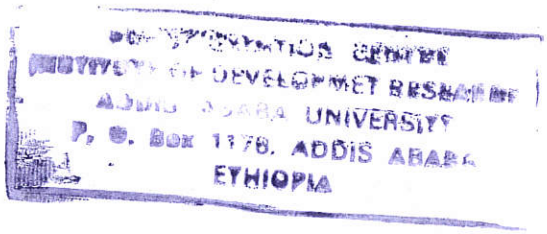
ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF DEVELOPMENT STUDIES

Challenges and Prospects of Commercial Agriculture Enterprise Development and the Afar Pastoralists: The Case of Tendaho Dam and Irrigation Project.



BY: WONDWOSSEN YEMANE

June, 2008
Addis Ababa

ADDIS ABABA UNIVERSITY
SCHOOL OF GRAGUATE STUDIES
COLLEGE OF DEVELOPMENT STUDIES

Challenges and prospects of Commercial Agriculture Enterprise Development and the Afar Pastoralists: The Case of Tendaho Dam and Irrigation Project.

A Thesis Submitted to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Development Studies (Rural Livelihoods and Development)

By: Wondwossen Yemane
Advisor: Yigremew Adal (Asst. Prof.)

June, 2008
Addis Ababa

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

COLLEGE OF DEVELOPMENT STUDIES

Title

Challenges and Prospects of Commercial Agriculture Enterprise Development and the Afar Pastoralists: The case of Tendaho Dam and Irrigation Project.

BY

Wondwossen Yemane Tekeste

DEVELOPMENT STUDIES

APPROVED BY THE BOARD OF EXAMINERS:	SIGNATURE
COLLEGE DEAN	
Yigzaw Adal — ADVISOR	
Fenta Mandefro — EXTERNAL EXAMINER	
Tesfaye Tafesse — INTERNAL EXAMINAR	

Acknowledgment

First of all, I would like to thank my advisor Yigremew Adal (Asst. Professor) for his scholarly advices and encouragements. You have time and again unreservedly guiding my work; without your support, it would not have been achieved.

I want to acknowledge, Ato Hassen Hammed for arranging schedules with Arebta clan leaders. Ali Ablisa Hamed (Deputy Clan leader of the Arabta Clan) I appreciate for sparing me your valuable time.

Ahmed Hassen, I am grateful; with out your help my field visit would not have been possible.

Moreover, I would like to thank Ato Ali Wotica (Mille Woreda Administrator), Development Agents: Abdu Yusuf Endrise, Billal, Ephrame Bekele, Ferew Bekele, I am grateful for your support in organizing pastoralists.

A special credit goes to Ato Million Moges: Planning and Programming Services Head at Tendaho Sugar Factory Project. And, Ministry of Federal Affaires; Afar Coordinating Department.

My heart felt gratitude goes to my late mother Bayush Asress who has provided me with every thing she could.

Table of Contents

Pages

List of Tables

List of Figures

Acronyms

DAs	Development Agents
EEPC	Ethiopian Electric Power Corporation
ESISC	Ethiopian Sugar Development Support Center
FGDs	Focused Group Discussions
IDR	Institute of Development Research
MoARD	Ministry of Agriculture and Rural Development
MoFA	Ministry of Federal Affairs
MoWR	Ministry of Water Resources
MoWUD	Ministry of Work and Urban Development
NTPIRDCO	Namalefun-Tendaho Project Integration Rural Development Coordination Office
PRA	Participatory Rural Appraisal
PPSBTSFP	Plan and Program Service Bureau of Tendaho Sugar Factory Project
TDIP	Tendaho Dam and Irrigation Project
WWCDE	Water Works Construction and Design Enterprise

Abstract

The research is based on pastoralists' experiences with developments of large scale irrigated commercial plantations in the Awash basin. Several studies have made explicit that pastoralists in one way or another have lost their grazing and watering sites for development of irrigated commercial plantations in past decades. Consequently, pastoral communities by large have become resistant to developments that could alter natural pasture from nomadic pastoralism. Their resistance emanates from previous governments commercial plantation initiatives that had resource centered approaches with minimal community participation and respect to pastoral values. Thus, there is a need to understand the implementation process of the new Tednaho Dam and Irrigation Project on pastoral communities.

The project's sugarcane plantation, irrigation scheme, dam construction and reservoir site allocation introduce new changes on nomadic pastoralism for Zone One of Afar National Regional State. Compulsory displacement and resettlement programs, compensation payments and pastoral communities' development schemes are parts of the coping strategies introduced. In these respects, the study applied the Inadequate Inputs Approach and the Inherently Complexity Approach to examine the development-induced displacement and resettlement programs. The concept of project planning is also employed for understanding of the planning and implementing phases of compensation payments, irrigated pasture developments and for other project and pastoral community integrating initiatives.

The study findings are based on qualitative data and supported by quantitative ones. The study shows pastoral communities are uncertain whether the new development will make them beneficiary or contribute to exacerbate their livelihood conditions. Lack of proper planning and coordinated work in implementation processes and pastoralists' negative perceptions towards commercial agricultures have shadowed project objectives. The project has aggravated the pastoral communities concern since failed development initiatives that had worsened their livelihood conditions are a near past experiences from previous regimes.

CHAPTER ONE

Introduction

1.1 General Background

Ethiopia is endowed with enormous potentials for developing mechanized commercial agriculture. It has a wide variety of topography and climate suitable for industrial and cash crop production. In this respect, the Ethiopian government has a development plan for further enhancing production of sugar and ethanol for domestic consumption and foreign exchange. The country's strategic location to the Middle East, Arabian Peninsula and Djibouti port also opens further opportunities.

The Tendaho Dam and Irrigation Project is one of the latest and among prioritized projects of the Ethiopian government in materializing the development goals. It is being built at a cost of 8 billion Birr financed by the Federal government in the Afar National Regional State. The project introduces sugarcane plantation and installs a higher capacity sugar factory for the agro-industry development of the region. The sugarcane plantations will replace the cotton and maize crops at Tendaho and are also further extendable to additional irrigable plains (Ministry of Water Recourses, 2005).

The project is established in lower Awash (Tendaho) and the Kessem Kebena river basins. It includes construction of dam on Awash River and preparation of irrigable plains for sugarcane cultivation. The irrigable plains extend from both right and left bank of the Awash River up to its tail end where it merges Gamari, Afambo and Lake Abbe. The total potential irrigable area is estimated to be 70,000 hectares. The irrigable plains include the existing cotton state farms at Dubti, Dit Bahari and intensively cultivated lands of Assaitya areas (Ibid).

The over all project area includes parts of Mille, Dubti, Assaitya and Afambo Woredas of Zone One of the Afar National Regional State. Communities residing in the proposed project areas are pastoralists and agro-pastoralists. The agro-pastoralists are more or less settled in or around the ex-state farms returned to the Afars between 1991 and 1993

following the country's regime change. And, individual and group of pastoralists from the same clans or sub-clans move with their livestock in search of pasture in the areas. The total population of the project Woredas is estimated to be 397,022. Out of which, 249,381 of them or 63% of the population would be affected in one way or another by different project activities.

As communities are predominantly pastoralists, the mainstay for their livelihood is livestock rearing. But, the gross irrigable area of the sugarcane plantation and dam reservoir sites encompasses the areas used for dry and wet season grazing by pastoralists and arable plains of agro-pastoralists. Consequently, pastoralists are concerned that the proposed development initiative would take their grazing and arable lands putting pressures on their livelihoods.

In general, project site Woredas are chronically affected by severe scarcity of water and over grazing. Drought is also a regular phenomenon in the project areas. Pastoralists have and are suffering from droughts spillovers like natural resource degradation and exacerbation of poverty. On top of these, stiff competitions for scarce grazing in addition to frequent droughts have contributed for the spread of desertification. On the other hand, in Dubti Woreda there are also seasonal flooding of the Awash River which forces the pastoralists to push to dry lands (Temesgen and Mathewos, 2005; Ministry of Water Resources, 2005).

In the Woredas, there are a number of bottlenecks for nomadic pastoral livestock productivity. High prevalence of livestock diseases with poor or non veterinary services are the main cited factors. Pastoralist's attitudes which concentrate on quantity rather than quality also contribute. Shortage of fodder caused by over crowdedness and poor livestock marketing systems as well add to the constraints. With regards to social services and infrastructures like health centers, roads, hospitals, flour mills, markets, schools etc are inadequate even compared to national standards. To acquire these services, pastoralists need to travel long distances though it weighs more on women who shoulder domestic works (Ibid).

At completion, the Tendaho Dam and Irrigation Project may have a positive contribution to the national economy and the Afar region in particular. Conversely, it might have adverse environmental and socio-economic effects during construction and operational phases due to some dispensable factors. Lack of proper planning in resettling the development-induced displaced could contribute to the adverse effects. Government strategies for accessing land and water among the enterprise and the pastoral communities are also areas that need consideration. Or else, negative perceptions of pastoralists on large scale irrigation plantations could be factors that can contribute to unintended outcomes.

Experiences of political and economic marginalization from previous regimes which are a near past experiences of pastoralists could underpin the adverse effects. The marginalization processes have been evident in the conducts of mechanized commercial agriculture in pastoral areas since inception in 1960s. The predominant aim of earlier interventions have been for resource extraction rather than incorporating pastoralists as the mainstay in the development processes. From these realities, the Afar pastoralists are enormously concerned about irrigation initiatives by public or private institutions in pastoral plains. For most pastoralists, irrigation development in Afar region is synonymous to lose of grazing and watering sites since they do not consider themselves as part of the beneficiaries (Ali, 1997; Yacob, 2001; Nicol, 2002; Mohammud, 2003).

When there are droughts and shortage of pasture, political instability or inter or intra-ethnic conflicts, pastoralists usually vandalize the government owned commercial plantations by their livestock to attract attention. In 2005, Tendaho cotton state farm lost uncollected cotton on farm of 1900 hectares by pastoralists deliberately deploying their livestock on ripe harvests (Temesgen and Mathewos, 2005). It is a plain indication that pastoralists have still remaining grievances on large scale plantations in the project site Woredas. As studies show, the emphasized reasons for most conflicts in pastoral areas are shortage of water and grazing. Plus, the contribution of state owned commercial plantations are overwhelming for scarcity of these resources (Ali 1997; Ayalew, 2001;

Mohammud, 2003). Thus, the new Tendaho Dam and Irrigation project has to acknowledge some of the discontents of pastoral communities and gear their responsible participation towards the implementation of its objectives. It has responsibility of creating favorable environment for the pastoralists to be part of the beneficiary and also to view the development intervention as part their progress.

