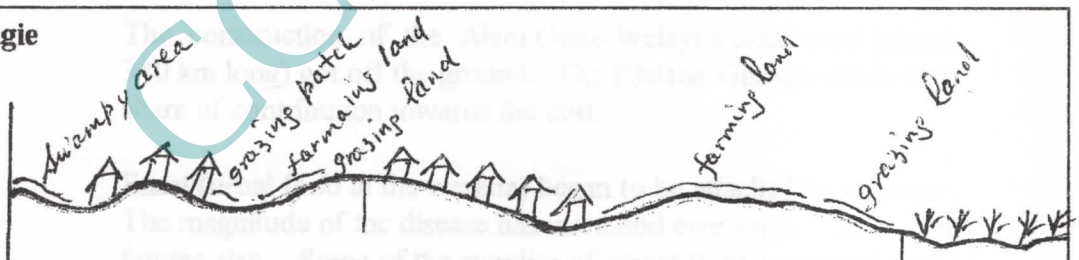
Transect (continied)

c) **Fato**



Soil type	red, clay soil	red	red
Vegetation	eucalyptus, tid	tid, bushes	tid, girar
Crops	enset, gesho, beans, wheat, barley	enset, barley, wheat, beans	—
problems	Pest, wild Animals, erosion	wild animals, erosion, pest	water logged, deforestation
Opportunities	afforestation, high water table	high water table	reafforestation, pasture devt

d) **Getagie**



Soil type	red	red	red
Vegetation	bushes, eucalyptus	tid, eucalyptus	bushes, girar, tid, mekenisa, tala
Crops	enset, barley, wheat, beans, peas	enset, barley, wheat, beans, peas	—
problems	water logged, wild animals, erosion, pest	pest, erosion, wild animals	deforestation
opportunities	high water table	high water table	reafforestation

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3.2 HISTORICAL PROFILE

A group of people in Fato, Waran Wacho, Weserbi Jido and Geyet Gereno were asked to recount significant events that occurred within living memory. Their ages ranged from 23 to 75. The following is what they had to say.

Hidar Beshita (the November plague)	It is thought that the plague (Hidar Beshita) broke out around 1911 EC*. The number of deaths was so high that it became very difficult to find undertakers in some instances. One person commented that the epidemic could be analogous with a flood.
1928 EC	The Italian Invasion The able bodied were conscripted into the Ethiopian army. Fifteen people from Fato village went to the war front and 10 returned alive, and all the four from Waran Wacho came back safely. People who were hired ("bandas") by the Italians to fight against the patriots looted and burned houses during the day time, and the patriots were served with food at night.
1936 EC	Aba gorba (black leg) and Aba senga (Anthrax) killed many cattle.
1945 EC	There was an outbreak of small pox.
1948 EC	Crop damage due to heavy rain
1954 EC	The construction of the Alem Gena-Welayita Sodo road (about 340 km long) got off the ground. The Kistane Gurages made their share of contribution towards the cost.
1955 EC	Enset (usual food in the wereda) began to be attacked by a disease. The magnitude of the disease has increased ever since. There was famine also. Some of the supplies of wheat flour contained a small proportions of lime or sawdust, and the bread made from the mixture killed many people.
1959 EC	The Buee-Aymelel lane was made by the local people.
1963 EC	There was earth tremor.
1965 EC	There was severe famine. People suffered from starvation. Many livestock died.

* Ethiopian calendar

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1969 EC

There was land distribution. It was not done fairly. The well off got more. Mismanagement followed corruption. One gentle man remembered the following song.

Weyo ledehe midir sefari
Chikun keberkem abkem ladhari

(It is a threat to the distributor for
his giving more land to the
'reactionary' and less to the 'oppressed')

Another song went as follows:

Midir yesefere tekebelem gubo
weredem goi Buee tej yesechebo
chomi yebelabo, anisi yachebo
ezhim kenferehuan awenam enbobo

(The distributor took bribes and later
went to Buee. When he came back,
his lips betrayed him for the tej he
drank and the fat meat he ate)

Later on cooperative stores were established at PA level in many parts of the country so that farmers could buy goods at prices lower than those charged at private shops. When people working in the cooperative stores were corrupted, the following song was made.

Egzer echo echo Geta echo echo
Yehibret suki waga wajibot melancho

(Oh God, Oh Lord, they bought a
horse with the proceeds from the
cooperative stores)

1977 EC

There was drought. It resulted in the death of people and livestock. People from the neighbouring PAs were instructed to go to a PA in the 'dry' Weyna Dega area to assist with ploughing as there were less men to work in the fields. Some people were forced to migrate from Kela, a town 10 km from Buee, abandoning their children due to abject poverty. It was because of enset that people could survive the drought. The saying went as follows:

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Suma semagnine
Sodo yaquaquamen feyi esetine

(The good enset helped the people in Sodo area to survive)

1982 EC — Many people died of malaria. 3 people died from Fato village. They could have caught the disease some where else.

1984 EC — Malaria caused the death of many people. Around 20 died in Waran Wacho, and about 20 were dying daily in the 'dry' Weyna Dega areas. The following song was sung as a result of the prevalent situation.

Egebaw yebaku zendire nebere
Edmie leshekerie mekerem techile

(I had the mind to go to the country side this year. Thanks to malaria, I can not make it even next year.)

1985 EC — The construction of the Buee-Aymelel road was commenced.

1986 EC — Hailstorm caused damage to crops. Shortage of food followed.

In general some interviewees classify the time from the recent past till 1988 EC into three periods, and make an account of their experiences. It was mentioned that during the time of Emperor Hile Selassie, the country was abundant in food. Crime was unheard of in the area. During the period of the Derg, every farmer had the right to own land. Nevertheless, as ownership of forest was not specific, deforestation followed, and even continued after its downfall. Mobility was restricted as opposed to the succeeding period. There was human rights abuse. The young were forced to go to the war front. Crime was on the increase. Family ties loosened. And from 1984 till 1988 EC, the level of unemployment has risen, and the number of ruffians and rogues has incresed comparatively. The need of the community has aggravated.

3.3 AGRICULTURE

3.3.1 Land tenure

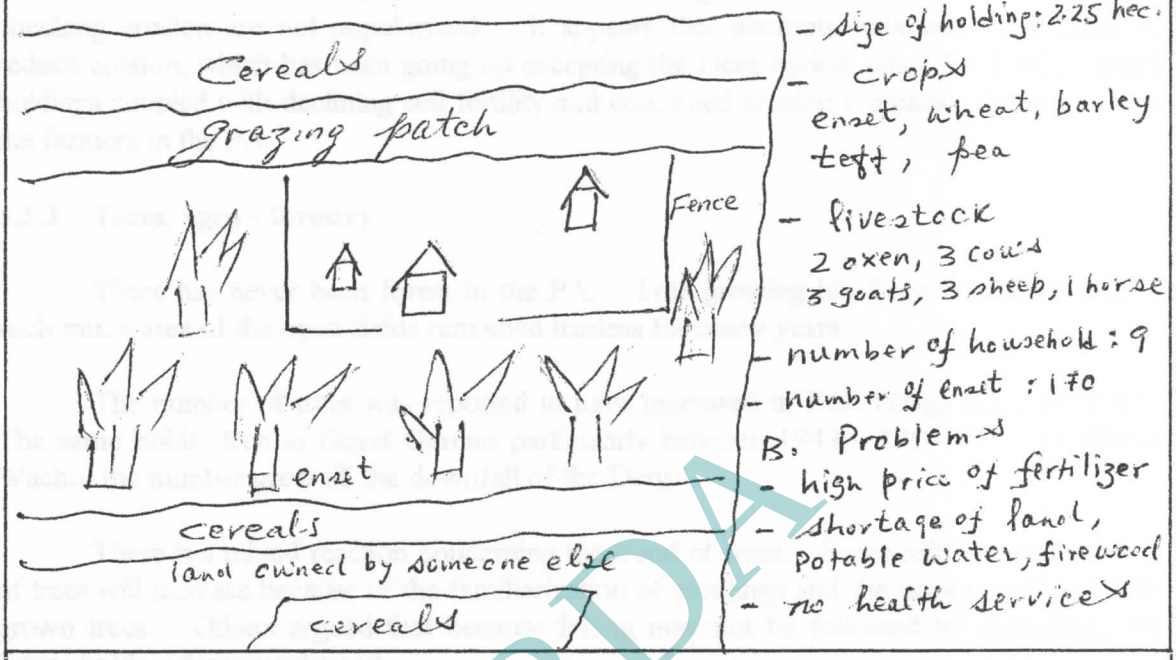
Farms are privately owned. The average holding ranges from 0.5 hectare (2 timad) to 0.75 hectare. However, the influx of people who had returned from the war front and others coming back to resettle, and the number of boys reaching adulthood is causing a decrease in the average holding. More land is being made arable to alleviate the shortage, which is one of the critical problems in the PA. Despite this measure, the number of land-less is on the increase.

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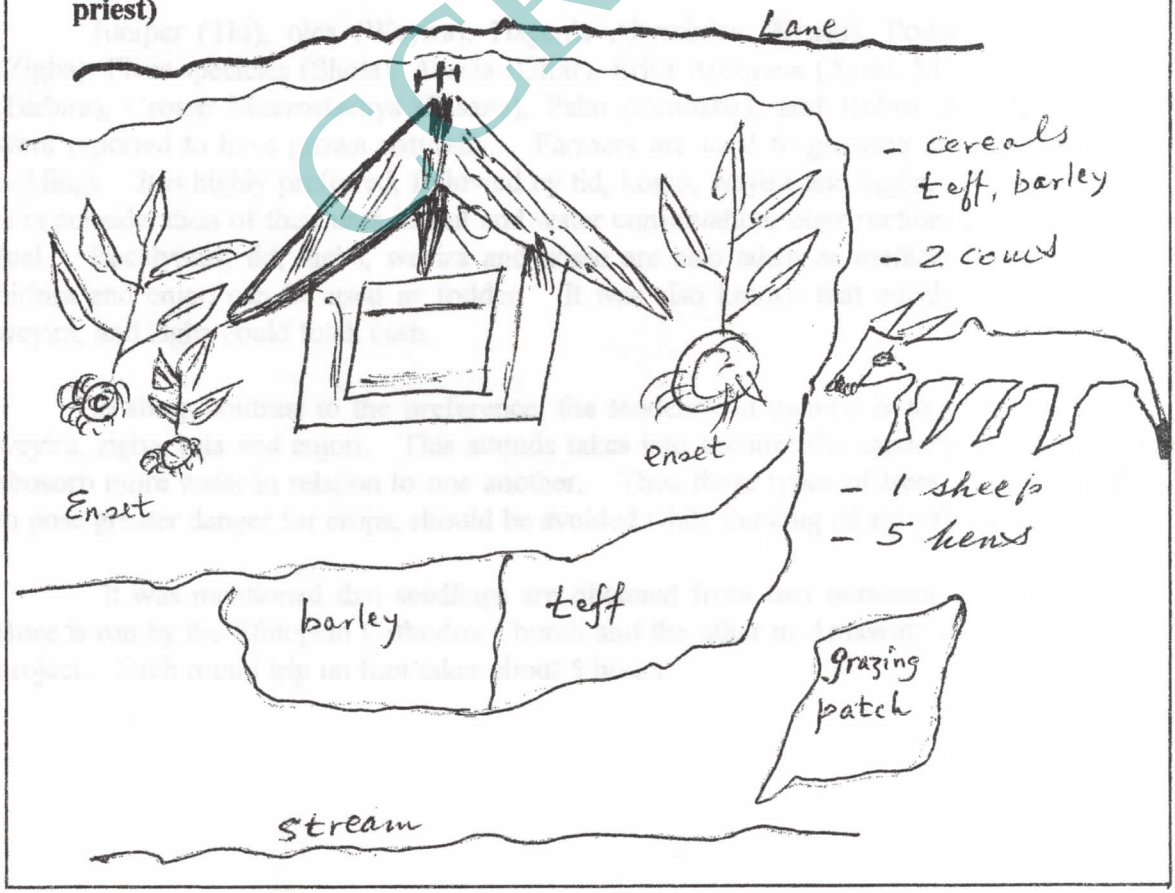
Figure 6 - Farm sketches

Each of the PRA subgroups enlightened a handful of farmers to make a sketch of their farms. Replicas of sample sketches are shown below.

a) Abebe Negash's farm sketch (a farmer in Niya)



b) Basazin Tefera's farm sketch (he is a farmer in Fato village as well as being a priest)



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3.3.2 Soil fertility and erosion

The soil in the PA is declining in fertility. The farmers maintain that fertilizer is necessary for satisfactory production. It was mentioned that terracing has been scaled down in some parts of the PA after the downfall of the Derg. On the whole, mechanisms for checking erosion are not popularized. It appears that attempts have not been made to reduce erosion, which has been going up excepting the Derg period, since 1933 EC. Small holdings coupled with declining soil fertility and continued erosion are causes for concern to the farmers in the PA.

3.3.3 Trees, agro - forestry

There has never been forest in the PA. Tree growing has been neglected, and as such much area of the open fields remained treeless for many years.

The number of trees was reported to have increased in Fato village since 1933 EC. The same holds true in Geyet Gereno particularly between 1949 - 1966 EC. In Waran Wacho, the number grew till the downfall of the Derg.

There is a mixed reaction concerning the trend of trees. Some said that the number of trees will increase because of the familiarization of seedlings and the presence of naturally grown trees. Others argued that because felling may not be followed by replanting, the future holds a downward trend.

Juniper (Tid), olea (Weyira), Hagenia Abyssinica (Kosso), Podocarpus Gracillor (Zigba), Ficus specicies (Shola), Acacia (Girar), Erica Arboraea (Asta), Millettia Ferruginea (Birbira), Croton Macrostachys (Bisana), Palm (Zenbaba), and Rubus Apetalus (Enjori) were reported to have grown naturally. Farmers are used to growing eucalyptus in their holdings. It is highly preferred, followed by tid, kosso, weyira and zigba. The preference is in consideration of their uses in soil and water conservation, construction, wood work and fuel. Eucalyptus, tid, zigba, weyira and kosso are also taken as medicinal trees. Asta, birbira and enjori can be used as fodder. It was also known that eucalyptus, tid, kosso, weyira, and zigba could fetch cash.

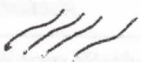
In sharp contrast to the preference, the tendency in general is to grow eucalyptus, weyira, zigba, asta and enjori. This attitude takes into account the capacity of the trees to abosorb more water in relation to one another. Thus those types of trees, which are liable to pose greater danger for crops, should be avoided while thinking of agro-forestry.

It was mentioned that seedlings are obtained from two nurseries. The one near Buee is run by the Ethiopian Orthodox Church and the other in Amawute is a World Vision project. Each round trip on foot takes about 5 hours.

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Figure 7 - Trend diagram of trees and erosion as presented in Geyet Gereno, Waran Wacho and Fato

The same 10 people who took part in the discussion on historical profile explained the trend of trees and erosion in Geyet Gereno. They used leaves, grass and barks of a tree on a chart with columns for different periods in order to show the trend of trees and erosion. Their ages ranged from 41 to 75. The people who drew the resource map of Fato also explained the trend of trees. The ages of the 6 participants in Waran Wacho ranged between 23 to 75. The outcome of the different discussions is combined in the diagram below.

Period (EC) / variables	till 1933	1934 - '49	1950 - '66	1967 - '83	1984 - '88
Trees					
erosion					

3.3.4 Livestock

Cattle, sheep, goats, donkeys, horses and mules are tended in the PA. The number of livestock was reported to have increased since 1933 in Fato and Waran Wacho villages. This has been attributed to a constant growth in population. The increase in population has also led to the cultivation of more grazing land, thus resulting in the scarcity of pasture.

The interviewees in Waran Wacho maintain that scarcity of pasture would lead to a decline in the number of livestock. On the other hand, there was a feeling in Fato village that the number of livestock is proportional to the size of population, and hence both will tend to grow. But, it was thought that shortage of grazing could give rise to a higher rate of animal disease.

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Figure 8 -Trend diagram of livestock population, grazing land and animal disease as presented in Waran Wacho and Fato.

The participants who explained the trends of trees in Waran Wacho and Fato did the same regarding livestock population, grazing land and animal disease. They used sticks to make columns on the ground and then leaves and small branches of trees to show the trend.

