

CONCERN ETHIOPIA

REPORT ON THE BASELINE SURVEY

OF

DESSIE ZURIAL LIVELIHOOD PROGRAMME AREA

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TABLE OF CONTENTS

ABBREVIATIONS	3
GLOSSARY	4
EXECUTIVE SUMMARY	5
I. INTRODUCTION	10
1.1 Purpose and Scope of the Baseline Survey.....	10
1.2 Methodology.....	10
1.3 Limitations	11
1.4 Organization of the Report.....	12
II. BACKGROUND	13
2.1 Implementing Agency/Concern	13
2.2 Country Context.....	13
2.3 Policy Environment	14
2.4 Dessie Zuria Livelihood Programme	15
III. KEY FINDINGS	16
3.1 Physical Environment	16
3.2 Demography and Human Resource	18
3.3 Existing Infrastructures	31
3.4 Finance and Markets	32
3.5 Institutional / organisational Aspects.....	38
3.6 The Food Economy	41
3.7 Vulnerability & Factors Influencing Production & Income	50
3.8 Livelihood Options	53
3.9 Cross-cutting Issues.....	54
IV. CONCLUSIONS & RECOMMENDATIONS	57
V. ANNEXES	59
Annex 1: Terms of Reference for the Baseline Survey in Dessie Zuria	
Annex 2: Checklists	
Annex 3: Kebeles and ‘Gotts’ Covered by the Assessment	
Annex 4: Map of Programme Kebeles	
Annex 5: Population of Dessie Zuria Woreda	
Annex 6: Cropping Calendar of Dessie Zuria Woreda	
Annex 7: Animal Population of the Programme Kebeles	
Annex 8: Types of Forest in the Programme Kebeles	
Annex 9: Water Sources and Utilisation Trends	
Annex 10: Availability & Conditions of Basic Infrastructures in the Programme Kebeles	
Annex 11: Access to Education in the Programme Kebeles	
Annex 12: Access to Health in the Programme Kebeles	
Annex 13: Wellbeing Ranking Done in DZLP Kebeles	
Annex 14: Participants of the DZLP Baseline Survey	
Annex 15: Sources of secondary data used in the survey	

ABBREVIATION

ABE	Alternative Basic Education
ACSI	Amhara Credit & Savings Institution
ADF	Africa Development Fund
ADLI	Agricultural Development-led Industrialisation
AEZ	Agro-ecology zone
ANRS	Amhara National Regional State
ARDB	Agriculture and Rural Development Bureau
CBO	Community-based organisation
CDW	Community Development Worker
CHA	Community Health Agent
DG	Development Group
DZ	Dessie Zuria
DZLP	Dessie Zuria Livelihood Programme
EBSN	Employment based safety-net
EPI	Extended Programme of Immunisation
FGAE	Family Guidance Association of Ethiopia
FGM	Female genital mutilation
FHH	Female-headed Household
FINNIDA	Finnish International Development Association
KDC	Kebele development committee
LNGO	Local Non-governmental Organisation
m.a.s.l.	metres above mean seal level
MoA	Ministry of Agriculture
NFBE	Non-formal Basic Education
NRM	Natural resource management
PASDEP	Plan for Accelerated and Sustainable Development to end Poverty
PSNP	Productive safety-net programme
SC	Service Cooperative
SPSS	Statistical package for social sciences
SSI	Small-scale irrigation
TBA	Traditional Birth Attendant
ToR	Terms of reference
WAO	Woreda Agriculture Office (the actual name is WARDO)
WARDO	Woreda Agriculture and Rural Development Office
ZARDO	Zonal Agriculture and Rural Development Office

GLOSSARY

Belg	Period of the small rains as well as the related agricultural season
Birr	Ethiopian currency
Dega	Highland above 2,400 above mean sea level
Gizo	Voluntary group work done by communities
Gott	Sub-division of a kebele
Gullit	Small local market
Kadi	An Islamic religious leader fulfilling social functions
Kebele	The lowest administrative unit
Kirie	A community organization in a rural setting fulfilling social functions
Meher	Period of the main rains and related agricultural season
Sedeqa	An occasion in bereaved households arranged to help the soul of the dead
Sheik	An Islamic religious leader fulfilling religious functions
Woina-dega	Mid-altitude area with elevations of 1,500-2,300 m.a.s.l.
Dega	A highland area with elevations of 2,300-3,200 m.a.s.l.
Wurch	A highland agro-climatic zone above 3,200 m.a.s.l.

EXECUTIVE SUMMARY

This is a report on the baseline survey of the 11 kebeles covered by Dessie Zuria Livelihood Programme (DZLP), implemented by Concern Ethiopia. DZLP focuses on reducing vulnerability and improving food and income security of communities in 11 kebeles through improving access to food & income, improving capacity local government & community organizations as well as promoting family planning in the programme kebeles. The objective of the baseline survey is to collect information that would give an up-to-date picture of household economies of target communities, that can be used as a benchmark for measuring change resulting from programme interventions.

The survey was conducted by a team consisting of Concern staff, staff of Dessie Zuria Woreda Agriculture & Rural Development Office (WARDO) and external consultants. The exercise focused on 4 sample programme kebeles selected on the basis of agro-ecology and intensity of planned programme work. The report contains: (i) an executive summary highlighting the main findings; (ii) introduction specifying the purpose & objectives of the survey, the survey methodology, the limitations within which the findings of the survey should be seen, and the organization of the report; (iii) background giving an overview of the implementing agency, the country context, policy environment as related to programme implementation, and the programme itself (DZLP); (iv) key findings that give an up-to-date picture of the target communities focusing particularly on natural & human resources, available infrastructure, institutional set up, economic activities, vulnerability, livelihood options as well as some cross-cutting issues, and (v) conclusions and recommendations. The highlights of the report are the following:

Human capital: The programme area has a population of 71,561 in 11 kebeles with an average population density of 201 persons/sq. Km. There are 13,617 households with an average family size of 5.26, (84.5% male-headed and 15.8% female-headed)¹. Over 51% of the population is below the age of 18, with an estimated family dependency ratio of 55.2%. They all belong to the Muslim faith and 82% of the respondents are married. About 96.5% of all those above 10 years of age practise mixed farming.

There is a high rate of illiteracy in the area with 65.5% of the interviewed households having confirmed that they cannot read and write. Heads of households who can only read and write constitute 17.8% of the total number of sample households. 54% of school-age children do not go to school. School enrolment of girls is 49.7% for grades 1-4 and 41.8% for grades 5-8. In the case of 80% of the respondents return trip to lower primary schools (grades 1-4) and higher primary schools (grades 5-8) takes a maximum of 2-3 hours and 3-4 hours respectively. There are no secondary schools in the programme area.

Health services are provided by health centres and health posts. The health centres are staffed by nurses and provide curative treatment, MCH, health education, family

¹ The percentage of female-headed households according to the survey results from the four sample kebeles is 15.8% whereas the result from the well-being exercised done in 2006 gives the proportion of FHH as 21.6%

planning, EPI and vaccination services. The health posts at each of the kebeles have 3 health agents focusing on awareness creation and preventive health care. Shortage of skilled personnel and materials is reported to be a constraint for better service provision. Awareness about family planning and HIV/AIDS is high. Those who practise family planning constitute 48.4% of the sample households, injection being the preferred treatment. For ca. 60% of the respondents the round trip to health posts, clinics or health centres takes two hours or less.

Access to clean water, which is 39.8%, is slightly higher than the average for the country in terms of rural water supply. Protected springs are the main sources of potable water (constituting 39.8% of the water supply) whereas unprotected springs, streams/rivers and hand-dug wells are the sources for the remaining amount. Time taken to fetch water is less than half an hour for about 70% of the cases and less than an hour for about 95% of the respondents.

Natural capital: The major natural resources that the programme communities benefit from are land (farmland & grazing land), water resources (springs & streams), natural vegetation and the bi-seasonal rainfall regime. All the sample households have access to land though the size of holding varies. The average holding of a household is 1.6 ha. (farm land and grazing land). This brings access per capita to about 0.3 ha. decreasing with increasing population. Use title is in the name of both husband and wife. The communities use both the *belg* and *meher* seasons for crop production in order to distribute the risk element. The youth, born since the land redistribution of 1988, are the landless. The growing need for fuel and cultivable land has depleted vegetation cover. Continuous cultivation and uncontrolled grazing have led to loss of soil fertility and decreasing harvest.

Physical capital: Availability of basic infrastructures, livestock and tree plantations are the main physical assets. The basic infrastructures found in the programme area are roads, schools, health facilities (for humans and for animals), telecommunication links, grain mills, developed springs, service cooperatives (SCs), farmers' training centres (FTCs), kebele offices, market places, etc. There is a newly-constructed road passing through the programme area supported by dry-weather roads linking each of the kebeles to the main road.

All the programme kebeles have first-cycle primary schools (grades 1-4); three kebeles have second-cycle primary schools (grades 5-8); the rest have grades 5 and 6. Alternative primary schools (NFBE) are also found in 8 of the kebeles. There are health centres at 3 kebeles, health posts in 11 kebeles and veterinary clinics at 3 kebeles. All the kebeles have grain mills, with some kebele having 3-4 mills. There are SCs, FTCs, improved irrigation schemes, local market places and kebele offices at 3, 8, 3, 6 and 6 of the kebeles respectively. Most of the kebeles also have developed springs as water points. Some of these infrastructures have just been set up, some have not been properly maintained and some need to be well manned and stocked in order to give good service to the communities.

About 93% of the interviewed households said that they have livestock. About 17.1% have no oxen, 53.3% have only one ox/bull, 41.8% have 2 and 4.9% have 3 or 4 oxen/bulls. The number of cows each household is also limited with 71.6% having only one cow, 25.2% having 2 cows, and 3.2% having 3 cows. Milk yield per cow is no more than 2 litres in 87.7% of the cases.

Planting trees has become a significant activity in the area. There is a state forest at one of the kebeles, community forests in 9 of the kebeles and small homestead plantations in all the programme kebeles. About half of the interviewed farmers said they grew 2 - 200 trees each, the remaining half growing 200 - 6,000 trees each.

Financial capital: The main sources of cash income are sale of grain, sale of livestock (from rearing and fattening activities), sale of livestock products, petty trade, seasonal wage labour, productive safety-net programme and begging. There are also financial inputs being provided through SCs in the form of SIDA's kebele empowerment programme, ACSI loans, World Bank loans, safety-net graduation loans, as well as loans in kind provided by Concern to poor households. Income from sale of grain, animal rearing/fattening programmes are mainly those of better-off households. Incomes from sale of small ruminants, some animal products, small fattening programmes and casual labour pertain to households belonging to the medium group. Incomes from safety-net programme, sale of livestock (small ruminants), share-rearing arrangements, petty trade, casual labour, income from seasonal migration and from begging pertain to the poorer households.

Social capital: The kebeles, SCs and the '*kiries*' are the key social institutions in the area. The kebele is the lowest formal administrative structure, has its own judiciary and performs various administrative functions at kebele level. The kebele is further subdivided into sub-kebeles and the communities in each sub-kebele are organized in what are known as 'development groups' that are used for mobilizing communities for public work and related functions. The SC is a voluntary organization organized parallel to the kebele structure for the purpose of creating access to agric. inputs, household commodities & credit as well as for market stabilization. The '*kiries*', on the other hand, are traditional institutions organized at kebele/gott level by the communities themselves. *Kiries* are informal institutions used as community support mechanism for people at times of bereavement and for fulfilling local judicial functions. They have the full trust of the communities and could be strengthened and used for addressing local development needs.

Institutional capacity: Kebeles, SCs and FTCs are the key institutions at kebele level that are meant to provide support to programme communities. Recently additional manpower has been added, mainly at lower levels. There are 3 DAs assigned to every kebele (for crop husbandry, livestock husbandry and NRM) resulting in a DA-to-farmer ration of 1:419. The institutions at kebele level are getting some support from woreda offices. The big change is in the deployment of additional manpower at lower level. The DA-to-farmer ratio is much better than what used to be in place earlier.

This does not, however, mean that farmers are getting sufficient extension support. Effective agricultural professional support is still low. More needs to be done to improve messages. Messages DAs take to the farmers need to be based on stronger orientation to research relevant to the area. Generation of appropriate research outputs, their demonstration at local level and capacity building of field staff to properly deliver the messages is the area which needs more focus and resource outlay. There is a need for increased capacity building so that government staff would, as partners, take active part in programme implementation, and gradually take over responsibilities at phase out.

Vulnerability: Mixed farming, consisting of crop and livestock husbandry, is the main economic activity in the programme area. Over 90% of household income comes from crops, livestock and livestock products. Petty trade and manual labour account for no more than 4.3% and 2.7% of income respectively. Livestock husbandry is the main of income contributing 50% of total annual income. Variability of rainfall and temperature regime is among the critical factors limiting agricultural production. About 60% of the communities are food insecure and are reported to have been recipients of food aid for a long time. No less than 52% of the interviewed households said that they have experienced food shortage during the last cropping season which was more or less a normal year. Female-headed households are also more vulnerable than male-headed households as a proportionally larger percentage of them are poor or very poor.

Coping mechanisms: Coping mechanisms of the programme communities vary depending on the wellbeing status of each household. The better-off households usually have some grain in store, some saving in terms of cash or some animals to sell and, as a result, they are less affected than others. Normally they sell out small animals, reduce marketable crops and use their own grain reserves. People in the medium category change their consumption pattern, sell out small ruminants and purchase food from the market. The poor and very poor households also sell their livestock, preferably small ruminants, work as daily labourers (as stated by ca. 25% of the households interviewed), reduce the number/size of meals (as stated by 18.5% of the interviewed households) eat less-preferred food, resort to selling firewood and temporarily migrate from the area looking for means of survival, etc.

Equality: Women in the programme kebeles have become increasingly aware of their rights, are asserting them and are starting to be listened to. Access to information is gradually being opened up, social institutions are also beginning to realize the need for equity between the sexes and women are getting some training and skill upgrading opportunities. Increased awareness about family planning and HIV/AIDS, social sanction given to respecting minimum age and HIV testing as requirements for marriage are positive steps that can be expected to decrease women's vulnerability.

As confirmed in the women's group discussions, with the technologies that are available, their workload is still much heavier than that of their men folk. School enrollment for girls at grades (1-4) is almost the same as for boys but is significantly less for girls than for boys in grades 5-8, i.e. 41.8% and 58.2% respectively. The absence of high schools

(grades 9-10) in the programme area puts girls at a bigger disadvantage as it is more difficult for them to continue schooling at Dessie.

With such a high percentage of FHH in the programme area (21.8%) and with 83.8% of the FHH being in the poor and very poor wellbeing category improvement of the wellbeing of the programme communities can only mean putting more focus on alleviating the problems of these households first and foremost. The skill training they have been getting up to now is nominal and practically unproductive. Increasing access to usable skills and resources is of paramount importance.

Indicators: The baseline survey has covered some key elements that can be used as indicators of process and outcome. Available infrastructure, diversity and level of agricultural production as sources of food and cash income, current income and areas of spending of target beneficiaries, status and role of CBOs, status of local government organs and their readiness to provide support, awareness & prevalence of HIV/AIDS and family planning methods, availability and usage of credits facilities, level of access to clean water, women's participation in managing programme activities and local affairs have been looked into to be later used as benchmarks for measuring progress and impact.

Recommendations: Some key points of recommendation that are considered to be useful for further improvement of programme results:

1. Continued programmes on birth spacing, TBA training and MCH support, with improved provision of drugs and equipment to the health facilities;
2. Strengthening the Service Cooperatives so that they become effective channels for accessing agricultural inputs and stable market outlets;
3. Putting increased focus on animal husbandry, especially sheep rearing and fattening with introduction of improved stocks for mutton and wool production;
4. Production of various species of highland fruits (apples, peaches, etc.) to be done at selected sites with sufficient technical support and follow up;
5. Putting increased focus on skill development especially for the youth and doing consistent work on attitudinal changes to enable the youth to maximize opportunities for becoming skilled farmers or to attain marketable skills;
6. Promoting integrated land management practices focusing on effective soil and nutrient conservation, fuel supply, commercial forestry and improved yield from animal and crop husbandry;
7. Expanding credit facilities to a wider target group through improved access to micro-finance & standardization of approach and interest rate also ensuring that the reasons for defaulting are well understood and effectively addressed.
8. Creating the environment for strengthening of CBOs (*'kiries'*) as well as for organizing and strengthening of KDCs so that they become owners of programme work done and take them forward;
9. Expanding involvement of female-headed households in local economic activities through skill training and increased access to credit;
10. Standardizing norms and procedures between different sources of credit after conducting a study around feasibility of access, scope and effectiveness;

I. INTRODUCTION

1.1 Purpose and Scope of the Baseline Survey

As per the Terms of Reference (ToR), the purpose of the baseline survey is to collect information (both qualitative and quantitative), which would give an up-to-date picture of household economies and livelihood strategies of target communities in the 11 kebeles of Dessie Zuria Woreda targeted by Dessie Zuria Livelihood Programme (DZLP). The findings would serve as a base against which changes resulting from development interventions can be measured.

The specific objectives of the survey, mentioned in the ToR, are:

- Establishing local food security indicators using disaggregated data and a base-line against which impact of food security interventions can be measured;
- Improving the level of understanding of the working area to enable the implementing organization (Concern) to redesign planned interventions as required;
- Assessing capacity of woreda partners to plan, implement and monitor development interventions and make changes to the capacity input as necessary.

The survey covered four of the eleven kebeles covered by Dessie Zuria Livelihood Programme (DZLP), i.e. three from higher highland agro-ecological zone (AEZ) and one from highland AEZ.

1.2 Methodology

The baseline survey employed both household survey (using structured questionnaire) and participatory rural appraisal (PRA) methods. The survey was carried out in four sample kebeles from two agro-ecology zones (AEZ) – three from higher highlands and one from highlands. The four kebeles from the two zones were purposefully selected based on two agreed criteria, namely population size and intensity of programme intervention.

A total of 398 household heads/spouces, constituting ca. 3% of total households, were interviewed in the four kebeles (Gelsha, Gugufu, Chirecha and Attint Mesberia) using the household questionnaire prepared for the purpose. The questionnaire was administered in 27 of the 110 *gotts*,² (24.6% of the total) covered by the programme. (See Annex 3 for sample kebeles and '*gotts*'). About 100 households were interviewed in each of the sample kebeles ensuring that women's views were sufficiently represented in the exercise. A half-day discussion and orientation was made at the beginning of the field exercise to familiarize the supervisors and enumerators with the questionnaire and data collection methodology. The questionnaire was also tested for consistency and speed

² 'Gott' is a local term used to denote a big village. In the programme area each kebele is divided into 10 *gotts*.

of administration. The data gathered through the survey method was compiled and processed by SPSS statistical package.

At field level, the assessment using PRA methods covered four project kebeles. The different PRA tools used to gather data and information include:

- Various documents including the project proposal, the livelihood analysis, the results of wellbeing ranking, the regional five-year strategic plan, the report on gender analysis, etc. were consulted (See Annex 15).
- Focus group discussions were conducted and semi-structured interviews were carried out with men's groups, women's groups, youth groups and kebele administrations in each of the four kebeles (Gelsha, Gugufu, Chirecha and Attint Mesberia) by two PRA teams.
- Discussions were held with some key informants at field level.
- Discussions were also held with the Head of Zonal Agriculture & Rural Development Office (ZARDO).
- Pertinent statistical data were collected from the Woreda Agriculture & Rural Development Office (WARDO).
- Discussions were held with the Concern Wollo Programme Office at the beginning and end of the field exercise.
- Site observations have also been done to get a glimpse of the environment in which the programme is being implemented.

It can be said that earlier involvement of one of the consultants in the design of DZLP, review of secondary data, intensive fieldwork lasting for 12 days can be said to have given adequate coverage of project kebeles, of households and community groups for the purpose indicated above, within the given timeframe. The various components of the work have also enabled the team to triangulate the information obtained from different sources and through different tools. Thus the consultants believe that the report will provide a fair picture of the current situation, a picture that can be used as a benchmark for measuring project performance (both process and impact).

The Survey was led by two external consultants (Sisay Takele, Team Leader and Hailemeleket Terefe) who facilitated the quantitative data collection through survey method and led the PRA teams that collected the qualitative information. Two survey teams (each consisting of 4 enumerators and one supervisor) were organized for the household survey and two PRA teams, each led by one of the external consultants, carried out the PRA assessments. Concern technical staff with a very good knowledge of the programme and the communities and WARDO experts with similar experience were fully involved in the field work. (For the list of the survey team see Annex 15.)