Currently, the Tendaho Dam and Irrigation Project is on construction and sugarcane plantation phases. The sugar factory has not yet been built. But, demarcation of areas and the coffer dam has been completed. The main dam is under construction with 50% completion and the irrigation canal for more than 6,000 hectors has been completed. There are also constructions of roads and other infrastructures which includes housing development for expected employees of the project and for agro-pastoralists. In Mille Woreda, pastoralists have been displaced for dam reservoir sites and are part of the development-induced displacement and resettlement programs. In Dubti Woreda, sugarcane plantation is being carried out on prior cultivated lands by agro-pastoralists. Agro-pastoralists in the Woreda have also been compensated for their production interruption loses. Moreover, in the Woreda pastoralists have lost grazing areas for construction of the main irrigation canal which transports water to other lower stream sites like Assaitya and Dit Bahari areas. There are plans to develop irrigated pasture in order to compensate grazing land loses for pastoralists.

1.2 Statement of the Problem

The sugarcane plantation arable lands and dam reservoir sites encompass areas currently clan-owned and occupied by pastoralists. Important arable and grazing plains of Mille, Afambo, Assaitya and Dubti Woredas are included as parts of the project areas. The areas are major sources of dry and wet season grazing for pastoralists and are valuable plains used for harvesting cotton and maize by agro-pastoralists. If the necessary emphases are not given to the affected pastoral communities, the project may have adverse environmental and socio-economic effects during construction and operational phases due to some dispensable factors. Adverse effects could arise from lose or shrinking of

grazing lands, cultivable lands and development-induced displacement which could alter pastoral livelihoods to grater uncertainty. Moreover, negative perceptions of pastoralists towards irrigated plantations could also inculcate the adverse effects.

From previous government owned irrigated commercial plantations pastoralists have already experienced the adverse effects. Commercial plantation enterprises had top-down orientation which led to political and economic marginalization of pastoralists in the region. Plus, the implementation experiences of the enterprises reveal negligible community participation. As a result, the interventions only paved ways for resource centered approaches with minimal benefits to the pastoral communities in former regimes (Mohammud, 2003; Yacob, 2001; Nicol, 2002).

The multifaceted exclusions from benefits of irrigated commercial plantations and negligible participations of pastoralists in developments have contributed for discontent among Afar pastoralists in the Middle and Lower Awash valleys. Pastoralists view irrigation initiatives for commercial farms as hindrances to grazing and watering sites perceiving they would not enjoy the benefits but only lose their lands and water for plantations (Ali 1997; Mohammud, 2003).

Based on the above pastoralists' experiences, the study has attempted to asses how the new Tendaho Dam and Irrigation Project addresses the age-old quests and concerns of Afar pastoralists parallel to the sugar development. The project has responsibilities to gear community's participation toward the project implementation by creating favorable environment for pastoralists to be part of the beneficiaries.

1.3 Hypotheses

The Tendaho Dam and Irrigation Project should synchronize the project and the local pastoral communities' development objectives by basing its implementation on the responsible participation of pastoralists otherwise; it would contribute to wastage of limited resources like its predecessor commercial agriculture initiatives.

1.4 Objectives of the Study

1.4.1 General Objective

The study assesses the challenges and prospects of developing irrigated commercial agriculture in pastoral areas.

1.4.2 Specific Objectives

1. To explore how the project supports the livestock production parallel to the sugarcane development.
2. To examine the process of development-induced displacement and resettlement in the dam reservoir areas of the project.
3. To examine the project's compensation methods for the expropriated resources.
4. To explore how the project integrates the local communities for long term forward and backward beneficiary linkages between pastoralists and the enterprise.

1.5 Research Questions

1. What are the methods used by the project to support livestock rearing?
2. How do displacement and resettlement programs and processes affect pastoralists?
3. How are compensation programs undertaken?
4. How are compensation programs viewed by agro-pastoralists?
5. What does community participation look like in the displacement and resettlement processes, compensation programs and other proposed non-pastoral activities?
6. How does the project address the expectations of pastoralists?
7. How does the project create mutual relations with the pastoralists for long term sustainable development?

1.6 Scope and Limitations of the Study

The study has concentrated on assessing the multifarious interactions among the Tendaho Dam and Irrigation Project and the pastoralists. Based on the findings of the formal and informal inquiry methods applied in the methodology, the study has attempted to outline

challenges that are faced in establishing irrigation based commercial plantation in the case study area. In addition, the successes of the irrigation project, depends on a better scrutiny of the challenges.

A forerunner limitation of the study is touching a number of interrelated issues which are not yet completed by the project. Absences of documents, studies and socio-economic impact assessments showing project activities on pastoral communities put pressure on in-depth discussions. In addition, data gathering through structured questionnaire at household level is not free from some faults. There were evident similarities among questionnaires filled by different households initiating concerns on the qualitative analysis. It could be due to the Afar culture which promotes sharing of information. To correct flaws, considerable discussions were done with enumerators.

The qualitative data generated were supported by observation and were analyzed with the necessary due care. It is worth to mention participants in the different FGDs presented cases worse than observed for their own different reasons. Conversely, to curb the effects the necessary explanations were done to participants. Scheduling interview date and time with different government officials from different ministries and bureaus were also challenging.

Some limitations that were observed in the research process

— Project executers have repeatedly used coercive measures to the demands that were sought by clan representatives and pastoralists in the research Woredas. These repeated incidents and some measures taken by pastoralists for showing discontents have made participants suspicious of revealing vital qualitative and quantitative data to the researcher and enumerators.

Initially, many participants thought the research was to spy on them and had a hidden agenda basing on the issues that were raised. In the field visits, the researcher was requested several times to show student identity card and the supporting latter written

from the College of Development Studies (CDS). Intense explanations on the purpose of the inquiry were necessary to convince clan representatives and get their consent. To create an ease environment, one method was participating in customary coffee and *chat* ceremonies with clan representatives and other participants. The researcher had covered *chat* costs and was necessarily frank as well as friendly to gain their trust, avoid hostility and to observe.

— From observation respondents created scenarios of their socio-economic situations worse than observed. Some have thought that the research would yield a better compensation payment or else had money and fund to give. Through explanations were done to create understanding and make pastoralists reveal the real issues and situations.

— Afar pastoralists share information and it is part of their customary practices. It's worthy to appreciate people's enthusiasm to know and to ask what is new. However, from their customary practices, it is difficult to justify that pastoralist households did not share information with in the days given for enumerators to collect data. Their attitude in sharing information could be one reason for the evident similarities among household questionnaires. It was repeatedly attempted to convince clan representatives in the FGDs not to share information with clan or community members for the reason of biasing the household survey but it is unlikely.

CHAPTER TWO

2. The Research Process and Methods

2.1 Selection of the Study Area

The extensive Tendaho Dam and Irrigation Project established for sugar development was selected for the research case study to examine whether the new development activities address the age-old quests of pastoralists. As already discussed, a number of studies show that pastoralists have reservation on initiatives in modes of irrigation schemes in the study area. Former regimes commercial plantations have taken up pastoral grazing and watering sites without the pastoral community being the major beneficiary.

Purposively based on the research objectives and activities undertaken by the project, two Kebeles from two different Woredas were selected for household survey. The attempt was to include the different forms of interactions between the pastoral communities and the project. In Dubti Woreda Dabalkee/Calibare Kebele was selected for the case study since sugarcane plantations have been carried out in the past two and half years. In the process, arable lands and watering sources used by agro-pastoralists have been curbed for sugarcane irrigation. In addition, construction of the main canal of the irrigation infrastructure cuts right through the Kebele opening job opportunities in construction fields. Currently, forest has been cleared; sugarcane plantation has and is being carried out on the expropriated arable lands formerly cultivated by pastoralists, private and state farms. Compensation has been paid to agro-pastoralists and private investors for capital investment done on the lands. Plus, pastoralists in the Kebele are also dispossessed of their dry season grazing land influencing changes on their nomadic pastoralism.

The project constructions have created new job opportunities and conditions which encourage non-pastoral activities. An army of new laborers in search of jobs and for opening small business have migrated from the neighboring Amhara and Tigray Regional States. These trends have introduced new changes in the socio-economic conditions of pastoralists in the Woreda.

The other is Gasyos-Laos Kebele in Mille Woreda. This Kebele is part of the project area for dam reservoir. Pastoralists in this Kebele are parts of the development-induced displacement and resettlement scheme. And, it is to examine the process that the Kebele is selected for the household survey. The Kebele residents were evicted from their lands around June 2007 because of the flood caused by the pilot survey of the reservoir.

2.2 Methods of Data Collection

A survey methodology was applied to asses the multifaceted interactions among the commercial enterprise and the pastoralists. To cover the different dimensions of the research objectives and to curb the limitation of one method by another both qualitative and quantitative method of study were employed. For quantitative inquiry a structured questionnaire was used on household survey. And for qualitative analysis, tools from participatory approaches were induced to generate data from households, community and other informants.

2.2.1 Primary Data Collection

2.2.1.1 Quantitative Approach

To generate quantitative data a structured questionnaire was employed with regard to level of community participation, compensation, access to resources and compulsory displacement and resettlement issues and processes. The structured survey was applied on the house to house inquiry (refer to Appendix I).

As described above, the study purposively selected two Kebeles from two different Woredas for the aim of incorporating the project activities. In both Woredas population data of the Kebeles are unavailable. Nevertheless, Mille Woreda Administration Office estimates the households of Gasyos-Laos Kebele to be around 1,000. And as per Dubti Woreda Administration, the number of households in Dabalkee-Cailbare Kebele is around 1,500. The household number, the needed travel distance between the two

Woredas and the resource available at hand were the main criteria in allocating the sample size from the around 2,500 households as a sample frame. About 5% of the households from each Kebeles were considered for the house to house survey. Hence, a total of 125 households were surveyed.

The 5% coverage was found to be satisfactory based on the above decisive factors. In addition, in both Kebeles the communities are predominantly pastoralists implying relatively homogeneous setting in there socio-economic situations. The patriarchal clan based structure and the communal ownership of resources makes their livelihood nearly similar irrespective of household number in a clan residing in a particular area. These conditions also make the 5% sample size to seem dependable to have a representative picture. Accordingly, 50 households from Gasyos-Laos Kebele and 75 households from Dabalkee-Cailbarre Kebele were inquired for household survey.

Unavailable population data especially for pastoralists and agro-pastoralists in both Kebeles made it impossible to apply Systematic Random Sampling Methods due to undefined sampling frames. According to Israney (1999) and Creswell (2003) in situations like this, Purposive Sampling Method from the non-random sampling procedures is appropriate. In the method, the researcher using his/her own judgment draws the best possible representative samples based on credible reasons. The 3 credible reasons used for drawing samples are presented as follows.