Period (EC) / varables	till 1933	1934 - '49	1950 - '66	1967 - '83	1984- '88
livestock population	□□	□□□	□□□□	□□□□□	□□□□□□
grazing land	xxxxxxxxxx	xxxxxxxx	xxxxxx	xxxx	xx
animal disease	oooooooo	oooooooooo	oooooooooooo	oooooo	oooo

Black leg (Aba gorba), Anthrax (Aba senga), Trypanosomiasis (Gendi), diseases of the foot and mouth, of the backbone, of the head (Azurit) and pneumonia are common in the PA. Parasitic worms and insects also cause diseases. It was considered that Aba gorba, disease of the foot and mouth, Aba senga, Gendi, and disease of the backbone are fatal.

It is regarded that animal disease could be highest in the months of May and November. In May, worms are present in the grass, and because the animals get fat in the month of November, they are susceptible to disease. As worms tend to disappear, animal disease is extremely low in the month of September. As a whole, the availability of treatment has resulted in the lessening of animal diseases.

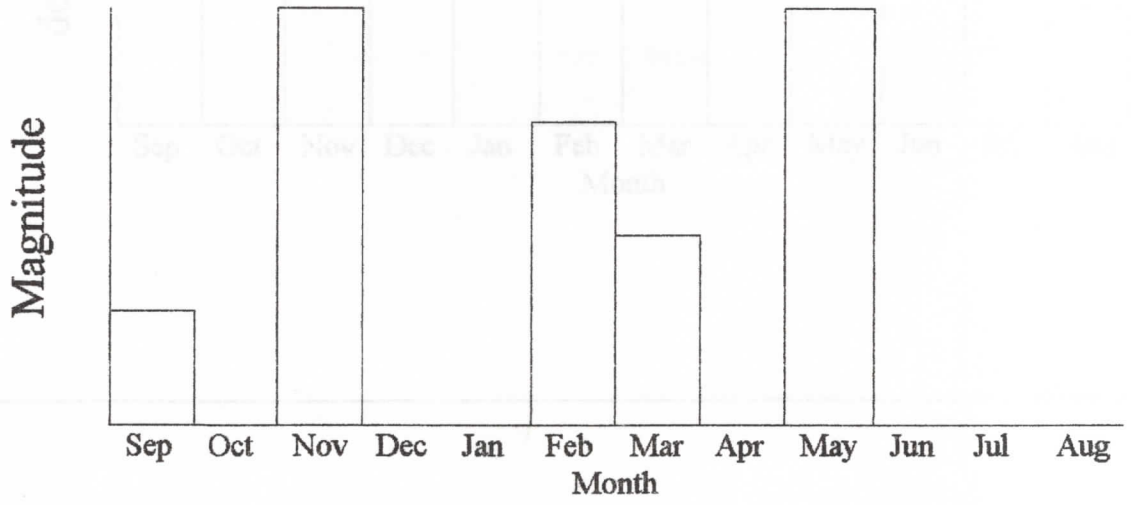
Matrix scoring of animal diseases as presented in Abeyi and Waran Wacho.

There were 10 participants in Abeyi and 4 in Waran Wacho. Their ages ranged from 27 to 77. They made the scoring through discussions in line with the PRA approach. The overall result is presented in the following table. Maximum point is 10 and the minimum is 0.

Type / criteria	Aba Gorba	Aba Senga	Gendi	Disease of the foot & mouth	Parasitic worms	Pneumonia	Disease of the head	Disease of the backbone
killing	10	10	9	8	6	7	7	8
being contagious	9	5	8	7	5	7	0	0
frequency of occurrence	10	4	8	8	3	4	8	4
availability of local treatment	0	0	0	0	0	0	0	0
painfulness	10	5	9	7	7	7	8	7

Seasonal calendar on animal diseases as presented in Abeyi and Waran Wacho.

The discussion with the same participants led to the following overall result



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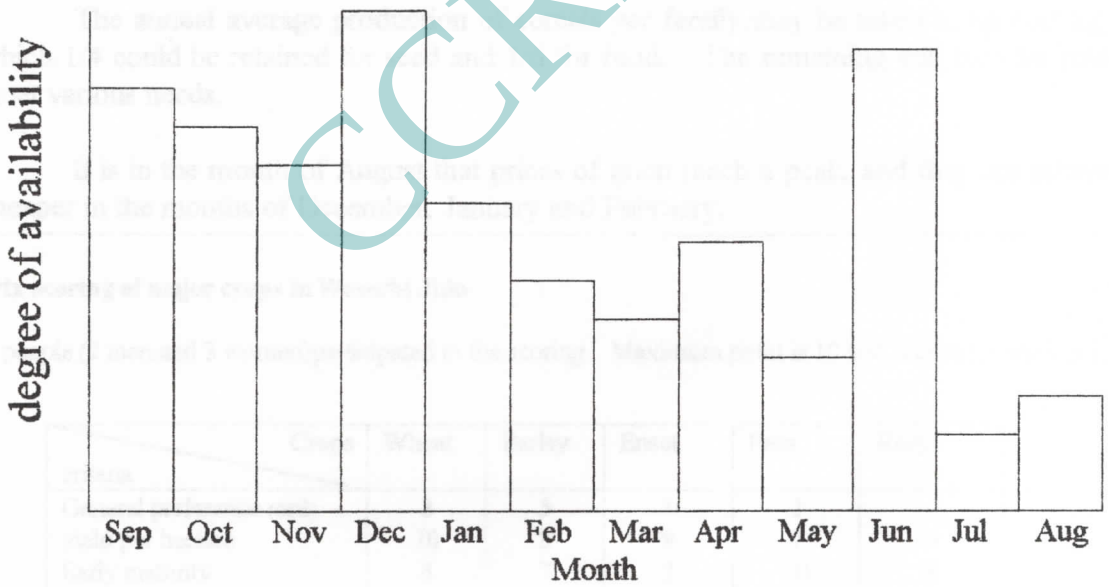
As far as feed is concerned, grass is available throughout the year, though the quantity varies. What is not collected during wheat and barley harvest (Karmia) is also available in the months of November, December and January. The animals can be fed chaff in the months of January, February, March, April, May and June. In the absence of rain, the sheep and goats eat leaves in the months of February, March, April and May.

It was pointed out in Getagie and Fato villages that grass is the most important diet for livestock. Stalks or chaff of beans and peas, barley, wheat and teff follow in that order as means of fodder in Getagie, and it is the same in Fato village except that the interviewees place more importance to leaves than the residue of teff. The reason for the ranking is given below.

grass - available whenever there is rain
beans and peas - grass grows alongside in addition to their chaff
residue of barley - nutritional value
wheat - grass grows alongside in addition to its stalks and chaff
residue of teff - strengthens the oxen
leaves - for sheep and goats

Seasonal calendar on the availability of forage as presented in Abeyi and Waran Wacho.

The participants were the same. The outcome of the discussions is shown below.



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Although the preference for animals varies from village to village, the benefits derived from keeping them is common. The uses offered are indicated below.

Ox :- ploughing, threshing, dung can be used as manure, skin can be used for making mat (kurbet), spoons can be made from the horns, can be offered for sale

Cow :-produces milk, gives birth to a bull, dung can be used as manure, skin can be used for making mat (kurbet), spoons can be made from the horns, can be offered for sale, their respiration worms the abode (part of the homestead is used as cattle shed)

mule :-carries loads, means of transport

donkey:-carries loads

sheep :- can be used for food, skin can either be sold or can be used to make mat (debelo), can be offered for sale.

horse :- carries loads, means of transport

goat :- can be used for food, can be offered for sale.

3.3.5 Crops

Wheat, barley, beans, peas, lentils, linum usitatissimum (telba), potatoes and teff are grown. These are mainly regarded as cash crops. The money obtained from the sale of these crops is used for the payment of tax, loan on fertilizer and for the purchase of household goods. The staple diet is called 'kocho', which is made from enset. Another type of food known as 'amicho' is also obtained from it.

The annual average production of cereals per family may be taken to be 600 kg, of which 1/4 could be retained for seed and 1/6 for food. The remaining will then be sold to meet various needs.

It is in the month of August that prices of grain reach a peak, and they are relatively cheaper in the months of December, January and February.

Matrix scoring of major crops in Weserbi Jido

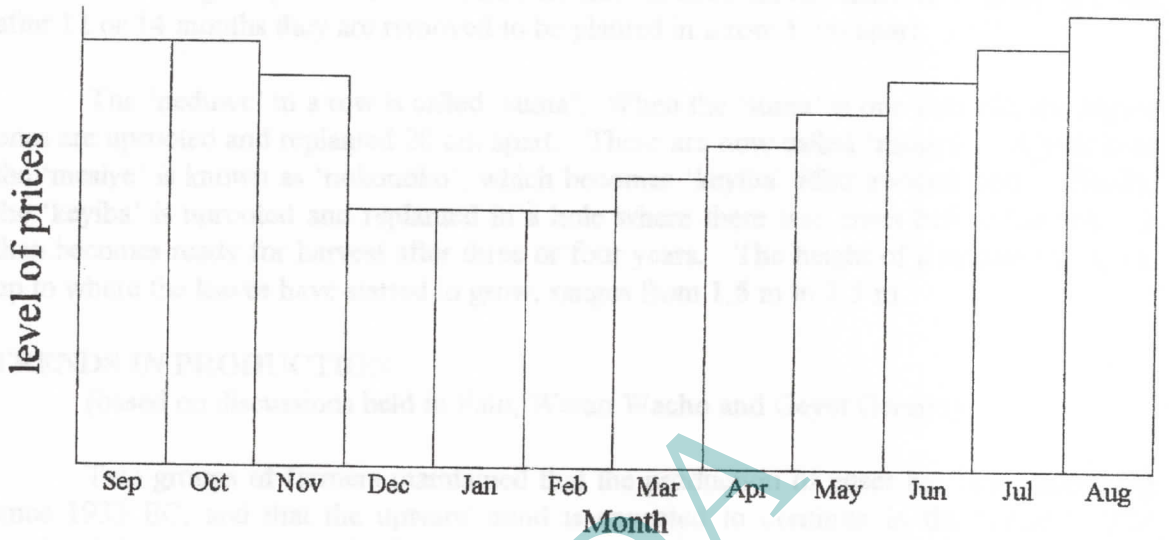
Four people (2 men and 3 women)participated in the scoring. Maximum point is 10 and minimum point is 1.

Crops / criteria	Wheat	Barley	Enset	Peas	Beans
General preference rank	3	5	1	2	4
yield per hectare	10	8	9	7	4
Early maturity	6	7	2	10	8
Food value	8	7	10	6	5
Market value	9	6	8	10	7
Disease and pest resistance	9	8	10	7	4
Drought resistance	8	6	10	3	1
Less labour requirement	5	6	1	8	7
Erosion protection	4	2	10	8	5

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Seasonal calendar on grain prices as presented in Weserbi Jido.

There were 5 participants. Their ages ranged from 45 to 78. They used a chart to show the calendar on grain prices.



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ENSET

Enset plantation is usually right behind and on the left and right hand sides of a homestead. It has the comparative advantage over fields of wheat, barley or any of the other crops grown in the area. A very small piece of land can be allotted to grow enough quantity cyclically, and the produce can feed a family for a life time. Supposing a poor man has 2,500 sq.m of land. It was understood that he can only have around 100 enset plants, which will cover an area of about 70 sq.m. The area of his dwelling can approximately be 55 sq.m. Thus he will have about 2,380 sq.m of land left for other crops that he may wish to grow.

Enset requires much labour, and takes 5 to 7 years to mature. It has the advantage of combating erosion and resisting drought. However, an unidentified disease affecting it alarmingly is a serious concern to every farmer.

It was explained by the farmers that enset will undergo five stages before reaching maturity. These are known as Neduwe, Suma, Mesiye, Nokonoko and Kiyiba consecutively. These stages were described as follows.

A kiyba is uprooted in the month of October and it is left in the sun for 3 to 7 days. The region around the root is pruned and the part beyond the 'amicho' (edible part of enset)

is also bisected. The bisection is made at a height of the kiyba which is 5 to 10 cm above the ground before the uprooting. A hole is then bored at the center of the cut off section, and a clod or a piece of stone is burried in it. By doing so, the growth of a single shoot is arrested. It is then replanted. The cut off section is covered with soft soil and two weeks later animal dung is spread on it. Some 20 new shoots, called 'neduwe', spring up, and after 12 or 14 months they are removed to be planted in a row 5 cm apart.

The 'neduwe' in a row is called 'suma'. When the 'suma' is one year old, the bigger ones are uprooted and replanted 20 cm apart. These are now called 'mesiye'. A year later the 'mesiye' is known as 'nokonoko', which becomes 'keyiba' after another year. Finally, the 'keyiba' is uprooted and replanted in a hole where there was enset before harvest. It then becomes ready for harvest after three or four years. The height of a mature enset, i.e. up to where the leaves have started to grow, ranges from 1.5 m to 2.5 m.

TRENDS IN PRODUCTION

(based on discussions held in Fato, Waran Wacho and Geyet Gereno)

Two groups of farmers maintained that the production of enset has been increasing since 1933 EC, and that the upward trend is expected to continue in the future. The continual increase was ascribed to the growth in population, i.e., production is directly proportional to the size of population. On the other hand, another group said that its production has been decreasing since 1933 EC, and that the downward trend is expected to continue in the future. Uncontrollable disease, resorting to the production of cereals, and rising wages of labourers who work in enset field are said to be causes for the continued fall in production.

In view of the scarcity of land and the widespread enset disease, it remains to be seen which school of thought will end up right.

One group of farmers shared the opinion that the production of wheat and barley has continued to decline since 1933 EC. It is anticipated that the fall in production will go on as the rise in population will demand the apportioning of the limited farm land to enset. The escalating price of fertilizer, erosion and deteriorating soil fertility were mentioned as additional factors that will contribute to the downward trend. The other two groups maintained that the ever increasing production of wheat and barley will go on.

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Figure 9 - Trend diagram of crops as presented in Fato, Waran Wacho & Geyet Gereno.

The participants were the same as in the discussion on trend of trees and erosion. The overall result is shown in the diagram below.

period (EC) / crop	till 1933	1934 - '49	1950 - '66	1967 - '83	1984 - '88
Enset	XX	XXXX	XXXXXX	XXXXXXXX	XXXXXXXXXX
Wheat	oo	oooo	oooooo	oooooooo	ooooooooo
Barley	||	||||	||||||	||||||||	|||||||||

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3.3.6 Agricultural activities

The main agricultural activities in the PA are planting enset, replanting enset, loosening enset field, removing bad enset, ploughing, sowing, weeding, harvesting, threshing and planting capsicum (Berberie), hoppe (Gesho) and kale (Abesha gomen)

With reference to the discusions held in Abeyi and Waran Wacho, the busiest month for the people in the PA is understood to be December and is followed by April. And conversely, activities are minimal in March, May and September. The activities by the month is indicated below.

January:- harvesting, threshing, digging enset field, replanting suma

February:- digging enset field, planting keyiba, ploughing

March:- ploughing, digging enset field

April:- digging enset field, loosening enset field, ploughing, planting berberie and gesho.

May:- ploughing

June:- ploughing, sowing, loosening enset field, planting berberie, gesho and abesha gomen.

July:- ploughing, sowing, planting berberie, gesho, abesha gomen and onion

August:- weeding, sweep up bad enset leaves, ploughing fallow land
September:- weeding

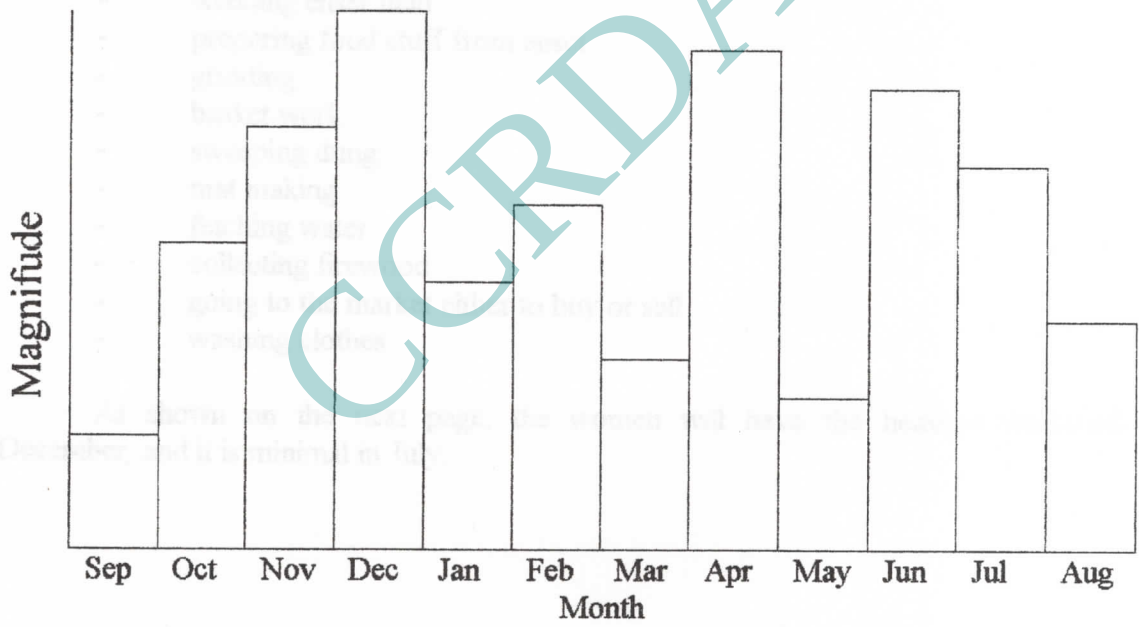
October:- digging enset field, Planting neduwe, cutting grass

November:- harvesting, digging enset field

December:- harvesting including enset, threshing, digging enset field, preparing land for planting keyiba, planting neduwe

Seasonal calendar on agricultural activities as presented in Abeyi and Waran Wacho

The participants were the same as in the previous discussions. The overall result is shown below.