1.3 Limitations

The survey was required to cover 4 out of the 11 programme kebeles, and through questionnaire survey and PRA methodology, to come up with sufficiently disaggregated data within a very short time. The team focused on interviewing a sufficiently large number of households (400) from a sufficiently large number of villages ("gotts") in a manageable way, and filling information gaps through conducting group discussions,

discussions with relevant Government offices as well as from secondary sources, most of the secondary data being based on work done by programme staff very recently. No less than 398 households have been interviewed in 27 “*gotts*” in the four sample kebeles. The team has tried to cover some of the key areas through group discussions.

Moreover, the enumerators involved are Concern’s Community Development Workers (CDWs) in the project kebeles. This definitely gave them the advantage of completing the questionnaire more quickly than it would have taken outsider enumerators. The efficiency with which the questionnaire has been administered, however, varied from enumerator to enumerator and this may, to some degree, have affected the incoming results. Some of the data generated by the questionnaire survey required follow up questions of clarification, an opportunity which was not effectively used by some of the enumerators. A more thorough preparatory work would have improved the capacity of the enumerators. Efforts have, however, been made to bring in the element of focus and objectivity and the discrepancies have, in the process, been minimised by a closer follow up and rechecking.

The survey was expected to be participatory involving key stakeholders. Assigning two staff on the part of WARDO to take part in the survey was useful for the exercise. The readiness of the Head of the Zonal Agriculture & Rural Development Office (ZARDO) to give the consultants an opportunity to have frank discussion with him about the programme area and the programme itself, notwithstanding his busy schedule, was commendable. One could justifiably say that WARDO would need to go beyond providing staff and information and show a more active interest in future programme work.

1.4 Organization of the Report

This report is organized into four major sections and an executive summary briefly mentioning the highlights of the report. Section I provides a general introduction that describes the purpose, scope, methodology of the survey, limitations and organisation of the report. Section II gives a brief background on the context, the policy environment, the engagement of the agency (Concern) and the setting up of the DZLP project. Section III, the core section of the report, discusses the main findings of the baseline survey including the physical environment, demography & human resources, existing infrastructures, a picture of finance & markets, institutions & organisational aspects (both public and community-level), a picture of the food economy & livelihood options, vulnerability & factors influencing production/income, as well as existing livelihood options and cross-cutting issues such as governance, gender, skills and diffusion of technology. Section IV provides conclusions and recommendations. In addition to these main sections, details on some of the findings and the processes of the baseline survey are included in the Section V (the Annex section).

II. BACKGROUND

2.1 Implementing Agency/Concern

Concern Worldwide is a non-governmental humanitarian organisation that works in over 30 countries and dedicated to reduction of poverty and suffering in the world's poorest countries. Concern Ethiopia has an almost thirty-year service in emergency- and development-related work. Humanitarian, rehabilitation and development activities were carried out during this period focused on assisting rural as well as urban communities in many parts of the country, ANRS being one of the main programme areas. Concern has developed good reputation in the area and its responses have saved thousands of lives among communities targeted by humanitarian development interventions. The various interventions on rehabilitation and long-term development are believed to have addressed the most affected communities and that they have helped to alleviate poverty. The organisation has formulated its strategic plan for the period up to 2011 in line with the global strategy and the international developments targets. Concern currently implements a number of different projects aiming to address the root causes of poverty and inequality. It also sees collaboration and partnership with local and international development/humanitarian actors as a mechanism to realise its mission and programme objectives in the country.

2.2 Country Context

With a land size of about 1.104 million square Km, a population of about 79.3 million and a GDP per capita income of USD 794 (ADB/OECD 2007) Ethiopia is the second most populous and one of the poorest countries in sub-Saharan Africa. It is a country with sharp contrasts in terms of altitude, temperature and rainfall regimes. Elevations range from more than 100 metres below mean seal level in the Dalol Depression to heights of over 4,500 m.a.s.l. in the Semien Mountains. About 40% of the total area of the country is highland of over 1,500 m.a.s.l. inhabited mainly by sedentary agricultural communities and 60% below 1,500 m.a.s.l., arid to semi-arid plains in the northeast, east, southeast and south inhabited mainly by pastoral communities.

Favourable agro-climatic conditions to agricultural activities are reported to prevail over 52% of the total area of the country most of which is in the highlands. More than 90% of the population, 60% of the livestock and 90% of the agriculturally suitable area are reported to be found there (Hurni, 1995). Drained by Tekezzie, Abbay and Baro-Akobo into the Nile in the west, by Wabi Shebelle and Genale in the southeast and by the Awash into the sands of the Afar plain in the northeast Ethiopia is believed to have a huge water potential though well-known for the prevalence of cyclic droughts and famines. The vulnerability of Ethiopia to drought and famine can be partly explained by the fact that Ethiopia, a country in the Sahel zone, is believed to have the sum total of the population of the Sahelian countries with just a tenth of the total area. (Hurni quoting Mesfin, 1984)

About 84% of the country's population are reported to live in a rural environment eking out a living as small-scale farmers living on an average land size of less than a hectare, using ox-plough cultivation and producing grain outputs of 0.3 - 1.5 tonnes per hectare on average and losing about 40 tonnes of soil per hectare of crop land (Hurni, 1993).

Though it has some areas of high production potential, ANRS is among the most densely populated, highly degraded and consequently the most vulnerable regions of the country. It accounts for about 15.4% of the country's area, 25.5% of the human population (89% rural and growing at a rate of 2.73% per annum) and 29% of the livestock population of the country. The region is divided into three main agro-ecology zones with 45.14% known as mid-altitude areas (*woina-dega*), 33.6% as lowlands (*kola*) and 20.37% as highlands (*dega*). It is in the mid-altitude and highland areas that 90% of the population and 70% of the livestock live. The region has 3.61 million hectares of cultivated land 6% of which is under *belg* cropping and 94% under *meher* cropping & irrigation. Household land holding is reported to be 0.7–2.6 ha. with an average of 1.7 ha. Forest cover is reported to be 5.6% with man-made plantations constituting 12.5% of the total. (ANRS Five Year Strategic Plan, March 2006)

Dessie Zuria is one of the most populated districts (*woredas*) in ANRS. It is basically a highland area with an altitude range of 1,800 – 3,500 m.a.s.l., has a total area of 1,329.52 sq. km and a population of 197,930 with a population density of 149 persons per square Km, i.e. more than double the national average which is 64 persons per sq. km. The district is divided into three main agro-ecological zones with higher highlands (*wurch* zone), highlands (*dega* zone) and midlands (*woina-dega* zone) constituting 32%, 25% and 43% of the *woreda*'s total area respectively. About 43% of the total area is reported to be cropland (40% under rain-fed and 3% under irrigated crops), 23% covered by eucalyptus plantations, 11% left for grazing purposes, 17% left as wasteland and only 6% considered to be cultivable but uncultivated. Mixed farming (crop and livestock husbandry), as in most of the highland areas of the country, is reported to be the norm. (Concern: Livelihood Analysis, August 2006). Administratively, Dessie Zuria *woreda* is divided into 31 *kebeles* 11 of which are covered by Concern's Dessie Zuria Livelihood Programme (DZLP).

2.3 Policy Environment

Concern is implementing the DZLP in partnership with the targeted communities and local government organisations within the existing government policies/programmes. Agricultural development-led industrialisation (ADLI) and the Plan for Accelerated and Sustainable Development to End Poverty (PASDEP) are the over-arching frameworks for policies/programmes. The direction for the national five-year development programme as well as for that of the ANRS (developed to guide its development activities during 2005/6 - 2010/11) has been set by these.

The focus of these policies and programmes is the small peasant producer defined as the centre of growth. Attention is given to intensifying production on small holdings through use of small-scale irrigation (SSI), water conservation & provision of agricultural inputs, capacity building of the farmer, diversifying agricultural production to include commercial crops and livestock suitable to specific areas of implementation.

The food security and rural development programmes developed within the framework of PASDEP focused on helping farmers to use their own resources to improve food security

through: (i) intensifying & diversifying crop husbandry, (ii) intensifying productive livestock husbandry; and (iii) conducting voluntary resettlement programme where the situation required. Implementing a safety-net programme for the neediest sections of the community to bridge them over difficult periods has also been built into the food security programme.

Accordingly the Regional Government of ANRS wants communities in Dessie Zuria Woreda to base their livelihoods mainly on livestock, i.e. to get 60% of their income from livestock, 35% from crops and 5% from natural resources (Source: Zonal Agric. & Rural Development.) Office). As Dessie Zuria is one of the food insecure woredas of ANRS it is currently covered by PSNP and various Donor-supported programmes such as SIDA's capacity building & community empowerment programme. About a third of the kebeles, the most remote ones at that, have now also been targeted by Concern's Dessie Zuria Livelihood Programme (DZLP).

2.4 Dessie Zuria Livelihood Programme

The Dessie Zuria Livelihood Programme was developed in November/December 2006 based on the positive experiences gained from Concern's earlier interventions in Dessie Zuria Woreda, Kallu Woreda and in Harbu area of the Amhara National Regional State (ANRS). The programme was designed for a period of five years (January 2007 – December 2011) and is being implemented by Irish Concern with funding support provided by Irish Aid. The programme targets poor households in 11 kebeles estimated to have a population of 14,545 households (72,144 people) 60% of which were considered to be food insecure.³

DZLP started to be operational in January 2007 with a wider objective of *contributing to reduced vulnerability and improved food & income security of communities in the 11 kebeles targeted by the programme*. In order to achieve the wider objective the programme has set itself three specific objectives that would be achieved within the project period, which are: (i) improving access to food and income for the target beneficiaries in the 11 kebeles through diversifying agricultural practices and promoting non-agricultural sources of income; (ii) improving capacity of relevant woreda government offices, KDCs and CBOs through provision of institutional support in the programme kebeles; and (iii) improving community awareness and access to family planning services to target communities in the 11 kebeles through local partners. (DZLP proposal, Dec. 2006)

The work plan formulated for the first year of programme implementation focuses on starting with some key activities such as conducting a baseline survey; setting up of project base at Guguftu; starting infrastructural work on river diversions; water harvesting & small-scale irrigation (SSI) development on a few existing springs; conducting training of farmers and staff (both Government staff and Concern staff) on a range of fields related to effective programme implementation. Side by side with this

³ This figure is at odds with the data obtained from the wellbeing analysis which seems to have gathered more detailed information about the programme kebeles and gives the total number of households as 13,617.

would be the community-based therapeutic care programme that would be implemented as a continuation of previous engagement in this area. The programme team has been implementing these activities though actual signing of the project agreement did not go as fast as anticipated earlier. Notwithstanding the remoteness and the relatively harsh environment of the area programme implementation is expected to be speeded up in the second year (Discussion with programme team).

III. KEY FINDINGS

3.1 Physical Environment

3.1.1 Geographical Description

The programme area consists of 11 kebeles in Gugufu sub-woreda within Dessie Zuria Woreda, constituting ca. 26% of the total area and ca. 36% of the population of the woreda (Concern documents). Gugufu, the programme base and the only rural town in the programme area, is 45 Km northwest of Dessie, itself an old town and main urban/trade centre of South Wollo Zone, also linked to Kombolcha, a main trade and manufacturing centre 25 Km south of Dessie. The all-weather road that is currently being constructed to link Dessie and Kombolcha with western Wollo and Gojjam is an excellent link of the programme area with different woredas and consequently a good outlet to markets.

The programme kebeles are situated in a highland area with an altitudinal range of 2,300 – 3,600 m.a.s.l. characterized by a rugged and undulating topography. Only 15% of the total area has slope gradients of 8% or less; ca. 30% having slope gradients of 9-15%; ca. 20% covered by gradients of 16-30%; another 20% having gradients of 31-50%; and the remaining 15% of the area having gradients of over 50%. (DZLP Programme document)

The programme area can be classified into two agro-ecological zones, i.e. upper highlands and highlands. The majority (81.8%) falls into upper highlands (*Wurch Zone*) having altitudes of >3,200 m.a.s.l. with low temperatures and where barley is the dominant crop. Livestock husbandry (cattle and sheep rearing) constitutes an important means of livelihood for the inhabitants of the area. The remaining 18.2% of the area, referred as '*Dega*,' is within an altitudinal range of 2,300-3,200 m.a.s.l. and is hence relatively suitable for production of a variety of cereal crops. The area is dependent mostly on '*belg*' crops, depending on the small rains in January and February, which have become more and more erratic and hence increasingly unreliable in recent times. This clearly puts strong limitations on the viability of crop production as a significant livelihood option. (ibid.)

3.1.2 Natural Resources

The programme area is so near to town and yet so far away from the benefits its proximity to an urban setting would entitle it to. It is one of the most seriously degraded parts of the country as a result of lack of proper resource management practices. It is an area that has been settled for a very long time and put under pressure by a growing population (with densities of 142 – 270 persons/sq. Km.) that has turned a large portion

of the highlands into unproductive wasteland. The feasibility study conducted by Concern in 2006 shows that only about 48% of the land is currently under cultivation, 15% is used for grazing animals (mostly above the cropping limit), 12% is under forest cover (mainly recently established fuel-wood plantations) and nearly 16% of the total area is considered to be wasteland as a result of degradation. (See Table 1)

The results of long-term overuse and mismanagement were decrease in crop and livestock yield as well as large tracts of land turning into complete wastelands. Natural vegetation cover has almost totally been removed with communities being exposed to serious problems of energy and being fully dependent on cow dung and homestead plantations for cooking food and for keeping themselves warm. Through intensive reforestation efforts that were started in mid-eighties, including a FINNIDA-supported fuel-wood project, new eucalyptus plantations are now visible on the otherwise bare hillsides and around homesteads.

Though communities complain about the irregularity of rainfall (having variability of as much as 40%) in total amounts the annual rainfall would have been quite sufficient for crop and livestock production had there been sufficient soil cover and vegetation cover to retain the moisture and to enhance groundwater recharge. There are reported to be about 450 springs (ca. 10% of them developed) and a number of small streams with high variability of discharge currently being used by the communities in the 110 'gotts' (in the 11 *kebeles*) and their livestock.(See Annex 9). Irrigation potential in the 11 kebeles is found around springs and streams and is reported to be ca. 350 ha. of which 250 ha. (71% of the total) being already used for traditional irrigation. (Concern notes). Not much work has yet been done by way of developing improved SSI. The grasslands in the programme kebeles, either purposely left for livestock grazing or untampered with because of the harsh environment, have been left for long without any effort at upgrading/enrichment of the biomass. Hence wildlife resources have also been affected from the long neglect and mismanagement.

As elsewhere in the country, land is the main natural resource that these communities continue to live on and, as such, the mainstay of their livelihoods be it in crop production or livestock production or a mixture of both husbandries. Since the Land Proclamation of 1975 land is the property of the state, and the people who live on it have only user rights. Tenure security has been a very controversial issue and as a partial solution to the problem, land certification has been carried out in the programme area as in the rest of ANRS. Concern's livelihood study shows that average land holdings vary according to agro-ecological zones, being 0.91 hectare per household in the upper highlands and 0.88 hectare per household in the highlands.⁴ In the upper highlands the topography is rugged with steep slopes and large proportion of the land is not cultivable. (Concern: Livelihoods Analysis....., Aug. 2006)

⁴ The findings from the household survey just conducted give an average figure of 1.24ha/hhld excluding grazing land and 1.6ha./hhld including grazing land. This may be the result of the higher figure of 14,545 held for number of households in earlier documents.

Table 1: Population Density, Households and Land use

Kebele	Popl. density (pers/Km ²)	No. of HH	Estimated Area in Hectares						
			Total area	Farm land	Grazing land	Forest land	Bushes & shrubs	Construction	Waste land
Gelsha	180	1292	3,537	1,835	126	768	404	81	323
Tebasit	227	1682	3,353	1,575	576	640	160	162	240
Degamote	194	896	1,593	954	144	216	632	84	403
Dajolie	215	1294	3,046	1,693	475	434	158	80	206
Guguftu	248	1032	2,058	1,124	537	166	0	68	163
Attint Mesberia	139	1299	4,313	1,489	998	304	80	133	1,309
Keygedel	142	1472	4,545	2,392	329	823	247	164	585
Chirecha	158	1501	3,688	1,915	767	284	79	95	548
Asgori	270	1403	3,722	1,870	530	435	115	116	653
Adey	238	1121	3,186	1,294	478	110	565	64	675
Derebba	201	625	1,715	696	258	58	304	36	363
Total	201	13,617	34,756	16,837	5,218	4,238	2,744	1,083	5,468
% of total				48.4	15.0	12.2	7.9	3.1	15.7

Source: Based on Concern notes from the feasibility study, 2006

3.2 Demography and Human Resource

3.2.1 Basic Characteristics of Survey Respondents

As shown on Table 1 there are 13,617 households in the programme area accounting for a population of about 71,560. The survey conducted in 4 of the 11 kebeles has captured 84.2% and 15.8% of male- and female-headed families, respectively.⁵ These family heads are followers of Islam. Besides, 82.0% of those family heads covered by this survey are married, while 6.0% and 4.5%, respectively, are single and widowed. Divorced family heads account for 5.0% of the total families covered by the survey. This indicates that single, divorced and widowed families combined accounts for 15.5%.

Regarding occupation of the head of household, 96.5% are engaged in mixed farming. On the other hand, from among the 390 heads of households that responded to this specific question 14.7% are engaged in occupations other than agriculture, such as petty trading, carpentry and daily labour, respectively, accounting for 9.5%, 2.1%, and 2.3% as shown in Table 2. Summary of basic characteristics of the respondents' family member, i.e., age, sex, religion, marital status, education, and occupation are presented in Table 2 below.

⁵ The well-being ranking done in 2006 gives the proportion of female-headed households as 21.8%.

Table 2: Basic Characteristics of Respondent Households

Characteristics		Respondents	Valid %age	
Households	Male-headed	336	84.2	
	Female-headed	63	15.8	
	Total	399	100.0	
Religion	Muslim	400	100.0	
Marital status of head of HH	Single	24	6.0	
	Married	328	82.0	
	Widowed	18	4.5	
	Separated	7	1.8	
	Divorced	20	5.0	
	Total	397	99.3	
Education				
Head of HH enrolled in school now (age >=5)	Yes	9	2.4	
	No	259	68.7	
	Total	268	71.1	
	No education	262	65.5	
	Read & write	71	17.8	
	Pre-school	1	0.3	
	Grade 1-4	30	7.5	
	Grade 5-8	28	7.0	
	Grade 9-10	7	1.8	
	Grade 11-12	1	0.3	
	Total	400	100.0	
	Occupation			
	HH member occupied in agric. labour (age >=10)	No	5	1.3
Crop production		8	2.0	
Animal husbandry		1	0.2	
Mixed farming		385	96.5	
Total		399	100.0	
Head of HH having occupation other than agriculture (age >=10)	No other	333	85.4	
	Carpentry	8	2.1	
	Petty trading	37	9.5	
	Daily labour	9	2.3	
	Other	3	0.8	
	Total	390	100.0	

The age structure of the households covered by the survey reflects the national picture. For instance, those who are below 18 years of age account for 51.2 % and those below 15 constitute 43.5% of the total population covered by the survey. Likewise, the average family size is 5.26 which is a little higher than the national average, estimated to be slightly below 5, as shown in Table 3 below.

Table 3: Age Group of Members of Sample Households

Age Group	Frequency	Valid %age	Major Blocks %ages
0 – 4	228	11.3	43.5
5 – 9	330	16.4	
10 – 14	317	15.8	
15 – 19	223	11.1	56.5
20 – 24	107	5.3	
25 – 29	126	6.3	
30 – 34	116	5.8	
35 – 39	117	5.8	
40 – 44	94	4.7	
45 – 49	88	4.4	
> 49	263	13.1	
Total	2009	100.0	
Dependency Ratio	1028+80=1108	51.2+4.0=55.2	
0 – 17	1028	51.2	
18 – 64	901	44.8	
65 & above	80	4.0	

The age structure of the population covered by the survey gives an indication of the family dependency ratio taking into account the legal personality of a person as well as actual dependency of children below 18 years of age, as they are not legally independent to marry as well as to elect their leaders. Thus, the family dependency ratio is estimated to be 55.2%, i.e. the sum of those below 18 and those above 64 years of age. This ratio is also more or less similar to the national estimate even if those children under the age of 15 are considered as is mainly in the case or rural Ethiopia.

There is a high rate of illiteracy in the area. Nearly two-thirds of the heads of households interviewed during the survey did not go to school and cannot read or write. Those who can read and write in any language constitute 17.8%. About 14.5% and 2.1% have been to an elementary school and to a secondary school respectively, as shown in Table 4. This gives an average literacy rate of 34.5% which is slightly lower than the average literacy rate for the country (38%).