Firstly, as well known Afar communities are predominantly nomadic pastoralists represented by clans based on *"patrilineal"* descent system. In their mode of social relations, Afar pastoralists highly regard and respect their clan leaders and family representatives (Abdi Abdullahi, 2006; Ali, 1997). Thus, consent was earned from Arebta and Gisak Amunda clan representatives in Dubti and Mille Woredas respectively. Representatives, by the Afar traditional information sharing method notified the communities which helped to minimize non-respondents during the survey.

Secondly, 4 Development Agents (DAs); 3 from Dubti and 1 from Mille Woreda whom work in the Kebeles where selected and trained to conduct the survey. The DAs have worked in the Kebeles for more than a year and are well familiarized with the communities and the Afar language. To avoid repetition and to make the sample representative the 3 enumerators were stationed in 3 different areas of the Dabalkee-Cailbare Kebele covering both agro-pastoralists and pastoralists. In Gasyos-Laos Kebele, the enumerator conducted the survey in two different areas of the Kebele. Thirdly, clan representatives assigned one Afar youth from the local community to each enumerator to facilitate the interaction process and avoid hostility especially with pastoralists. Moreover, the assigned youths served for controlling purpose by reporting the enumerating process to the researcher.

Prior to the conduct of the full-scale inquiry a pilot survey was done by discussion with DAs who have experience with the locals and the project activities. Especially clan representatives from the Arabta clan in Dubti Woreda served in the testing exercise by sharing their views. Amendments on the techniques and wording of the house to house survey were appropriate to improve the questions from the feedbacks.

2.2.1.2 Qualitative Approach

In this approach, the researcher conducted the primary data collection instrument by being present in the natural setting. As noted by Creswell (2003), at the outset of the study the researcher must necessarily identify personal values, assumptions and biases on the research area and the community to conduct the data collection instruments. Accordingly, the necessary due care were taken by the researcher. Main tools from participatory research methods expressed in Participatory Rural Appraisal (PRA) were applied for data collection. The emphasis was to achieve what Mwanje (2001) described as the approach being a reciprocal learning process in the relationship between the outsider and the "subjects". Bing flexible enough, progressive learning and incorporative makes PRA approach a favorable one.

Group Discussion

Different forms of group discussions were held in both case study Kebeles. Several casual discussions were held with groups of DAs actively working in the areas, project workers and residents. The discussions raised general issues on socio-economic situations and perceptions of pastoralists on the project. The discussions helped to identify important cultural norms in approaching the local pastoral communities since it was the researcher's first visit to the area. The main group discussion was the Focus Group Discussion (FGD) which was held with clan and family representatives in Dubti Woreda and with a group of pastoralists in Mille Woreda.

The conventional reason why the FGDs centered on clan representatives was to gain the advantages of pastoral communities' social attributes. Clan representatives are formally aware of critical issues in their community. Afar pastoralists highly regard their clan representatives and share with them important information about their situations. There were 2 sessions of FGDs in Dubti Woreda and the number of participants was between 6 and 8. The participants were Deputy Clan leader of the Arabta clan and other clan and family representatives of both agro-pastoralists and pastoralists. Women's representative of the Dabalkee-Cailbare Kebele in Dubti Woreda was also a prominent participant. In the Gasyos-Laos Kebele Mille Woreda, a FGD was held with pastoralists arranged by the Woreda DAs. There were 6 participants. There were a total of 3 FGDs.

The FGD technique may have its own drawbacks according to Mwanje (2001: 26) by "eliciting information considered private or concerning behavior that might be subject to disapproval, since people are usually reluctant to share such information in a group setting." Despite shortcomings, attempts were done to gain viable information from the advantages of the method. The technique let group interactions between respondents and stimulates rich response; it allows new and valuable thoughts to emerge. The researcher can also observe respondents behavior, attitudes feeling and body languages thus have first hand insights (Mwanje 2001). Therefore, attempts were done to generate viable information by concentrating on these advantages.

FDGs helped to differentiate actual situations and project activities in both Woredas. Discussions were held with community representatives and group of pastoralists centering on the following issues;

- Planning and implementation processes of the development induced displacement and resettlement programs.
- Community participation and involvement in the different activities of the project.
- Designing and implementation processes of the compensation programs.
- Vocational and other trainings given to pastoralists for integrating them with the project activities or for proper management of their compensation payments.
- Nomadic pastoralism and the development of irrigated pasture as alternatives to support livestock rearing.
- Pastoralists perceptions on and expectations from the short-term and long-term phases of the project.
- If any, what problems are identified in the displacement and resettlement programs; compensation programs; irrigated pasture development and on other activities that involve community's interest.
- What visible solutions can be forward, if problems are mentioned.

Key informant Interview

Key Informant interviews with Face to Face interviewing method were applied for obtaining information (refer to Appendix II). The interviews were semi-structured for the reasons that Kotharis (2002) and Mwanje (2001) illustrated. In this technique, the interviewer uses prepared interview guides which consist of a series of topics but is free to modify and be flexible in there order, way they are worded and explained. Moreover, the interviewer based on perception and context of conversation can leave out or include questions on what is appropriate. Accordingly, suitable interview guides and ways were used when addressing different informants. The findings of the interviews served to balance the information gathered from the FGDs and the discussions. For better coverage,

efforts were done to include a range of bureaus and offices parallel to there project responsibility in the interview.

Key informants were;

- Deputy clan leader of the Arabta clan.
- The Deputy Bureau Head: Pastoral, Agriculture and Rural Development of Afar Regional State; for first hand information on development activities and achievements on the overall Afar pastoral communities.

- Mille Woreda Administrator and the Head of the Woreda Pastoral, Agriculture and Rural Development Officers: since they are the ones involved at the grass root level.

- The Head, and the Deputy of The Nemalefun-Tendaho Project Integrated Rural Development Coordination Offices; the office has the responsibility to coordinate and integrate the locals with the project.

- The Head of the Planning and Programming Service Bureau of the Tendaho Sugar Factory Project. The bureau undertakes sugarcane plantation, out-growing sugarcane strategies on agro-pastoralist and rangeland development.

- The Head of the Human Resources Management Department at Ministry of Water Resources. The bureau has responsibilities on settling the development-induced displaced, compensation payments and facilitates non-pastoral income generating activities.

- The Head of the Afar Coordinating Department at the Ministry of Federal Affairs and also the District Adviser and Team Leader.

Observation

In order to have first hand information on project activities and on socio-economic situations of pastoralists observation was necessary. Observer-As-Participant Approach was applied for the purpose. According to Creswell (2003), the approach may have some limitations since the researcher does not participate in activities but only observe. She/he could be a center of attention and disturb the actual phenomena. However, considering the 3 weeks field visit and the budget at hand, other observation methods were inapplicable.

Together with community members the researcher was involved in field visits across construction sites. The author have tried to observe situations in the main cannel irrigation system construction sites, sugarcane plantation fields, cleared forest lands and grazing areas. In addition, have visited dam construction sites in Logiya and reservoir sites in Mille Woreda. Moreover, the author had also observed livestock herd situations in Dubti and Mille Woredas.

The observation process helped to differentiate and understand a number of issues. It facilitated a closer look on community participation in various areas and on perceptions of pastoralists on the project activities. In addition, project workers perceptions and environmental issues were also some of the areas which were closely studied. Based on what pastoralists say, observing the different changes that are brought by the project on pastoral livelihoods was overwhelming. The field visits were repeatedly done on different sites before and after the FGDs. It helped the researcher to be prepared on what to ask and also clarified and cohered most of the issues that were discussed in the FGDs and Key Informant Interviews.

2. 3 Secondary Sources

Secondary data were major inputs to the study. Reviews were made on secondary sources for better understanding on; pastoralism, socio-economic situations of the area; Tendaho

Dam and Irritation Project objectives and strategies; development phases of the project and how the project incorporates the local communities as part of the beneficiaries.

Secondary data were colleted from the Afar Regional Government Bureaus, documentations in the different ministries, project documents; literature and the internet.

2. 4 Ethical Considerations

Based on Mwanje (2001) in studies that involve human subject, it is important to consider the underlying ethical principles. The appropriate cultural measures and ways of conducts should be respected by the researcher not to disturb the day to day activities. If not, the researcher could be the center of attention more than she/he has to be and will help to create artificial phenomena. In the research process, the researcher has taken the necessary measures to respect ways of conducts in pastoral communities.

In addition, confidentiality was some thing that cannot be overlooked. Thus, in the survey process, individuals and community's right to confidentiality and anonymity were respected. The purpose of the research was briefly explained to whoever involved. Acknowledging individuals right to privacy and owning their consent prior to the house hold survey and interviews were respected by the researcher and its enumerators.

CHAPTER THREE

3. Tendaho Dam and Irrigation Project

3.1 Introduction

The Tendaho Dam and Irrigation Project is a new development intervention in the Afar National Regional State. The project started its construction phases in 2005 by building dam and preparing irrigation systems on the former Tendaho cotton state farms. The projects irrigable plains further extended to lands that were and are cultivated by agro-pastoralists in Zone One of the region. The current irrigation developments are for the purpose of producing sugarcane to meet the growing demands of ethanol and sugar. Hence, it is one of the latest and most prioritized projects of the Ethiopian government designed to enhance the economic development of the nation and the Afar region. It is being built at a cost of 8 billion Birr covered by the Ethiopian government (Ministry of Water Resources 2005).

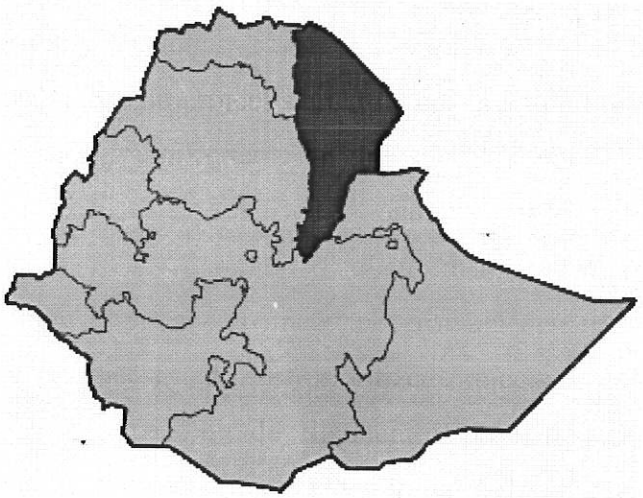


Figure (3.1) the Afar National Regional State

The new project on lower Awash and the Kessem Kebena river basins includes construction of dam on Awash River at Logiya; preparing irrigable plains extending along both right and left bank of the Awash River up to its tail end where it merges with Gamari, Afambo and Abbe lakes. The total potential irrigable area is estimated to be 70,000 hectares. However, if required irrigable plains could be further extended. The

irrigable area includes the existing state cotton farm at Dubti, Dit Bahari and intensively cultivated lands of Assaitya (Ibid). The overall project area is in Zone One of Afar Regional State. The affected Woredas are parts of Mille, Dubti, Assayta and Afambo.