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3.4 WOMEN's WORKLOAD

Women's labour

Five women took part in the discussions that was held in Nyia. They were asked to enumerate activities that the women are primarily engaged in, and their reply is listed as follows.

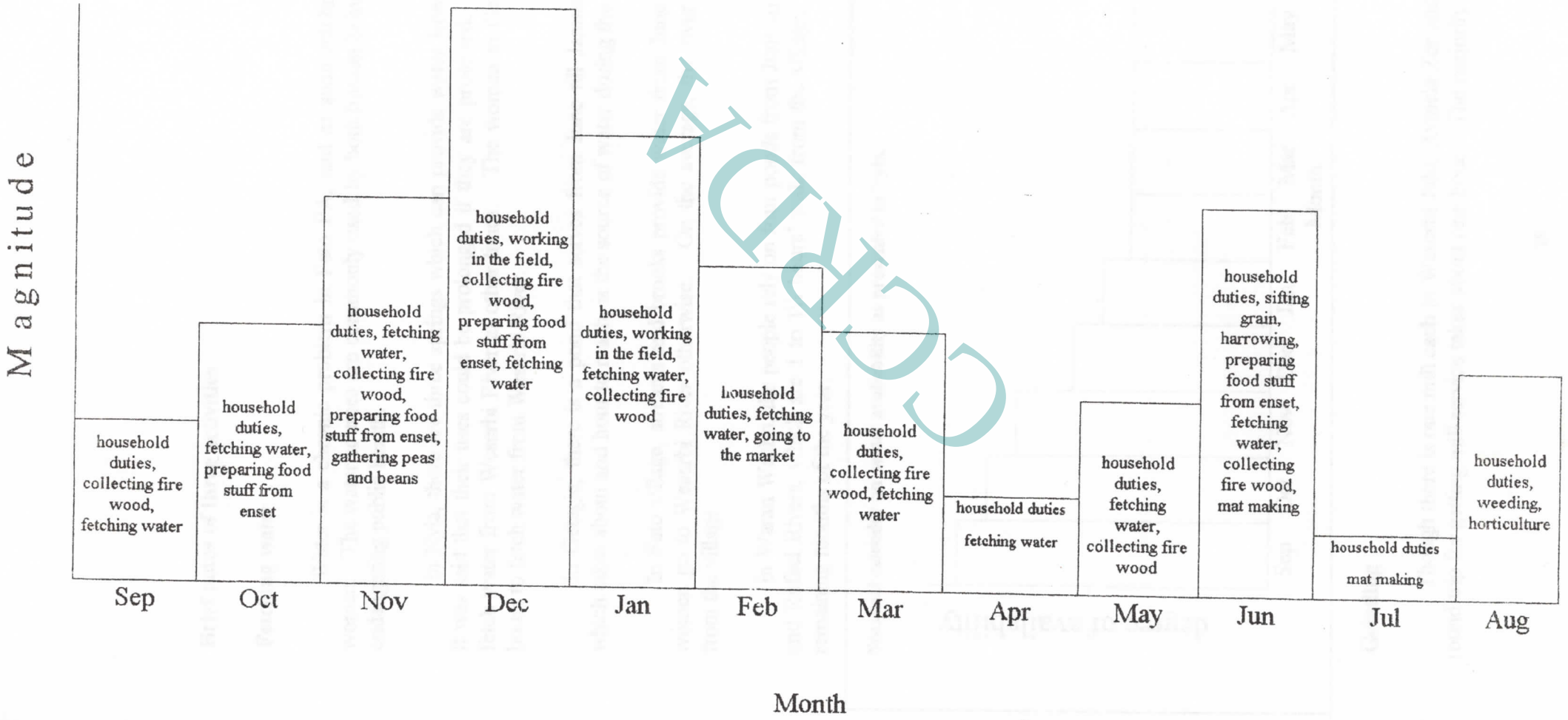
- harrowing
- sifting grain from the chaff using a locally made utensil
- weeding
- bundling crops
- carrying crop to the threshing spot
- cleaning the threshing spot
- collecting 'karmia' (what is left behind on the farm after harvest)
- child care
- cooking
- weeding enset field
- preparing food stuff from enset
- grinding
- basket work
- sweeping dung
- mat making
- fetching water
- collecting firewood
- going to the market either to buy or sell
- washing clothes

As shown on the next page, the women will have the heaviest workload in December, and it is minimal in July.

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Seasonal calendar on women's workload as persented in Nyia.

The group of 5 participants, that included unmarried ones, were all women.



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Brief notes of three activities

Fetching water

Water is a chronic problem in Fato PA, and as such fetching it is a burden on women. The water sources are commonly used by both human beings and livestock, thus endangering public health.

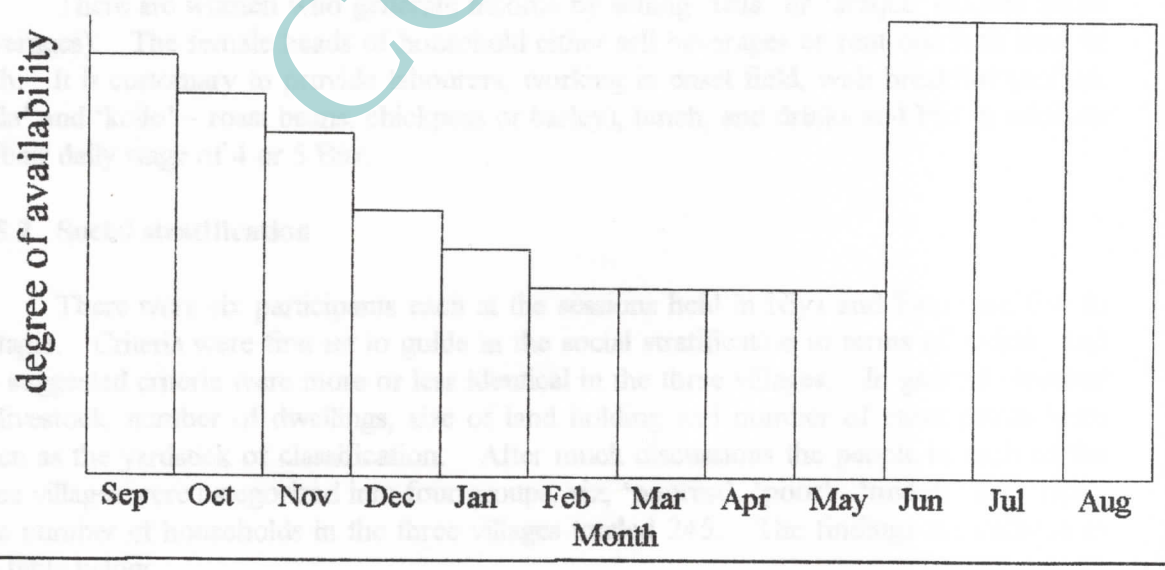
In Nyia, there are three springs which can provide water from June till December. It was said that their uses could be prolonged if they are protected. It takes 3 hours to fetch water from Weserbi River at other times. The women in Gedri Jido also travel 3 hours to fetch water from Weserbi River.

In Getagie, there is a pond that serves from June till January. Weserbi River, which takes about and hour to reach, is the source of water during the rest of the year.

In Fato village, streams and brooks provide water from June till October. The women go to Weserbi River otherwise. On the average, the river is 45 minutes' walk from the village.

In Waran Wacho, the people rely on four ponds from June to December. Gerefa and Rufael Rivers, which are 1 to 1½ hours' walk from the village, provide water in the remaining months of the year.

Seasonal calendar on water availability as presented in Nyia.



Grinding

Though there is one mill each in Weserbi Jido, Aymela Zer and Waran Wacho, the round trip for getting mill service takes about one hour. The majority of the women carry

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the grain, which can weigh 25 kg at most, to the mill while few use their donkeys instead. A smaller quantity is ground at home using millstones, which entails a labourious task.

Collecting firewood

Wood is the major source of heat in the PA. As the area covered by trees is diminishing day by day, the women find it very hard to collect fire wood.

3.5 HOUSEHOLD ECONOMY AND FOOD SECURITY

3.5.1 Means of livelihood

Farming, which is predominantly subsistence, is the major occupation of the people. Dairy and poultry products are not available abundantly on market days. They are widely consumed at home. Fowls are greatly attacked by falcons. Livestock rearing is practised at low level due to shortage of pasture. Although there appear to be opportunities for bee keeping, the number of bee hives in the PA is insignificant.

There were about 80 artisans and builders at the time. The artisans are skilled in pottery, wood work, tanning, metal work and weaving. Those doing tanning , metal work, weaving and the builders also have farms of their own; and most of those doing pottery and wood work do not. The ones engaged in wood work and pottery are usually husband and wife. They have no abode of their own. They stay in a particular house as long as the owner permits, and move to another place otherwise. The transfer could be temporary or permanent depending on the whim and wish of the owner of the house.

There are women who generate income by selling 'tella' or 'araqee' (locally made beverages). The female heads of household either sell beverages or rent out their land or both. It is customary to provide labourers, working in enset field, with breakfast (coffee, 'tella' and 'kollo' – roast beans, chickpeas or barley), lunch, and drinks at 4 PM in addition to their daily wage of 4 or 5 Birr.

3.5.2 Social stratification

There were six participants each at the sessions held in Niya and Fato, and five in Getagie. Criteria were first set to guide in the social stratification in terms of wealth, and the suggested criteria were more or less identical in the three villages. In general, number of livestock, number of dwellings, size of land holding and number of enset plants were taken as the yardstick of classification. After much discussions the people in each of the three villages were categorized into four groups, viz, 'poorest', 'poor' , 'middle' and 'rich'. The number of households in the three villages totaled 245. The findings are collated in the table below.

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Category	Possession	Number of people in the category
Poorest	no livestock, no land, shelter provided by in-laws or paid to stay in a house whose owners are living somewhere else	21
Poor	1 cow, 1 sheep, 1 goat, 0.25 hectare of land, 100 enset plants, grain harvest amounts to 100 kg/year, a small house	82
Middle	1 ox, 1 or 2 cows, 1 or 2 sheep, 1 or 2 goats, 1 donkey, 0.75 hectare of land, 150 enset plants, grain harvest amounts to 600 kg/year, 1 house and a separately built kitchen	89
Rich	2 oxen, 3 or 4 cows, 3 sheep, 5 or 6 goats, 1 donkey, 1 mule or a horse, 1½ to 2 hectares of land, 300 - 400 enset plants, grain harvest amounts to 900 kg/year, 2 houses and a separately built kitchen (the houses can be on the same or different farm lands).	53

In addition to the above, other factors such as the number of meals taken in a day, renting out land and sell of labour were mentioned as a measure of wealth. Those in the 'poorest' category usually eat one meal a day at home and earn their living by selling their labour. Those in the 'poor' category eat one meal a day as well, and often work as labourers. They are also characterized by renting out their piece of land. The people in the middle category eat 3 meals a day, do not sell their labour, and sometimes rent land from others. Finally, those in the 'rich' category eat three meals a day, hire labourers and also rent land from others.

The size and construction cost of dwellings were also taken as a way of easily identifying an individual's status. The floors of the huts are circular and the diameter ranges from 8.5m to 10m. The diameter of a poor man's house could be around 8.5m and that of the rich can even be a little above 10m. The person's house in the 'middle category' could have any dimension between 8.5m and 10m. The construction cost varies with the length of the diameter of the floor. A 'poor man' can not afford more than Birr 500 for the construction of his dwelling, and those in the 'middle category' could spend around Birr 2000, while the rich can go to Birr 4000. Another striking difference mentioned during the discussion was the amount of money one gets from kin living in Addis Ababa and other towns during the Meskel and Easter holidays. The ones in the 'middle category' will receive Birr 20, while the 'rich' will get around Birr 50 for each of the two holidays.

An individual, who has only an ox looks for a man who owns one ox only. They combine them to form a pair and plough their plots one at a time. The 'poor man' who does not have ox at all trys to secure one from someone else. He then forms a pair in the same way as mentioned above. The ploughing is also done like wise. During harvest, the 'poor man' shares his product equally with the person who provided him with an ox in the first instance.

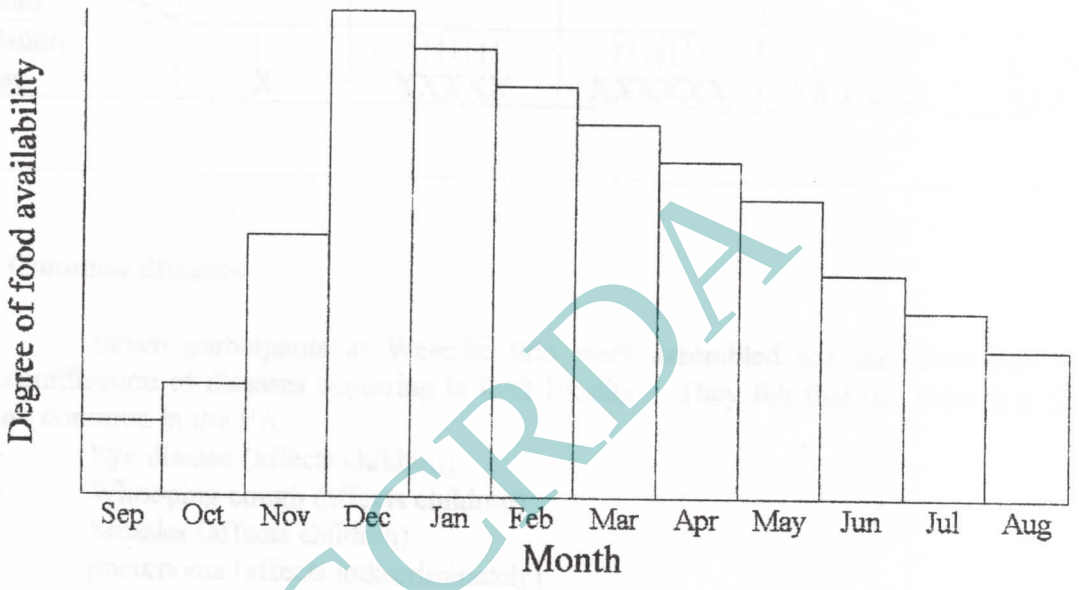
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3.5.3 Food availability

The participants in Weserbi Jido were briefed on the matter and they were asked to make a food availability chart. The following was what they arrived at.

Food availability calendar as presented in Weserbi Jido.

The 5 participants who took part in the discusion on grain prices calendar again showed the degree of availability on a chart.



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The participants agreed that food is relatively in abundance in the month of December, followed by January, February, March April, May November, June, July, August, October and September. Furthermore, they stated that production is meant for food and partly for sale. Usually, when food is out of stock, a way of coping with the problem is to borrow money at 5% interest per month from a usurer.

3.6 HELTH, EDUCATION & OTHER SERVICES

3.6.1 Health

Health facilities

It was understood that human disease is on the increase. This could be attributed to the continued rise in population and the absence of a health institution in and around the PA. Buee is the nearest center for getting treatment. The sick, who are unable to walk, are taken to Buee by mule or using a locally made stretcher. Cases, which are beyond the

capability of the clinic in Buee, are referred to Addis Ababa. Those who can not afford going to the clinic in Buee opt to come to Addis Ababa where their clothest relatives will take care of them. Under the circumstances, children and expectant mothers suffer most.