Table 4: Level of Education of Interviewed Household Heads

Level of Education	Frequency	Valid %	Cumulative %
No education	262	65.5	65.5
Can read and write	71	17.8	83.3
Pre-school	1	0.3	83.5
Grade 1-4	30	7.5	91.0
Grade 5-8	28	7.0	98.0
Grade 9-10	7	1.8	99.8
Grade 11-12	1	0.3	100
Total	400	100	

3.2.2 Access to Basic Services

a) Education

There are different levels of educational facilities in the programme kebeles, namely 5 non-formal basic education (NFBE) facilities, 5 first-cycle primary schools (grade 1-4), 3 first & second cycle primary schools (grades 1-8), one having grade 1-5 and one having grade 1-6. The NFBE are found in 5 of the kebeles. Data collected a year ago shows that there are over 10,650 pupils enrolled in first-cycle and second cycle primary schools. Out of this 7,979 pupils are enrolled in first-cycle primary schools (grades 1-4) out of which 49.7% are girls. Pupils enrolled in second-cycle primary schools (grades 5-8) are only 2,673 out of which 41.8% are female. The above figures show that about 54% of school age children have not been able to go to school. (See Annex 11)

Among 285 respondents, 22.1% have confirmed that there are NFBE centres for children in their vicinity, while 77.9% of the respondents said they didn't have one. In the case of pre-school educational facilities, almost all of the 251 respondents asserted that there were no such facilities nearby. Considering those respondents that confirmed that there were NFBE centres in their areas, about 25% said that it takes 20-30 minutes; about 42% believe that it takes them less than an hour whereas nearly 19% had exaggerated views saying that it takes no less than 10 hours.

There are lower primary schools (grades 1-4) and primary schools (grades 5-8) in their areas as reported by 93.5% and 85.9% of the respondents. Some communities have to travel longer distances to school than others. About 15% of the respondents estimated that a round trip to school takes less than an hour; for about 42% it takes 1–1.5 hours and for others, no less than 10%, it takes 1.5–2 hours. For about 80% of the respondents the

return trip has been estimated to take no more than 2-3 hours to a lower primary school (grade 1-4) and 3-4 hours to a primary school (grade 5-8) as in the table below.(Table 5).

Table 5: Round Trip Walking Distance to Lower Primary and Primary Schools

<i>Minutes</i>	<i>Lower primary (1-4)</i>		<i>Primary (5-8)</i>	
	<i>Frequency</i>	<i>Valid %age</i>	<i>Frequency</i>	<i>Valid %age</i>
< 5	13	4.1	7	2.6
5 – 9	3	0.9	2	0.8
10 – 40	30	9.5	15	5.4
50 – 90	12	3.8	10	3.6
100 – 149	131	41.5	131	47.4
150 – 190	33	10.4	30	10.9
200 – 240	25	7.9	40	14.5
>240	69	21.8	41	14.8
Total	316	100.0	276	100.0

Regarding the presence of secondary school (grade 9-10), 81.1% of the respondents stated that it doesn't exist while 18.9% responded positively. Looking at access to secondary education, distance to school was one of the aspects critically assessed. About 59% of those who said they had secondary school added that the round trip takes 23 hours whereas for about 34% of the cases the trip takes 1 - 2 hours only, as shown in the table below.(Table 6)

Table 6: Round Trip Walking Distance to a Secondary School (9-10)

<i>Hours</i>	<i>Frequency</i>	<i>Valid %age</i>
1	9	20.5
2	6	13.6
23	26	59.1
28	2	4.5
30	1	2.3
Total	44	100.0

The issue of dropouts or children not going to school seems to be significant in the area. As many as 29.2% of the respondents said that they have school-aged children that do not go to school. Among these 84.4% have one boy, 13.5% have 2 boys not going to school. Over all a total of 113 boys from 96 families and 63 girls from 43 families appear not to go to school, giving averages of 1.2 boys and 1.5 girls per family not going to school, showing a significantly higher proportion of girls with limitation of access to education.

The reasons given by those who have school-aged children not going to school are, in the case of girl children, mainly that the heads of the families do not believe in education (27.7%), or schools area too far (18.5%), and family heads need girls to work at home (18.5%). The remaining 21.5% of the respondents give other reasons as shown in the table below (Table 7). On the other hand, the main reasons for families' not sending their

school-aged boys to school are that schools are too far (25.0%), they need boys to work at home (15%) and/or they do not believe in education (14.8%),

Overall the three main reasons for not sending children to school in this area appear to be: (i) lack of sufficient motivation of families to send their children to school; (ii) the schools being located far away from their villages; and (iii) the labour contribution of children required by the family. In addition to distance and the child labour factors which appear to be more or less equal in both cases the attitudinal/cultural factor or the lack of motivation to send children to school appears to be a greater additional constraint for girls than for boys.

Table 7: Reasons for not Sending School-aged Children to School

Reasons for not going to school	Girls		Boys	
	Frequency	Valid %age	Frequency	Valid %age
Don't believe in education	18	27.7	13	14.8
Schools are too far	12	18.5	22	25.0
Unable to provide food	1	1.5	2	2.3
Can't buy school materials	5	7.7	7	2.3
Can't buy school uniform			2	8.0
Need the child to work at home	12	18.5	13	14.8
To avoid social risks			1	1.1
Early marriage	3	4.6	4	4.5
Others	14	21.5	24	27.3
Total	65	100	88	100.0

Other than access and/or school enrolment of children, the issue of dropouts and school leavers is quite significant as 10.9% of the 318 respondents confirmed that they have dropouts. Among the 39 family heads that confirmed they have children who dropped out from school 30 are male-headed families, while the remaining 9 are female-headed. This is a slightly higher percentage (23%) than the percentage of FHH in the area. This calls for the need for supporting children from female-headed families so that their children would pursue their education.

Among those who confirmed that, they have boy dropouts, 28 and 8 family heads, respectively, have 1 and 2 children who have dropped out from school. A total of 44 boys from 36 families indicates a drop out rate of 1.2 boys per family. On the other hand, 13 family heads confirmed that they have girl dropouts; hence, they have 20 girls within the 13 family heads indicating an average girl dropout rate of 1.5 per family.

As indicated in Table 8, among those families that confirmed that they have children that dropped out from school, the main reasons for girls' dropping out are related to family heads not believing in education (33.3%), are not able to buy school materials (14.3%), early marriage (14.3%), and others reasons not expressed (28.6%). On the other hand, reasons for boys' dropping out area related to family heads not having strong belief in education (51.6%), schools being to far (12.9%), family heads unable to provide food (9.7%), and family heads need their boys to work at home (9.7%).

Table 8: Reasons for School Dropouts

<i>Reasons for dropouts</i>	<i>Girls</i>		<i>Boys</i>	
	<i>Frequency</i>	<i>Valid %age</i>	<i>Frequency</i>	<i>Valid %age</i>
Don't believe in education	7	33.3	16	51.6
Schools are too far			4	12.9
Unable to provide food	2	9.5	3	9.7
Can't buy school materials	3	14.3		
Early marriage	3	14.3	1	3.2
Need the child to work at home			3	9.7
To avoid social risks			2	6.5
Others	6	28.6	2	6.5
Total	21	100.0	31	100.0

Grades 7 and 8 were added recently with SIDA's support. There is space problem. The only option children have to enrol in secondary schools is to go to Dessie and live there, which is difficult. Therefore, after grade 8 they remain in their kebele as farmers. The school environment and appearance is not attractive. It lacks basic services like washing room. It needs to be rehabilitated. The demand for high school has become top-urgent as farmers are compelled to send their children to Dessie, which in most cases fail to do.

b) Health

Three of the programme kebeles have health centres and the other 8 have only health posts. The health centres are manned by nurses and provide curative treatment, MCH, health education, family planning services, EPI and vaccination programmes. The health posts, on the other hand, are manned by health agents assisting communities through preventive health care programmes. (See Annex 12).

Focussed group discussions and interviews with key informants pointed out that water-borne diseases, flu/cold, and trachoma (due to the dust from the road construction) are the most common diseases in the programme area. The Health Centre at Gelsha (the nearest kebele to Dessie) was constructed last year with the support of SIDA. The health post has 3 health agents focussing on awareness creation or preventive health care. Drug supply is reported to be in sufficient quantities. Shortage of skilled personnel and materials is reported to be a constraint for better service provision.

No epidemic has been experienced recently. People are reportedly becoming physically weak though this has not been mentioned in the interview at the Health Centre. There is no health professional with sufficient experience. People reportedly go to Chirecha, Gugufu and Dessie for treatment.

Access to health services depends on the existence of the basic infrastructure. Health posts have been established at kebele level, as confirmed by 61.2% of the 324 respondents. About 76% of the households (22% of which are FHH) reported that they

have access to health centres. Existence of government clinics or hospitals was mentioned by an insignificant minority (ca. 2%). Private clinics and pharmacies do not exist in the area covered by the survey. Access to these health facilities depends on their distance and on whether they are easily reachable or not. About 60% of the respondents said that they can make the round trip to health posts, clinics or health centres within two hours as shown in the table below (Table 9).

Table 9: Round Trip Walking Distance to Health Facilities

Round trip walking time in hours	Health Post		Clinic		Health Centre	
	Frequency	Valid %age	Frequency	Valid %age	Frequency	Valid %age
< 0.05	1	0.5			7	2.6
0.05 – 0.09	1	0.5			5	1.8
0.10 – 0.40	11	6.0	1	5.3	18	6.5
0.50 – 0.90			2	10.5	8	2.9
1.00 – 1.40	70	38.5	12	63.2	93	36.2
1.50 – 1.90	18	9.9			25	9.0
2.00 – 2.40	51	28.0	4	20.3	71	25.4
2.50 – 2.90					10	3.6
3.00 – 5.00	7	3.8			16	5.8
>5.00	23	12.5			16	9.3
Total	182	100.0	19	100.0	279	100.0

People seem to have reservations to come to health service providers. The most frequently visited ones for consultation are government clinics (according to 31.1% of the respondents). Community health workers and traditional healers are a far second and third at 6.1 and 3.9%. The majority of the respondents (early 57%) reported that they went to neither of these health service providers for consultation as shown in Table 10.

Table 10: Consultation with Health Service Providers

Health Service Providers	Frequency	Valid %age
Private clinic	3	0.8
Government clinic	112	31.1
Community health worker	22	6.1
Traditional healer	14	3.9
Religious leader	4	1.1
Others	205	56.9
Total	360	100.0

Awareness about HIV/AIDS is reasonably high. No less than 89.5% of the family heads that were interviewed (10.5% of which are women) have heard about HIV/AIDS. It is significant to know that an equal proportion of female family heads (another 10.5%) reported that they haven't heard about HIV/AIDS. Knowledge of people who have died from HIV/AIDS is low as 89.1% of the respondents said that they didn't know anybody who died from it. It is only 43 respondents (10.9%), about a quarter of which are women

heads of households, who asserted that they knew. In the opinion of 87.7% of the respondents, unprotected sex is the main means of transmitting HIV/AIDS whereas the remaining 11.3% said they did not know the mechanism of transmission. About 75% of those who didn't know are male family heads. For details, see the table below (Table 11).

Table 11: Means of Transmitting HIV/AIDS

<i>Means of transmitting HIV/AIDS</i>	<i>Frequency</i>			<i>Valid %age</i>
	<i>Male</i>	<i>Female</i>	<i>Total</i>	
Unprotected sexual contact	294	47	341	87.7
Eating with infected person	1	1	2	0.5
By shaking hands	1	0	1	0.3
Through cuts and pricks	1	0	1	0.3
Don't know	33	11	44	11.3
Total	330	59	389	100.0

The other aspect of health care is reproductive health and family planning. The survey has attempted to get the views and attitudes of family heads. Accordingly, out of the 399 sample family heads, 309 (77.4%) have confirmed that they haven't given birth in the last two years, while the remaining family heads (22.6%) said that they have done so. About two-thirds of those that gave birth have received pre-natal services either from a community health agent (CHA) or a professional health worker and over 72% have been assisted by traditional birth attendants (TBA) 62% of which were untrained as shown in the table below (Table 12).

Table 12: Follow up during Pregnancy

<i>Service Providers</i>	<i>Prenatal</i>		<i>Assisted during Child Birth</i>			<i>Valid %age</i>
	<i>Frequency</i>	<i>Valid %age</i>	<i>Frequency</i>			
			<i>Male</i>	<i>Female</i>	<i>Total</i>	
Not examined	35	31.0				
Untrained TBA	2	1.8	43	6	49	45.0
Trained TBA	3	2.7	28	2	30	27.5
Health worker			7	0	7	6.4
Relative / friend			15	3	18	16.5
Community Health Agent	37	32.7				
Professional health worker	36	31.9				
Not assisted			5	0	5	4.6
Total	113	100.0	98	11	109	100.0

Discussion with communities and with staff of the health centre at Gelsha pointed out that birth spacing (family planning) is given as part of the health programme in the programme area. About 80% of the total respondents covered by the household survey, (including 65% of the women covered) said that they have heard of childbirth spacing (family planning). Notwithstanding the high level of awareness, about 52% of the respondents have asserted that they have done nothing regarding family planning leaving only 48%. Compared to the prevalence of family planning practice at national level a practice rate of 48% is very high. (See Table 13)

Taking injection seems to be the most predominant practice as it is practised 41.4% of the respondents or constituting 86% of the technology in use, followed by pills, breastfeeding and condom constituting 6%, 3.3% and 2.6% of the technology in use respectively. The presence of a regional office and consultation/treatment centre of Family Guidance Association of Ethiopia (FGAE) at Dessie may have contributed to the awareness building and high uptake of the family planning technology.

Table 13: Family Planning Methods Used / Practiced

<i>Methods</i>	<i>Frequency</i>			<i>Valid %age</i>
	<i>Male</i>	<i>Female</i>	<i>Total</i>	
Nothing	129	33	162	51.6
Natural method	2	0	2	0.6
Breastfeeding	4	1	5	1.9
Pills	8	1	9	2.9
Injection	122	8	130	41.4
Nor plant	1	0	1	0.3
Condom	2	2	4	1.3
Total	268	45	313	100.0

Pursuing the effort to know the reasons behind not practicing family planning, around 29% of the 198 respondents have expressed their feeling that they want more children, about 6% said that the husband was not willing, about 4% said that it was due to lack of awareness, 2.5% said that their religion does not allow and about 56% of the respondents did not express their reasons clearly as shown in the table below (Table 14)..

Table 14: Reasons for Not Using Family Planning

<i>Reasons for not using family planning</i>	<i>Frequency</i>			<i>Valid %age</i>
	<i>Male</i>	<i>Female</i>	<i>Total</i>	
Want more children	54	4	58	29.3
Husband not willing	12	0	12	6.1
Religion doesn't allow	3	2	5	2.5
Causes health problems	3	1	4	2.0
Lack of awareness	6	2	8	4.0
Others	81	30	111	56.1
Total	159	39	198	100.0

c) Water

The other basic service for improved livelihood is access to clean and adequate water. The survey has indicated that the main sources of water during the dry season are springs (both protected and unprotected) and streams. As indicated in the table below (Table 15), 39.8% of the households covered by the survey use protected springs as the main source

of their water supply whereas 55.8% get their water from unprotected springs, and/or streams/ivers.⁶

Table 15: Sources of Water during Dry Season

<i>Water Source</i>	<i>Frequency</i>			<i>Valid %age</i>
	<i>Male</i>	<i>Female</i>	<i>Total</i>	
Public tap	6	2	8	2.0
Open well in dwelling / yard/plot	2	2	4	1.0
Open public well	3	1	4	1.0
Protected spring	137	22	159	39.8
Unprotected spring / river/stream	188	34	222	55.8
Pond/lake/dam/flood	0	2	2	0.5
Total	336	63	399	100.0

Discussions with women’s groups pointed out that collection of water is mainly the responsibility of women though their husbands and grown up sons help in fetching water (using donkeys and jerry cans) if the water points are further away. About 70% of the respondents estimated that it takes them less than half an hour to fetch water, while a quarter of the respondents said that it takes between half an hour and one hour, as shown in the table below (Table 16).

Table 16: Walking Time to Fetch Water

<i>Minutes</i>	<i>Frequency</i>	<i>Valid %age</i>
0-30	279	69.8
30-60	100	25.0
More than 60	21	5.3
Total	400	100.0

Concern’s notes on the feasibility study done in 2006 (Annex 9) show that the programme kebeles have a large number of springs (451) 47 of which are protected and the rest unprotected. Other sources of water are streams/ivers (33), hand-dug wells (10) and ponds (77). This is a reasonably high potential for further improving community access to clean and sufficient water.

Daily use of water by the households in the programme area shows a significant variation probably depending on the level of economic wellbeing. According to the responses given by the interviewed households (a total of 400 from 27 ‘gotts’ in 4 kebeles) about a third of the households (33.5%) have water use of 20-34 litres/day, about 49.3% have water use of 40-54 litres/day, 9.1% have water use of 55-64 litres/day and 5% of the households have a daily water use of less than 20 litres. (See Table 17)

⁶ This is a reasonably high figure compared to the national average on rural water supply which is 24% (ADF Appraisal Report, June 2005) but lower than the coverage for the woreda, which is reported to be 59.1%, according to information obtained from WARDO.

Table 17: Quantity of Water Daily Collected

<i>Estimated Litres</i>	<i>Frequency</i>	<i>Valid %age</i>	<i>Major Areas</i>
< 5	3	0.9	5.0
5 – 9	1	0.3	
10 – 14	8	3.0	
15 – 19	3	0.8	
20 – 24	42	10.5	33.5
25 – 29	54	13.5	
30 – 34	38	9.5	
35 – 39	1	0.3	49.3
40 – 44	109	27.3	
45 – 49	3	0.8	
50 – 54	88	22.0	
55 – 59	5	1.3	9.1
60 – 64	31	7.8	
65 & above	14	3.6	
Total	400	100.0	

Considering those sample households that are reported to collect 40-54 litres of water per day and taking into account a family size of 5 (average family size for the area), the average daily supply of water per person could be about 8 – 10 litres.

The survey attempted to examine water availability from the demand side through asking the respondents about the number of people served by the water collected. Accordingly, 44.2% of the respondents said that 0-4 persons were served, while 52.1% stated that 5 – 9 persons were served by the water collected, as indicated in the table below (Table 18), indicating a median value of around 5 as water users per household.

Table 18: Number of People Served Daily

<i>Number of persons</i>	<i>Frequency</i>	<i>Valid %age</i>
0 – 4	176	44.2
5 - 9	208	52.1
10 – 14	4	1.0
30 – 34	1	0.3
35 & above	2	0.5
Total	399	100.0

The sample households were asked whether they use water collected for gardening or watering animals. Accordingly, the survey result indicated that 69.3 of the respondents confirmed that they don't use water collected for gardening or watering animals, and the remaining don't know. Considering the traditional practice of rural families, watering of animals is mainly done by taking the animals, irrespective of the number of animals, to the source of water like rivers/streams, springs or ponds, except for calves and pregnant animals, implying that the water collected is mainly used for drinking and for other domestic purposes.

d) Nutrition

When looking into nutrition, the first thing that comes to mind is the frequency of food intake. Food intake varies with availability and/or access to food at different times of the year. In terms of total amount food availability and intake is at its best at harvest time and marginal for most households during the rest of the year. The survey result clearly shows that there are seasonal variations in food intake and consequently nutritional status. According to the results obtained from 389 respondents 96.7% of the sample households have three meals a day at harvest time, while the remaining 2.3% get only two meals a day. During lean periods, on the other hand, it is only 54.2% that have three meals a day whereas 44% are limited to two meals a day as shown in Table 19.

Table 19: Number of Meals Eaten Daily at Different Periods

<i>Food Intake</i>	<i>At Harvest Time</i>		<i>During Lean Period</i>	
	<i>Frequency</i>	<i>Valid %age</i>	<i>Frequency</i>	<i>Valid %age</i>
Once a day	2	0.5	5	1.3
Twice a day	9	2.3	173	44.0
Thrice a day	385	96.7	213	54.2
More than thrice	2	0.5	2	0.5
Total	389	100.0	393	100.0

This means that during the lean period almost half of the population, as represented by the respondents, lose one meal a day. The lean period, which is an average of 6 months for most households, is also longer than harvest period. Hence, it is bound to have negative effects on the nutritional status of poorer households taking into account the altitude of the area and the level of energy required to keep people warm and productive.

Discussion in the women's group (at Gelsha and Attint Mesberia) pointed out that household food planning is done by women. Better food is eaten at harvest time. When there is food shortage preferential treatment is given first to children and then to the men. They pointed out that some husbands prefer to share with their wives whatever is available, with children getting a safer share. If the woman is the head of the household then she gives priority to her children.