Communities residing in the proposed project area are pastoralists and agro-pastoralists. The agro-pastoralists are more or less settled in or around the ex-state farm areas returned to the Afars between 1991 and 1993 because of the change of government in the country. In addition, individuals and group of pastoralists of the same clan and sub-clan move with their livestock in search of pasture in the clan-administered areas. The total population of the woredas is estimated to be 397,022 of which 173,872 are female. The ethnic compositions are 92% Afar, 4.5% Amhara, 0.9%Tigray and Argobas, 0.8% Oromo and others hold 1.2%. In terms of religion 95.6% are Muslims and 4.4% are Christians. Afar is the dominant language spoken. The distribution of the number of people affected by the project as per to the woredas is as follows:

Table 3.1. Number of Affected People by Woreda

Administrative level	Affected people population in each Woreda				Total
	Male	(%)	Female	(%)	
Mile Woreda	46,617	56.2	37,790	44.8	84,407
Dubti Woreda	48,565	58.5	34,422	41.5	84,407
Asayita Woreda	36,591	55.5	29,334	44.5	65,925
Afambo Woreda	8,463	52.7	7,599	47.3	16,062
Total population affected by the project	149,236	56.2	109,145	43.8	249,381
Total population of Zone One of Afar region	223,150	56.2	17,3872	43.8	397,022

Source: Ethiopia Statistical Abstract 2003, Addis Ababa, January 2004 in Temesgen and Mathewos (2005).

From Table (3.1), about 249,022 or 63% of the Zone One population in all Woredas could be affected in one way or another by the project. The number of population affected by specific project activities like developmental-induced displacement and resettlement activities, compensation programs, out-growing of sugarcane and alike are not specified.

Project areas residents are predominantly pastoralists and their mainstay for livelihood is nomadic livestock rearing. Accordingly, communities are affected by undertakings that influence grazing land productivity. The gross irrigable area of the sugar development plantation and dam reservoir sites encompasses the areas normally used for dry and wet season grazing and arable plains used by the pastoral communities. The irrigation scheme will therefore occupy much of the most productive grazing and arable lands of Afambo, Assayta, and Dubti woredas. Thus, pastoralists in the areas are concerned that the proposed project will take up their land and eventually disturb their nomadic movements which would pressurize their livelihoods (Temesgen and Mathewos, 2005).

In general, the woredas are chronically affected by problems of severe scarcity of water and over grazing. Drought is also a regular phenomenon to these areas. The pastoralists have suffered for most of drought spillover effects such as natural resource degradation and exacerbation of poverty. Furthermore, stiff competitions for scarce grazing lands together with over crowdedness of pastoralists and their livestock have contributed to the spread of desertification.

The Woredas are recognized for inter and intra-ethnic conflicts caused by shortage of grazing. Though tenure of grazing lands among pastoral communities are well defined form forefathers, surpassing demarcations by pastoral groups during shortage of grazing are the main causes of conflicts in the areas. Conflicts are likely in long dry seasons and when there are droughts. Nevertheless, there are also seasonal flooding of the Awash River banks which forces the pastoralist to push to dry lands in the summer rainy season of the country (Ministry of Water Resources, 2005).

Productivity of livestock are influenced by many interrelated factors in the Woredas. Despite populous herds and high prevalence of livestock diseases in the Woredas, there are poor or none veterinary services. Moreover, backward animal rearing methods with poor livestock marketing systems make bottleneck for livestock rearing. Regardless of all problems, pastoralists in the area prefer rather to count heads than concentrate on qualities of their herds. On the other hand, social services such as health centers, hospitals, flour mills, water and fuel supply, markets, schools and related services are inadequate even compared to national standards. Plus, obtaining these facilities needs traveling long distances. Inadequate supplies of social services especially put more pressure on women who assume almost all of domestic works (Temesgen and Mathewos, 2005; Ministry of Water Resources, 2005).

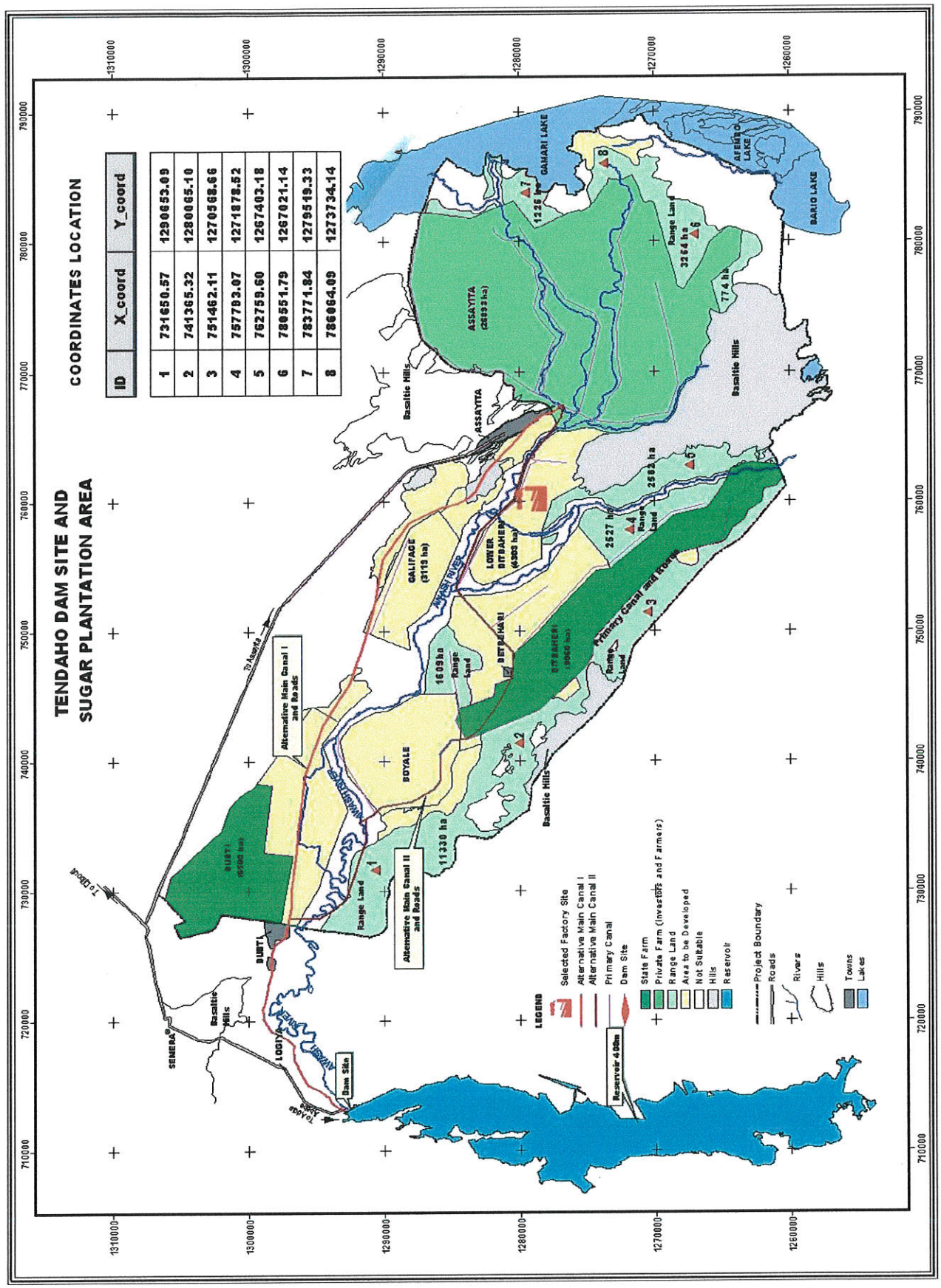
Physical characteristics such as total size of project area, locations and climatic conditions of the areas are presented in Table (3.2).

Table 3.2. Characteristics of the project area

Characteristics	Value/unit
1. Total project area	70,000 hectare
2. Altitude	340-365 m.a.s.l
3.Annual average rainfall	234.3mm
4. Average sunshine per day	8.4h
5.Average monthly maximum temperature	37.1°c
6. average monthly temperature	21.8°c
7. Latitude	40°-45°N
8. Longitude	41°-03°E

Source: Ministry of Water Resources, 2005.

The sugar plantations, dam and reservoir sites, irrigated pasture areas and site of the sugar factory in their tentative Woreda locations are presented in Figure (3.2).



Sources: Ministry of Water Resources, 2005

3.2 Woreda Level Profile

Based on the statistical data obtained from the Ministry of Federal Affairs (MoFA): Afar Coordinating Department and Ministry of Water Resources (MoWR) the location, population characteristics and socio-economic conditions of the case study areas are presented. Only the profiles of Dubti and Mille Woredas are presented out of the affected Zone One Woredas. The two Woredas are selected purposely because the case study Kebeles; Debalkee/Calibare and Gasyos-Laos Kebeles are found in Dubti and Mille Woredas respectively.

3.2.1 Dubti Woreda

3.2.1.1 Location and population characteristic

The woreda is located in lower Awash sub-basin in Zone One of the Afar Regional State. It is neighbored by Afidar and Elidar to the north, Mille and Somali Region to the south, Asayita and Afambo to the east and Awura and Chifra to the west. The Woreda is estimated to be 539,044.13 hectors in size with very hot and sunny climate all year round. It has a potential of 22,705 hectors of land that can be cultivated through rain fed and irrigated agriculture. There are 16 administrative Kebeles in the Woreda of which 3 are urban, 8 are agro-pastoralist and 5 are pastoralist Kebeles.

The total population of the Woreda in August 2006 was about 87,025 of which 36,114 or 41.5% are women. With regard to the livestock population in the same year is indicated as cattle 40,599; sheep 46,819; goats 52,727; camels 5,966 and 1,591 donkeys.