Figure 10 - Trend in population growth and human disease as presented in Geyet Gereno

period (EC) / Virables	till 1933	1933 - 66	1967 - 83	1984 - 88	1989 -
Population	||	||||||	|||||||	||||||||	|||||||||
Disease	X	XXXXX	XXXXXX	XXXXXX	XXXX

Common diseases

Seven participants in Weserbi Jido were assembled for the discussion on the identification of diseases occurring in their locality. They felt that the following diseases are common in the PA.

- Eye disease (affects children)
- Whooping cough (affects children)
- Measles (affects children)
- pneumonia (affects indiscriminately)
- Parasitic disease (affects children)
- Tuberculosis (affects indiscriminately)
- Acute pain (affects indiscriminately)

Matrix scoring of the fore-going diseases. Maximum Point is 10 and minimum point is 0.

disease / criteria	eye disease	whooping cough	measles	pneumonia	parasitic disease	TB	acute pain
Frequency of occurrence	8	5	6	4	7	2	10
Availability of treatment	0	0	0	0	5	0	0
Painfulness	5	7	9	7	8	4	9
Killing	0	5	6	7	6	5	10
treatment cost	4	5	0	5	7	8	8
being contagious	3	6	9	6	4	8	1

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3.6.2 Education

It was estimated that there were about 600 school age children in the PA. It appears that the figure does not commensurate with the capacity of the primary school that was under construction. The school has four classrooms and could have roughly a seating capacity of 240. As the trek discourages parents from sending their children to the schools in Buee or Amawutie, serious thought needs to be given to expanding and upgrading the school in order to accommodate the growing number of children in and around the PA.

3.6.3 A summary of other services

- Water supply:- available at far away sources
- Mills:- The three mills in the PA are said not to commensurate with the demand
- Supply of agricultural inputs:- fertilizer, improved seeds and pesticides can be had in Buee, the wereda capital about 10kms distant from the PA
- Credit facility:- loan from the nearest bank is available only for the purchase of fertilizer
- Nursery:-Nurseries are situated near Buee and in Amawutie which are far from the PA.
- Crop protection:- There is no crop protection service at all in the PA. However, there was one development agent based there.
- Veterinary service:- Preparations were underway to start veterinary service.
- TBAs - There were two TBAs in the PA

3.7 INSTITUTIONS AND ASSOCIATIONS

3.7.1 Institutions

The only institution at the time of the fieldwork was the PA office. It can be taken as the lowest administration unit. The wereda council uses the PA office for various purposes such as organizing the people for participatory development, security, tax collection, distribution of fertilizer, and showing around visitors. It also serves as a court of justice.

3.7.2 Associations

The following associations were reported to exist in the PA

- Sabugnet
- Tija
- Wusacha
- Wojo
- Senbete
- Ekub
- Mahiber

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Sabugnet

Sabugnet has been cited as the most important association. Fato PA is divided into the nine villages using this type of association.

Members of the sabugnet bring food and fire wood to the house of the bereaved in addition to their contribution of money, which is fixed at 2 Birr when a husband or wife dies and 1 Birr when a child under 5 dies. It also arbitrates disputes between the members.

Tija

A group of 8 to 10 men work in the enset field of one of the members of the group. The work rotates until all the members are served. Usually, the group is offered breakfast, lunch, and drinks at every house where the work is done.

Wusacha

Women assemble to prepare 'kocho' and 'amicho' from enset at each house of the members of their group. This is carried out in rotation. The food stuff that is to be prepared may last a household a year or more depending on the number of enset an individual owns. Each household serves the women with coffee, lunch and 'tella'.

Wojo

About 20 households form a group, and their livestock are herded by one member of the group for a day. The turn shifts until every member has done the herding. Children aged 14 or 15 may take the place of their parents and those without such children will have to do it themselves.

Senbete

Members of the senbete gather at church on sundays either monthly or fortnightly. Food and drinks is brought by turns. Prayer is offered during the occasion, and travellers passing by are asked to take rest and have something to eat and drink.

Ekub

2 to 5 Birr is collected from members of the Ekub every month. The money goes to an individual by drawing lots. The lot is avoided whenever a member critically needs money so as to face an obligation, and the collection is given to him/her in consideration of his request. An individual can also buy a lot on any one of a given number of drawing dates so as to collect money with out going into the casting of lots. The money thus raised by the ekub is shared among members at the termination of the ekub. Any one within or outside the PA is eligible for joining the ekub. The ekub can have a duration of more than 5 years, i.e., depending on the membership, which could very from 20 to 100.

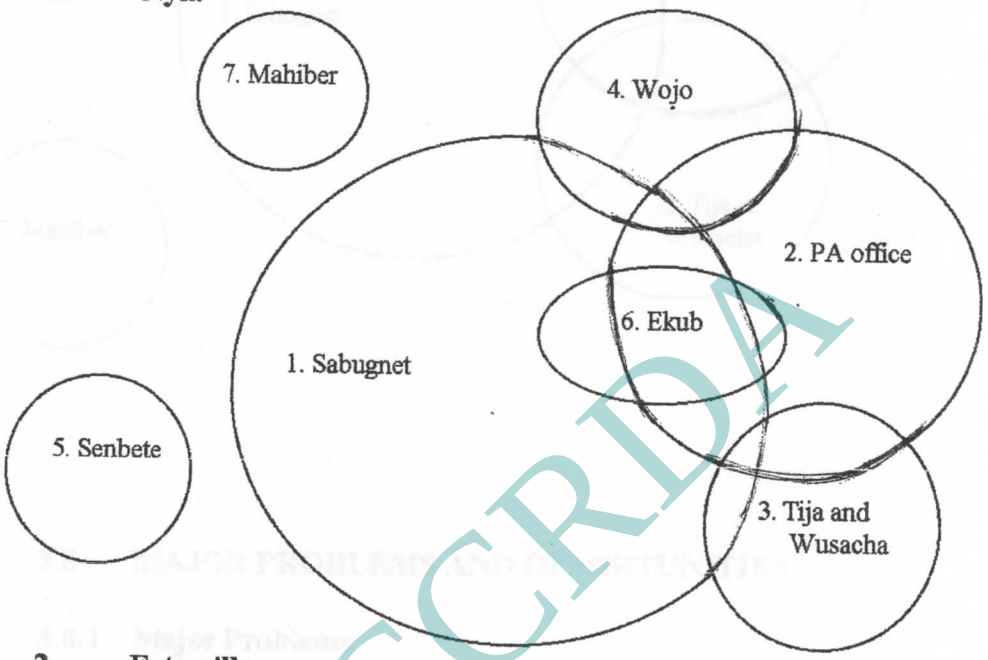
CCRDA

Mahiber

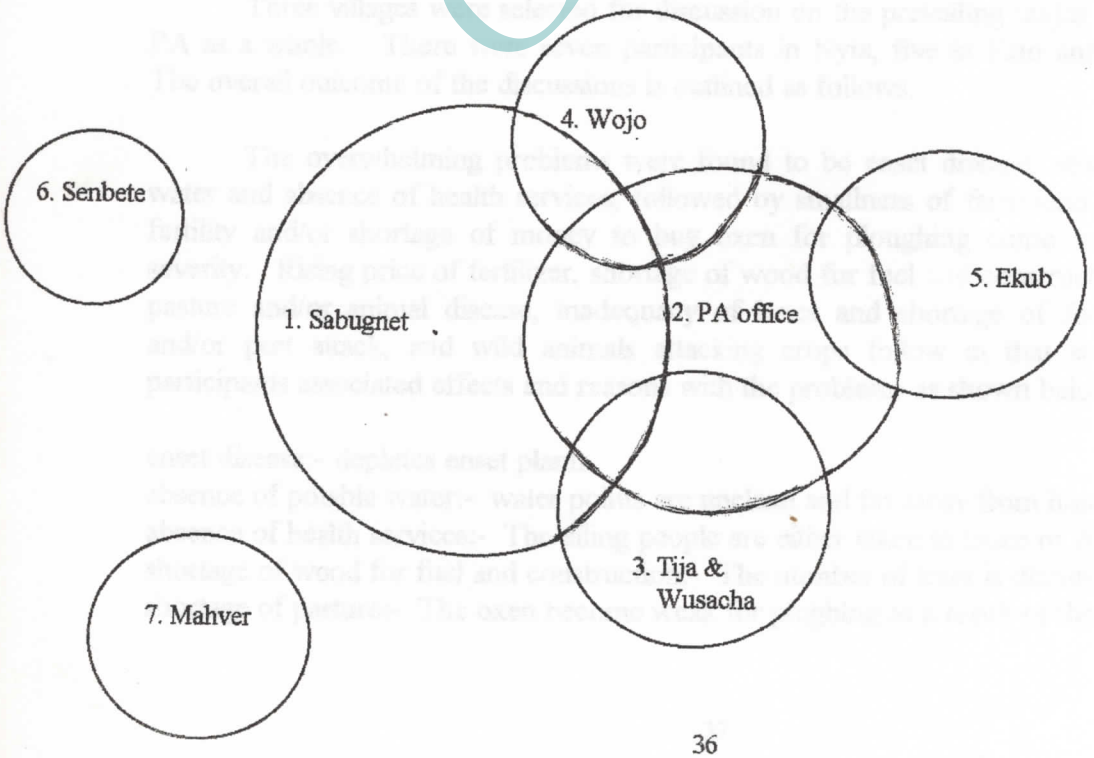
Mahiber takes place every month in commemoration of St. Mary and St. Michael. The rotational feast is at a member's house between 2 and 6 PM. An unlimited membership is practised. This gathering is taken as a means of promoting fraternity, and an opportune moment for thanksgiving and blessing..

Figure 11 - Venn diagram of the institution & associations

1. Nyia

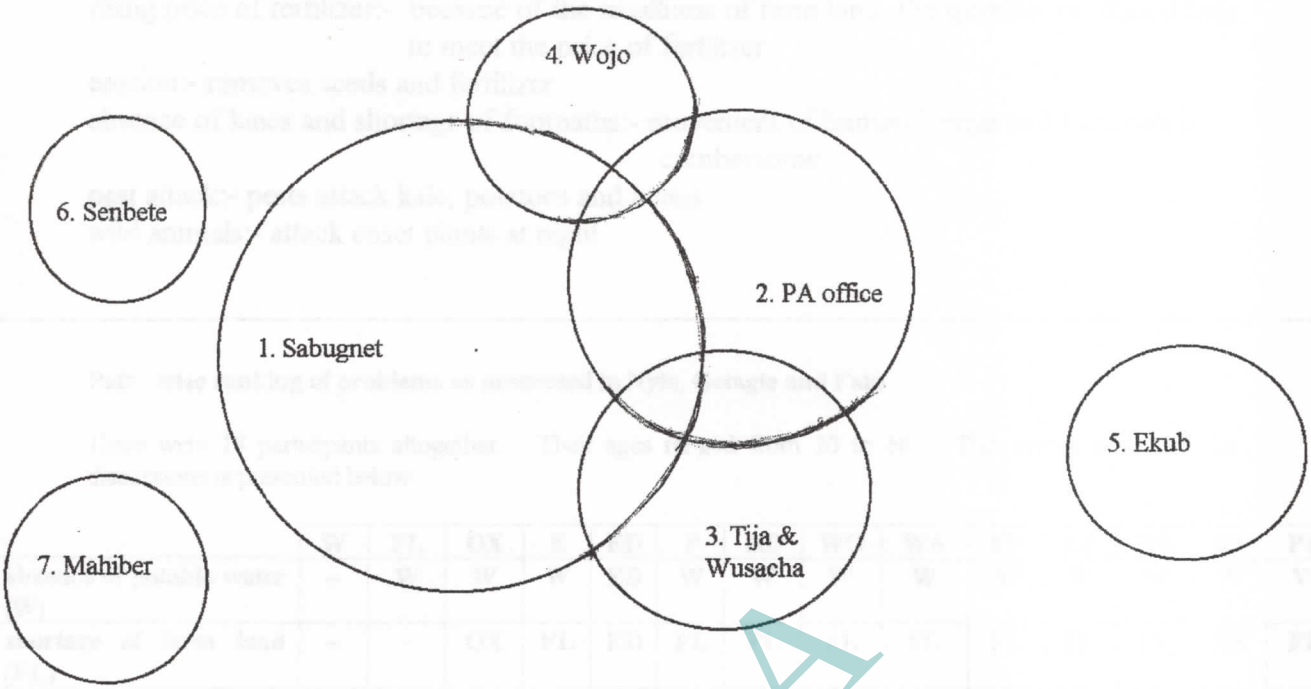


2. Fato village



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3. **Getagie**



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3.8 MAJOR PROBLEMS AND OPPORTUNITIES

3.8.1 Major Problems

Three villages were selected for discussion on the prevailing major problems in the PA as a whole. There were seven participants in Nyia, five in Fato and six in Getagie. The overall outcome of the discussions is outlined as follows.

The overwhelming problems were found to be enset disease, absence of potable water and absence of health services, followed by smallness of farm land. Declining soil fertility and/or shortage of money to buy oxen for ploughing come next in terms of severity. Rising price of fertilizer, shortage of wood for fuel and construction, shortage of pasture and/or animal disease, inadequacy of lanes and shortage of footpaths, erosion and/or pest attack, and wild animals attacking crops follow in that sequence. The participants associated effects and reasons with the problems as shown below.

enset disease:- depletes enset plants
absence of potable water:- water points are unclean and far away from home
absence of health services:- The ailing people are either taken to Buee or Addis Ababa
shortage of wood for fuel and construction:- The number of trees is diminishing
shortage of pasture:- The oxen become weak for plughing as a result of the shortage

animal disease:- causes the death of oxen
rising price of fertilizer:- because of the smallness of farm land, the quantity produced fails to meet the price of fertilizer
erosion:- removes seeds and fertilizer
absence of lanes and shortage of footpaths:- movement of human beings and livestock is cumbersome
pest attack:- pests attack kale, potatoes and beans
wild animals:- attack enset plants at night

Pair - wise ranking of problems as presented in Nyia, Getagie and Fato

There were 18 participants altogether. Their ages ranged from 20 to 66. The overall result of the discussions is presented below.

	W	FL	OX	E	ED	P	AD	WO	WA	SF	LF	PA	HS	PF
absence of potable water (W)	–	W	W	W	ED	W	W	W	W	W	W	W	W	W
shortage of farm land (FL)	–	–	OX	FL	ED	FL	FL	FL	FL	FL	FL	FL	HS	FL
shortage of money to buy oxen (OX)	–	–	–	OX	ED	P	OX	OX	OX	OX	OX	OX	HS	PF
erosion (E)	–	–	–	–	ED	P	AD	E	E	SF	LF	PA	HS	PF
enset disease (ED)	–	–	–	–	–	ED	ED	ED	ED	ED	ED	ED	HS	ID
shortage of pasture (P)	–	–	–	–	–	–	AD	WO	P	SF	P	P	HS	PF
animal disease (AD)	–	–	–	–	–	–	–	WO	AD	SF	AD	AD	HS	PF
Shortage of wood for fuel & construction (WO)	–	–	–	–	–	–	–	–	WO	SF	WO	WO	HS	WO
wild animals attacking crops (WA)	–	–	–	–	–	–	–	–	–	SF	LF	PA	HS	PF
declining soil fertility (SF)	–	–	–	–	–	–	–	–	–	–	SF	SF	HS	SF
inadequacy of lanes & shortage of footpaths (LF)	–	–	–	–	–	–	–	–	–	–	–	LF	HS	PF
pest attack (PA)	–	–	–	–	–	–	–	–	–	–	–	–	HS	PF
absence of health services (HS)	–	–	–	–	–	–	–	–	–	–	–	–	–	HS
rising price of fertilizer (PF)	–	–	–	–	–	–	–	–	–	–	–	–	–	–

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3.8.2 Opportunities

- There is an access road that links the area with the Addis Ababa-Welayita high way
- The formation of the society permits to launch campaigns so as to undertake development activities

- Experience ensures that the water table in the area guarantees the development of surface water
- The fact that grazing is communal leaves room for the improvement in forage
- There is a good understanding of the uses of trees, and thus tree growing can be implemented on a large scale over the years

3.9 MEETING WITH THE MEMBERS OF THE COMMUNITY

An invitation was extended to the men and women of the nine villages through the PA office to come to a meeting with the PRA group. The meeting was held one day after the conclusion of the PRA fieldwork, which covered five consecutive days. An encouraging attendance of more than 80 people was witnessed.