The other aspect the survey looked into was consumption of balanced diet. The responses obtained from the interviewed households indicate the types of food consumed in the area at different times, based on availability and affordability. Thus, responses regarding consumption of highly nutritional food such as meat, egg, milk, vegetables and edible oil stand out as important indicators for wellbeing ranks of households in the programme area as they relate to access to additional resources that could be used to fill the nutritional gap created by the cereal skewed diet.

Table 20: Intake of Highly Nutritious Food

<i>Food intake</i>	<i>Meat</i>		<i>Egg</i>		<i>Milk</i>		<i>Oil</i>	
	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>
<i>Daily</i>	9	2.7	28	9.6	141	46.5	187	58.1
<i>Once a week</i>	18	5.3	51	17.4	16	5.3	49	15.2
<i>Once a month</i>	19	5.6	42	14.3	8	2.6	22	6.8
<i>During holidays</i>	167	49.3	36	12.3	2	0.7	30	9.3
<i>As and when available</i>	126	37.2	136	46.4	136	44.9	34	10.6
Total	339	100	293	100	303	100	322	100

For 40-50% of the households all the nutritional foods indicated here are, with the exception of oil, consumed ‘as and when available’, an expression that indicates rarity. Those nutritional foods taken on a daily basis by a relatively significant proportion of the households are edible oil (58.1%) and milk (46.5%) only. Those that are consumed largely once a week are eggs (46.5%) and edible oil for some 15% of the respondents. For 14.3% of the respondents eating eggs is a luxury they can enjoy only once a month. For a large proportion of the population meat and eggs are eaten during holidays and as and when available. (See Table 20)

e) Housing

The survey result indicates that 97.5% of the sample households own their houses, including female-headed households. Those who do not own the houses they live in are 8 that have been given freely and another 2 families have reportedly rented the houses they live in.

3.3 Existing Infrastructures

The programme kebeles are within a range of 27 to 62 Km from Dessie with some of them such as Gelsha (at 27 Km) and Gugufu (at 42 Km) lying on the new Dessie-Bahrdar road (an all-weather road that is currently being constructed). Gugufu, the programme base, is connected with each of the programme kebeles with Derebba, Degamote and Asgori, the furthest kebeles situated at distances of 22-24 Km. All the kebeles have dry-weather roads connecting them with Gugufu, except Degamote that is limited to using the dry-weather road from Tebasit onwards only. The dry weather roads linking the kebeles with Gugufu are maintained through PSNP. This has enabled transport vehicles to come at least into some of the kebeles though the fees that have been set are considered to be very high (e.g. it transpired in the group discussion that one-way trip from Attint Mesberia to Gugufu, which is a distance of only 12 Km, costs Birr 15).

Notes on the feasibility study done by Concern in 2006 show that there are 47 protected springs, 404 unprotected springs, 10 hand-dug wells, 77 ponds and 33 points of access to river water in the 110 ‘gotts’ of the programme area. There are three health centres (at Gelsha, Gugufu and Chirecha) with all the other kebeles being locally limited to preventive health care provided by health posts. Three of the kebeles (Gugufu, Chirecha and Tebasit) have veterinary clinics. Four of the kebeles (Attint Mesberia, Adey,

Degamote and Asgori) do not have kebele offices. Only Gelsha, Chirecha and Tebasit have service cooperative offices/facilities. All kebeles except Dajolie have farmers' training centres (FTC) though two of them (those of Attint Mesberia and Asgori) are not yet complete.

All the kebeles have first cycle primary schools (grade 1-4). Gelsha, Gugufu and Chirecha have also second cycle primary schools (grades 5-8), Adey, Degamote, Tebasit, Asgori, Keygedel and Dajolie partially have second cycle primary schools (grades 5-6), Attint Mesberia has only grade 5 and no information has been made available on Derebba. Secondary schools (grades 9-10) are not available in any of the kebeles. Non-formal basic education (NFBE) or what are referred to "alternative primary schools" are found in Keygedel, Dajolie and Derebba and one is reported to be under construction at Asgori. Alternative primary schools are funded by communities and reportedly provide education of grades 1-3. It was pointed out in one of the group discussions that students from the NFBE can join first cycle primary schools as and when space is available.

Half of the programme kebeles (Gelsha, Gugufu, Chirecha, Tebasit, Keygedel and Derebba) have local market places. All the kebeles have grain mills, some up to 3 or 4 though Gelsha (on the main road and the nearest to Dessie) has only one grain mill and that is not functional. All the programme kebeles have wireless telephone connection in with communities at Gugufu and Dajolie being served by telecommunications operators⁷.

Traditional irrigation is practised in all the kebeles (except Keygedel for which information was not available). Improved irrigation is reported to be practised in Gugufu, Tebasit and Derebba only. (See Annex 10)

3.4 Finance and Markets

3.4.1 The Credit Market

During the last few decades accessing credit and mobilising savings have been intervention that have been promoted in rural areas of the country either through credit cooperatives or micro-finance institutions. The credit is mostly designed to serve for a variety of purposes.

The survey has attempted to capture the services provided and outcomes of credit facilities extended by different providers. A total of 196 households (49.6% of the respondents) confirmed that they have received credit in the last 12 months. About 14.3% of those who have received credit are female family heads, i.e. lower than the proportion of FHH sampled for the survey. Comparative picture about access to credit shows that 44.4% of the women-headed households and 49.7% of the male-headed households have accessed credit in the last 12 months.

⁷ The wireless at Asgori has been dismantled after reportedly being hit by lightning.

Those who responded positively have been asked for what purpose the credit was extended. The survey result indicated, as shown in the table below (Table 21) that 85.2% of the credit provided was for livestock purchase, while 3.6%, 2.0%, and 5.6% were provided for purchase of agricultural inputs related to crop production, for start up of new business and for other activities, respectively. Credit used for household consumption accounts for only 2.0%. Farmers using most of the credit for investing on purchase of livestock shows that they have selected livestock production/fattening as a profitable activity.

Table 21: Purposes for Borrowing

<i>Purpose</i>	<i>Frequency</i>	<i>Valid %age</i>
Purchase of agricultural inputs	7	3.6
Purchase of livestock	167	85.2
Start up of new business	4	2.0
Expansion of existing business	3	1.5
Household consumption	4	2.0
Others	11	5.6
Total	196	100.0

Looking into the sources of credit one could see that there is a clear shift from traditional institutions to new and well organised institutions. Traditional institutions and local moneylenders combined account for 4.5% of the loans taken whereas the share of credit from friends/ relatives/neighbours is almost non-existent. A third of the customers of traditional institutions and local money lenders are female heads of households.

The major lenders, on the other hand, are the Amhara Credit & Savings Institution (ACSI - a micro-finance institution working in the Amhara Region), service cooperatives (SCs) and other sources providing 47%, 39.9% and 8.1% respectively. Those that have been categorised as other sources have not been clearly defined. About 41% of the female heads of households that were interviewed (26 women) are those that received credit through these credit providing agencies / organisations.

Service cooperatives provide credit mainly to their members. They provide credit to non-members only if the kebele administration is ready to stand as collateral, as stated in the group discussions. On the other hand, credit facility of the micro-finance institution (ACSI) is for those who fulfil the basic requirements set by it.

Credit worthiness is also an important aspect for assessing the performance and viability of the services. Information obtained from the survey showed that 13.7% percent of the respondents have repaid the loan in full, 42.1% have repaid in part, and 44.2% haven't repaid at all at the date due.

During the focussed group discussion it has been reflected that the communities in the programme area got some access to credit from ACSI, World Bank, the government safety-net programme (PSNP), given to be used for animal fattening, livestock development, petty trade etc., and Concern's livestock credit.

ACSI's credit is given to both men and women (one of them co-signing for the other) and is of two types:

- Birr 600-3000 is given for animal fattening and livestock development. The credit is given through group collateral, for 11 months and bearing an interest of 18.5%.
- The second is credit given for petty trade, again through group collateral and at same interest rate but to be paid on a monthly basis.

People who cannot benefit from this credit facility are those who are unable to do productive work either because of age or disability.

The World Bank's credit is covered by a programme period of 5 years and has a quota of 100 farmers per year. It is given through the Service Cooperative and is given to both men and women household heads, bears an interest rate of 10%. The World Bank loan is given to both men and women, in equal proportions. The safety-net programme (PSNP) gives Birr 1,500 per household every year to the graduating 20% of the households covered by PSNP. The safety-net has an interest rate of 7% per annum. One person can benefit from all the credit sources but he/she has to pay the previous loans in full before receiving the new one.

The youth are reportedly getting access to credit. They get credit from ACSI through group collateral (groups of 4-8). They consider the interest rate of ACSI's credit to be very high. They get credit also from the World Bank through the SC with the SC acting as collateral for its members and the kebele for those who are not members of the SC. Credit for fattening animals is given for 9 months whereas that for rearing animals is given for 3 years payable at regular intervals. Concern has started to give sheep credit to the very poor farmers. More work could be done around the youth by way of skill upgrading in the areas such as animal husbandry by providing improved credit facilities.

Regarding sources of additional household income, they suggested that weaving, animal rearing and fattening; sewing, metal works (if started with some training) could be good sources of additional income. Some individually practise some of these skills but they are not organised and supported. Farming, livestock rearing and fattening Washera sheep are being practised. Washera sheep are in great demand. The SC has reportedly asked for more Washera sheep but got no response.

Training has been given in sheep rearing, livestock health, as well as personal and family health. They say it was useful though there is concern (raised in a group discussion) that access to these trainings is given to officers' relatives and friends. Training has also been given in health but participants were limited. The training they consider very useful is that on sheep rearing especially as related to 'Washera sheep'. Some sheep have already changed hands after a very short time (3 months), and at high prices at that.⁸ They say

⁸ Seid Muhye Hassen (present at a group session) has 5 mother ewes 3 of which have given birth to Washera hybrids. Abebetch Seid (also present at the group session) has 13 mother ewes plus 2 growing ewes. She has sold 4 Washera hybrids to Ahmed at Birr 310 each when they are only 3 months old.

that there is no problem of fodder or water in the kebele for sheep rearing purposes. They value training as a useful tool for strengthening their coping mechanism.

3.4.2 Markets for Output & Consumer Goods

With such proximity to Dessie (with an estimated urban population of more than 200 thousand) and with all kebeles linked through access roads, market for outputs and consumer goods do not face a problem. Small grain and livestock traders are active in the area and have their agents in the different localities. This may make it difficult for service cooperatives to grow and expand easily. Furthermore, supplying agricultural input may not seem to be an important activity which would otherwise have given the cooperatives an important role to play, an active role that could have promoted their engagement in purchase of crops and livestock, as appropriate.

Still, because of its proximity to an urban town the project area has comparative advantage compared to many other project areas. It's being suitable for highland commodities like barley, sheep, lentils, horse beans, etc, which are highly in demand in nearby urban towns and beyond, could also be seen as an additional asset. Sheep rearing linked to export of live sheep to Middle-east countries as well as to domestic markets has even attracted private investor to the area.

Realising the potential of the area, one could still see a big gap in terms of urban-rural linkages through livestock products like supply of milk and milk products. The production system is geared towards mere survival rather than one influenced by market demands. Nowadays, business intermediaries are acting as media for promoting demand driven production in rural areas. Speed of technological diffusion is slow, as it comes through government offices and a little bit through NGOs operating in the woreda. It also takes a longer time to diffuse to the rural communities, despite the comparative advantage the project area has in terms of location. With some focussed intervention the comparative advantages of the area could, however, be put to good use.

3.4.3 Household Income

Critical assessment of household incomes is vital in terms of examining the livelihoods of the people covered by the programme. In this connection, the survey has attempted to identify the main sources of incomes as well as the preferences and priorities of investment that the households make.

The survey result has indicated that 38.4% of annual income comes from crop production, while sale of livestock covers about 50% percent of the total income. The combined contribution of crops, livestock and livestock products make up more than 90% of the total annual household income. It can be concluded that an average household's annual income is dependent on the livestock sector that make up more than 52% of annual income as shown in below, in Table 22.

Table 22: Sources of Annual Household Income

<i>Income Source</i>	<i>Frequency</i>	<i>Valid %age</i>	<i>Cumulative valid %age</i>
Crops	143	38.4	38.4
Livestock	186	50.0	88.4
Livestock products	8	2.2	90.6
Petty trading	16	4.3	94.9
Handicraft	1	0.3	95.2
Daily labour	10	2.7	97.9
Forest/ agro-forestry production	1	0.3	98.2
Land rent out	1	0.3	98.5
Other	6	1.5	100.0
Total	372	100.0	

Other than those mentioned above, annual income coming from non-farm sources mainly petty trading and handicraft accounts for 4.6% and this increase to 7.3% if we add income from daily labour.

Estimating the total amount of annual household income is critical, though individuals are conservative in providing information on their incomes. The rough picture obtained from the survey is compiled in Table 23 according to certain income ranges, as appropriate. Those sample households whose annual income is less than Birr 950 cover almost 50% of the respondents. On the other hand, 20% of the respondents have annual income of Birr 2,150 and above and the remaining 30% of the respondents have annual incomes between Birr 950 and 2,150. (See Table 23)

Table 23: Household Annual Income

<i>Income Range (Birr)</i>	<i>Frequency</i>	<i>Valid %age</i>	<i>Valid cumulative %age</i>
< 150	20	5.5	5.5
150 – 349	32	8.8	14.3
350 – 549	67	18.4	32.7
550 – 749	47	12.9	45.6
750 – 949	15	4.1	49.7
950 – 1,149	32	8.8	58.5
1,150 – 1,749	54	14.8	73.3
1,750 – 2,349	32	8.8	82.3
2,350 – 2,949	30	8.3	90.6
2,950 – 3,549	13	3.7	94.3
3,550 – 4,149	8	2.4	96.7
4,150 – 4,749	4	1.2	97.9
4,750 – 4,949	1	0.3	98.2
> 4,950	6	1.8	100.0
Total	364	100.0	

The survey has also attempted to evaluate decision making of the respondents in allocating their incomes according to their priority. As shown below in Table 24, first choice allocation of income of the sample households is more skewed to purchase of food (81.2%) followed by purchase of clothes (13.2%), while the second choice is more in favour of purchase of clothes (67.8%) followed by purchased of food (10.7%). Regarding the third choice, it comprises of wider choices that include social affairs (36.9%), children schooling (21.1%), and purchase of clothes (13.1%).

The fourth choice of income allocation is dominated by social affairs (39.2%), medication (22.7%), and children schooling (18.5%). The final choice is relatively sparsely distributed comprising of medication (29.6%), children schooling (21.4%), social affairs (18.8%), and renting in farmland (10.5%).

Table 24: Ranks of Income Allocation

<i>Allocations</i>	<i>1st</i>		<i>2nd</i>		<i>3rd</i>		<i>4th</i>		<i>5th</i>	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
Purchase of food	320	81.2	42	10.7	15	3.9	1	0.3	2	0.7
Purchase of agric. inputs			16	4.1	10	2.6	9	2.5	17	5.6
Purchase of livestock	2	0.5	15	3.8	27	7.0	10	2.8	10	3.3
Purchase of clothes	52	13.2	265	67.8	51	13.1	9	2.5	1	0.3
Social affairs	2	0.5	20	5.1	143	36.9	142	39.2	57	18.8
Debt repayment	13	3.3	14	3.6	32	8.2	10	2.8	14	4.6
Children schooling	4	1.0	15	3.8	82	21.1	67	18.5	65	21.4
Savings	1	0.3			5	1.3	1	0.3	16	5.3
Medication			4	1.0	21	5.4	82	22.7	90	29.6
Renting a farmland					2	0.5	31	8.6	32	10.5
Total	394	100.0	391	100.0	388	100.0	362	100.0	304	100.0

It is clear from the data that income allocation for purchase of agricultural inputs, debt repayment and savings as well as renting of farmland are insignificant. Traditionally, revealing one's savings and debt is difficult to get through structured questionnaire, and it has its own rational behind it. Income allocation for purchase of agricultural input seems to indicate that consumption of chemical fertilizer and improved seeds are insignificant in the area. Further scrutiny would also show that the poorer households spend a larger percentage of their income on food than the better-off households.

3.5 Institutional / organizational Aspects

3.5.1 The Public Sector

3.5.1.1 The System of Governance

Decentralised decision-making power is entrusted in regional states established on the basis of ethnicity as enshrined in the constitution of the country. Accordingly, the state is structured in regions, woredas and kebeles. The latter is the lowest administrative structure of the state. At these levels, there are legislative, judicial and executive branches of the state. The executive branch of the state has cabinets in the case of regions, woredas and kebeles.

Kebeles are divided into 3 sub-kebeles and 10 village units ('gotts). Communities in each village unit (gott) are again divided into development groups (DG) locally known as '*yelimat buden*' each consisting of 20-28 farmers with a leadership consisting of a Chairperson and a Secretary. There are 3 DAs stationed assigned to every kebele (working on crop husbandry, livestock husbandry and natural resource management). It is through the leadership of the DG that DAs do technology transfer or that communal work is organised and conducted.

This type of organisational setting seen at kebele level is designed or formulated by the regional state such as to promote and facilitate any developmental endeavour that attributes to effectiveness and efficiency in project/programme implementation, planning, monitoring and evaluation based on participation of all stakeholders. Although, it seems contradictory to what the constitution aims to achieve, such formulation is left to the regional states to formulate laws/directives, as appropriate to their localities – i.e. the prevailing conditions and development strategies.

On the other hand, despite the clear distinction of separation of powers between the state branches/arms, limited capacities/capabilities at different levels have deterred / hindered the realisation of the envisaged outcomes. This gap seems to be realised by the government since it is still expressing its commitment for the rule of law and better governance.

3.5.1.2 Available Resources

Because of their proximity to the zonal centre the programme kebeles are expected to have the advantage of benefiting from the human and other resources available at woreda and zonal levels. At least that is an additional benefit improvement of communication gives them. In the last three years the woreda has been improving its capacity in terms of manpower allocation for the agricultural sector. There are currently 117 diploma holders compared to 93 in 2006/7 and 64 in 2005/6. There are also 10 BA/BSc holders compared to 6 and 5 in the previous years. The level of second and third degree holders remained the same (4) for the three consecutive years.

The big change seen in the area is the deployment of additional manpower at kebele level where professional staff are expected to make direct contact with the communities and to provide them with new ideas. Having three DAs at each kebele has theoretically enabled

to keep DA-to-farmer ratio of 1:419. This is a much better proportion than that used to be in place earlier.

Quality and motivation of staff are, however, issues that would need to be seriously addressed. DAs and other agricultural professionals would need to be more familiar with the new extension system and also motivated to make a change. The message they take to the farmers needs to be based on better research outputs relevant to local conditions. Generation of appropriate research outputs, their demonstration at local level and capacity building of field staff to properly deliver the messages is the area which needs more focus and resource outlay. It is only when WARDO has professionally competent staff and the required logistics that it will be able to provide effective technical support as well as to closely monitor programmes within its area of jurisdiction. Evidences on the ground show that much remains to be done in this area. Keeping staff in place motivated and providing valued support to farmers is a critical area.

3.5.2 Grassroots Organisations

3.5.2.1 Kebele Associations & Cooperatives

The kebele leadership (kebele cabinet) has 14 members. The kebele structure has 3 sub-kebeles and 10 gotts in each of the sub-kebeles. The kebele communities have been organised into 52 development groups, one development group having 20-28 member farmers. Women's representation in the kebele cabinet is very low.

People spend 20% of their time for public work and spend what is left (80%) on their normal day-to-day activities. People's participation in public works is said to be mostly voluntary. For example, the communities have built an additional house of three rooms to address the problem of space faced by a school in one of the programme kebeles. People's participation is said to be less when the kebele leadership does not have time to provide the necessary encouragement. Women have also started to be more engaged when the kebele leadership provided the required encouragement. People's views are expressed at farmers' conferences when officers from the woreda offices are present.

The programme area is within the catchment of SIDA's rural capacity building programme being implemented in ANRS. SIDA provides comprehensive support focusing on improving local infrastructure and grassroots organisations. It builds health centres, schools, water points and kebele to kebele roads. The health centre it built at Gelsha serves 4 kebeles. SIDA also provides what it calls a kebele empowerment budget using which a three-room block was built at Gelsha in 2006 at a cost of Birr 37,257 to upgrade the school. Budget has been allocated for construction of a library. The road linking kebele 38 (Gelsha) with kebele 30 (Attint Mesberia) was built through FFW

There are three SCs in the programme area, at Gelsha (038), Chirecha (031) and Tebasit (037), that have been established to provide access to consumer goods, provide agric. inputs, stabilise market prices by collecting agricultural outputs from the members and selling them at higher prices later on. They are voluntary organisations with growing

membership but not yet strong enough to provide some of the key services expected from them, such as providing access to agricultural inputs and market stabilisation. Nor have they done much in terms of improving access to financial resources though their serving as collateral for their members to get some of the available loans is worthy of note. The farmers have great expectations of benefiting from their cooperatives and to fulfil these SCs have to be strengthened.⁹

3.5.2.2 Local Organisations/self-help Groups

There are 'kiries' in every 'gott'. The leaders are called 'lebasie' and 'abba haga'. Officers are assigned one officer for small gotts and two officers for bigger gotts. Leadership is elected and stays in power indefinitely until removed from office by the community. What matters for election is the trust people have in the candidate's judgment. Kiries play a key role at times of a family bereavement. They are also useful for conflict resolution. If contestants do not agree with their judgment, they can go to court. The fact that communities have great trust to and expectations from kiries makes the latter very strong social organizations which could further be developed to address socially-oriented development needs. The women emphasized, in the group discussions, that in the long run to be able to bring changes the local tradition "Kirie" system should be developed so that it could serve as formal development association of the people.