3.2.1.2 Socio-economic and infrastructure conditions

Agriculture and livestock rearing is the mainstay of the economy in the woreda. But, the overwhelming majority of residents covering 85% are pastoralists which base their livelihood on livestock production by nomadic pastoralism. The livestock production

system is traditional and the focus is on incrementing livestock quantity than quality. Due to diseases, over crowdedness and shortage of fodder, the sector productivity is very low.

The mode of the pastoral communities' social life is based on clan system. Communities are represented by their clans and the clan has a despotic right over the resources in its locality. The people highly regard and respect the clan leaders which play a great role in managing resources including grazing land and watering sites. Conflicts management is also another prominent responsibility of clan leaders. Apparently, issues which involve property holdings, usufruct rights and conflicts are mandated by administrative decisions of clan leaders, there is tendency to shadow the formal administrative units.

Dubti Woreda education coverage is better when compared to all other areas of the region. There are 28 schools in the Woreda. 18 are elementary schools, 8 are elementary and junior high, 1 is high school and 1 is preparatory. Almost all of the schools are found in poor condition and there is shortage of water supply. With regards to health coverage, the majority of Dubti population is nomadic pastoralists hence; they have a lesser opportunity to get appropriate health services at different stations.

In terms of facilities, there is one referral hospital in Dubti serving the region; 3 clinics and 7 health posts. There are 1 veterinary clinic and 1 veterinary health post built. However, there is no veterinary service caused by lack of equipments and manpower.

The water supply in Dubti is found in poor conditions. Most of the supply schemes are not functioning either to absences of pump, maintenance or quality problems. There are 7 deep wells but there coverage is minimal. The majority uses the Awash river for domestic consumption.

The Woreda has 24 hour electric facility by diesel generator. There are post offices, banking facilities and automatic telephone service. Dubti is located 11 km from the asphalt road of Addis Ababa to Djibouti. It has gravel road to Samara, Asayita, Logiya,

Mille and Dessie. The Woreda has 174 km and 15 km of all weather roads and dry season roads respectively.

3.2.2 Mille Woreda

3.2.2.1 Location and Population Characteristic

On this Woreda, there are number of unavailable data and some to be contradictory. The total area coverage of the Woreda is around 673,910.83 hectors. The climate condition is very hot and sunny all year round with negligible rainy days. There are 18 administrative Kebeles and all are pastoralist Kebeles. The Woreda has 11,411.34 hectors of land that can be cultivated through rain fed and irrigated agriculture.

The total population of the Woreda in 2006 was around 88,116 of which 39,652 or 45% are female. With regard to livestock data, the number of cattle is round 135,924; sheep 248,516; goats 304,005; camels 69,549; donkey 8,865 and poultry 1,042. The total number of livestock in the Woreda is around 167,901.

3.2.2.2 Socio-economic and Infrastructure Conditions

The economy base of the Woreda is livestock husbandry. Nearly 100% of the Woreda population is nomadic pastoralist. The social setting of the Woreda is not different from Dubti Woreda. Likewise, the livestock production and management system is traditional and the focus is on increment of livestock quantity than quality. Among members, having a huge herd is seen as a sign of prestige. In addition, due to diseases, shortage of fodder and over crowdedness of animals, the sector productivity is very low. The mode of their social life is clan based on a kinship representation on *patrilineal* descent system. The people are highly considerate of their clan leaders and are abide to their customary rules. The clan under communal property regime has exclusive usufruct rights over the resources in its locality. Consensus and special arrangement in ways of compensation among clan leaders have to be set for one pastoral group to enjoy resources outside of its location.

Clan leaders play constructive role in resolving conflicts and other social problems otherwise dealt by formal government institutions. Resources which are in common usufruct rights of the clan including grazing lands and watering sites are managed by clan leaders. Different socio-economic cases which may include human right issues are also covered by clan leaders' customary rules. Matters that need sorting through formal judiciary system or which need critical investigation of the police are dealt by clan leaders. Moreover, the communal way of life obliges the community to bear responsibilities rather handled by an individual. To explain, criminal offence committed by an individual member is shouldered by payments of the community as a whole. Thus, the uniqueness of their social setting makes the customary norms to function parallel with the formal administrative units. According to the Woreda administration, in almost all cases, it is when a non-Afar stake is involved that formal government institutions like the judiciary and law enforcing organs are used.

The educational coverage of the Woreda is poor verified by 2004 enrolment rate being less than 4%. From the 2006 data, there are 3 mobile primary and 1 stationed elementary schools covering from grade 1to 6. In addition, there are two junior high schools covering from 5 to 8 grades only. The enrolment is alarmingly low because apart from the negligible capacities of the schools most of the Afars do not send their children to school as they have a responsibility to search for nomadic grazing and water.

In respect to health, there are 7 health posts, 3 clinics and 1 tuberculoses (TB) center. The coverage of health service in the Woreda is as low as 28%. Despite the poor facilities, nomadic pastoralism as a livelihood also has a role in the low coverage of the Woreda. Though, the livestock population is numerous and the main sources of livelihood, there are no veterinary services in the Woreda. In terms of facilities, there are 4 veterinary health posts built but, due to shortage of equipments and absences of man power they are not functional.

On the water supply there are no available data. However, the major source of water for both human and livestock remains to be Awash River. There is 24 hour electric facility by diesel generator. There is post office, a bank and automatic telephone service. There is one asphalt road with good condition that passes the Woreda from Addis Ababa to Djibouti. There is no information about gravel roads connecting the Woreda to other areas or in terns of weather roads.

CHAPTER FOUR

4. Literature Review and Conceptual Framework

4.1 Displacement and Resettlement

Development-induced displacement occurs when interventions such as construction of new industries, dam and irrigation systems, transportation high ways or urban development etc force people to leave their homes for the implementation of the projects (Tesfaye, 2007). These development activates introduce new changes in the land, water and other resource usages altering the predominant socio-economic situation. The merits from these projects may be profound as they improve people's lives by being foundation for economic growth. But, the changes in usufruct rights upon valuable resources and or contradictions in distributing development benefits may possess challenges on the compulsory displaced (Mathur, 2000).

One sources of contradiction usually emanate from the distribution of development benefits between the initiative or the project and the interest of the development-induced displaced. Conflict of interest often arise from the displaced being vulnerable to material and cultural asset losses caused by physical exclusion from geographic territories which are vital for economic and social networks. They usually face socio-cultural confusion and cultural estrangement since they no longer could uphold their values and social institutions. These processes pave ways for political and social tensions being ironic for what development stands for (Dinku, 2004; Cernea, 2000).

Resettlement plans are undertaken in mitigating the social injustice and asymmetric equity visible on the development-induced displaced. It may be over ambitious to prevent every adverse effect of displacement by sound resettlement schemes. That is, the outcomes of resettlement programs are not limited to planning but also involve other dimensions which are difficult to manage and predict. Projects that involve population displacement give rise to a set of complex economic, social, political and environmental

problems that need to be addressed with care and sensitivity but difficult to anticipate in the resettlement period (Mathur, 2000; Wet, 2004).

Part of the difficulties lie in the range of different actors involved in the displacement and resettlement process targeting their own agenda. There are planers, officials and extension agents with the interest of the project. There are also differentiated groups of resettles affected differently in their socio-economic situations. Moreover, there are a variety of host individuals, families and communities that will be affected by new relations created with resettles (Pankhurst, 2004). Nevertheless, displacement-induced resettlements risks could be mitigated and rehabilitated since developmental projects are predictable and controllable. Hazards could be better managed by proper resettlement programs and plans. Carefully planed approach will be necessary to address the complex problems associated with the resettlement of the displaced (Malthur, 2000).

Resettlement program experiences show that since development projects have multiple dimensions resettles do not bear the priority. Projects have dimensions like designing, construction and so on were implementations incur huge costs. Hence, resettlement programs are viewed as additional responsibilities owning a lesser emphasis in planning and available inputs. In many incidents, resettlement schemes have been undertaken with feasibility bottlenecks. Experiences of Thailand (Nampong project), Indonesia (Kedung Ombo project), Malaysia (Batang Ali dam project) etc show development-induced displacements that have resulted in negative consequences leading the displaced to impoverishment and powerlessness (Mathur, 2000; Cernea, 2000).

As outlined by Wet (2004) there are two views as to why things often go unintended in resettlement projects leading to exacerbated social, economic and psychological conditions of the resettled. The views are Inadequate Inputs Approach (associated with initiatives and polices of the World Bank) and Inherent Complexities Approach (established by Wet, 2004) respectively.

Inadequate Inputs Approach explains that resettlement programs go wrong principally because of lack of proper or over looked inputs such as; national legal frame works and polices, political will, funding, pre-resettlement survey, planning, consultation, careful implementation and monitoring. Lack of these inputs in implementation of resettlement projects cause failures. As a result, proper policy, finances and political response could overcome the problems of resettlement projects. Thus, "the complexity of the resettlement process can in principle be mastered and turned to good effect (Wet, 2004:52)."

The Inherent Complexity approach is developed because of the nature of involuntary resettlement. "It is characterized by a complexity which gives rise to a range of problems that are more difficult to deal with and involve more than providing the kind of inputs [set in the Inadequate Inputs Approach] (Wet,2004:54)." The complexities around resettlement programs give rises to threats functioning and operating differently than the planed outcomes. The combinations of the complex threats emanate from features like; imposed spatial change lead to new resources access and tenure. Accelerated socio-economic changes pressurize the resettles. Institutional problems associated with in resettlement programs. And, all new changes and processes happening simultaneously or in short duration makes unanticipated developments to occur which are not planned for or predicted. These situations could make resettlement projects problematic and incompatible with sound planning. Thus, the complexities arising from the different features functioning in the resettlement program have spillover effects beyond planning.

4.2 Concepts of a Project

A project is an operational system and an instrument intended for accomplishing a specific objective. It is the "cutting edge of development" as it is an instrument or means to achieve objective by building blocks of a development structure (Gittinger, 1984). As an operational element for achieving objective, a project has a time frame of beginning and ending activities, requires allocation of resources and meeting specified quality standards within budget and schedule. For a project to achieve its objective or "be

successfully completed, it must be carefully planned, organized, staffed, adequately equipped, timely supplied, systematically and properly managed (Teshome, 1990 :2)". In addition, project has to pass through stages from planning to completion in materializing objective known as project cycle (Development Project Studies Authority, 1990; Gittinger 1984).