The meeting started by the introduction of the PRA group, and it was followed by a briefing on each topic treated during the fieldwork. The findings of the PRA, with emphasis on the prevailing problems in the area, were also presented to the gathering. Discussion then continued with the people focusing on the problems widely affecting them. Issues raised by them included.

- the need for the construction of a bridge across the Rufael River, which has caused the death of many lives
- the need for large scale afforestation
- the scarcity of pasture
- the need to develop springs
- wild animals attacking crops continue to be a great challenge
- superstitious acts such as slaughtering goats or fowls had been carried out with the intention of eradicating enset disease but to no avail. The intervention of the government in this regard is important
- A bridge should be constructed across the Meki River. All concerned are willing to make contribution towards the cost of construction
- the absence of inter village lanes necessitates having them at all costs

As the discussions drew to an end, the PRA group underscored that the community should not rely completely on external aid to overcome its problems. It was then pointed out to them that organizing themselves so as to pave the way for addressing themselves to the problems facing them is of paramount importance. The meeting ended after an exchange of thanks and best wishes.

3.10 DEVELOPMENT OPTIONS

In view of the overall findings of the PRA, the following development options can be recommended. It is understood that there will be the participation of the community in all the projects aimed at ameliorating the unfavourable condition.

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Enset disease

Any development agency that is operational in the wereda should consult and work together with the Bureau of Agriculture in Awasa so as to mitigate the problem of enset disease.

Water supply

It can be recalled that the water points are far from most of the huts. The impurity of the water is aggravated by animals treading on it, and the people washing their clothes on the river beds. The situation can be improved by developing springs, construction of hand dug wells, and construction of ponds for livestock.

Health services

Assessment can be carried out to identify the type of health facilities that could serve the needs of the community. Training of TBAs and CHAs are areas which should not be ignored. The provision of veterinary service must be considered also.

Nurseries

In view of the dire need for wood, i.e., for fuel and construction purposes, the establishment of nurseries (central, communal, private) is justified. An appropriate project should be designed to this effect.

Pasture

As the demand for land continues to grow, it is likely that parts of the areas restricted to grazing can be reclaimed. Thus a study needs to be undertaken in order to contain the problem and also improve the availability of forage.

Reduction in the use of fertilizer

Animal dung is used for fuel less than wood. The introduction of compost in the long run thus becomes a possibility. This measure can result in the reduction of the purchase of fertilizer, the price of which tends to increase.

Soil and water conservation

In view of the mounting problems with regard to soil, appropriate techniques of soil and water conservation can be introduced.

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Inter village lanes and footpaths

As farmers are willing to give up part of their holdings for the purpose of having lanes and footpaths, a way of mitigating the problem should be sought.

Credit scheme

Agricultural productivity can be enhanced if a credit scheme can be carried out successfully. Thus a study should be conducted to identify how best the farmers can utilize loans from a credit scheme.

Agricultural extension

Any development undertaking in the area by an NGO should consider ways of supporting the development agent who is stationed in the area.

Education

The school can accomodate the growing number of children in the PA if it is expanded and upgraded. Thus a project that aims to encourage the participation of school age children is feasible.

Mill

There are already three private mills in the PA. The addition of one more mill at a strategic place can further reduce the burden on women, and it will be profitable also. Thus needy women can generate income for themselves if a project organizes them to own and run the additional mill.

CCRDA

PICTORIAL RECORDING

1. The PRA team





ICRDA

2. Participatory appraisal





CORDA





CGRDA

3. **Scenes in Buee Zuria PA**







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4. Meeting with members of the community in Fato PA



4. BUEE ZURIA PA

4.1 A PROFILE OF THE PA

4.1.1 Location, population, climate

Buee Zuria is also one of the PAs in Sodo Wereda, and it is bordered by seven PAs. The PRA fieldwork covered 7 of the 8 villages which are within a radius of 7 km from Buee, the wereda capital. The farthest of them is Arona. The Addis Ababa - Welayita high way crosses Kasai and Guchimotebie. The following is the list of the villages.

- Guchimotebie
- Kasai
- Dire & Awara
- Chirahi & Telahi
- Washi
- Welasa
- Arona
- Arachi & Emayegie

The first 7 villages on the list were reported to have 485 households, of which 73 (15%) were headed by females. The average family size was found to be 6.5, and thus the population of the PA at the time could be in the neighbourhood of 3500, with about 94% of them being followers of the Ethipian Orthodox Church. The number of muslims was around 4%, and that of protestants was about 2% of the population. The St. Michael church in Washi has a cemetery for christians. There is also the Beale Wold (Glory to the Son) church in Buee. The muslims have their burial ground not far from the St. Michael church.

The majority in Buee are traders with many of them being engaged in activities such as the sell of araqie and tella (locally made beverages), and sell of one's labour. The number of government employees is quite significant.

The PA lies at an altitude of about 2000 m, and it is in the 'wet' Weyna Dega part of the wereda. The rains come only during the 'big' rainy season.

4.1.2 Overall features

The Meki River borders Washi and Welasa villages to the west. Arona is bordered by the Meki River to the east and by Arona River to the south. The Meki, Aleltu and Weldia Rivers flow by Chirahi & Telahi. Dire & Awara is bordered on one side by the Kelekindo River.

The soil in Arona, Kasai and Chirahi is a combination of red and black whereas in Guchimotebie, it is red, black and brown. In Washi, it is predominantly black with little brownish and red clay soil. Welasa has only black soil.

Teff, maize, sorghum, wheat, beans, chickpeas and enset are cultivated in the PA. In Arona, there are some farmers who are used to irrigation. Baboons, monkeys, bush pigs and porcupine cause damage to crops.

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Cows, oxen, sheep, goats, donkeys and hens are kept in the PA. There is shortage of pasture. Grazing area is at the banks of the Meki River, in the valleys and on the hills.

There are 2 ponds and a spring in both Guchimotebie and Kasai. There is also a pond in Washi.

There is now no forest as such but a bunch of trees consisting of Acacia (Girar), Croton Macrostachys (Bisana), Eucalyptus, Juniper (Tid), Ficus (Warka), Cordia Africana (Wanza) and Casuarina equisetifolia (Shewshewie) can be seen here and there.

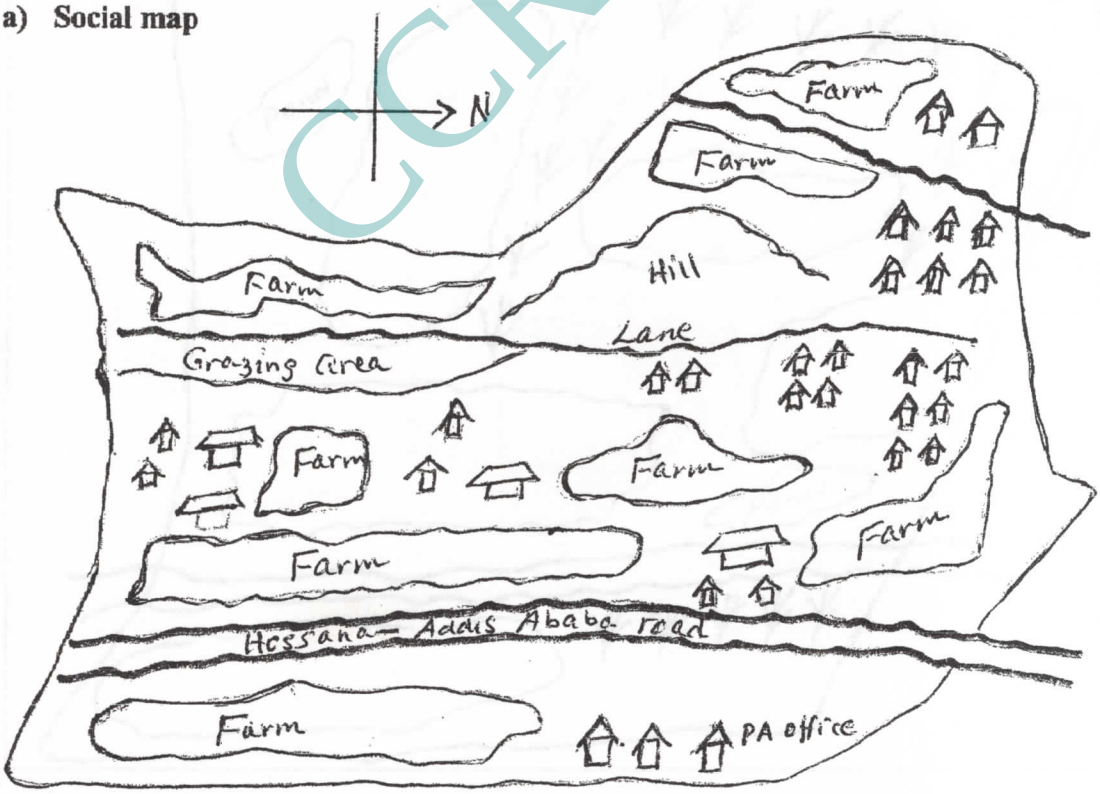
There is an elementary school in Chirahi & Telahi. It was also found out during the field-work that there was one TBA in Washi. On the whole, Buee is the place that renders services such as education, health, veterinary and mill. Fertilizer is also made available there. Tuesday and Thursday are the market days in Buee. The villagers in Welasa also go to the market in Kella, a town 10 km further from Buee, on Saturdays.

The Ethiopian Orthodox Church nursery is situated at the bank of the Meki River in Washi village.

Figure 1 - Social and resource maps of Kasai

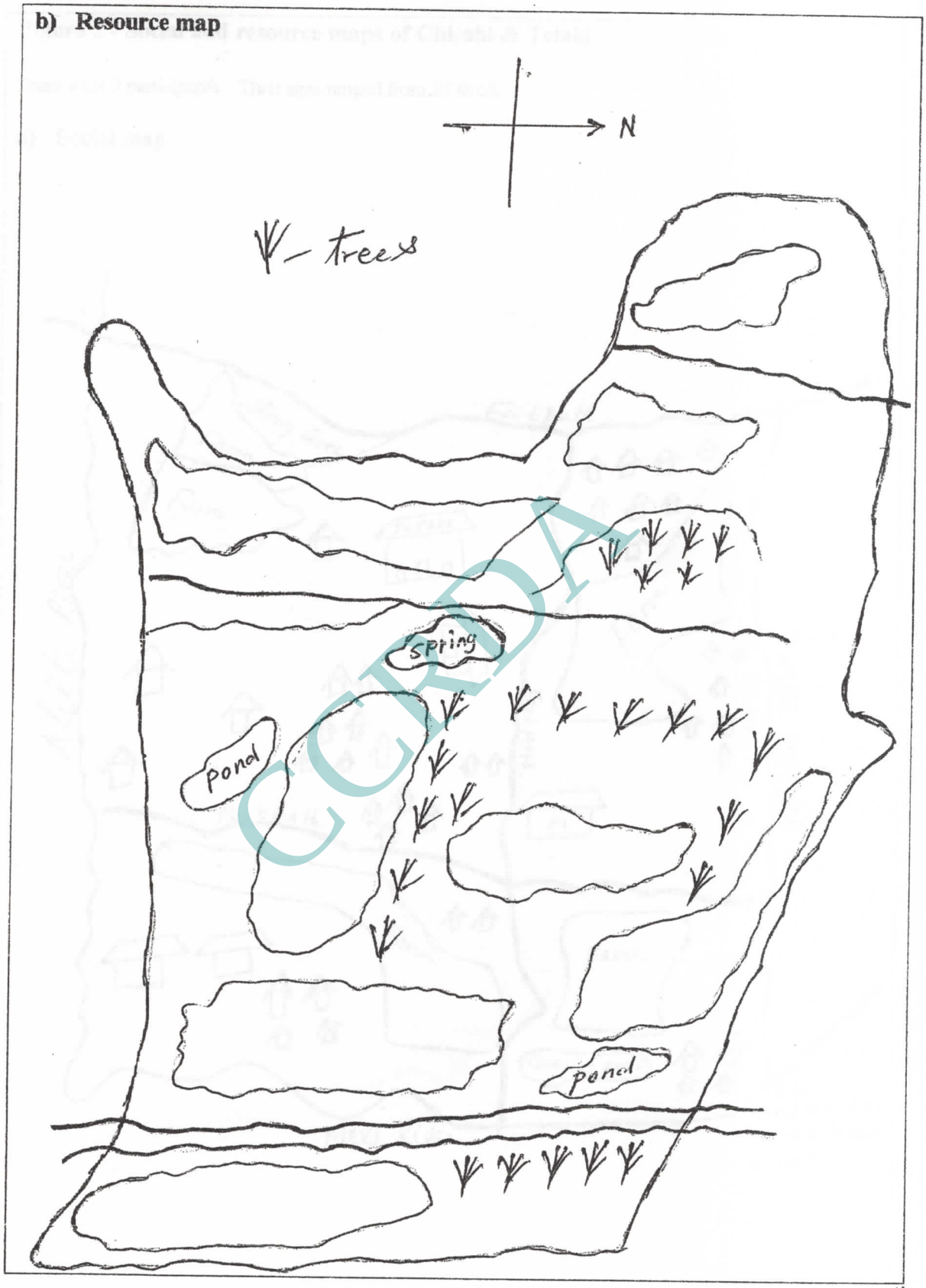
The participants numbered 15. They were very enthusiastic while drawing the maps. Their ages ranged between 20 and 80.

a) Social map



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b) Resource map



CCRDA

Figure 2 - Social and resource maps of Chirahi & Telahi

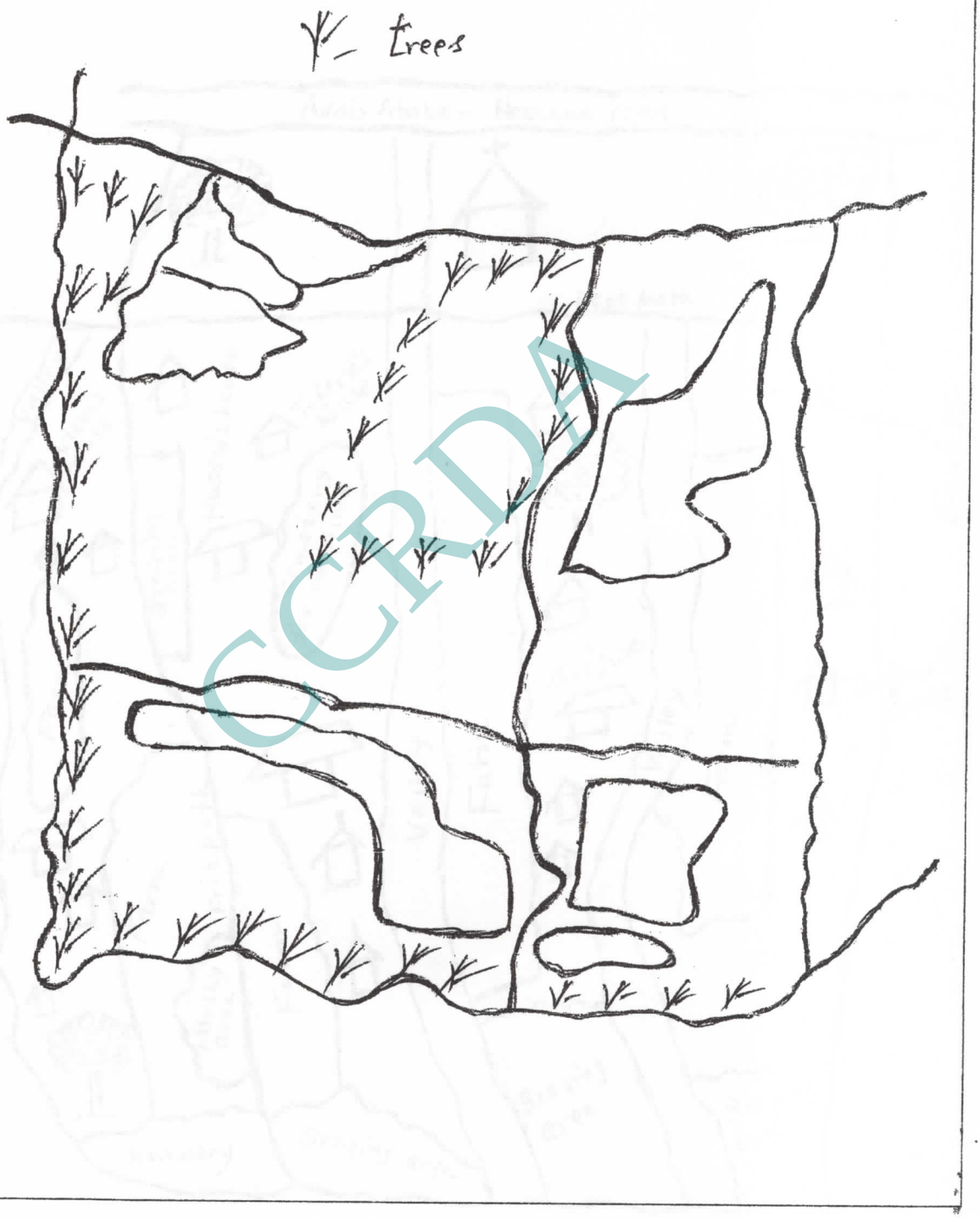
There were 7 participants. Their ages ranged from 25 to 65.