The youth have their own formal organisation in-built into the kebele structure. They are represented in cabinets from kebele upwards. The youth take part at kebele-level meetings and express their views. They reportedly discuss their problems and put forward their ideas to the kebele leadership. Solutions to their problems, however, may not be easily forthcoming. They have specific problems related to their livelihoods some of these are related access to land and lack of unemployment. Youth born at the time of land distribution (1988) get plots of land 30m by 30m. They are given these plots by their parents when they become of age. Those who were born after the redistribution of land did not get any share.

Kebele development committees (KDCs) are not visible in the programme area. With many of the activities already starting there is a need to focus on properly organising and strengthening KDCs as they should be able to take ownership of programme activities and to take them forward.

3.5.3 Cultural, Religious, Attitudinal Factors

There are new developments that matter most women in particular. For instance, girls used to get married at 14 and boys at 18 years of age. Girls are now legally considered ready for marriage when they are 18 years old. HIV/AIDS testing is now compulsory before marriage. Forced marriage and female genital mutilation (FGM) are reportedly getting out of practice. Marriage ceremonies are being avoided by agreement and there are mechanisms for doing that. There are, however, some families who still try to force their children to marry, but children resist and run away from their neighbourhood. Of

⁹ The SC at Gelsha has a membership of 766 farmers that have joined after paying an entrance fee of Birr 25.

course, the trend is changing from time to time, and at a fast pace. As far as decision making is concerned, they said in the past it was male-dominated, but at present changes are witnessed through continuous awareness creation and discussions. Through community pressure, they said it is possible to keep the balance.

3.6 The Food Economy

3.6.1 Crop Husbandry

Mixed farming (a mixture of crop and livestock husbandry) is the main economic activity of the communities in the programme area as in most parts of the Ethiopian highlands. As mentioned earlier, the programme area is divided into two agro-climatic zones – upper highlands of over 3,200 m.a.s.l. (*Wurch zone*) and highlands with altitudinal range of 2,300-3,200 m.a.s.l. (*Dega zone*). About 81.8% of the programme area – the upper highlands- are reported to be *belg*-dependent and the remaining 18.2% (highlands in & around Degamote, Derebba and parts of Gelsha) are, because of their lower altitude, practising both *belg* and *meher* cropping and hence are dependent on both *belg* and *meher* seasons. The programme area has a moist dega to moist *wurch* agro-ecology. It is not the total amount of rainfall as such but its variability that is the critical factor. *Belg* planting is the dominant cropping practice in both zones supplemented by some *meher* cropping at lower altitudes. *Belg* cropping is preferred by the farmers because it gives them a longer growing season with sufficient moisture provided there are both *belg* and *meher* rains without a long gap in between.

From the group discussions it was learnt that the main crops grown in the upper highlands are mainly barley followed by field peas, faba beans, lentils, flax and wheat. The same crops are grown in the highland areas with a slightly broader variety of crops including some maize on lower ground. Wild oat is a new crop being grown in the area, including upper highlands. It is used as animal fodder but because of persistent food shortage it is also being used as food for humans. The critical rain for both zones is the *belg* rains falling in January-February. With good *belg* rains ploughing is done from January to March the newly prepared land being used for *belg* or early *meher* (Ginbote') planting. *Belg* planting is done in January-February and early *meher* planting is done from mid-April up to July depending on the type of crop and its susceptibility to frost bite. (For cropping calendar see Annex 6).

a) Crop Yield & Output

As mentioned above barley is the main food crop grown in the area followed by field pea, faba bean, lentil, flax and wheat. Crop yield is affected, according to the farmers, by a number of factors such as rainfall variability, shortage of labour, infestation of crop pests/diseases, hail storm and last but not least, by frost, with shortage of rainfall and frost being pointed out as the most prominent factors. Prioritisation of crops is done based not only on yield per unit of land and market value but also on the degree of resistance to the vagaries of climate, pests and diseases. Crop yields are generally low and harvest failures are common phenomena.

Access to improved technology is quite limited. No less than 80.7% of the interviewed farmers said that they use nothing by way of improved inputs in their farming practices. Only 13.4% said they used fertiliser and 5.7% said they used improved seed. Contour ploughing (reportedly practised by 76.6% of the respondents) seems to be the only soil conservation measure they use to minimise soil loss though some soil & stone bund construction is visible here and there along the main road. Use of manure is very limited as animal dung is used mainly for cooking. Traditional irrigation is practised in all the kebeles, to a very limited extent. Improved irrigation and cultivation of root crops, vegetables and fruits is a new area that is still to be developed with strong back up from the programme and WARDO.

Crop production in the last production season is seen differently by different farmers 16.5% of those interviewed saying that it was the same as a normal year, 43.6% saying that it was below normal and 39.8% saying that it was above normal. Those who said production was below normal gave shortage of rainfall and frost occurrence as the causes. On the other hand, those who said there was better harvest gave good rainfall as the windfall. As pointed out in the group discussion at Gelsha, the reasons for decreasing yield are flood, rain, and depletion of soil nutrients.

Lessons to be learnt from such a varied response would probably be that with so small harvests the difference in magnitude between what is normal, above normal or below normal is insignificant. Communities are all the same on the precipice and the poorer sections of the community are easily traumatised by any slight irregularity whereas those who are in a better position can better weather off the storm.

Farmers in the area plant either during belg or meher seasons. They do not have the luxury of using both seasons. Choice of season to use is based on calculation that takes into account a number of factors such as the promise of availability of sufficient rain, the type of ground to be cultivated, availability of the right type of seed for the season, etc. Farmers being practical minded people they tend to split their farmland for both belg and meher planting to distribute the risk element. Tables 25-28 give a comparative picture of area used for the two planting seasons and the amount of grain harvested in both.

During the meher season nearly 42% of the households plant land sizes of less than a hectare; another 42% plant plots of 1-2 hectares. The remaining 16.5% reportedly cultivate plots >2 hectares. The amount of grain they harvest is not very encouraging. About half of the farming households get 10 quintals or less; about 24% get 10-15 quintals; and about 26% get more than 15 quintals of grain.

During the belg season 60% of the households plant a hectare or less; 32.8% plant 1-2 hectares; and 7.3% plant plots of 2ha. or more. In terms of harvest 71.4% get 10 quintals or less; 16.8% get 10-15 quintals; and 11.8% get harvest greater than 15 quintals.

The survey results show that more people tend to plant smaller proportions of their land during *belg* season than in the *meher* season. In terms of harvest a larger proportion of the households get less harvest during the *belg* season than they get during the *meher*

season. This may be taken as an indication that the *belg* has become unreliable as a production season and farming communities are forced to live with the October/November frost or else shift more to livestock husbandry. This is at odds with the general picture of cereal production in the country which shows that the contribution of the *belg* season is 10% of the total for the country and ‘the *belg areas*’ including Dessie Zuria produce 60% of their grain during the *belg* season.

The farmers have a very narrow selection of crops (barley, faba beans, field peas, lentils and, at lower ground, wheat). As shown in Table 29, in terms of cash earning, wheat would be the best choice, followed by barley. The other crops normally planted there are only half as useful as cash earners. Flax is not expected to do any better. Wild oats, which can be good animal fodder, have reportedly been recently introduced. Introduction of new research findings related to the productivity and susceptibility of these crops could make a big difference for these communities provided they are wisely channelled. So far, these communities have been left to make difficult choices by themselves based on the limited knowledge they have at their disposal.

Table 25: Area Planted in Meher

Area Planted (Ha.)	Count & %age	Gelsha (038)	Chirecha (031)	Attint Mesberia (030)	Guguftu (036)	Total
0 -1	Count	41	48	42	36	167
	% within the KA	40.6%	48.5%	42.0%	36.4%	41.9%
1.01 - 2	Count	44	37	44	41	166
	% within the KA	43.6%	37.4%	44.0%	41.4%	41.6%
>2	Count	16	14	14	22	66
	% within the KA	15.8%	14.1%	14.0%	22.2%	16.5%
Total	Count	101	99	100	99	399
	% within the KA	100.0%	100.0%	100.0%	100.0%	100.0%

Table 26: Total Quantity of Grain Produced in Meher

Total Qty. (Quintals)	Count & %age	Gelsha (038)	Chirecha (031)	Attint Mesberia (030)	Guguftu (036)	Total
1-10	Count	49	50	51	50	200
	% within KA	48.5%	50.5%	51.0%	50.5%	50.1%
11-15	Count	26	22	27	19	94
	% within KA	25.7%	22.2%	27.0%	19.2%	23.6%
>15	Count	26	27	22	30	105
	% within KA	25.7%	27.3%	22.0%	30.3%	26.3%
Total	Count	101	99	100	99	399
	% within KA	100.0%	100.0%	100.0%	100.0%	100.0%

Table 27: Area Planted in Belg

Area Planted (Ha.)	Count & %age	Gelsha (038)	Chirecha (031)	Attint Mesberia (030)	Guguftu (036)	Total
0 -11	Count	63	58	49	69	239
	% within the KA	62.4%	58.6%	49.0%	69.7%	59.9%
1.01 - 2	Count	31	32	41	27	131
	% within the KA	30.7%	32.3%	41.0%	27.3%	32.8%
>2	Count	7	9	10	3	29
	% within the KA	6.9%	9.1%	10.0%	3.0%	7.3%
Total	Count	101	99	100	99	399
	% within the KA	100.0%	100.0%	100.0%	100.0%	100.0%

Table 28: Total Quantity of Grain Produced in Belg

Total Qty. (Quintals)	Count & %age	Gelsha (038)	Chirecha (031)	Attint Mesberia (030)	Guguftu (036)	Total
1 - 10	Count	66	69	73	77	285
	% within KA	65.3%	69.7%	73.0%	77.8%	71.4%
11- 15	Count	22	16	18	11	67
	% within KA	21.8%	16.2%	18.0%	11.1%	16.8%
>15	Count	13	14	9	11	47
	% within KA	12.9%	14.1%	9.0%	11.1%	11.8%
Total	Count	101	99	100	99	399
	% within KA	100.0%	100.0%	100.0%	100.0%	100.0%

Table 29: Food Crops Grown in the Programme Area

Crop Types	Yield (100Kg/ha)	Market Prices/100Kg in Birr				
		Jan-Mar.	Apr.-July	July-Sept.	Oct.-Dec.	Average
Barley	19	236	247	176	153	203
Field pea	5	350	450	300	300	350
Faba bean	8	186	240	260	173	215
Lentil	3	550	550	500	500	525
Flax	2					
Wheat	18	290	290	260	263	276
Wild oat	12.5	This is a newly introduced crop.				

b) Land

Land is one of the critical assets for rural livelihoods whether they depend on crop production, or raising animals or both. Land distribution was done in the area about 20 years ago (in 1988). All farming households in the programme area are reported to have been allocated land the sizes of plots allocated taking family size into account. All the

400 heads of households (15.8% women) say they have access to land and from the group discussions (both in the women's groups and in the men's groups) it was learnt that user right certificates are prepared jointly in the name of the husband and the wife.

Families having children have reportedly got additional allocations of 900 square metres of plots per child, including new-born babies. These additional allocations are being given out to the youngsters by their parents when they get married. Children born since the land distribution, however, remain landless. Returnees from the settlement sites who came back in 1991 are reported to have been given small plots from what had been put aside as lands retained for public services.¹⁰ In the group discussions it was pointed out that through time (in the last 5 years as the question was posed) the family plots have decreased both in size (through informal distribution at household level) and in fertility (through overuse). Those who were small kids in 1988 when land was distributed have now become landless farmers, a fact that has exacerbated an already difficult problem.

Farm plots are small and fragmented. Different sizes have been given by different sources as average size of land per household. Data shown in Table 1, which is the result of merging of the land use data and the number of households from the feasibility study and the wellbeing analysis respectively (both done by Concern), gives average farmland per household of 1.2 hectares, and 1.6 hectares per household including grazing land.(See Table1). This is not at great variance with the findings of the Livelihood Analysis done by Concern in 2006.

Because of the prevalence of low temperatures the choices in crop husbandry are limited. At best farmers expect to get one harvest per year from one plot. Because of continuous cultivation and the planting of the same crop in consecutive years, the removal of cow dung and crop residues for fuel and fodder, and limited soil conservation culture the fertility of the soil has been noticeably on the decline.

c) Oxen Ownership

Crop cultivation is mainly based on the ox-plough culture. Farmers in the area who resort to crop cultivation thus need to have not only access to land but also to labour and other agricultural inputs, including oxen and seed. The difficulty is always getting the land and labour as well as the required agricultural inputs combined at the right time in the right proportions. Not less than 81.8% of the farmers who were interviewed said that they use their own oxen for cultivating their land; ca. 16.3% said they rented oxen and about 0.8% said they used hand tools/hoes. From among those who said they had oxen 53.3% said they had only one ox, 41.8% said they had 2 and 4.9% said they had 3 or 4 oxen. Those who do not have oxen and/or manual labour for tilling the land, mainly women-headed households, the aged and other disadvantaged groups, either resort to share-cropping or ask for communal support at times of work. Those who have only one ox join up to make a pair of oxen and cultivate their plots in turns. Waiting for communal support or linking up has implications of missing optimum time for cultivation.

¹⁰ Promoting voluntary resettlement is one of the cornerstones of the government's food security programme. The communities in the programme area have been invited to take part in this but they showed no willingness to do so.

3.6.2 Livestock Husbandry

Because of the high altitude and the limitation this poses on crop production livestock husbandry is seen as more than a complementary activity in food production. The feasibility assessment done by Concern in 2006 shows that there are about 38,500 oxen, cows and calves, about 88,900 shoats, over 13,700 equines and over 25,000 poultry in the 11 kebeles covered by DZLP.(See Annex 8). About 93% of the interviewed households said that they have livestock. Out of the interviewed 17.1% have no oxen, 53.3% have only one ox/bull, 41.8% have 2 and only 4.9% of the households have 3 or 4 oxen/bulls. The number of cows each household has is also very limited with 71.6% having only one cow, 25.2% having 2 cows, and only 3.2% having 3 cows. Milk yield per cow is no more than 2 litres in 87.7% of the cases.

Almost all of the livestock are of local breed, meaning that not much work has been done or success achieved in improving the quality of livestock in the programme area. The only exception to this may be the introduction of improved sheep (Washera type probably brought from the area known by the same name in Gojjam).¹¹ Even in the case of Washera sheep it is only six households out of the total of 400 who said they have these sheep, their holdings ranging from 1 to 13 as shown in the table below. (See Table 30). That has become visible from the exercise is the total absence of exotic bulls in the area. This could have been compensated by delivery of artificial insemination service. But this has not been mentioned anywhere during the survey.

In addition to this lack of fodder and veterinary services are seen by the farmers to be impeding livestock husbandry in the area. Grazing land constitutes about 15% of the total area but it is of poor quality and has been deteriorating for lack of proper management. Not much has been done by way of propagating fodder crops suitable to the area or otherwise promoting improved management of grazing lands. What had been allocated as communal grazing lands have been partitioned among the resident households. No less than 96.8% of the interviewed households said that they use their own grazing lands as source of fodder. Those who said they use purchased hay, crop residues and communal grazing are only 1.8%, 0.8% and 0.5% respectively.

¹¹ Washera sheep are reported to be well known for the quality of meat, and they appear to have a high demand in the programme area.

Table 30: Livestock Ownership among the Interviewed Households

<i>Livestock Owned</i>	<i>N</i>	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>Std. Deviation</i>
Oxen/bulls (local breed)	306	1	4	1.5261	.62277
Cows (local breed)	317	1	3	1.3155	.52907
Calves (local breed)	206	1	4	1.4320	.70034
Heifers (local breed)	88	1	9	1.9545	1.91731
Sheep/goats (local breed)	310	1	25	6.3194	4.04000
Chicken (local breed)	246	1	15	3.6951	2.18542
Horses (local breed)	184	1	8	1.2880	1.10571
Donkeys (local breed)	189	1	8	1.3651	1.16192
Cows (exotic breed)	1	1	1	1.0000	
Heifers (exotic breed)	1	1	1	1.0000	
Bull (exotic breed)	0				
Sheep (exotic breed)	6	1	13	6.0000	3.94968
Chicken (exotic breed)	1	3	3	3.0000	
Livestock that died in 1997/98 EC (in 2005)	146	1	11	1.9384	1.22177
Honey annually produced (Kg)	16	1	26	7.1875	8.13403

Bee keeping is a rare activity in the area and limited to lower grounds as bee colonies need to be protected from the cold and have to have suitable areas to forage. Only 3.4% of the interviewed households said they practise bee keeping. The practice is limited to use of traditional technology. No more than four farmers reported that they use modern hives. Apiculture seems to be a no-go area for women-headed households.

Animal health also seems to be a critical issue for these communities, especially to those with more limited resources. No less than 146 livestock are reported to have died in 2005 alone from lack of treatment facilities. Of the six veterinary clinics in the woreda three are found in the programme kebeles, namely at Gugufu (036), Chirecha (031) and Tebasit (037). (See Annex 10). According to WARDO animal diseases prevalent in the woreda are as shown in the table below. (Table 31). These clinics are reported to be manned by animal health assistants, have basic drugs and provide services such as curative care, extension education, vaccination, or any other type of service (WARDO).

Table 31: Major Livestock Diseases in the Area

<i>Major livestock diseases</i>	<i>Causes of the diseases</i>	<i>Effects on animals</i>
Pasteurellosis	Bacteria	Affects respiratory tract of the animal
Black leg	Bacteria	Affects skeletal system
Sheep pox	Virus	Affects skin & internal organs
Internal parasite	Worms & protozoa	Affects GIT and causes diarrhoea
External parasite	Lice, ticks & mange	Affects the skin & causes loss of weight

3.6.3 Tree Growing

According to the regional government of ANRS tree growing is one of the three main areas identified as potential sources of income for Dessie Zuria Woreda with 60% of income to be derived from livestock production, 30% from crops and 5% from tree growing. (Source: ZARDO). Tree growing has been encouraged since mid-eighties with outside financing through food-for-work (FFW) programmes later followed by Finnida-supported fuel wood projects as properly manifested in Gelsha Kebele.

Land degradation has been manifested in the area partly through loss of vegetative cover including forests, bushes and grasslands that have, with growing population, been encroached upon by cultivation. As shown in Table 1 above, nearly 16% of the land has been put out of production. The table also shows that forests and bushes/shrubs cover 12.2% and 7.9% of the area respectively. These figures, the veracity of which would need to be proved, do not look bad at face value and are clearly the result of intensive afforestation campaigns supported by rehabilitation campaigns as mentioned above. They have also been encouraged by the proximity of these kebeles to Dessie (a major urban centre) and the road link beyond Dessie which has created an attractive market for fuel and construction wood.

Gelsha, the programme kebele closest to Dessie has a state forest, community forests and private forests whereas the forests in the other ten kebeles are community-owned and privately owned. Types of trees grown and/or protected for regeneration/enrichment are Eucalyptus, Cupressus, Juniperus, Olea, Croton, Hygenia, and Acacia species, with Eucalyptus, Sesbania and Tree Lucerne as exotic species that have been introduced as fast growers, the latter two also for their use animal fodder. Seedlings for these plantations have been provided by WARDO and privately produced by the farmers in small quantities. (See Annex 8).

Farmers in Gelsha have mixed feelings about the state forest in their kebele. They pointed out (in the men's group discussion) that the hillside plantation of the Finnida Fuel Wood Project was done without much study and the crop fields below the plantation have become increasingly less productive. There is also concern among the youth in the same kebele that they have not been allowed to use forest products though they also acknowledge that cutting trees has provided additional income when the plantations are sold and cut.