There are various ways in which the project cycle may be viewed and portrayed depending on the purpose of illustration. However, according to Development Projects Authority (1990), project cycle may be said to comprise six stages in three major phases:

I. Pre-investment: 1. Identification, 2. Preparation, 3. appraisal/ decision
II. Investment: 4. Implementation
III. Operational: 5. operation, 6. ex-post evaluation

Through out the stages of the project cycle, the primary pre-occupation of the analysis is to consider alternatives, evaluate them and to make decisions as to which of them should be advanced to the next stage. The results or output of a given stage analysis serves as the input or part of the inputs of the next sequential stage. Otherwise, it could also be used as a feedback to reconsider necessary flaws in the preceding stage before passing the output to the proceeding stage. More importantly, the cumulative results of project analysis from different stages constitute a valuable input for the preparation of subsequent projects (Ibid).

Planning of a project cycle consist inter-related activities with in a stage and sequential stages beginning from project identification all the way to ex-post evaluation. In Gettinger (1984) and In Development Project Studies Authority (1990) the activities and sequence stages are described as:

I. Project Identification

Consist of project finding which could contribute towards achieving specific objective. Suggestions for new project idea could arise form multiple sources and events. Project identification involves processes like:

Preliminary screening: screening from different suggestions or project candidates to select one or more ideas which are potentially promising. The stage screening criteria's are broad and concentrating on ideas and are susceptible to specification and refinement as project planning advances. During the preliminary selection, the analysis should eliminate project proposals that: technically unsound with high risk; have inadequate supply of input; have low market for output; very costly in relation to benefits and over ambitious sales and profitability etc. it is necessary to conduct the screening in order to reduces project alternatives to a manageable scale to which more work and time could be devoted too. "Indeed, project planning can be viewed as a process of elimination, i.e, elimination of inferior alternatives (Development Project Study Authority, 1990:16)."

II. Project preparation

Pre-feasibility study: or an opportunity study indicates whether the project is, promising or further work is necessary for justification. It requires investigating project in a systematic manner. This involves the preparation of brief report that indicates sufficient information on screening criteria's of project identification from project version that are promising and suggest the ones to be eliminated. In-depth analyses of the technical, financial economic, social and institutional analysis are postponed to later stages. However, the pre-visibility study should briefly indicate which of the dynamics need scrutiny in later stages. The pre-visibility study should briefly discuss:

— the availability of the most important material and human input
— basic alternative technologies with their merits and drawbacks
— alternative project locations and sites and project size

— alternative project engineering plans and implementation schemes
— rough estimate of financial and economic return
— any major factors such as financing, management, organizational, environmental, social and sociological that is likely to have an impact on the project.
— what further information on the technical, financial economic or institutional aspects of the project should be acquired through special studies and surveys.

At completion of the pre-visibility study, it should be possible to out line:
— whether future detailed work is justifies
— what major issues have been identified, what project alternatives have been considered and which of them have been rejected
— a rough estimation of cost of project that look promising and a specific work plan for the next stage

Feasibility study: the project from sketchy from in pre-visibility study advances to this stage where a thorough analysis is done before a decision is taken on whether to implement it. The analysis of the project technical, commercial, social, environmental, financial economic and institutional aspects should be detailed and comprehensive enough to allow decision maker to decide on the future of the project with confidences. These investigations are normally conducted by hired consultant firms for the agency sponsoring the project.

Generally, project preparation is the most important stage but, may be expensive and time consuming. Often, a year or two or longer periods for complex agricultural projects and it may also consume from 7 to 10 % of the total project investment. Yet, to postponing non-technical and engineering issues like financial, economic and institutional aspects paying lesser emphasis would very likely yield consequences in later stages. The aftermath of neglecting project preparation on non-technical issues could result to projects that have inflexible structure with limited freedom for decision making executors. Otherwise project that fall behind schedules; or else have low return and waste scares resources that are virtually irreversible. Thus, preparation increases project efficiency and help ensure

its smooth implementation to the future. In other words, the additional time and money required for non-technical activities will probably be returned many times folded (Gittinger, 1984).

III. Appraisal and Investment Decision

Appraisal is a stage where comprehensive and systematic assessments of all aspects of the project are done after it is prepared. The critical review, asserts whether the proposal is sound and is appropriate before investment decisions are reached. The appraisal process builds on the project plan or may involve new information if the appraisal team feels that some of the data and assumptions are questionable. Decisions should base on careful consideration of the output of the appraisal.

IV. Implementation

By this stage of the project cycle, finance is secured and decisions are reached to proceed with the implementation of a given project. Inter-organizational linkages for smooth implementation are also arranged. The project office plays a key role during this stage and if there has been delay in implementation for any reason, the estimate given in the feasibility study may become out dated. Necessarily, if there are delays beyond reasonable sum, the project office will have to update and revise the study.

V. Operation

Project operation involves the running and maintenance of the project according to planed objectives and tasks. Implementation stage will gradually transfer or proceed to normal administration operation, all the planned and physically setup would transfer to output in realizing objectives.

VI. Ex-post Evaluation and Follow up

It is the final stage in the cycle. Ex-post evaluation is done with the aim of assessing whether the objective of the original project has been attended, and if not why. For the purpose of learning from experiences, project incorporates in its operation a monitoring system that will allow an ex-post evaluation. Consequently, the nature, magnitude and timing of the envisaged benefits should be clearly stated in the feasibility study to serve as points of references in the follow up function.

4.3 The pastoral land and the Afar pastoralists

Pastoralism is one of the oldest socio-economic systems in the Horn of Africa in which livestock husbandry in open grazing area is the major means of subsistence for the pastoralist. Pastoralists in Ethiopia encompass the entire geographical, environmental and economical peripheries of the state. The pastoral population comprises diverse communities and ethnics in different regional states of the country. The Afar and Somali Regional States have overwhelmingly pastoral communities. In the Oromia Regional State, the Borena Zone and in the Southern Nation, Nationalities and People Regional States (SNNPRS) the South Omo Zone has profound pastoral communities (Abdi Abdullahi, 2006; Yacob, 2001).

Lands generally inhabited by pastoralists are classified as *Qolla* (semi-arid and arid low land) lying below 1500 M.A.S.L. The rainfall is low with annual precipitation of 400-700 mm. The pastoralist communities are estimated to constitute around 15% of the population occupying more than 60% of the total land area of the country. It is estimated that 93% of the population in the pastoral areas is engaged in pastoralism and agro-pastoralism, while the remaining 7% engaged in other activities such as petty trading, mining, hunting and civil servant (Mohammud, 2003).

The pastoral areas of Ethiopia are generally endowed with enormous economic potential though, it is untapped. The lands are enriched by expansive plains that are often watered

by the county's major rivers. The Abbay, Omo, Tekeze, Wabeshebelle rivers and the Baro-Akobo, and the Genale-Juba-Dawa rivers basin stretch through the expansive pastoral territories before crossing the boundaries. The Awash valley is also a major source of water which remains inland (Yacob, 2001).

The low land pastoral production system is one of the main production systems in the country with a major share of contribution to the national economy. In Ethiopia, the livestock sector consists of 16% of the total Gross Domestic Product (GDP), 1/3 of Agricultural GDP, and 8% of the export earnings. Pastoralists raise the largest size of the national livestock resource, accounting for more than 40% of the cattle, 26%of the sheep, 75% of the goats 20% of pack animals and 100% of camels. Thus, pastoralists own 42% of the national heard (Abdi Abdullahi, 2006).

The Afar are one of the largest pastoral groups in the Horn of Africa inhabiting the rangelands of north eastern Ethiopia, south eastern Eritrea and western Djibouti. The Awash River which flows through their area is one of the most important sources of water for dry season pasture. Afar communities inhabit most of the middle and almost the entire lower Awash valley. They are related to other Cushitic language speaking ethnics such as Oromo, Saho, Beja, and Somali (Ali, 1997).

4.4 Pastoralists and Development Strategies

The right to development as expressed in every human entitlement to participate in, "control, and enjoy economic, social, cultural and political development...." is a fundamental human right which is inviolable and inalienable (Melakou, 2001:5). Rather, from most African countries experiences of development strategies pertaining pastoralists were and are not able to determine their own form of development in many cases (Ibid).

When governments and development agencies first started to address pastoralism in the early 1970s, the dominant view was the need to modernize the backward way of life using an intensive western livestock development model. It was aimed for mobilizing and

developing pastoral resources for contributing to the national economy (Swift, 2003). In the aftermaths of the devastating droughts of the 1970's and 80's pastoral development underwent a major change in strategies and outlooks in Africa. It was then directed to restoring the capacity of pastoralists to feed themselves rather than being contributors to the economy (Helland, 2001).

The top-down approaches which were maintained by most of African governments condemn pastoralism as a non-progressive livelihood and imposed changes. In many incidents, state development initiatives which did not include pastoral values made pastoralists not to be a full-fledged stakeholder in initiatives resulting capture and enclosure of key resource such as grazing and watering sites. The enclosure disrupted the pastoral migration cycle movements making them more vulnerable (Ayalew, 2001).

The historical pattern of pastoral development in Ethiopia is synonymous with other pastoral communities in the region (Nicol, 2002; Markakis, 2004). However, for many centuries Ethiopian pastoralists have made most of their natural environment by quickly adopting introduced changes in unpredictable physical and social environments (Abdi Abdullahi, 2006).

The expansion process from the central highlands of Ethiopia in the 19th century put most of the pastoral lands under the central control of the Ethiopian state. And, the imperial regimes considered the pastoral lands as no man's land, since the users of the lands were not sedentary. The results of the consideration were the constitutional and legal recognition of pastoral lands as government properties in the 1950s. Since then large scale irrigation development scheme were undertaken which alienated the pastoralists and encroached upon large areas of both wet and dry season prime grazing lands (Mohammud, 2003).

The large scale mechanized commercial enterprises established in the lower Awash valley were mostly managed by foreign companies in joint ventures with the state. These commercial enterprises were evident of the encroachment. Their orientation was top-

down resource centered approach which marginalized the pastoralists excluding the human aspect of the situation in the imperial regime (Mohammud, 2003; Ali, 1997).

Following the 1974 revolution and the assumption of the military junta to power, land reform proclamation was introduced in 1975. It resulted in nationalization all commercial farms to be managed as state farms. However, the aid and donor driven development strategies that pursue the modernization perspective had again top-down orientations which did not allow for community participation in the formulation and implementation of laws, polices and strategies. Thus, similar to the imperial period surplus extraction was followed. There has also been considerable expansion of state farms and irrigation projects particularly in the middle Awash valley which also affected the pastoralist adversely. (Ali, 1997; Getnet, 2002).

After the change of regime in 1991 about 15,383 hectares of land under state farms in the Awash valley were retuned to the Afar communities because of threatening grievances. A number of stakeholders such as absentee herders, agricultural investors, influential pastoralists and agro-pastoralists scrambled over the control of the returned lands. Absence of clear land usage policies in defining access and usufruct rights paved ways for inter and intra clan conflict for utilization of lands (Yirgalem and Eyasu 2001).