a) Social map



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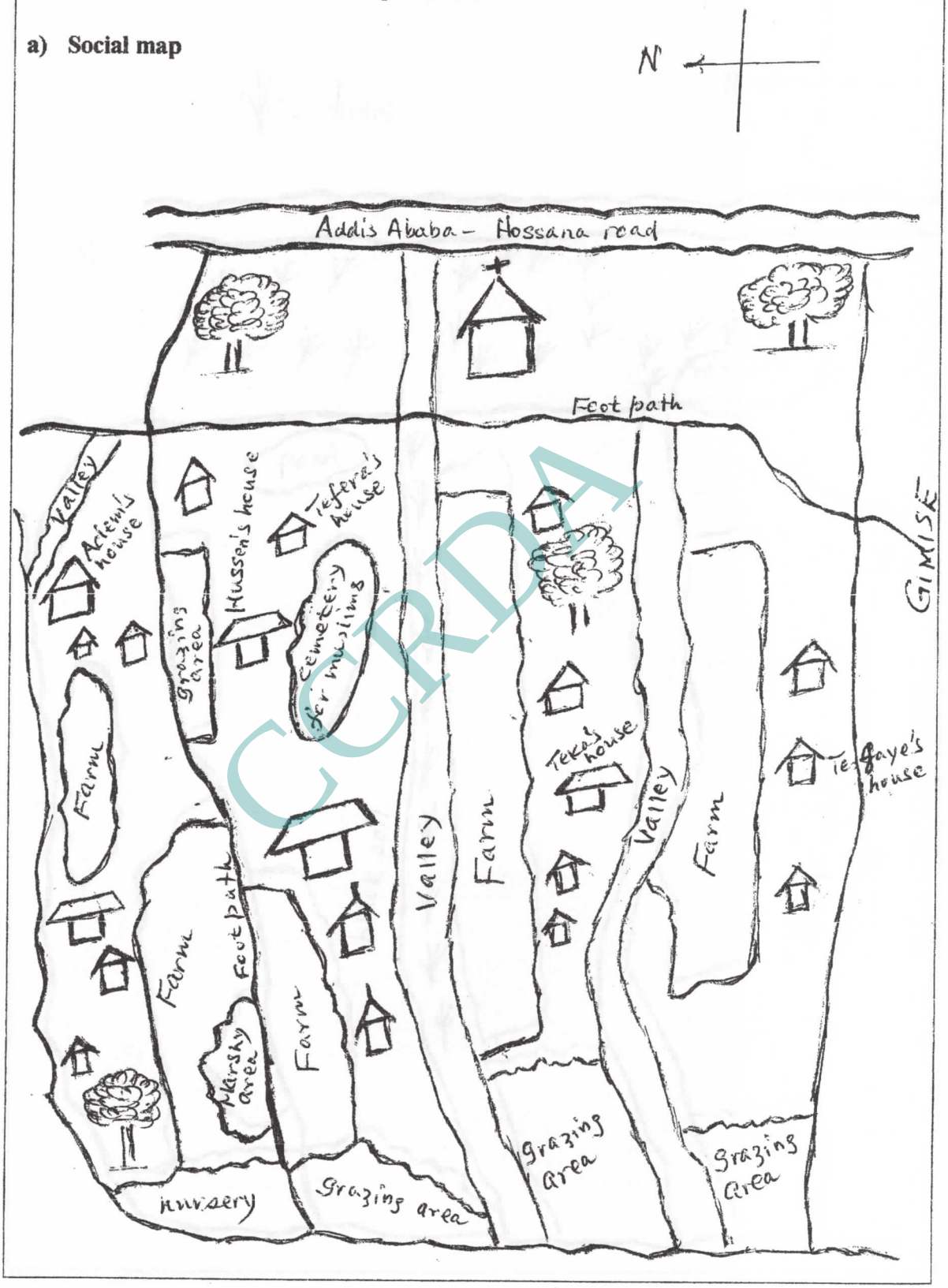
b) Resource map



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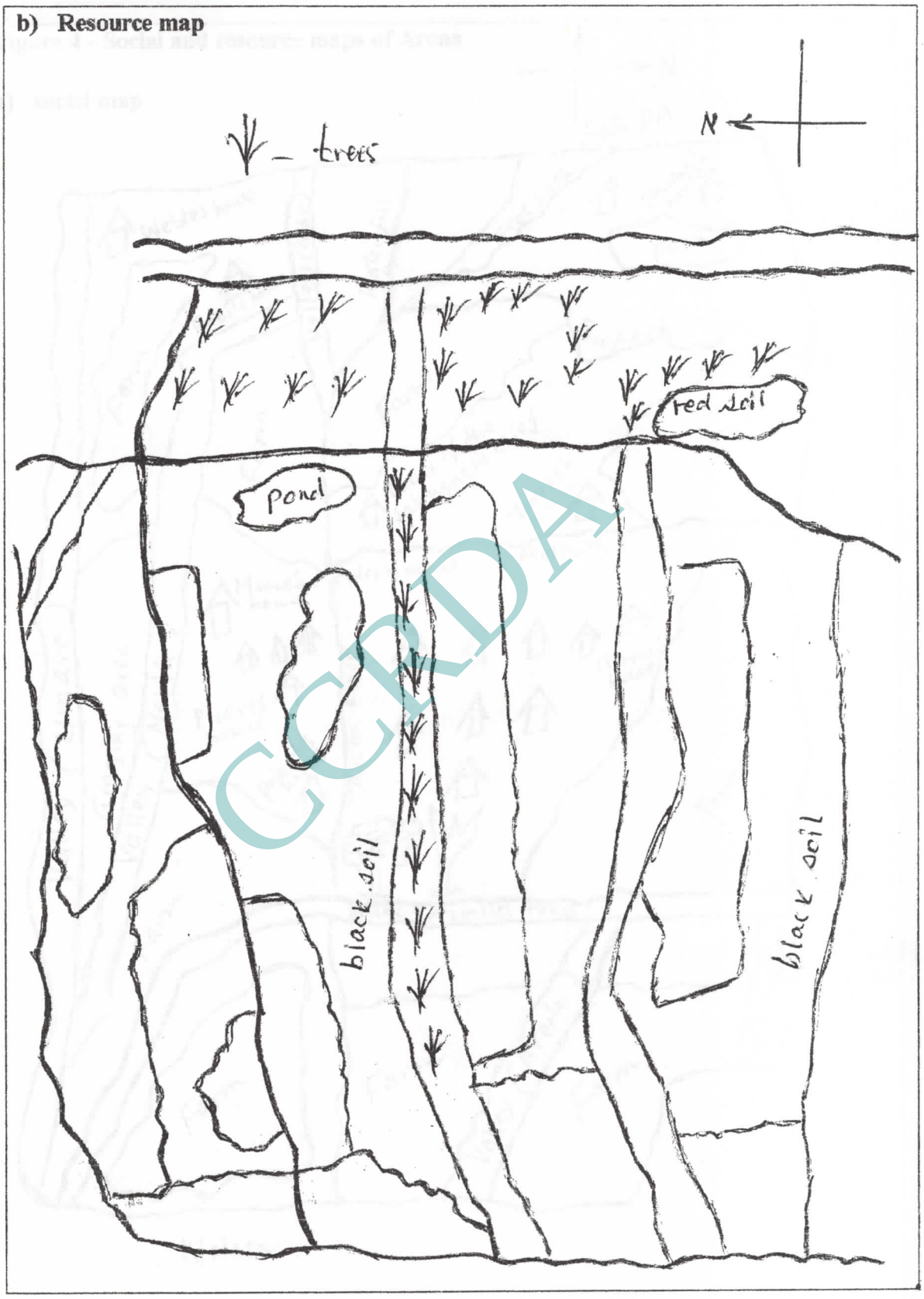
Figure 3 - Social and resource maps of Washi

a) Social map



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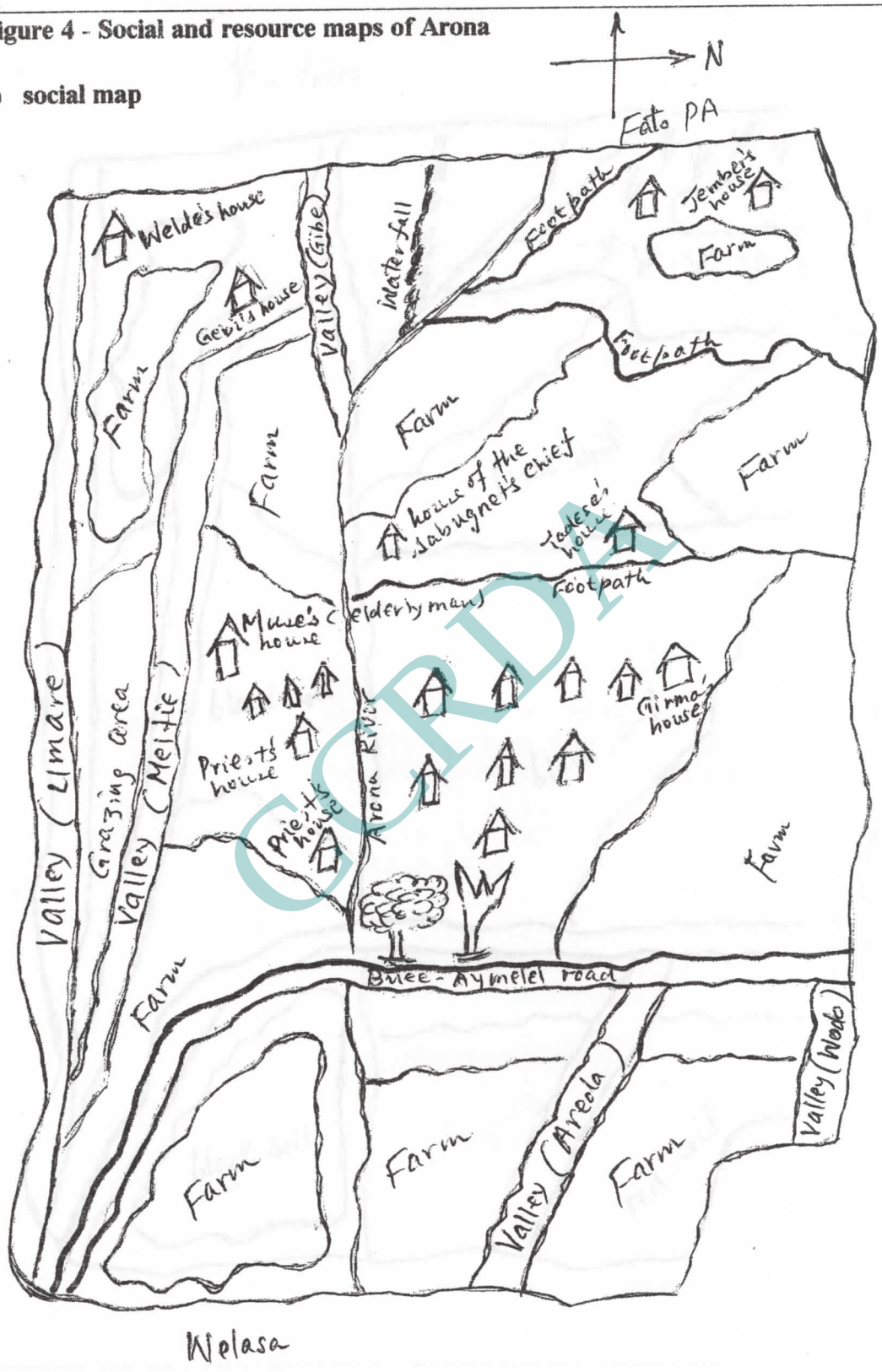
b) Resource map



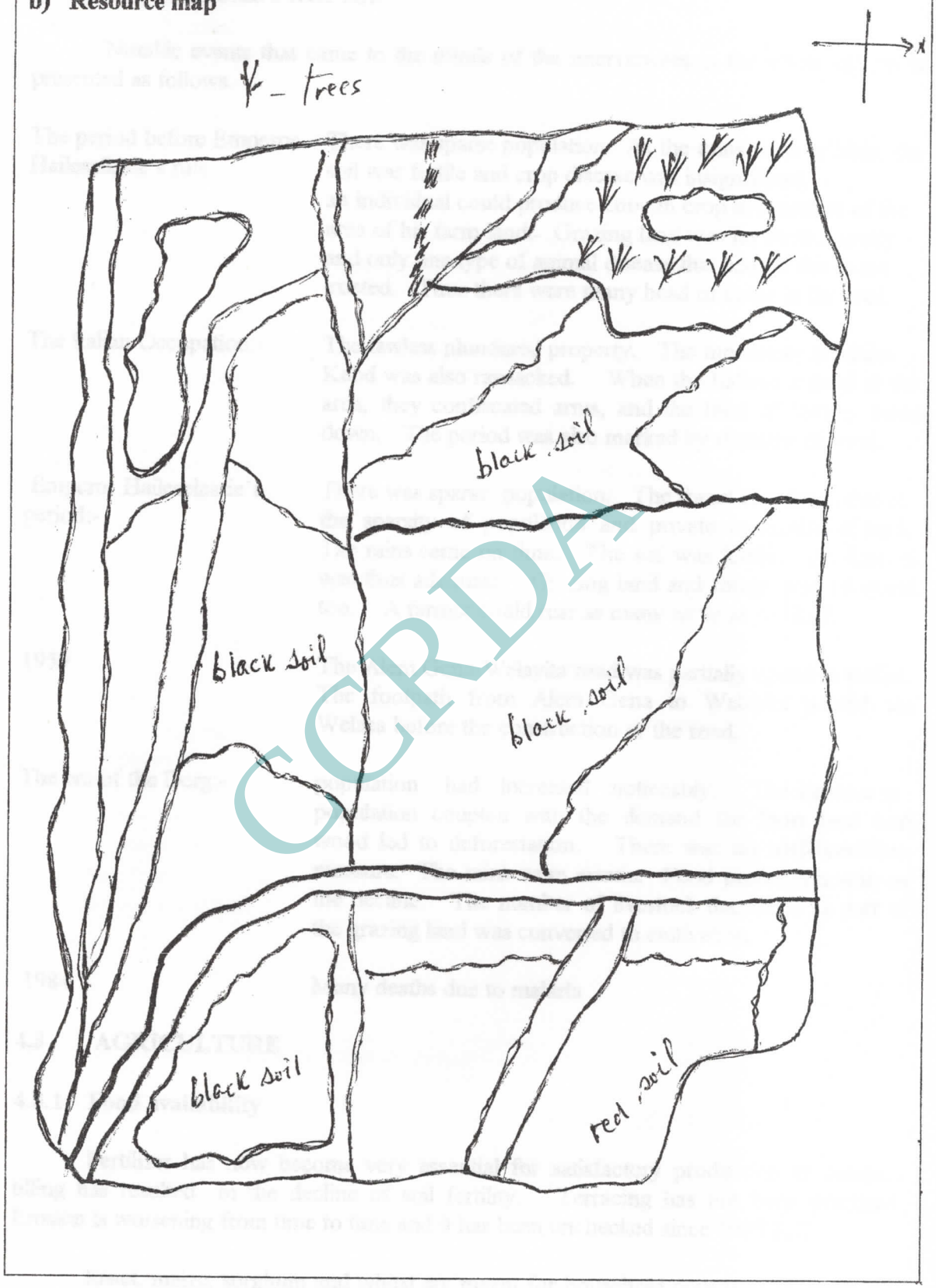
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Figure 4 - Social and resource maps of Arona

a) social map


N
Eato PA
Welde's house
Gebi's house
Valley (Gibe)
Farm
Farm
Farm

b) Resource map



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4.2 HISTORICAL PROFILE

Notable events that came to the minds of the interviewees in the seven villages is presented as follows.