The growing need for fuel and construction wood as well as the high value of trees as sources of income have fuelled farmers' interest for planting trees. The focus seems to have been given to fast-growing trees, particularly Eucalyptus. No less than 79% of the interviewed households mentioned eucalyptus as the only perennial crop they plant. Farmers are using wood from their own plantations, animal dung and dry branches from the small forests around them as sources of energy. Crop residues have not been mentioned here as sources of fuel as the main crop grown is barley which has relatively low biomass content compared to mid-altitude and lowland crops such as maize and sorghum. About half of the interviewed farmers said they have less than 200 trees each the remaining half saying that they have from 200 to 6,000 trees each. A point worth

noting in this connection is that the high figures given by the farmers could be misleading as they do not relate to plantations with sufficient spacing between the saplings ensuring a greater chance for survival.

Land allocated for community forests has reportedly been parcelled out to be given to returnees from settlement sites. Private tree planting would need to be encouraged and provided with policy as well as technical support. In the area of policy support providing/ensuring access to land is the key issue. Allocation of land for planting purposes with guaranteed user rights would be essential. Technical support would include promoting economically productive and environmentally useful species as well as training at nursery and plantation management level. Ensuring user rights on whatever communal forests are still available would also be a useful measure to promote tree planting as a profitable economic activity.

3.6.4 Support Structure

Recently concerted effort has been made to provide trained manpower and local institutions required to pass on agricultural extension messages to the farmers. Accordingly, three development agents (DAs), all diploma holders, have been assigned to every kebele, working with the farmers in crop husbandry, livestock husbandry and natural resource management. The DAs pass on extension messages through the leaders of development groups (DG).¹² One service cooperative (SC) organiser and one veterinary officer for every three kebeles and a farmers' training centre (FTC) at every kebele have been added to this structure. Farmers are said to be trained for three months at the FTCs. (Source: Interview with DA at Gelsha). Many of these structures are new or are on the way to be established.

3.6.5 Non-farm Employment¹³

People from different age groups, starting from 10 are involved in agricultural activities though the type of work and the intensity varies with age and sex. Involvement is intensive during high agricultural seasons, mainly at the time of land preparation and at harvest. During lax seasons farmers resort to seeking non-farm employment opportunities be it in the area or further out. Locally existing opportunities are not that encouraging given the large number of employment seekers including the youth. Generally they move out to other agricultural areas such as the Awash basin to do seasonal work during peak seasons. Some also practice share-raising of livestock. Women are also engaged in market transactions buying and selling small stuff getting some small profit margin to live on. With the road construction work that is going on in the area there is now better access to employment opportunities as daily labourers.

Skill development has been an activity which involved men and women farmers as well as the youth. Small groups of men, women and the youth have received short-term

¹² Kebeles in the area are divided into 3 sub-kebeles and 10 'gotts' (village units). Communities in each 'gott' are again divided into development groups (DGs) locally known as 'yelimat buden' each consisting of 25-28 farmers led by a Chairperson and a Secretary.

¹³ Income transfer was raised at the group discussions. The discussants said that it was an element not worth mentioning.

training with in order to create additional sources of income. Women have been trained in skills such as making closed stoves, cotton yarn making, tailoring, weaving, carpet making, etc. Men have been trained in metal work and wood work. The youth have also been trained in cottage industry skills such as carpet making, metal works, traditional weaving, carpentry, etc. These undertakings are not, however, followed up by putting into good use the new skills gained from these training programmes. Those that have been trained have not put their skills into practice because they do not have the materials and tools or the necessary set up to go into production (Discussion with Attint Mesberia youth group). Farmers appreciate skills in rearing and fattening of animals. Some women do their best to develop traditional skills for making household goods (such as 'mesob') and use them as income generating activities. Many of the skills attained through training are, however, simply wasted for lack of follow up.

3.7 Vulnerability & Factors Influencing Production & Income

The communities in the programme kebeles are known to be highly vulnerable to food shortage and related problems. About 60% of them (those in the poor and very poor category of the well-being exercise done in 2006) are reported to be food insecure and have been recipients of food aid for a long time. According to the farmers who took part in the group discussion at Gelsha food was in short supply in 2004/5 with some improvement in 2005/6. There is concern that the current harvest (that of 2006/7) has been affected by frost (mainly field peas and faba beans). In general the crops they produce are reported to last them only 6 months on average. Farmers at Attint Mesberia said that what they produce lasts them for a period of 3 to 9 months depending on the wellbeing of the family. The food gap is generally from January to June with March/April to June as the highly critical period, as testified by farmers from Attint Mesberia and Gelsha.

They bridge the gap (January – June) by selling small stock, buying cheaper crops like maize from the market, by resorting to casual labour, getting support through PSNP, by using government credit to purchase food for the time being, etc. Nearly half of the respondents (52%) said they experienced food shortage during the previous year. For those who experienced food shortage March and April were the particularly difficult months. Vulnerability appears to be the result of a number of factors (including wellbeing status of the household as well as the immediate impact of the particular incident that triggered off the resulting food shortage). The combined effect of the number of factors at play during a certain period seems to determine the degree of the problem making life difficult for the communities in general and the most impoverished sections of the communities in particular.

3.7.1 Factors Affecting Production & Income

Traditional farming system: The traditional agricultural practice has been a combination of crop and livestock husbandry (mixed farming) with crops grown being limited to barley and some pulses and livestock consisting mainly of cattle, sheep and equines. Topographic and climatic factors have also limited the choices people have. Through lack of proper management the natural resource base has been eroded, more and more land has become unproductive, and crop yield has continued to decline through overuse. The

effects of rainfall variability and frost occurrence have become more and more pronounced because of increased dependence of communities on these crops without inputting the required change in agricultural technology, without any improvement in practice. To make matters worse, neither crop production nor livestock production has been provided with sufficient extension and capital support to improve performance thereby guaranteeing the wellbeing of the communities.

Population pressure: The problem has been exacerbated by the pressure a growing population posed on the limited resources. Population has been growing at a very fast rate. At the national level population is known to double itself in less than 20 years. Average size of household plots in the area has decreased from 2.9 hectares to less than half that size in the last 30 years. (See Concern's Dessie Zuria Livelihood Analysis). This implies a doubling of the population of the area during the same period. Population density in the programme kebeles is currently known to be ca.201 persons/sq. Km, a figure which is very high considering the production potential of the area. Average size of household is 5.26 which is significant compared to the limited resources that are available.

Rainfall variability & poor support mechanisms: Climatic variability particularly the recurrence of droughts has had quite an alarming effect particularly because the return period has been at increasingly short intervals. These are areas with high rainfall variability and belg rains are becoming more and more unpredictable. Shift from belg to meher rains would also mean exposure to frost hazard. As a result the farming communities are easy prey to the vagaries of nature. Creating alternative access to moisture, increasing optimum utilisation of fields at lower ground so that crop production would not be pushed to higher areas where the risk element is greater, improved diversification of crops and protection measures, a studied shift from crop to livestock production could have been useful. But this took long even to be realised.

Household wellbeing: As seen above the food shortage was differently perceived by different households. This could partly be due to the degree of preparedness each household had which in turn depended on availability of sufficient assets to weather off the storm. The status of the household seems to be the critical factor for its being able to withstand major shocks or slight tremors. The wellbeing ranking done by Concern in the programme area gives a picture of the degree of preparedness of the communities, as perceived by themselves.

A wellbeing analysis was conducted in each of the 'gotts' of the 11 programme kebeles in 2006. Community members who took part in the exercise established criteria for identifying wellbeing groups and, using agreed criteria, grouped the households in their own kebeles into 4-5 groups. The four-tier grouping had very poor households, poor households, medium households and better-off households. In the five-tier grouping a more refined differentiation was used. The criteria used took into account size and type of livestock holding, ability to plough their land properly and don time, ability to feed their family throughout the year, access to additional source of income, ability to send their

children to school, ability to provide support to those in need and recognition/respect by members of their community.

According to the criteria they established, 31% of the households were found to be very poor, 28.7% of them poor, 22.4% were in the medium wealth category and 17.7% were considered to be better-off. Women-headed households constitute 21.8% of the total number of households in the 110 'gotts' (11 kebeles) and hence represent a smaller proportion of households in each wealth grouping. Looking at the women-headed households separately shows that no less than 39.7% were in the very poor category, 20.7% in the poor category, and 11.6% in the medium wealth-ranking group and only 5.6% were considered to be better-off. This is a reflection of the additional pressure women-headed households have to bear in day-to-day life and that they are more vulnerable than others to food security crises.

3.7.2 Coping Strategy

As mentioned earlier the area has been hit by several food shortages (both transient as well as chronic). Communities had to pay dearly for each famine and pestilence when they were less prepared and no timely support was forthcoming. The impacts these food shortages made on these communities depended on the wellbeing of each household and their coping strategies differ accordingly.

Traditional coping strategies: The survival mechanisms or the coping strategies of vulnerable communities are more or less the same among subsistence farmers in the Ethiopian Highlands. There are, however, marked differences between different households depending on the wellbeing of each household in question. The better-off households usually have some grain in their store, some saving in terms of cash or some animals to sell and, as a result, they are less affected than others. Either they stand their ground using the grain they have stored or use the other resources they have in order to buy the required food items before prices go up. Normally they change their consumption pattern, sell out small animals, reduce marketable crops and use their own grain reserves. About 41.7% of the households that said they were affected by food shortages said that they sold livestock to bridge the gaps, 25.1% said that they worked as daily labourers and 18.5% said that they reduced the number/size of meals.

These may as well be times when the more entrepreneurial ones would make more money by making more profitable use of their resources. People in the middle category change their consumption pattern, sell out small ruminants and purchase food from the market. The poor/very poor change their consumption pattern (eat less, eat less preferred food), resort to selling firewood; migrate from the area looking for means of survival, etc.

Life-saving and rehabilitation programmes: The government had started the productive safety-net programme (PSNP) to support the neediest sections of the community during the hungry seasons through providing an opportunity to get access to income in order to curtail/minimise erosion of assets. Rates for daily work on public work were reported to be Birr 6 per person-day or its equivalent in grain. Communities pointed out that kebeles were provided with limited quotas and the resources provided were not sufficient to

address the needs. Voluntary settlement programme was considered to be another government strategy to address the community needs over a long period of time. Communities were not, however, willing to take part in this. It is only an insignificant portion of the interviewed households (1.3%) that said that there was anyone from their family that was settled anywhere.

3.8 Livelihood Options

3.8.1 Food Self-sufficiency

With the traditional practices they have at hand and with the inputs that are being provided the communities in the programme area would not be able to fully address their food needs. Though far from sufficient under existing conditions average size of land holding at household level is more or less equal to that considered to be average for the country (ca. 1 ha.). Those in the upper highlands (*wurch* zone) even have slightly more. The problem is low productivity of the land mainly due to limitations temperature and variability of rainfall pose. Belg planting would be preferred by the communities provided they get sufficient rainfall. With good belg rains they could get better harvest. But there is no way of using both belg and meher seasons as sometimes practised in other areas or mixing maize and sorghum with the other cereals. Taking 1500 Kg¹⁴ of grain as the minimum cereal component of annual food intake required by an average household of 5 persons one can see that it is only 26.3% of the households that would be able to produce enough grain to fulfil this requirement. In the case of belg harvest it is only 11.8% of the households that would be able to reach that threshold. This is a clear indication that because of the uncertainty of rainfall ‘belg’ has failed the communities as an agricultural season. (See Tables 25 & 27).

Production of vegetable crops is also limited partly due to lack of opportunities for using small-scale irrigation and partly because the provision of agricultural extension service has not been vigorous enough to introduce appropriate technology packages. The area has consequently been food deficit and the poorer sections of the community have been supported with various programmes (though not sufficiently resourced) to fill the food gap.

3.8.2 Opportunities for Diversification

The prospects for continued production of cereal crops in the programme area are limited. There is clearly a need to make a gradual and informed shift to production of new type of crops. These could probably be carefully selected highland fruits, vegetable crops such as potatoes and tree crops. As the kebeles are not far from Dessie (a well-established trade centre) and more or less on the main road commercialisation of tree production could be intensified using appropriate legislation as well as technical and bridging support. Specific varieties appropriate to the area could be selected using research results from agricultural research centres representing similar agro-ecologies in the country (e.g.

¹⁴ This is true assuming that the additional 300Kg of cereal equivalent would come from animal products and vegetable crops such as potatoes.

Holeta) or elsewhere. This needs increased commitment from the relevant institutions and an increased outlay of resources for selected activities.

Prospects for livestock production, on the other hand, could be more encouraging as there are already limited experiences in that direction. Livestock rearing and fattening are activities that more forward-looking farmers are already going into. No less than 75% of the households in the programme area have an ox/bull, or a cow or both. About the same proportion of households have shoats. The problem communities are facing here is lack of sufficient fodder, effective veterinary support and a concerted effort to improve the quality of the animals. The survey showed that the number of improved cows/heifers and sheep is abysmally low. There are no improved bulls in the area and the practice of artificial insemination is nowhere in evidence. The interest communities are showing in the Washera sheep is a very encouraging sign.

Sources of income would need to be further diversified through well thought training and skill upgrading programmes. Discussion with the communities (with men's groups, women's groups and youth groups) in the four sample kebeles has shown that the skill training given to some members of the communities have not benefited them as they were not linked to production. One needs to go beyond training for training's sake. Mechanisms have to be developed to make the skill training exercises productive as these would be useful tools for income diversification.

3.9 Cross-cutting Issues

3.9.1 Governance

During the last few decades, basic education accessed by the communities and awareness created through different means have exerted pressure that rule of law and governance be established, maintained and strengthened such that on-going development endeavours would be sustained and be replicated to make a difference in the livelihoods of the people as well as in the economic growth of the country.

The needs, demands as well as aspirations reflected in the democratic process related to the last election and through the on-going development efforts are exerting pressure on ensuring and sustaining governance. This has been reflected in the discussions and focused interviews made with the stakeholders. The communities are still consistently advocating for winning diverse elements/issues that matter to their livelihoods. Local administrations appear to be strong and to have close contact with the communities. This could be useful for increasing the participation of communities to address their need. There is still the need for a working balance between the organisational drive in getting things done and the opening up of sufficient political space to positively entertain ideas that come from different quarters and help to generate sufficient energy for a boost in terms of improving people's livelihoods. The younger generation needs to be very much aware of this in order to become a productive social group.

3.9.2 Gender

The survey has looked through different aspects that divide the roles of men and women in the programme area. The main issues are related to participation, division of labour within the household, decision-making, access to credit and skill training, and social and cultural pressure on women, and general well-being of women-headed households. The survey results show that women have started to participate in skill training and to a certain extent in community development, but might not be sufficiently visible at leadership level. The training they received have so far not been productive as they have not been able to gainfully use the training/skill upgrading they were given. For instance, at one of the kebeles (Attint Mesberia) 6 women have been trained in making closed stoves, but only one of them is still trying to go into practicing.

Well-being is mainly based on access to resources and skills. The well-being ranking done in 2006 showed that about 83.8% of the female-headed households are either in the poor or the very poor category as shown in Table 32. (See also Annex 13)

Table 32: Proportional Distribution of Well-being Ranking

<i>Categories</i>	<i>Better-off (%)</i>	<i>Medium (%)</i>	<i>Poor (%)</i>	<i>Very Poor (%)</i>
Total households	17.7	22.4	28.7	31.0
Female-headed households	1.0	2.6	6.0	12.3
Male-headed households	16.7	19.8	22.8	18.8
% of female-headed households	4.5	11.9	27.3	56.5

The discussions in the women's groups have pointed out the following facts and perceptions:

- There is a general appreciation that the workload of women is higher than that of their men-folk. It was emphasised that women are directly involved in all agricultural activities except ploughing. The participants added that the woman's day starts very early in the morning and ends late at night, a longer day than that of the man.
- The work load is slightly reduced during dry season. Female household heads get the heavy work like ploughing done by their sons if they have sons. Otherwise, they get it done by outsiders through different arrangements such as payment in hay, work against cash payment if they have the means, by calling voluntary support by preparing a meal for the day ('gizo'), or they rent out the land on a sharecropping basis.
- Regarding decision making at household level, men are considered to have overall responsibility for household resources. At household level, all field activities and managing major livestock are considered to be the man's responsibility, while managing poultry, eggs, milk and milk products are that of the woman though they spend the proceeds to fulfil household needs. Husband and wife have equal rights on the household land. Certificate of use right is given to them jointly.
- The woman does household food planning. Better food is eaten at harvest time. When there is food shortage of preferential treatment is given to children and men

- folk. Nevertheless, some husbands prefer to share with their wives whatever is available, with children getting a safer share.
- Women have access to credit from ACSI; from the World Bank fund through the SC. ACSI has men and women's credit provision strategy. Concern provides animal credit only to poor women though the husband co-signs. The woman could take a loan from the WB loan on her own. Nevertheless, as this brought complications in times of separation now both have to sign for the loan. Husband and wife discuss credit issues at home.
 - Project interventions, together government development programmes, have brought skill training for women equally with men.
 - There is no sufficient health care though there is a limited amount of support. They know that lack of birth spacing has health implications. They are using family planning tools such as pills, Norplant, loop and others. Because of support from the health, service there is improvement in childbirth. However, there are no trained traditional birth attendants.
 - Grown up children and husbands share the workload of women in fetching water from distant places using jerry cans and donkeys, unless the water source is in the vicinity. Children's sharing of the workload of women does not hinder their going to school. Fetching fuel wood and animal dung is still the woman's area.
 - There is an overall attitudinal change on the equality of men and women as awareness creation has been done on a continuous basis. Women who stay at home do not equally benefit from these changes and they need to be focused on. Men should also be given continuous training/awareness creation also.
 - Both men and women benefit from the safety-net programme. Education and discussion are considered good mechanisms for bringing about change in gender relations.
 - Though some encouraging changes are beginning to appear in the programme area the workload on women related to production and reproduction still exists still leaves them the bearer of the brunt.

These Concerted efforts should be made by all stakeholders that the good start should go beyond being a token move.

3.9.3 Education, Skill Training & Diffusion of Technology

Though close to an urban setting, the programme area has a lower degree of adult literacy than the average rate for the country. Improved access to education would be an important stepping stone for a whole range of skills and for diffusion of appropriate technology useful to improve food production and/or access. Even the limited non-formal education has been instrumental to the creation of awareness related to HIV/AIDS and the rights of women, though it has not been given much opportunity towards providing insight, understanding and exposure to new technological developments related to crop and animal husbandry.

A limited number of women have been trained in making closed stoves, cotton yarn making, crop protection, fodder production, and sheep rearing. They have also benefited from distribution of improved seeds and fertilisers. New technologies like closed stove

(which save fuel, save time, are cleaner and with minimal health risk) have been introduced. Both men and women got short-term training to produce these. At least some of these trainings have not been seen to have any meaningful contribution in changing the lives of the communities in general or even the trainees themselves in particular. One needs to look into what works and what doesn't and build on the strengths. There are, for instance, some women who do sewing as an income generation activity. Making mesob is also resorted to. A participant in a women's group said that it takes 15 days to complete one 'mesob', which is sold at Birr 70-80, and 'sefied' which sells at Birr12. She said there is a good market for them. There may be similar other things that can be tried.

Knowledge and skills need to be further expanded in the programme area for people, especially the young, to have diversified sources of income. With increasing population and limited natural resources communities in the programme area cannot afford to continue living like their forefathers before them. There is a need for new and innovative skills to be developed, particularly to attract the youth who are landless. They should be supported to move about with a marketable skill in order to make a decent living.

There are also traditional skills such as the ones related to animal husbandry which could further be developed to make the sector productive. This requires a clear policy direction, drive and concerted effort by all stakeholders.

IV. CONCLUSIONS & RECOMMENDATIONS

The programme area needs to change fast with the changing environment. It carries a large population with a diminishing share of productive land per capita and with a growing young and landless generation that has no marketable skills. Addressing basic services to these communities is being done, resources allowing. There is a significant improvement in infrastructure from which all the programme kebeles are benefiting though to varying degrees. Access to education is limited to primary schools as sending children, especially girls, to high schools in Dessie is very demanding.

The creation of access to credit, seen differently, by different people, would have been useful had the recipients been able to pay back their loans on time. The default rate may be an area to seriously look into and to find appropriate mechanisms to redress it. The various community support programmes are useful as they would keep people from slipping down. But the quota system, the issue of resource limitation and graduation from support would need to be seen with fresh eyes.

Concern's livelihood programme has a promising start. It is good that it has started the programme with strong focus on building initial knowledge about the communities and the area. This knowledge needs to be further developed through the programme life. The focus on the neediest is a good start though for a programme of this size, and with a probability to continue for a few more years, one needs to look for a mechanism of encouraging the smart pickers, people with innovative ideas, and compare the results.