In 1993 Agricultural Extension Program was initiated and focused on intensive crop production package which totally neglected the pastoral area development. Nevertheless, the several subsequent have provided brief and incremental pastoral development strategies. Yet, strategies in developing pastoral production have a lesser emphasis compared to package programs for crop production (Mohammud, 2003).

In the Federal Democratic Republic of Ethiopia (FDRE), (2002) Rural Development Policies, Strategies and Plans; the development activities to be undertaken in pastoral areas are outlined. The short and middle term agricultural development objectives in pastoral areas focus on food security strategies in nomadic pastoralism livelihoods. Short term objectives are to be attained by improving; water supply and grazing availability,

invigorating cultural livestock rearing and marketing situations. On the other hand, in the long term objectives the nomadic pastoralism is viewed as a hinder to the provision of social and physical infrastructures to pastoral communities. Thus, according to the long term strategies rapid and sustainable development could only be achieved if pastoral communities are settled.

Rain fed agriculture is not prioritized in nomadic areas. Hence, the base for settlement attempt is the development of irrigation schemes on major rivers that cut through the pastoral areas or the immense potential of extractable underground water. It's inevitable that long term objectives will have implications on the socio-economic setting of pastoralism by transforming communities to market based sedentary farming livelihood from subsistence nomadic pastoralism (Ministry of Information; Press and Audiovisual Head, 2002).

4.5 Irrigation Development and Pastoralism

Benefits derived from irrigation are overwhelming as discussed by Lankford (2003). Irrigation secures crop productivity against short falls and breaks in rainfall. Planning and timing of cropping possibly reduces labor calendar over-lap by extending cropping season length. These, in return raise the number of paid and secured jobs conducted on land prior to the irrigation scheme. In addition, parallel to its productivity the value of land adds since it attracts commerce involving renting of plots and changing from subsistence production to irrigating to the market. Benefits from irrigation-based livelihoods are felt at households, regional and national level as the scale of the irrigation increases. Lankford further outlines that there are many studies to support the success picture of irrigation.

In pastoral areas also the benefits of irrigation are profound. Pastoralism is a pre-dominant livelihood system in arid and semi-arid low land areas where rain fall is unpredictable. The pastoral land tenure and their production based on calculated mobility as well as their social and political institutions have been efficient in preventing

environmental degradation, tense competition and conflict. However, because of overcrowding in livestock and human population, environmental pressures and by large due to excessive private and/or state initiated development interventions in pastoral areas have made the nomadic pastoralism a vulnerable and a prone to conflict livelihood system (Getachew, 2001; Yacob 2001).

Irrigated based land production and pasture development in modern management system is viewed as a proper blanket solution to the drawbacks of current pastoralism in (Ministry of Information; Press and Audiovisual Head, 2002). Irrigation in pastoral areas is a way out for economic viability of livestock production and agriculture by providing accessible land and water for sustainable livelihood income. Furthermore, irrigated grazing land could also be a very good instrument in preserving the social and cultural asset losses of pastoralism in animal husbandry.

Irrigation development like any opportunity may also have costs and risks. Lankford (2003) based on researches form the past 20 to 30 years noted the major risks to irrigation aside to its success. Transaction costs, institutional problems, low economic return compared to irrigation costs and environmental impacts are the major risks outlined. Institutional problems like "the considerable consumption of water in large area irrigation subtracts for its use in other areas and sectors connecting inter-dependent users in river basin through shortage (Lankford, 2003: 5)." As a result, irrigation development should be considered with awareness of other sectors and livelihoods. Thus, there is a need to observe whether land and water management institutions and conflict mediation mechanism are properly installed.

In Middle Awash basin pastoral areas of Ethiopia achievements of irrigation schemes implemented in the 80s and 90s are debatable when a crude financial analysis is undertaken. Ali (1997: 127) argues that "the performance of the irrigation scheme looks even grimmer when compared with the magnitude of initial investment cost establishing the schemes. It is arguable that if these investment costs had been directed to the pastoral sector, the benefits that could have been derived would have been far greater than from

irrigation." In addition, Ali (1997); Ayalew (2001) and Temesgen & Mathewos (2005) explained that irrigation development initiatives may have contributed to the decline of livestock production in pastoral lands due to one or a combination of the following factors:

— Water saving mechanisms and reservoirs have trapped the flood used to maintain the natural grazing. In return, it forces reduction of available fodder supply especially to dry season grazing areas. It has resulted in the concentration of animals in the wet season areas leading to over stocking of animals. Over stocking negatively creates pressure on the environment and further generate conditions to exploit marginal areas.

— Soil salinity is one of the main environmental problems associated with the use of irrigation. "Reclaiming of these lands requires leaching the excess salt which is often costly and time consuming (Ali, 1997:129)."

— Reservoir and canal systems of irrigation projects increase the prevalence of malaria encephalitis, yellow fever, cholera, typhoid and various gastro-intestinal diseases which are normally associated with proximity to swamps, marshes and stagnant pools. Plus, it increase incidents of livestock diseases such as internal parasites. Moreover, large scale irrigated agricultures consume huge agro-chemicals which may have negative consequences on the environment in addition to human and livestock health.

4.6 Communal Property Regime and the Afar Pastoralists

In communal tenure, the resource in question is held in principle by the occupants belonging to the collective as a whole (Cohen and Weintraub, 1975). Ownership lies in the hands of a defined group, usually a community which enjoys the rights over the resources, including the ability to exclude non–group members (Abdul, 2001). Clearly, members are well known and group size is defined. Within members, the resource is used in common or the individual has a right not to be excluded from the benefits and usufruct rights of the resource under his/her community. This signifies an element of equality in

allocating rights among members (Dejene, 2002). In the non-excludable return to benefits and costs communal property regime has similarity to private ownership of a resource. However, the use of the resources by one member subtracts its availability to others unlike public goods (Tesfaye, 2003).

The inalienable rights which the individual has are considered as long as the person is a member of a community. These rights are generally enforced and observed under customary rules by means of a local authority exercising administrative rights. Moreover, the community has specified rules and regulations about resources exploitation and mechanism for implementing rules and sanctioning violations (Abdul, 2001). In these arrangements people may or may not have depending on the customary rules the right to sell or rent their share of common resources or as collective rights of members to outsiders (Mc Cay, 2000).

Land ownership, watering sites and camels are collectively owned by the community and administered by Afar clan leaders in a specific clan area. There is absence of conflict in demarcation of land and water due to long held tenure among communities. Thus, when clans violate a specific rangeland and water for their herds, it is done knowingly due to other influential factors. Problems with other Afars from different clan are not dealt individually to the persons but collectively involving the communities. Clan leaders which are highly respected in their community discuss on issues and consent will be reached. In addition, disputing individuals and the community as a whole agree to the terms reached by clan leaders (Temsegen and Mathewas, 2005; Abdi Abdullahi, 2006).

CHAPTER FIVE

5. Data Analysis and Discussions

5.1 Background Characteristics of Sampled Households

Both research site Kebeles have homogeneous socio-economic characteristics of pastoralism. In terms of their clan, communities in Dabalkee/Calibare Kebele in Dubti Woreda are from Arabta clan grouping and pastoralists from Gasyos-Laos Kebele in Mille Woreda are from Gisak-Amunda clan. Table (5.1) presents respondents as to their clans.

Table 5.1: Respondents classified by their clan

Name of Clans	Frequency	Percentage
Arabta	94	77.7
Gisak-Amunda	25	20.7
Total	119	98.4
Missing system	2	1.6
Total	121	100

Sources: field survey, 2008

In Dabalkee/Calibare Kebele, there are both agro-pastoralist and pastoralist residents. According to the Dubti Woreda profile, nearly 85% of residents are pastoralists. Nevertheless, from the 75 household surveyed 63% and 34% are pastoralists and agro-pastoralists respectively. The remaining 3% are merchants and laborers. Coverage of agro-pastoralist is raised purposely for a better analysis of the compensation and the sugarcane out-growing strategies and processes. In Mille Woreda, Gasyos-Laos Kebele communities are pastoralists and out of the 50 households surveyed 47 are nomadic pastoralists. They cover 94% of respondents. From the sample size, 60.3% of households are from Dabalkee/Calibare Kebele and 38.8% are from Gasyos-Laos Kebele as presented in Table (5.2).

Table 5.2: Respondents classified by Kebele

Kebeles	Frequency	Percentage
Dabalkee/Calibare	73	60.3
Gasyos-Laos	47	38.8
Total	120	99.1
Missing system	1	.9
Total	121	100

Sources: field survey, 2008

From the total sample size, female respondents cover 15%. In terms of pastoralism, 16.0% and 14.1 of female respondents are agro-pastoralists and pastoralists respectively. Their coverage according to ways of pastoralism is presented in Table (5.3).

Table 5.3: Female respondents

Value	Female respondents frequency	Percentage	Male respondents frequency	Percentage
Agro-pastoralists	4	16.0	21	84.0
Pastoralists	13	14.1	79	80.0

Sources: field survey, 2008

In both Kebeles illiteracy is alarmingly high. From the sample size, 66.9% of respondents are illiterate. And, 56% and 78.3% of agro-pastoralists and pastoralists are illiterate respectively in Dabalkee/Calibare Kebele. From Gasyos-Laos Kebele, 61.7% of the surveyed pastoralists are illiterate. Educational status of the sample size is presented in Table (5.4).

Table 5.4: Educational status of respondents

Educational states in grade completed		
Grades	Frequency	Percentage
1-5	31	25.6
6-8	7	5.8
9-10	-	-
11-12	-	-
Above 12	1	.8
Illiterate	81	66.9
Total	120	99.2
Missing system	1	.8
Total	121	100

Sources: field survey, 2008

From the total sample size, the overwhelming majority are pastoralist. Agro-pastoralists cover 19.8% and pastoralists are 73.6% as presented in Table (5.5).

Table 5.5: Occupational status

Occupations	Frequency	Percentage
Pure Pastoralists	89	73.6
Agro-Pastoralists	24	19.8
Merchants	3	3.3
Others	4	2.5
Total	120	99.2
Missing system	1	.8
Total	121	100

Sources: field survey, 2008

According to the marital states of the sample size, 81.0% are currently married. In the age distribution, 37% of respondents are between the age of 25 and 34 holding the majority of respondents.