The period before Emperor Hailesellasie's rule	There was sparse population. As the rains were reliable, the soil was fertile and crop disease was insignificant, an individual could produce enough crop irrespective of the area of his farm land. Grazing land was far from scarcity and only one type of animal disease that caused diarrhoea existed. Thus there were many head of cattle in the area.
The Italian Occupation:-	The lawless plundered property. The monastery at Midre Kebd was also ransacked. When the Italians arrived at the area, they confiscated arms, and the level of looting went down. The period was also marked by shortage of food.
Emperor Haileselassie's period:-	There was sparse population. The forest was dense due to the sparsity of population and private ownership of land. The rains came on time. The soil was fertile. Production was thus adequate. Grazing land and forage was adequate too. A farmer could rear as many cattle as he liked.
1959	The Alem Gena-Welayita road was partially opend to traffic. The footpath from Alem Gena to Welayita passed via Welasa before the construction of the road.
The era of the Derg:-	population had increased noticeably. The increase in population coupled with the demand for farm land and wood led to deforestation. There was no reafforestation measure. The rains were erratic. Food production was on the decline. The number of livestock decreased as part of the grazing land was converted to cultivation.
1984	Many deaths due to malaria

4.3 AGRICULTURE

4.3.1 Food availability

Fertilizer has now become very essential for satisfactory production as constant tilling has resulted in the decline of soil fertility. Terracing has not been practised. Erosion is worsening from time to time and it has been unchecked since 1933 E.C.

Enset, maize, sorghum and wheat are meant for household consumption while teff and beans are cash crops. The income thus derived is used for payment of tax and to

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meet basic necessities. Enset continues to be attacked by unidentified disease. The cultivation of teff is tiresome as compared to that of the other crops.

The discussions held with four groups of farmers led to the understanding that the production of enset has been decreasing since 1933 EC, that of wheat and teff tended to have a positive trend.

Food is sufficiently available in the months of December and January, and gradually decreases afterwards. It is particularly deficient from June to August.

Prices of grain are relatively cheaper from December to February. They begin to rise as of March and are particularly higher from July to September. The months of October and November show a fall in prices.

From the discussions with three groups of farmers, it can be concluded that the busiest months are July, November and December. Activities are moderate in the months of April, May, June, August, September and October; and minimal in January, February and March.

Matrix scoring of major crops in Kasai. Maximum point is 10 & Minimum is 0.

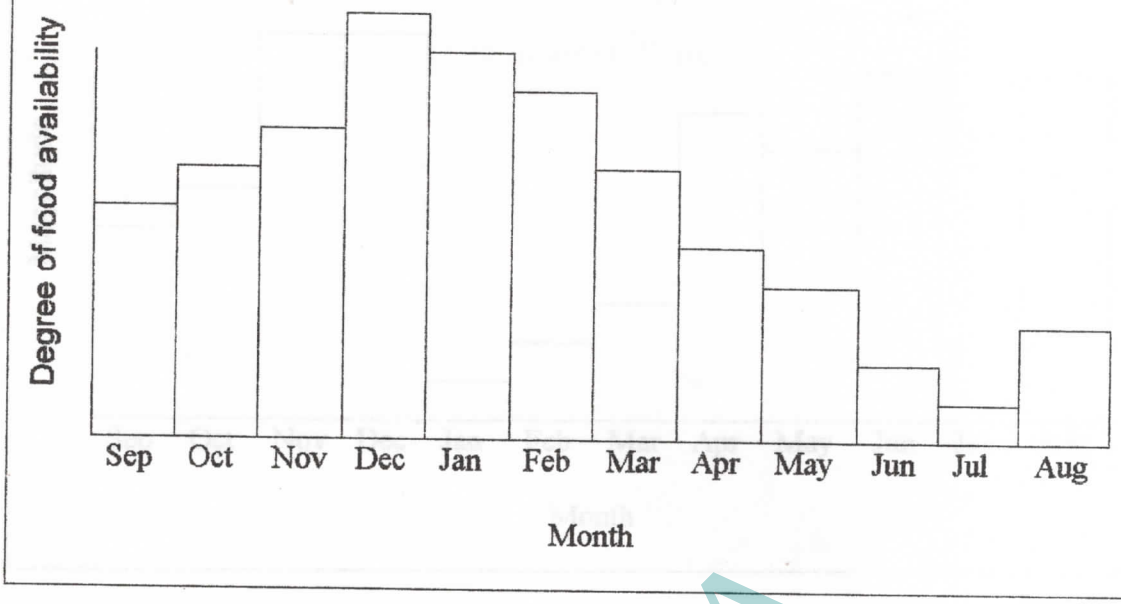
Crop / Criteria	Maize	Wheat	Teff	Sorghum	Beans	Enset
General preference rank	2	5	4	3	6	1
Household consumption	8	6	5	7	4	9
Market value	0	8	10	6	3	0
yield per hectare	6	5	7	8	4	7
Disease resistance	7	8	5	9	6	4
Labouriousness	6	8	9	5	4	7
Adding fertility to the soil	9	5	4	3	8	6
Erosion protection	7	5	6	8	4	10

Figure 5 - Trend diagram of crops as presented in Chirahi & Telahi

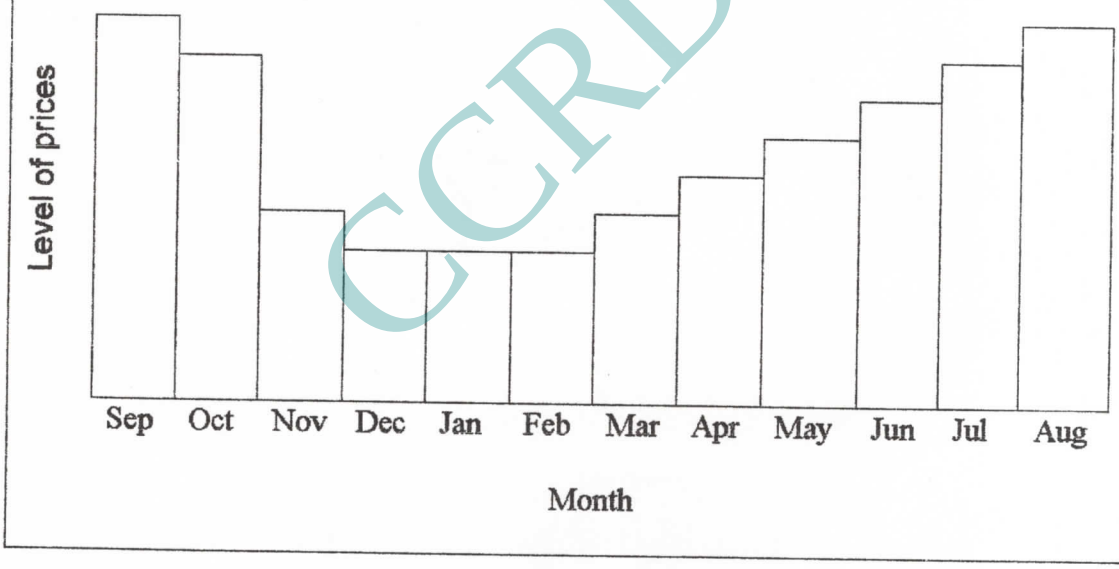
period (EC) / crop	till 1933	1934- 49	1950 - 66	1967 - 83	1984 - 88
Enset	XXXXXXX	XXXXX	XXXX	XXX	XX
Wheat	00	000	0000	00000	000000
Teff	||	|||	||||	|||||	||||||

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Food abailability calendar as presented in Guchimotebie

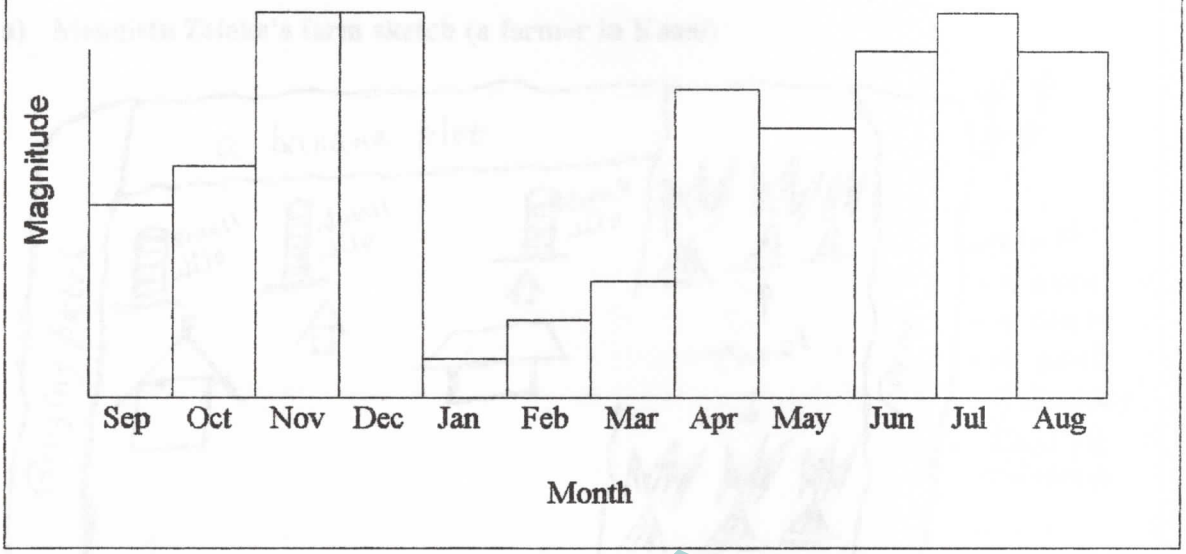


Seasonal calendar on grain prices as presented in Welasa



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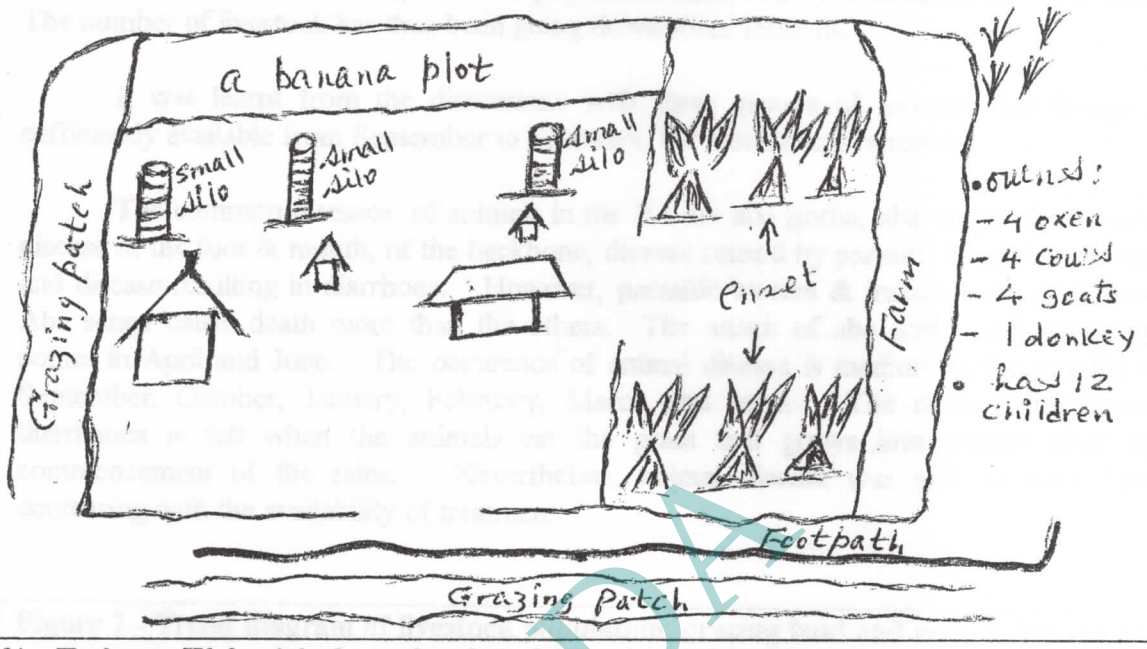
Seasonal calendar on agricultural activities as presented in Arona



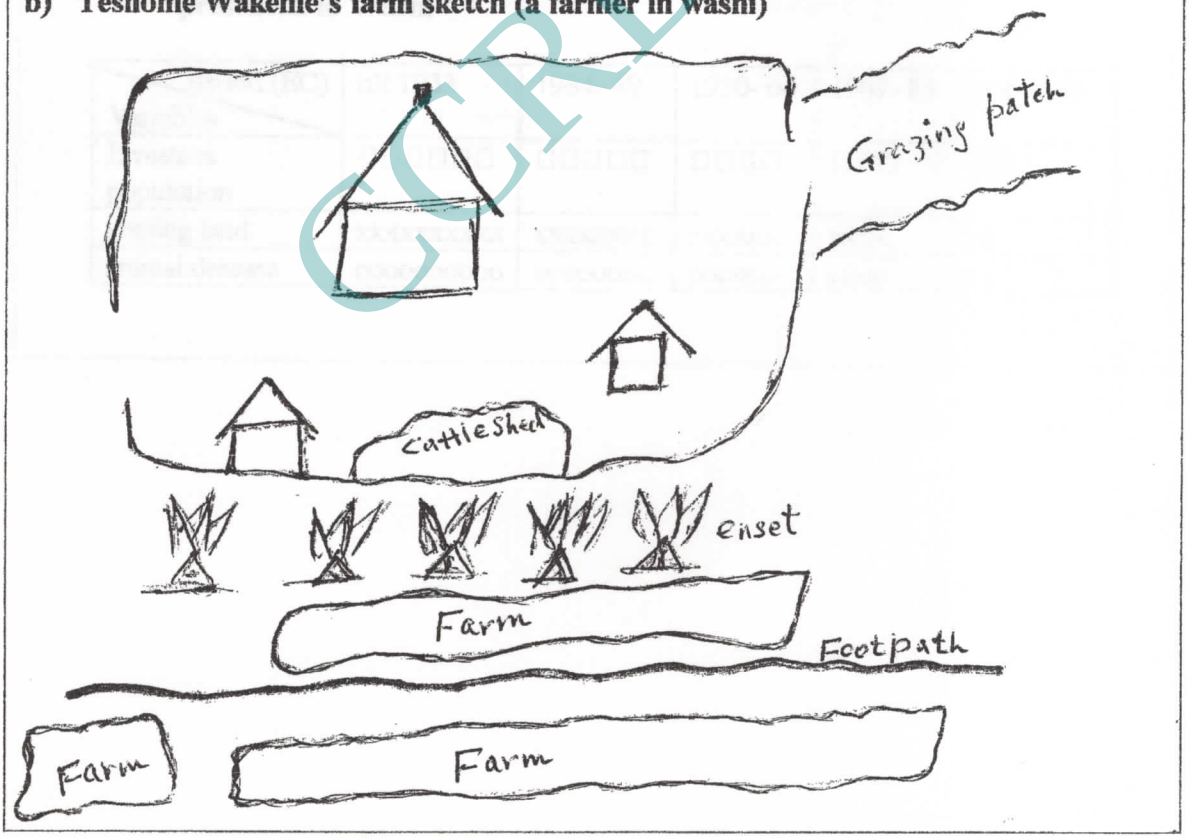
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Figure 6 - Farm sketches

a) Mengistu Zeleke's farm sketch (a farmer in Kasai)



b) Teshome Wakenie's farm sketch (a farmer in washi)



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4.3.2 Livestock

The grazing land was big in the olden times as opposed to the present one. The decline in size is due to the growth of population followed by a demand for farm land. The number of livestock has thus been going down since 1933 EC.

It was learnt from the discussions with three groups of farmers that forage is sufficiently available from September to February, but insufficient otherwise.