With this in mind the following recommendations could be made for further improvement of programme results:

1. Continued programmes on birth spacing, TBA training and MCH support, with improved provision of drugs and equipment to the health facilities;
2. Strengthening the Service Cooperatives so that they become effective channels for accessing agricultural inputs and stable market outlets;
3. Increased focus should be put on animal husbandry, especially sheep rearing and fattening with introduction of improved stocks carefully selected both for mutton and wool production;
4. Intensified grazing land improvement and fodder production;
5. Production of various species of highland fruits (apples, peaches, etc.) should be done at selected sites with sufficient technical support and follow up;
6. Access to water should further be improved with further spring development work;
7. Increased focus should be made on skill development especially for the youth;
8. Consistent work should be done on attitudinal changes to enable the youth to maximize opportunities for becoming skilled farmers or to attain marketable skills;
9. The kebele centres should be better linked through improvement of existing roads maintained through EBSN resource inputs;
10. Integrated land management practices should be promoted focusing on effective soil and nutrient conservation, fuel supply, commercial forestry and improved yield from animal and crop husbandry;
11. Expansion of access to micro-finance and standardization of approach and interest rate;
12. Putting more focus on organizing and strengthening of KDCs so that they become owners of programme work done and take them forward;
13. Strengthening of local CBOs (kiries) to cover not only social functions but also to effectively support local development efforts, of their own initiative;
14. Expand involvement of female-headed households in local economic activities through skill training and increased access to credit;
15. Standardize norms and procedures between different sources of credit after conducting a study around feasibility of access, scope and effectiveness;
16. Provide credit facilities to a wider target group.

V. ANNEXES

Annex 1: Terms of Reference for the Baseline Survey in Dessie Zuria

1. Background

Concern first became operational in Ethiopia from 1974-77 in response to the famine and again from 1982 to the present day. Throughout this time, Concern Ethiopia has aimed to maintain a strong poverty focus in its work.

Emergencies in Ethiopia are cyclical and endemic and Concern has aimed to address the short-term needs in emergencies, the medium term needs through rehabilitation programs and the longer term strategic needs of the poor through our long-term development interventions.

Rehabilitation and longer term development aims to build the capacity of the poor to enable them to take responsibility for their own development needs – to make a sustainable impact on poverty.

Through working in chronic food deficit areas and in the most disadvantaged areas of Addis Ababa, Concern Ethiopia has ensured that its programs target those who are most vulnerable in the most disadvantaged areas of the country. Concern is currently launching a livelihood program in Dessie Zuria and Damot Weyde weredas.

2. Rationale for the Study

Concern puts great emphasis on improving the livelihoods of chronically food insecure communities. Accordingly, a long-term food security program has been launched in 2007 in Dessie Zuria to bring positive and sustainable changes on the lives of poor households. Although needs analysis and other consultations have been conducted in developing the program, there is a dearth of reliable statistical information and key indicators that could be used to measure program impact on household food security. The rationale of this study is therefore to gather necessary data that could be used as indicators of progress and impact of the program.

3. Scope of the Study

3.1 Scale: The study will be conducted in the 11 kebeles of Dessie Zuria wereda where Concern is implementing a livelihood program. The team will select 4 sample kebeles (3 from higher highlands and 1 from highland kebeles) for the exercise.

3.2 Customers: Concern, target communities and partners of the program at woreda level.

3.3 End users: Concern, communities in Dessie Zuria, partners and collaborating government offices.

3.4 End result: The result will be a baseline data on available resources that will serve to develop indicators and benchmark for future impact analysis.

4. Purpose & Objectives of the Study

The purpose of the planned exercise is to collect quantitative and qualitative information, which would give an up-to-date picture of household economies of target communities and serve as a base against which changes resulting from development interventions can be measured.

The specific objectives of the survey are:

- To establish local food security indicators using disaggregated data and a base-line against which impact of food security interventions can be measured;
- To improve the level of understanding of the working area to enable the organization (CONCERN) to redesign planned interventions as required
- To assess capacity of woreda partners to plan, implement and monitor development interventions and make changes to the capacity input as necessary.

5. Task & Information Needed

The primary task is to develop disaggregated baseline data primarily related to household food security against which impacts of project interventions can be measured.

The consultants are expected to gather the following information that would provide valuable data to attain the above stated purpose and objectives. Additional information, which the consultants consider to be valuable for attaining the above-mentioned objectives, will also be incorporated.

- **Natural capital:** The stock of resources the target communities have access to including land, forest, water resources and other natural resources and who has access according to disaggregated data.
- **Financial capital:** Cash or cash equivalent resources that people have access to achieve their livelihood objectives including savings, regular transfer of income, access to credit services and others. Data to be disaggregated within the household.
- **Human capital:** Access to health, education, knowledge and skills of the community: In addition to current stocks of human capital, resources in the community, which are used to improve or maintain human capital, such as schools and health centres, should also be considered as human capital. Data to be disaggregated according to gender/age/disability etc.
- **Social capital:** Informal social networks and groups upon which households draw support in pursuit of their livelihood security according to disaggregated data. What

community strengths exist which can be built upon to improve social capital in order to expand livelihood options.

- Physical capital: Includes affordable transport, access to markets, livestock, secure shelter, adequate water supply and sanitation, clean, affordable energy and access to information communication.
- Political capital: The ability of communities to influence policies and practices and their representation in governance and decision making.
- Livelihood shocks and communities coping capacities: The occurrence of disasters which may impact on livelihoods and communities' capacity to withstand shocks.
- Food production and consumption patterns: Availability of food at household level and seasonality. What consumption patterns exist within the household looking at differences in gender/age etc.
- Income from farm and off-farm activities: Household income from various sources, mainly from farm related and off-farm activities and how this is distributed within the household.
- HIV/AIDS: The impact of HIV/AIDS on livelihoods security and how it impacts different vulnerability groups.
- Institutional capacity: Capacity of woreda partner offices LNGOs and CBOs to plan and manage development programs with regard to staffing, resources and existing monitoring systems
- Equality: All the above information need be analyzed and disaggregated on gender and other vulnerability factors including age/disability/health status..

1. Methodology

In conducting the survey the study team will use the following methods of data gathering and analysis:

- Conducting review of secondary data available with relevant government departments, CBOs and Concern offices (related study reports, project progress reports, evaluation reports, etc.);
- Design a questionnaire to be used at household level to capture diversity of views (men, women, young and old etc...);
- Randomly select four kebeles from the two agro-ecological zones (one from the highlands and 3 from the higher highlands) for the exercise.
- Using representative sample households according to vulnerability groups within the selected kebeles, conducting household surveys and focus group discussions with different social groups e.g. gender/age/artisans/landless etc. to gauge household and community views on the pertinent issues;
- Use additional tools such as PRA to gather the necessary information.

2. The Study Team

The study team will be composed of one chief consultant with strong food security background and a sociologist with relevant development survey experience and understanding of equality issues. Concern will make the necessary support staff (enumerators) available from its existing staff in Dessie Zuria and from partner agencies. The chief consultant will make sure that the exercise is participatory and Concern staff will learn from the exercise.

The chief consultant will sign contract agreement with Concern with clear outline of terms and conditions of task.

8. The Study Report

The outcome of the study will be a concise and readable report with clear baseline information of the target community of the Dessie Zuria Livelihood program. The reports will be based on the findings of key points outlined under Section 5. The findings will have to be analyzed and organized in a way that the information will serve to achieve the objectives of the exercise. The Chief Consultant is expected to submit a concise and readable report (not exceeding 30 pages excluding annexes). The study report will need to fully address the objectives mentioned above and should include the following major parts:

- Introduction
- Executive summary
- Methodology
- Findings (baseline information)
- Conclusion and recommendations

9. Reporting Line

The chief consultant will report to Ato Aregawi Hagos, Concern Assistant Country Director.

10. Logistics Support

During the consultancy period Concern will provide transport services to and from the study area and around the study area. Contact person during fieldwork will be Endalamaw Belay – Wollo Program Coordinator

11. Study Period

The study will commence around the third week of November 2007 and will take four weeks, including field work, data analysis and write up. The final report is expected to be submitted on the 24th of December.

12. Potential candidates:

Potential candidates for the exercise are expected to submit their technical and financial proposal on the 20th of November 2007. The technical proposal should include time table and CVs of the consultants.

Annex 2: Checklists

2.1 Checklist for DZLP Baseline Survey – Men’s Group

Focus areas	Key questions
<i>Natural capital</i>	<ul style="list-style-type: none"> • Has access to (availability of land) diminished, been the same, or increased over the last 5 years? • How about forests and water resources? • Who has access to these and who has not? • Has the quality of land improved, been the same or diminished over the last 5 years?
<i>Financial capital</i>	<ul style="list-style-type: none"> • Are households supported by regular transfer of income? • Are credit services available? • Who benefits from these? Do men and women equally benefit? • Are there any disadvantaged groups, e.g. the elderly, the young?
<i>Human capital</i>	<ul style="list-style-type: none"> • Do people have sufficient access to health, education, knowledge and skills? • What skills are available within the community to improve livelihoods? • Are there limitations by gender/age/disability, etc.?
<i>Social capital</i>	<ul style="list-style-type: none"> • What informal social networks and groups are available for people (men, women, the young, the old)? • What community strengths exist which can be built upon to improve people’s wellbeing?
<i>Physical capital</i>	<ul style="list-style-type: none"> • What transport facilities are available in the area? • Are they affordable? • Is there sufficient access to markets? • Is there adequate supply of water throughout the year? • What are the main sources of energy? Are they sufficient? • What are your sources of information and means of communication?
<i>Seasonality of food availability & coping capacity</i>	<ul style="list-style-type: none"> • Do you produce sufficient food to take you round the year? • If no, what are the lean periods? • How do you bridge those periods? • Are traditional coping mechanisms still functional? • Have you ever resorted to food aid?
<i>Livelihood shocks</i>	<ul style="list-style-type: none"> • What are the common livelihood shocks (drought, hail, landslide, flood, etc.)?
<i>Political capital</i>	<ul style="list-style-type: none"> • How actively involved are you in kebele affaires? • Do you try to make your voices heard or to address your needs at local level? • Do you think you can influence decision making?
<i>HIV/AIDS prevalence</i>	<ul style="list-style-type: none"> • Is HIV/AIDS prevalent in the area? • If yes, has it had any noticeable impact?

2.2 Checklist for DZLP Baseline Survey – Woreda Admin. & Sector Offices

Focus areas	Key questions
<i>Development practitioners</i>	<ul style="list-style-type: none"> • Food security/livelihood situation in the programme area? • On-going Govt. programmes in the area? • Other Agencies supporting community/Govt. programmes?
<i>Resource availability & utilization</i>	<ul style="list-style-type: none"> • Staff capacity and utilization? • Budget allocation and utilization? • Key problems faced in terms of resource/capacity to deliver programmes? • Capacity building efforts in the last 3 years and prospects for the future?
<i>Governance & participation</i>	<ul style="list-style-type: none"> • Community involvement in resource management and solving local problems? • Community representation in policy formulation and implementation? • Participation of women, the youth/aged and other disadvantaged groups?
<i>Health situation & health services</i>	<ul style="list-style-type: none"> • What are the most prevalent health problems in the area? • Existing capacity (in terms of health institutions and trained manpower) to address these problems and prospects for the future? • Activities related to health service coverage, birth spacing, and EPI coverage rate? • Major undertakings to control maternal and childhood diseases? • Activities related to HIV and reproductive health?
<i>Agric. activities</i>	<ul style="list-style-type: none"> • What are the main crops grown and main livestock bred? • How significant are crop and/or livestock husbandry in the area? • What agric. inputs have been made available in the last 3 years? And in what magnitudes? • What are the main problems related to crop and/or livestock husbandry? • Do farmers get sufficient extension support? • Have there been sufficient agricultural professionals to support the farmers? • How was the flow and use of information at different levels? • What are the major crop and livestock diseases? • What are the key agric. constraints? • How big have been their impacts in the last 3-5 years?
<i>Water services</i>	<ul style="list-style-type: none"> • How is the water availability for human and livestock consumption? • Any plans for future improvement?
<i>Education</i>	<ul style="list-style-type: none"> • What is the level of literacy in the area? • What educational facilities are available to the communities? • How well are these facilities staffed? • Are there any plans for improvement?
<i>Food security</i>	<ul style="list-style-type: none"> • Have there been problems related to moisture stress? • Did this result in any food shortage, need for food aid, and displacement of people? • Have people been taken from here for resettlement elsewhere? • Have there been any returnees? • Are traditional coping mechanisms still functional?

2.3 Checklist for DZLP Baseline Survey – Women Group

Focus areas	Key questions
<i>Gender division of labour (GDL)</i>	<ul style="list-style-type: none"> • How is the division of labour at household and community level (by gender, by age, paid labour, unpaid family labour & community work) affecting men and women, boys and girls? • Activity profile over 24 hours (who does what, when, how and where)? • What is the time spent related to major activities (fetching water, fuel wood collection, agricultural activities, other domestic chores & wage employment)? • Distance to these works and seasonality? • Are works similarly valued within the household in terms of importance and reward? If not, why? • Who is doing the major work and who has more workload? • What are the implications of workload on health, income, and educational participation of members of the household? • Is there flexibility/rigidity of the gender division of labour? If yes, why? • Key determinants and changes in the GDL – if there is any technology introduced that decreased or increased workload or any change during time? • How does the change affect different individuals within the household?
<i>Household decision making (HDM)</i>	<ul style="list-style-type: none"> • Who has access to/control over: <ul style="list-style-type: none"> √ Agric. products (different crops, livestock, etc.) & farm implements? √ Farmland, agric. extension services and training? √ Household income (sources of income & expenditure responsibilities)? √ Credit and savings facilities (formal & informal)? Who controls income from the credit? √ Medication, family health, family planning, ARV therapy) & caring practices (childcare, sickness related) • Is there any food allocation pattern for women and men (quality & quantity, during normal year & shortages, during pregnancy & breastfeeding)? • Access to opportunities to technological innovations? • Access to community resources (water systems, including irrigation water, forest, land, etc.)? • Children’s marriage, migration, etc. • Key determinants & changes in household decision making?
<i>Traditional practices & violence against women</i>	<ul style="list-style-type: none"> • List down all the traditional practices (both good and bad) that affect women and children, e.g. marriage and divorce systems? • Prevalence of sexual exploitation and domestic violence (wife beating, trafficking, etc.) • Are all cases reported to the police and taken to court? • Number of cases reported to police in the last two years? • Number of cases presented to justice and court decisions? • What are the possible causes for these deviations? • What do you recommend against these deviations?

	<ul style="list-style-type: none"> • Changes over time & roles played by different institution?
Perceptions shaping gender relations (gender norms)	<ul style="list-style-type: none"> • Women's self image? • Community perceptions & expectations from women/girls (also from FHHs) • Changes over the years?
Factors influencing gender relations	<ul style="list-style-type: none"> • Men's and women's access to paid employment & payment practices (factors contributing to gender disparity) • What do you think are the factors affecting gender relations (culture/tradition, religion, land tenure, economic condition, etc.)?)
Gender needs	<ul style="list-style-type: none"> • Issues that can be addressed in the short run and in the long run?

2.4 Checklist for DZLP Baseline Survey – Youth Groups

Focus Areas	Key Questions
Role	<ul style="list-style-type: none"> • What major role do you play in development work? • What is your share in the whole process? • What do you think your role is in building a strong community?
Participation	<ul style="list-style-type: none"> • What is your level of participation in planning? • Are you only listeners to what adults say or do you have your own say respected by adults? • Do you manage your issues individually in isolation or collectively? • Do you have any association or organization through which you act to resolve whatever issues you have?
Practices (social, cultural, economic & political)	<ul style="list-style-type: none"> • How do you manage your time? • Are there poor cultural practices that hinder your youth-hood? • Are early marriage, abduction and F.G.M. prevalent in the area? • Is there enough work that keeps you busy? • If not, what do you do in your spare time?
Access to land	<ul style="list-style-type: none"> • Do you have access to land? • If yes, how do you get it? Do you get it from your own family or through other means?
Access to credit	<ul style="list-style-type: none"> • Are there possibilities of borrowing money? • If yes, who lends it to you? Conventional banks, credit associations (micro-finance institutions, local money lenders, or other sources)? • What is the interest rate and what are the mechanisms of repayment?
Skill training	<ul style="list-style-type: none"> • Did you get any skill training in the past two years? • If yes, what kind of skill training? • Were they beneficial? • If you have not acquired any skill through training in the past two years what were the reasons? • Do you think skill training is beneficial to you?
HIV/AIDS	<ul style="list-style-type: none"> • Is HIV/AIDS prevalent in the area? • If yes, has it had any noticeable impact in your area? • How do you express youth-hood in relation to HIV/AIDS and productivity?

<i>Education</i>	<ul style="list-style-type: none"> • Do you have problems accessing formal school? • If yes, what are the problems?
<i>Health</i>	<ul style="list-style-type: none"> • What are the major health problems that affect the youth?
<i>Leisure/entertainment</i>	<ul style="list-style-type: none"> • What games do you play in your leisure time? • Are there sport activities in your area? • What are the major games frequented in the area?
<i>Intoxicants</i>	<ul style="list-style-type: none"> • Are the youth exposed to addiction of any sort? • What preventive methods do you think should be deployed?

2.5 Checklist for DZLP Baseline Survey - Concern Office

Focus areas	Key questions
<i>Linking and networking with other stakeholders</i>	<ul style="list-style-type: none"> • What was the level of collaboration with government partners? • What was the level of engagement of the community, and local government in planning and programme start up? • Was there networking with other NGOs in the woreda, zone, and region? • How was the flow and use of information at different levels? •
<i>Expected programme life</i>	<ul style="list-style-type: none"> • How long does Concern expect to stay on the ground?

Annex 3: Kebeles and ‘Gotts’ Covered by the Assessment

Annex 3.1: Kebeles Covered by the PRA

Kebele &	PRA Team	Date	10:00-12:00	12:00-12:30	12:30-14:30	14:30-15:30

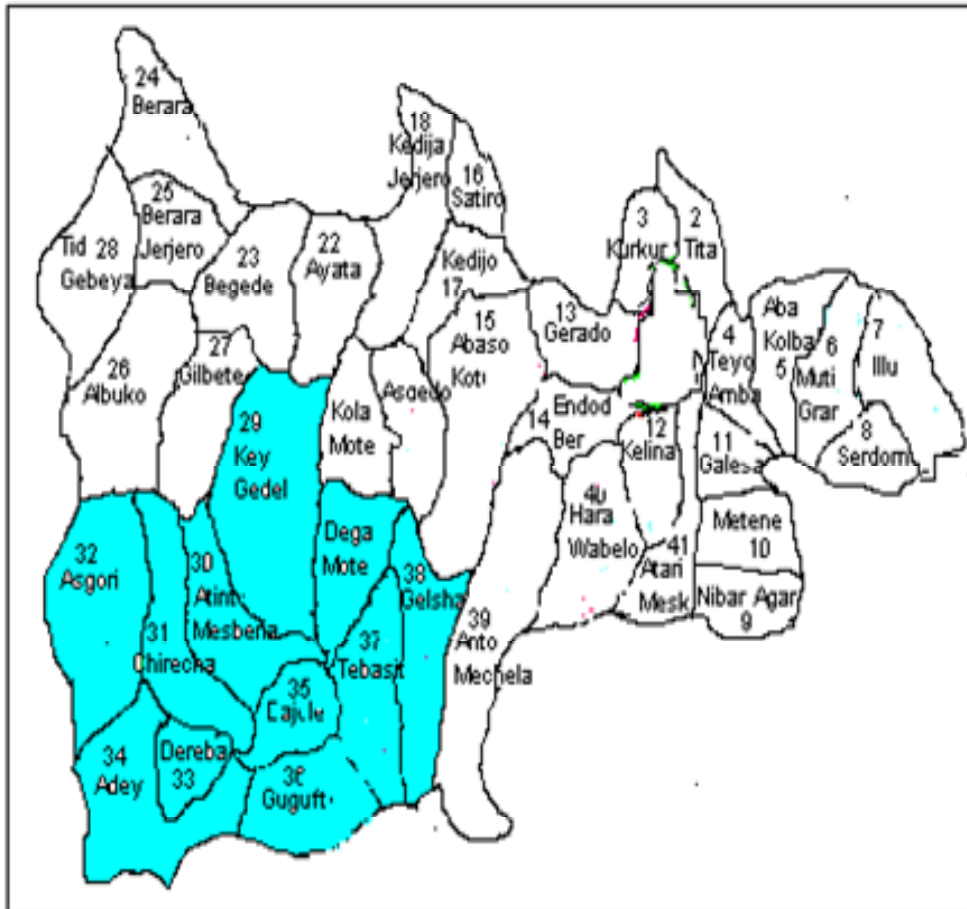
Gelsha (038)	Team 1	Nov.28	Men's Group	Break	Women's Groups	
		Nov.29	Youth/Other Social Group	Break	Kebele Office	Key Informants (Health staff & DA)
Guguftu (036)	Team 2	Nov.28	Men's Group	Break	Women's Groups	
		Nov.29	Youth/Other Social Group	Break	Kebele Office	Key Informants (Assistant Director of Junior Secondary School)
Attint Mesberia (030)	Team 1	Nov.30	Men's Group	Break	Women's Groups	
		Dec.1	Youth/Other Social Group	Break	Kebele Office	Key Informant (Elder)
Chirecha (031)	Team 2	Nov.30	Men's Group	Break	Women's Groups	
		Dec.1	Youth/Other Social Group	Break	Kebele Office	Key Informants (Trader)