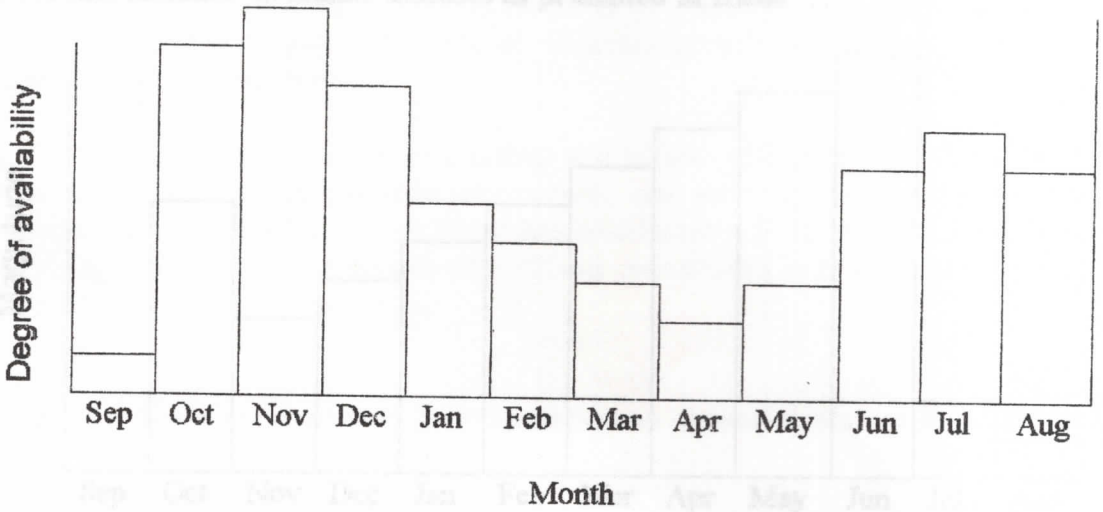
The common diseases of animals in the PA are aba gorba, aba senga, rinder pest, disease of the foot & mouth, of the backbone, disease caused by parasitic worms & insects, and disease resulting in diarrhoea. However, parasitic worms & insects, aba gorba and Aba senga cause death more than the others. The attack of aba gorba and aba senga comes in April and June. The occurence of animal disease is medium in the months of September, October, January, February, March and June. The disease that causes diarrhaoea is felt when the animals eat the grass that grows immediately after the commencement of the rains. Nevertheless, animal disease was said to have been decreasing with the availability of treatment.

Figure 7 - Trend diagram of livestock population, grazing land and animal disease as presented in Washi

period (EC) / Variables	till 1933	1934- 49	1950- 66	1967- 83	1984 - 88
Livestock population	□□□□□□	□□□□□	□□□□	□□□	□□
grazing land	xxxxxxxxxx	xxxxxxxx	xxxxxx	xxxx	xx
animal desease	oooooooooo	oooooooo	oooooo	oooo	oo

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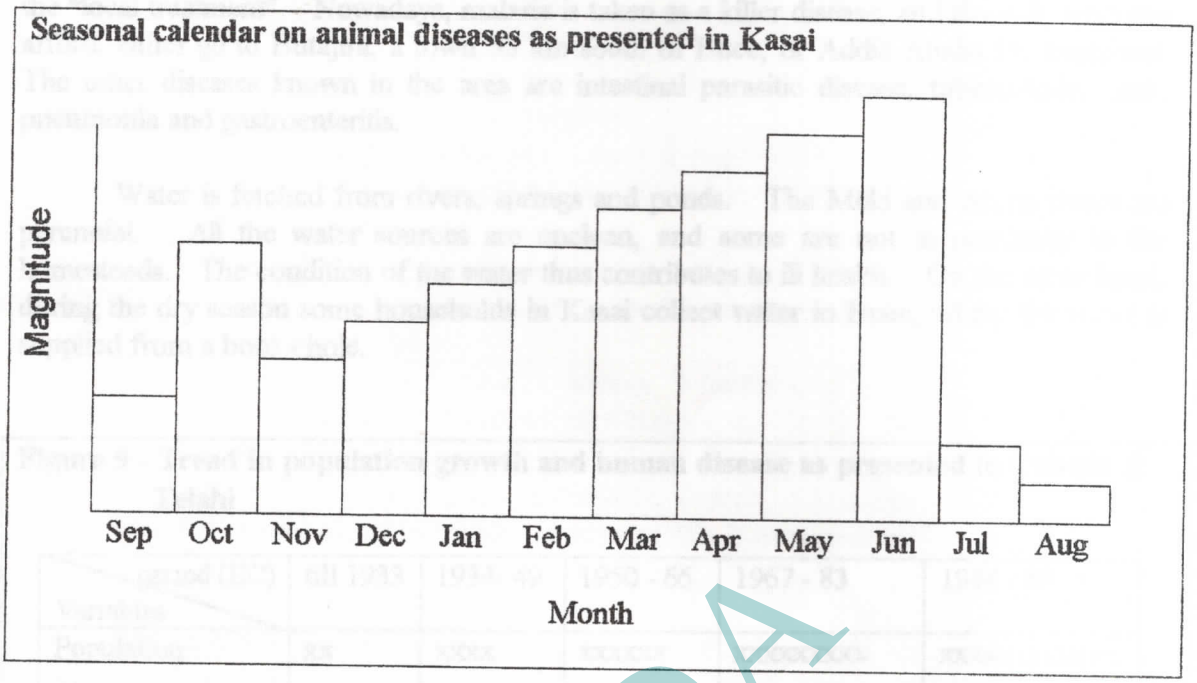
Seasonal calendar on the availability of forage as presented in Dire & Awara



Matrix scoring of animal diseases as presented in Washi. Maximum point is 10 & Minimum is 0

Type / Criteria	Aba gorba	Aba senga	Rinder pest	disease of the foot and mouth	disease of the backbone	parasitic worms
Killing	9	9	6	0	4	2
causing leanness	5	4	0	8	6	5
being contagious	6	9	8	4	0	6
frequency of occurence	8	6	2	7	1	9
availability of local treatment	0	0	0	0	0	0

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4.3.3 Trees

The dense forest, that was under the protection of private ownership before the rise of the Derg to power, is disappearing slowly. The growing demand for farm land, and wood for fuel and construction are the causes for the diminishing of forest land. There has not been a move to redress the damage. The preference is for red eucalyptus, Acacia (girar) and Cordia Africana (wanza). Red eucalyptus is more useful in constructing dwellings, girar for fuel and in soil conservation, and wanza in woodwork.

Figure 8 - Trend diagram of trees and erosion in the PA as a whole

period (EC) / variables	till 1933	1934-49	1950 - 66	1967 - 83	1984 - 88
Trees					
Erosion					

4.4 HEALTH, SOCIAL STRATIFICATION & ASSOCIATIONS

4.4.1 Health

Human disease has been going up since 1933 EC. It was mentioned that the only disease that existed in the past was malaria with a "shivering symptom", and it was said not

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to be fatal. Garlic, soup made from the flesh of a lamb or a hen, and alcoholic drink were the "local treatment". Nowadays, malaria is taken as a killer disease, and the sick, who can afford, either go to Butajira, a town 35 km south of Buee, or Addis Ababa for treatment. The other diseases known in the area are intestinal parasitic disease, tuberculosis, itch, pneumonia and gastroenteritis.

Water is fetched from rivers, springs and ponds. The Meki and Arona rivers are perennial. All the water sources are unclean, and some are not in proximity to the homesteads. The condition of the water thus contributes to ill health. On the other hand, during the dry season some households in Kasai collect water in Buee, where the water is supplied from a bore - hole.

Figure 9 - Trend in population growth and human disease as presented in Chirahi & Telahi

period (EC) / Variables	till 1933	1934- 49	1950 - 66	1967 - 83	1984 - 88
Population	xx	xxxx	xxxxxx	xxxxxxxxx	xxxxxxxxxxxx
Disease	||	|||||	|||||||	|||||||||	||||||||||||

Matrix scoring of human diseases as presented in Guchimotebie. Maximum point is 10 & minimum is 0.

Type / Criteria	Malaria	TB	Parasitic disease	Gastro - enteritis
Affecting women	4	8	3	3
Affecting children	9	0	9	0
Affecting men	5	3	2	7
Easy to diagnose	7	5	6	5
Killing	7	5	2	1
Availability of treatment	6	0	8	7
Frequency of occurence	8	3	5	2

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4.4.2 Social stratification

In the discussions held at each of the 7 villages, the participants used similar criteria and agreed to stratify their society into 5 categories, viz, 'very rich', 'rich', 'middle', 'poor' and 'very poor'. The outcome of the discussions is shown in the table below.

Category	Possession	number of people in the category
Very poor	1 cow, 1 goat, 0.75 hectare of land, a small house	152
Poor	1 ox, 1 cow, 2 goats, 2.5 hectares of land, 50 enset plants, 1 house	80
Middle	2 oxen, 2 cows, 3 goats, 3.5 hectares of land, 100 enset plants, 2 houses (the houses can be on the same or different farm lands)	146
Rich	3 oxen, 6 cows, 4 goats, 1 donkey, 5 hectares of land, 150 enset plants, 2 houses (the houses can be on the same or different farm lands)	63
Very rich	5 oxen, 9 cows, 6 goats, 2 donkeys, 1 mule, 7 hectares of land, 200 enset plants, 3 houses (the houses can be on the same or different farm lands)	44

The table indicates that out of the 485 households, 31% are in the 'very poor' category, 17% in the 'poor' category, 30% in the 'middle' category, 13% in the 'rich' category and 9% in the 'very rich ' category. A farmer in the 'poor' category borrows an ox and ploughs his own land and that of the borrower's alternately, i.e., one day he works in his field and the next two days in the borrower's field.

4.4.3 Associations

The participants in all the 7 villages stated that edir, mahiber, senbete and ekub are the major associations affecting their lives positively. These associations have their own statutes, and are functional accordingly.

The PA office is responsible for familiarizing government regulations. It implements drectives meant for the PA. It also maintains law and order through its court of justice.

Edir or Sabugnet

All the villages have their own edir. The amount of contribution made by members of the edir is more when a husband or wife dies, and less when a child or a close relation dies. Firewood can be brought to the house of the bereaved depending on the regulation of the edirs.

Mahiber

Mahiber is held every month on St. Mary's, St. Michael's, St. Gabriel's, Medhane Alem's (the Messiah) and Beale Wold's (Glory to the Son) days. The one on St. Mary's day is exclusively for women. The festivity, which rotates among member's houses, begins at 12 noon and ends at 6 PM. The celebration is closed by thanksgiving and blessing.

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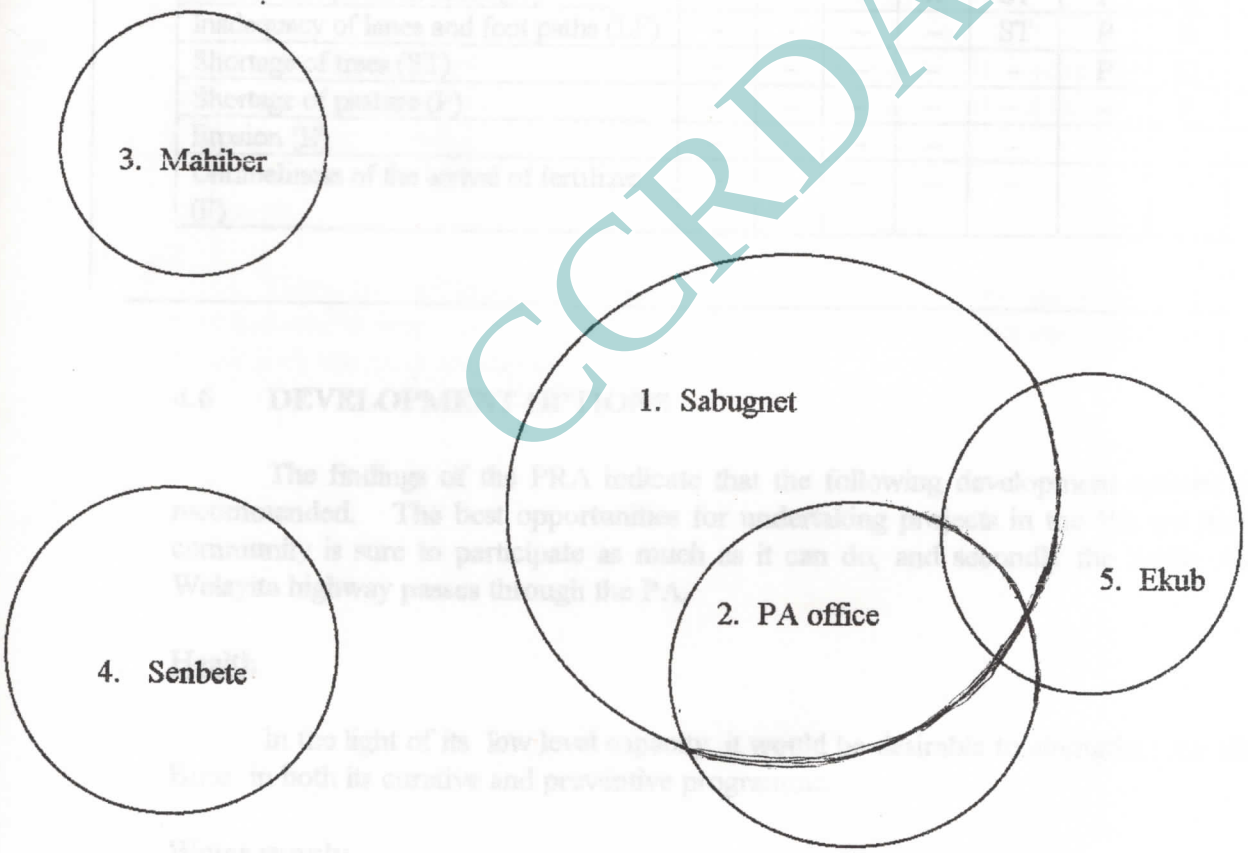
Senbete

Members of the senbete meet at church on Sundays after the morning prayer around 9 a.m. Priests and deacons are supposed to join them. They eat nifro (a mixture of boiled beans and wheat or chickpeas and wheat) and drink tella (locally made beverage). Pertinent matters are discussed in the course of eating and drinking.

Ekub

The money for the ekub is collected from members fortnightly or monthly, i.e. on Sundays or saints' days. The sum of money is given to a member by drawing lots. Membership could vary from 20 to 60, and individual payments could range between 3 Birr to 10 Birr. The ekub can have a duration of three years at most.

Figre 10 - The description of institutions in all the 7 villages was alike. The overall picture is shown in the diagram below.



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4.5 MAJOR PROBLEMS

Discussions were held in each of the seven villages with a group of farmers to identify the major problems in the PA. The overall result of the discussions is summarized as follows.

The overwhelming problem was found to be absence of health services; and next to it absence of potable water, declining soil fertility and shortage of pasture were taken to have equal magnitude. Shortage of trees, erosion, the untimeliness of the arrival of fertilizer and inadequacy of lanes and footpaths follow in that order in terms of intensity.

Pair - wise ranking of problems in the Pa as a wohle

	HS	SF	W	LF	ST	P	E	F
Absence of health services (HS)	–	HS	W	HS	HS	HS	HS	HS
Declining soil fertility (SF)	–	–	W	SF	SF	SF	SF	SF
Absence of potable water (W)	–	–	–	W	ST	P	W	W
Inadequacy of lanes and foot paths (LF)	–	–	–	–	ST	P	E	F
Shortage of trees (ST)	–	–	–	–	–	P	ST	ST
Shortage of pasture (P)	–	–	–	–	–	–	P	P
Erosion (E)	–	–	–	–	–	–	–	E
Untimeliness of the arrival of fertilizer (F)	–	–	–	–	–	–	–	–

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4.6 DEVELOPMENT OPTIONS

The findings of the PRA indicate that the following development options can be recommended. The best opportunities for undertaking projects in the PA are firstly the community is sure to participate as much as it can do, and secondly the Addis Ababa - Welayita highway passes through the PA.

Health

In the light of its low level capacity, it would be desirable to strengthen the clinic in Buee in both its curative and preventive programme..

Water supply

Though it is not in short supply, the available water is unclean. Thus assessment should be conducted to identify the type of water development that is suitable for the area in order to avail potable water.

Soil and water conservation

In view of the gravity of erosion and deteriorating soil fertility, any project that is to be designed for the area should include soil and water conservation activities.

Pasture

The grazing land that is at the disposal of the community is on the decrease. Thus a study on how to sustain the capacity of the existing grazing land and to improve the availability of forage should be undertaken.

Reafforestation

The rate of deforestation vis-à-vis the demand for wood is a growing concern to the community. In view of this fact, the establishment of nurseries (central, communal, private) becomes important in order to address the problem.

Inter village lanes and footpaths

Communications between villages and with in villages is a serious problem. As lanes and footpaths are also important while implementing projects, a way of mitigating the problem should be sought.

Irrigation

There are perennial rivers in and around the PA. As the landscape permits irrigation and as some farmers are already familiar with it, a project envisaged for the area should look into how irrigation can be made viable.

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