Annex 3.2: Gotts Covered by the Household Survey

Village "Gott"	Kebele Name and Code				Total
	Gelsha (038)	Chirecha (031)	Attint Mesberia (030)	Guguftu (036)	
Worienie	14	34			48
Doyo Ager	27				27
Chicho	3				3
Abto (Jima)	15	7		9	31
Jima Misreta	12				12
Adem Ager	7				7
Kurbent	6		1		7
Mentoch	2				2
Buto	1				1
Timisas		24			24
Agaro Ager	6	2	1	6	5
Taju Ager	1				1
Debela	2				2
Tulu Ware	3				3
Jeben		20			20
Chewagisa			53		53
Jijiga			12		12

Kermemie			19		19
Abule Ager			14		14
Degendo				24	24
Berentu		4			4
Abaseya		4			4
Sheto Ager	1			23	24
Kule Ager		4			4
Kaisa				6	6
Salayish 09				19	19
Abicha 08				12	12
Total of 27 'gotts'	100	99	100	99	398

Annex 4: Map of Programme Kebeles (Not to scale)



Annex 5: Population of Dessie Zuria Woreda

	Kebele	Male	Female	Total
1	Higher - highlands			
1.1	Tebasit	3726	3958	7684
1.2	Gelsha	3112	3232	6344
1.3	Guguftu	3019	3206	6225
1.4	Chirecha	2678	2950	5628
1.5	Attint Mesberia	3570	3867	7437
1.6	Keygedel	3245	3452	6697
1.7	Dejawele	3146	3310	6456
1.8	Asgori	7108	2772	9880
1.9	Adey	3584	4148	7732
	Sub total	33,188	30,895	64,083
2	Highlands			
2.1	Degamote	2326	2335	4661
2.2	Derebba	1785	1674	3459
2.3	Ayata	4619	3969	8588
2.4	Begede	2988	3042	6030
2.5	Gelbite	2740	3357	6097
2.6	Antomechella	4050	3800	7850
2.7	Attan mesk	2356	2561	4917
	Sub-total	20,864	20,738	41,602
3	Midlands			
3.1	Kellina	2254	2131	4385
3.2	Abso kotu	3779	3476	7255
3.3	Harawebello	4152	3408	7560
3.4	Kedijo Jerkero	3773	3196	6969
3.5	Kedijo Sattiro	1265	1328	2593
3.6	Kedijo	2936	2884	5820
3.7	Tid gebeya	4548	2577	7125
3.8	Berara	2954	2827	5781
3.9	Asgedo	2936	2884	5820
3.10	Kola mote	2633	2979	5612
3.11	Berara Jerjero	1837	1749	3586
3.12	Allemkko	4894	5301	10195
	Sub-total	37,961	34,740	72,701
4	Lowlands			
4.1	Ilu	4392	3292	7684
4.2	Mitigrar	2261	1692	3953
4.3	Nebar ager	4518	3455	7973
	Sub-total	11,171	8,339	19,510
	Total	102,635	95,295	197,930

Source: DZ WAO as quoted in Concern's Livelihood Analysis in DZ Woreda, 2006

Annex 6: Cropping Calendar of Dessie Zuria Woreda

Cropping /Labour/Calendar for Major Crops

Crop Type	Activities	J		F		M		A		M		J		J		A		S		O		N		D		
		1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	1 st h	2 nd h	
Barley	1 st Ploughing																									
	2 nd Ploughing																									
	3 rd Ploughing																									
	Sowing																									
	1 st Weeding																									
	2 nd Weeding																									
	Harvesting																									
	Trashing																									
Teff	1 st Ploughing																									
	2 nd Ploughing																									
	3 rd Ploughing																									
	Sowing																									
	1 st Weeding																									
	2 nd Weeding																									
	Harvesting																									
	Trashing																									
	1 st Ploughing																									
	2 nd Ploughing																									
	3 rd Ploughing																									
	Sowing																									
	1 st Weeding																									
	2 nd Weeding																									
	Harvesting																									
Trashing																										
Faba bean	1 st Ploughing																									

Annex 7: Animal Population of the Programme Kebeles

<i>Kebele</i>	<i>Oxen</i>	<i>Cows</i>	<i>Calves</i>	<i>Sheep</i>	<i>Goats</i>	<i>Horses</i>	<i>Mules</i>	<i>Donkeys</i>	<i>Poultry</i>
Gelsha	1850	1870	750	8420	2260	710	620	980	4149
Tebasit		3937	-	5707	581	488	219	749	-
Degamote	857	763	195	?	?	?	?	?	?
Dajolie	811	679	-	7622	889	412	272	316	2270
Guguftu	610	577	-	8071	492	231	65	327	3409
Attint Mesberia		2333		6601	344	612	154	344	-
Keygedel		4808	-	7400	1700	360	180	1500	4500
Chirecha	1800	1920	650	7340	1330	720	180	790	2693
Asgori	1728	1656	711	7704	972	828	193	500	2520
Adey	1400	1120	-	9260	-	300	150	700	2084
Derebba	369	877	324	2836	842	243	128	450	3625
Total	14,963	15,002	8,480	79,441	9,410	4,904	2,161	6,656	25,250

Source: Concern notes from the feasibility study, 2006

Annex 8: Types of Forest in the Programme Kebeles

Kebele	Ownership Type			Tree Species	Source of Seedling
	State Owned	Community Owned	Privately Owned		
Gelsha	√	√	√	<i>Eucalyptus, Cupressus, Juniperus, Olea, Croton</i>	Private and WARDO
Tebasit		√	√	<i>Eucalyptus, Juniperus, Olea</i>	
Degamote		√	√	<i>Eucalyptus, Juniperus, Olea, Hygenia</i>	Private and WARDO
Dajolie		√	√	<i>Eucalyptus, Juniperus</i>	Private and WARDO
Guguftu		√	√	<i>Eucalyptus</i>	Private and WARDO
Attint Mesberia	-	√	√	<i>Eucalyptus, Sesbania, Trilucerne</i>	Private and WARDO
Keygedel			√	<i>Eucalyptus, Juniperus, Olea, Acacia</i>	Private and WARDO
Chirecha		√	√	<i>Eucalyptus, Acacia</i>	Private and WARDO
Asgori		√	√	<i>Eucalyptus, Cupressus, Juniperus,</i>	Private and WARDO
Adey		√	√	<i>Eucalyptus, Juniperus</i>	Private and WARDO
Derebba			√	<i>Eucalyptus, Cupressus, Juniperus,</i>	Private and WARDO

Source: Concern notes from the feasibility study, 2006

Annex 9: Water Sources and Utilisation Trends

Kebele	No. of 'Gotts'	Population	Protected Springs	Unprotected Springs	River	Hand-dug Well	Ponds	Roof Catchments	Other (Specify)
Gelsha	10	6,344	6	30	11	2(1nf)	1	0	0
Tebasit	10	7,624	7	25	5	0	12	0	0
Degamote	10	4,322	5	43				0	0
Dajolie	10	6,556	4	65	3	1		0	0
Guguftu	10	7,565	6	50		0	15	0	0
Attint Mesberia	10	5,975	3	11	1	0	11	0	0
Keygedel	10	6,443	6	?	?	?	?	0	0
Chirecha	10	5,828	2	50	3	2	10	0	0
Asgori	10	9,880	2	58	2	0	18	0	0
Adey	10	7,565	2	53	6	5	0.	0	0
Derebba	10	3,459	4	19	2	0	10	0	0
Total	110	71,561	47	404	33	10	77		

nf = not functional

Source: Concern notes of the feasibility study done in 2006

Annex 10: Availability & Conditions of Basic Infrastructures in the Programme Kebeles

Infrastructure	Programme Kebeles										
	Gelsha (038)	Guguftu (036)	Chirecha (031)	Attint Mesberia (030)	Adey (034)	Degamote (021)	Tebasit (037)	Asgori (032)	Keygedel (029)	Dajolie (035)	Derebba (033)
Distance from Dessie	27 Km	42 Km	57 Km	54 Km	47 Km	40 Km	30 Km	60 Km	62 Km	42 Km	57 Km
Distance from Kombolcha	48 Km	68 Km	80 Km	80 Km	70 Km	00 Km	55 Km	92 Km	87 Km	60 Km	87 Km
Distance from Guguftu	17 Km	0 Km	16 Km	12Km	5 Km	23 Km	10 Km	24 Km	22 Km	5 Km	22 Km
Access road to Dessie	Available & functional	Available & functional	Available & functional	Available & functional	Available & functional	Available up to Tebasit	Available & functional	Available & functional	Available & functional	Available & functional	Available & functional
Water point	Protected spring	2 protected springs + 1 piped water for the town	1 protected spring; existing water problem	3 protected springs all requiring maintenance work	2 functional	5 functional		3 available	4 functional		
Health facility	Health Centre	Health Centre	Health Centre	Health post	Health post	Health post	Health post	Health post (not working & far from villages)	Health post	Health post	Health post
Primary school , first cycle (Grade 1-4)	Available & functional	Available & functional	Available & functional	Available & functional	Available & functional	Available & functional	Available & functional	Available & functional	Available & functional	Available & functional	Available & functional
Primary school , second cycle (Grade 5-8)	Available	Available	Available	Grade 5 available	Grade 5-6 available	Grade 5-6 available	Grade 5-6 available	Grade 5-6 available	Grade 5-6 available	Grade 5-6 available	?
Secondary School (Grade 9-10)	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available
“Alternative primary” school (NFBE)	Available & functional	3 available & functional	Not available	Not available	Available & functional	3 available & functional	Available & functional	On construction	4 available & functional	Available & functional	Available & functional

									1		
Vet. clinic	Not available	Available & functional	Available & functional	Not available	Not available	Not available. They go to Tebasit	Available & functional	Not available	Not available	Not available	Not available
Kebele Admin. Office	Available	Available	Available, but old	Not available	Not available	Not available	Available	Not available	Available	Available	Available, but old
SC office & facility	Available (store, shop)	Not available. Go to Tebasit.	Available (store, office)	Not available	Not available	Not available	Available & functional	Not available	Not available	Not available	Not available
Grain mill	Available but not working	Available & functional	Available (>3 functional)	Available (3 functional)	Available (2 functional)	Available (3 functional)	4 available, only 3 functional	4 functional	4 Available	Available	Available
FTC	Available & functional	Available & functional	Available & functional	Not complete	Available & functional	Available & functional	Available & functional	Incomplete	Available & functional	Not available	Available & functional
Market place	Available	Available	Available	Small 'gullit'; they go to Chirecha	Not available	Available (small market)	Available	Not available	Available	Not available	Available
Telephone	Wireless	With telecom. operator	Wireless	Wireless	Wireless	Wireless	Wireless	Hit by lightning	Wireless	With telecom. operator	Wireless
Traditional irrigation	Available	Available	Available	Available	3 available	4 available	4 available	5 functional ?	?	Available	Available
Improved irrigation	Not available	Functional, on-going	Not available	Not available	Not available	Not available	1 functional	Not available	?	Not available	Available

Source: Concern notes

Annex 11: Access to Education in the Programme Kebeles

<i>Kebele</i>	<i>Satellite Schools</i>	<i>ABE</i>	<i>Level of School</i>	<i>Grade 1 to 4</i>			<i>Grade 5 to 8</i>			<i>Grade 9 to 12</i>		
				<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Gelsha	1	1	G1-G8	350	350	700	180	153	333	0	0	0
Tebasit	0	1	G1-G6	320	311	631	119	90	209	0	0	0
Degamote	0	0	G1-G6	547	540	1087	0	0	0	0	0	0
Dajolie	0	0	G1-G4	327	367	694	0	0	0	0	0	0
Guguftu	0	1	G1-G8	328	307	635	571	360	931	0	0	0
Attint Mesberia	1	0	G1-G4 ¹⁵	373	306	679	0	0	0	0	0	0
Keygedel	0	1	G1-G4	342	358	700	0	0	0	0	0	0
Chirecha	0	0	G1-G8	482	484	966	685	515	1200	0	0	0
Asgori	1	1	G1-G4	386	418	804	0	0	0	0	0	0
Adey	0	0	G1-G4	373	387	760	0	0	0	0	0	0
Derebba	0	0	G1-G4	187	136	323	0	0	0	0	0	0
Total	3	5		4,015	3,964	7,979	1,555	1,118	2,673	0	0	0
%age				50.3%	49.7%	100%	58.2%	41.8%	100%			

Source: Concern notes of the feasibility study done in 2006.

¹⁵ Grade 5 has now been added.

Annex 12: Access to Health in the Programme Kebeles

Name of Kebele	Health Institution	Staff			Services Provided			
		Male	Female	Total	Treatment	MCH	Health Education	Family Planning
Gelsha	Health Centre	1	3	4	√	√	√	√
Tebasit	Health Post		2	2	√	√	√	√
Degamote	Health Post		2	2		√	√	√
Dajolie	Health Post		2	2		√	√	√
Guguftu	Health Centre	1	1	2	√	√	√	√
Attint Mesberia	Health Post		1	1		√	√	√
Keygedel	Health Post		2	2		√	√	√
Chirecha	Health Centre			5	√	√	√	√
Asgori	Health Post		2	2		√	√	√
Adey	Health Post		2	2		√	√	√
Derebba	Health Post		2	2		√	√	√

Source: Concern notes of the feasibility study done in 2006.

Annex 13: Summary of Wellbeing Ranking Done in Concern's DZLP Kebeles

13.1: Summary Picture of Wellbeing Ranking

Kebele	Total No. of HH			Very poor HH				Poor HH				Medium HH				Better-off HH			
	HH	M	F	Total	M	F	%of F.HH	Total	M	F	%of F.HH	Total	M	F	%of F.HH	Total HH	M	F	%of F.HH
Degamote	896	701	195	213	100	113	51.6	248	192	56	22.6	239	216	23	9.6	196	190	6	3.1
Keygedel	1472	1247	225	302	170	132	43.7	466	396	70	15.0	417	394	23	5.5	287	287	0	0.0
Attint Mesberia	1299	1065	234	556	391	165	29.7	286	253	33	11.5	267	245	22	8.2	190	176	14	7.4
Asgori	1403	1121	282	556	370	186	33.5	392	330	62	15.8	242	219	23	9.5	213	202	11	5.2
Chirecha	1501	1137	364	469	266	203	43.3	428	331	97	22.7	359	309	50	13.9	245	231	14	5.7
Derebba	625	485	140	175	105	70	40.0	185	135	50	27	127	112	15	11.8	138	132	6	4.3
Adey	1121	800	321	418	260	158	37.8	345	242	103	29.9	197	144	53	26.9	161	154	7	4.3
Guguftu	1032	735	297	389	227	162	41.6	278	212	66	23.7	198	157	41	20.7	167	139	28	16.8
Dajolie	1294	978	316	419	232	187	44.6	354	280	74	20.9	300	261	39	13.0	221	205	16	7.2
Tebasit	1682	1305	377	373	188	185	49.6	589	448	141	23.9	452	415	37	8.2	268	254	14	5.2
Gelsha	1292	1069	223	367	248	119	32.4	342	283	59	17.3	257	230	27	10.5	326	308	18	5.5
SUM	13617	10643	2974	4237	2557	1680	39.7	3913	3102	811	20.7	3055	2702	353	11.6	2412	2278	134	5.6
%	100%	78.2	21.8	31%	18.8%	12.3%		28.7	22.8	6.0		22.4	19.8	2.6		17.7	16.7	1.0	
<i>Adjusted %age</i>							56.5				27.3				11.9				4.5

Source: Concern data from the wellbeing analysis done in 2006.

13.2: Community Criteria for Wellbeing Ranking

Beneficiary communities at every ‘gott’ in the 11 kebeles covered by DZLP conducted a wellbeing ranking exercise using piling as a tool. Some of the groups chose to make 4 wealth groupings and others decided to have 5. A summary of the criteria used at some of the ‘gotts’ that decided to use 5 categories is as follows.

<i>Wellbeing Group</i>	<i>Coping Strategy</i>
Better-off	<ul style="list-style-type: none"> ▪ Have 2 or more oxen, mule/horse, donkey, cows and enough sheep. ▪ Are able to plough their land properly and on time and plough that of others by sharing. ▪ Are able to feed their family throughout the year. ▪ Have small family size and are able to cover their food budget for up to two years. ▪ Do not seek external support. ▪ Are involved in other income generating activities, e.g. trading in grain, sheep and cattle, have shared grinding mill, etc. ▪ Are able to organize “<i>sedeqa</i>” for dead relatives. ▪ Can send their children up to high school and university ▪ Can lend money to and support their relatives as requested. ▪ Are well respected and accepted by communities. ▪ Are engaged in fattening and shared rearing of animals.
Medium	<ul style="list-style-type: none"> ▪ Have 2 oxen, a horse, donkey, one cow and a few sheep. ▪ Have mules for own transport. ▪ Can plough their land on time and are engaged in ploughing that of others by sharing. ▪ Can cover their food up to one year by their own. ▪ Can send their children up to high school in the nearest town.
Lower medium	<ul style="list-style-type: none"> ▪ Have an ox and a cow. ▪ Have 3-4 ‘timads’ of land. ▪ Take loans from micro-finance institutions and are involved in petty trade. ▪ Plough their farm land by themselves. ▪ Are forced to purchase grain for consumption.
Poor	<ul style="list-style-type: none"> ▪ Have up to 2 ‘timads’ of land and give it out on share-cropping to others or exchange their labour for oxen power. ▪ Have more than five family members. ▪ Are not able to cover their consumption throughout a year. ▪ Work as daily labourers as soon as possible. ▪ Rearing shared animal from better-offs. ▪ Are unable to pay back loans from the government. ▪ Use the same shirts day and night. ▪ Are engaged in safety-net programme. ▪ Do not have any food stored for more than three months.
Very poor	<ul style="list-style-type: none"> ▪ Are returnees from settlement sites.

	<ul style="list-style-type: none"> ▪ Are patients, people with disabilities and live on alms. ▪ Are dependent on safety-net and aid packages. ▪ Get no labour support from family or relatives. ▪ Do not have any farm land or have very small land. ▪ Have no cattle. ▪ Have no asset to be sold. ▪ Are widowed women with children. ▪ Are involved in shared rearing of animals from better-offs. ▪ Have no shirts and blanket for night.
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Annex 14: Participants of the DZLP Baseline Survey

SN	Name	Agency	Responsibility
1.	Abate Molla	Concern Ethiopia	Community Dev. Worker (CDW)
2.	Balcha Alemu	Concern Ethiopia	CDW
3.	Belay Abate	Concern Ethiopia	CDW
4.	Belew Tadele	Concern Ethiopia	CDW
5.	Eshetu Worku	Concern Ethiopia	CDW Coordinator
6.	Hailemeleket Terefe	Consultant	Coordinator
7.	Mesafint Melaku	Concern Ethiopia	Agric. & NR JPO
8.	Mohammed Ahmed	Concern Ethiopia	CDW Supervisor
9.	Mulu Eda	Concern Ethiopia	CDW
10.	Redaey Belachew	MoA	NR Expert
11.	Sisay Takele	Consultant	Coordinator
12.	Tariku G/Selassie	Concern	Com. Dev./S/P/Officer
13.	Yalemzer Bekele	MoA	Expert
14.	Zehara Seid	Concern Ethiopia	Gender Officer
15.	Zenebetch Yimam	Concern Ethiopia	CDW
16.	Zewdie Negere	Concern Ethiopia	CDW

Annex 15: Sources of secondary data used in the survey

1. Concern: Dessie Zuria Livelihood Programme (DZLP) Proposal, Dec. 2006.
2. ARDB of ANRS: Five Year Strategic Plan (2006 – 2010, Amharic version)
3. Concern: Livelihoods Analysis Dessie Zuria, South Wollo Zone of Amhara Region, Ethiopia, August 2006
4. ADF: Rural Water Supply & Sanitation Programme Appraisal Report, June 2005
5. ADB/OECD: African Development Outlook, 2007
6. Concern: Wellbeing ranking notes
7. Concern: Feasibility study notes
8. Concern: Gender Analysis