5.2 Community Participation and the Tendaho Dam and Irrigation Project

Based on documents from the Namalifun-Tendaho Project Integrated Rural Development Coordination Offices (NTPIRDCO); Plan and Program Service Bureau of the Tendaho Sugar Factory Project (PPSBTSFP) and Ministry of Federal Affairs (MoFA); Afar

Coordinating Department, community participation is an integral part of the development initiative. Pastoral communities' responsible participations are major input for materializing development goals.

Project interventions that involve local community's interest and values are to be participatory to the pastoral communities in designing and implementation phases. Activities are also to be implemented in ways that community's interest and values are centered. Such project activities include development-induced displacements and resettlement programs, sugarcane out-growing strategies, irrigated pasture developments and compensation payment programs.

Responsible community participations are stipulated in the documents to be essential for sound implementations of the above programs. The roles that pastoral communities have by their participation are profound in the short term (construction phases) and long terms (sugar and ethanol production) phases of the project. In the short term, the project needs daily laborers for construction of dam, residential houses, irrigation canals and sugar factory. Likewise, for the long term production phases, the forward and backward linkages to be created between the sugar development and the pastoral communities are essential bridges to materialize the developments.

It is estimated that the final phases of the sugar development will create around 50,000 jobs. Out of which, nearly 45,000 of job openings are to be occupied by pastoral communities. Moreover, dam construction and other project activities will have spillover effects on other development agencies. Agencies like the Ethiopian Electric Power Corporation (EEPC) and Ethiopian Telecommunication Corporation (ETC) will also create additional job opportunities by further enhancing their capacities.

According to the household survey of both Kebeles, 84.2% of respondents are informed that the above programs must involve community participation. However, 69.8% and 61.2% believe that the project role in encouraging community participation and the level

of community participation are low respectively. Opinions are presented on Table (5.6) and (5.7) in that order.

Table 5.6: Opinions on project role in encouraging community participation

Values	Frequency	Percentage
Very good	-	-
Good	2	2.1
Satisfactory	14	15.0
Low	65	69.8
Very low	10	10.7
Total	91	97.8
Missing system	2	2.2
Total	93	100

Sources: field survey, 2008

Findings of the FGDs support the household survey result on the project encouragement of community participation. Clan representative participants agree that the initiatives taken by the project are minimal for approaching and discussing on issues with the pastoral communities. They exemplified the projects shortcomings by the compensation programs, sugarcane out-growing strategies and compulsory displacement implementation processes. They affirm that there were no considerable involvements of pastoralists from designing to implementation of the programs.

Participants further stressed that it is difficult for the pastoralists to ask responsible involvement about the compensation or any other programs because of potential threats. They said several times their demands and questions were unanswered and they were coerced not to ask. Moreover, agro-pastoralist participants said they are reserved from asking questions fearing negative consequences like not getting land when the out-growing strategies are completed.

Table 5.7: Opinions on levels of community participation

Values	Frequency	Percentage
Very good	1	1.0
Good	3	3.2
Satisfactory	21	22.5
Low	57	61.2
Very low	10	10.7
Total	92	98.9
Missing	1	1.0
Total	93	100

Sources: fielded survey, 2008

From the FGDs findings, the levels of community participation are not as intended. The reasons that partly attribute to least community participation arise from the project actions, employee's attitudes and the community itself. Project's inability to organize pastoralists or agro-pastoralists on grounds of their concerns like irrigated pasture development, compensation programs or sugarcane out-growing strategies is one pitfall. In addition the necessary advocacy and awareness creation has not been done on community participation. Lack of technical and vocational skills also hindered overwhelming pastoralists from participating. Communication problems also contributed since the majority of experts and project workers who came from the other parts of the country can not speak the Afar language.

Participants also reflected that some project employees are negatively stereotyped about the working habits of pastoralists. Thus, employers some times refrain from giving job opportunities to pastoralists which contribute to lesser community participation.

From the household survey on pastoralists and agro-pastoralists, 66.9% feel the efforts of the project are low in meeting their community's interest as presented on Table (5.8).

Table 5.8: Opinions on project efforts to meet community's interests

Values	Frequency	Percentage
Very good	-	-
Good	3	2.5
Satisfactory	9	7.4
Low	81	66.9
Very low	27	22.3
Total	120	99.2
Missing	1	.8
Total	121	100

Sources: field survey, 2008

From the FGDs with clan representatives, the project integrating mechanisms reflect the interests of both pastoral communities. They further recognize the benefits of the long term forward linkages with the sugar development which increases security to their livelihoods. Nevertheless, in the project construction phases, participants stipulate that the mainstay of their livelihoods has been neglected. In the construction spillover effects like development-induced displacements and resettlements, compensation programs, and encouraging non-pastoral livelihoods the efforts of the project in addressing community's interests are not satisfactory.

The project activities from dam construction which take up grazing lands to sugarcane plantation on arable lands affects pastoralists and agro-pastoralists more or less similarly. On the other hand, the projects integrating mechanisms of the affected communities relatively differ. Agro-pastoralists are prospect sugarcane out-growers to the sugar factory while pastoralists would further specialize on modern livestock rearing on irrigated pasture and on by-products of sugarcane. Otherwise, they are prospect employees of the sugar factory.

In the sub-sequent sections of the chapter, the processes of displacement and resettlement, compensation programs, projects support to livestock rearing and encouraging non-pastoral livelihoods will be discussed in brief.

5.3 Development-induced Displacement and Resettlement Processes

From the compulsory displacement strategies stated in the NTPIRDCO documents and Temesgen and Mathewos (2005) Socio-Economic Impact Assessments on Tendaho Dam and irrigation Project; programs must account the following summarized issues in resettling the displaced.

— Project activities (in planning and implementation) must be participatory of the affected people and be oriented in ways as much as possible to satisfy the interests of the displaced.
— Participation in the planning process most importantly must accommodate different groupings in the community especially men and women groups which are affected differently.
— Affected peoples right to be heard must be respected.
— Relocation of people must be to suitable area for sustainable development.
— Compensations are to be paid in kind and or cash 6 months earlier than the compulsory displacement and resources losses.
— Adequate health services, other infrastructures and employment opportunities have to be arranged in the resettlement area.
— Implementations to be oriented in ways possible to satisfy the interests of the compulsory displaced.

These issues are underpinned by the displacement project to mitigate losses and negative impacts on the communities. The project recognizes the detriment effects of involuntary displacement on the affected people. Hence, observing the above issues is stressed for obtaining the acceptance and responsible involvement of the population under the displacement schemes. It is held by the project that appropriate planning might even turn potential involuntary displacement in to desirable and voluntary resettlement.

The project has and will displace pastoralists from different project proposed sites. In Mille Woreda the project has displaced residents from dam reservoir area in June 2007.

Formerly, the reservoir site was used for dry season grazing by local clans and also by other Afar clans which migrate to the area in time of droughts. The plan is to resettle the compulsorily displaced to the right side of the reservoir site. Construction of 20 km of road and other infrastructures will be completed prior to the resettlement scheme. The area is selected for its arable lands and suitability for later phases of community integrating programs appropriate for sustainable development.

According to Mille Woreda Administration, the compulsory displaced of the Woreda are to be resettled in the mentioned areas respectively. The displaced from *Daylena-Giraru* and *Sunasana- Kusertu* areas are to be resettled in *Garsa, Feyabure* and *Indahisa* areas. The displaced from *Kayalu*, *Ass-Mohamed* and *Kudy* areas are to be resettled in *Dereabulu* and *Merkeli* areas. And, residents of *Gasyos-Laos* areas are to be resettled in *Goyan* areas. In addition, based on the Ministry of Water Resources (MoWR); Human Resources Management Department, resettlement program on 1,200 households from Mille Woreda has been attempted at *Adaytu* in 2007.

From the interviews with Key Informants; Mille Woreda Administrator and Mille Woreda Pastoral, Agriculture and Rural Development Offices Head, Gasyos-Laos Kebele residents totaling up to 1000 households are displaced for the dam reservoir areas. Pastoralists in the Kebele have participated in the resettlement planning and process in different groupings of the community. Selection of suitable area was also reached by consensus with clan leaders and the community. Accordingly the Gasyos-Laos Kebele residents will be resettled in *Goyan* areas.

Even though the planning process was participatory, there were gaps in implementation according to the informants. Some of the problems viewed were; there were lack of coordination between the Woreda Administration and the Tendaho Dam and Irrigation Project on when and how to displace residents from the area. To emphasize on the coordination gap, informants raised the Kebele's displacement process in the summer rainy season of 1999 EC. The dam reservoir was blocked for a pilot survey in the rainy season without informing the Woreda Administration or evacuating the pastoralists from

the area. As a result, the water flooded the kebele at night and came up to 39kms back blocking the road from Addis Ababa to Djibouti in days. Gasyos-Laos Kebele was completely covered by flood and residents were greatly endangered. Much of the reminding Woreda Kebeles were also flooded by the incident.

Immediate rescue expeditions were taken to save lives and livestock by the project trucks and also by Disaster Prevention and Preparation Bureau. Relief aids for the displaced and fodder for the survived animals were brought by the bureaus. Yet, pastoralists have lost more than 1,000 livestock by the flood according to the Disaster Prevention and Preparation Bureau records. Fortunately, there were no human losses to the immediate flooding but the aftermath situation put pastoralists in critical conditions. The flood caused water-vector diseases like cholera and diarrhea epidemics against poor health facilities.

At the time of data collection, the residents of the Kebele have been displaced for the past 10 months and they have not been resettled nor compensated for their losses. They only received relief aids for their suffering during the tragedy. Residents are scattered around the near by Kebeles for shelter and there were no adequate social services provided. After the water has retreated some pastoralists have gone back to their areas with their livestock. But, a great deal of bushes and shrubs have died since the water lay on it. It should be recognized that, short trees and bushes are the main fodders for the most valuable livestock of pastoralists (the camel).

Quoting Mille Woreda Administrator,

The current problems would not have occurred if the authorized bureau had informed the Woreda to evacuate people and livestock. There were communication gaps.

Interviews with Key Informants; project officials from the NTPIRDCO and Human Resources Department Head at Ministry of Water Resources (MoWR) stated that the reasons why the displaced were not resettled or for programs delay were pastoralists from

Gasyos-Laos Kebele could not agree on selecting area of resettlement due to a number of issues.

On the other hand, there were attempts of resettlement programs on other displaced communities from Mille Woreda in Adaytu areas after facilitating infrastructures. The resettles comprise around 1,200 households. However, the programs had to be interrupted since the sub-groups from *Issa* Somali ethnic clan invaded the area and killed settlers. The resettlement programs were attempted without complete socio-economic impact feasibility studies. At the time of data collection, 1,200 household resettles were facing different socio-economic problems and the Federal government was seeking solutions with the Regional governments.

From the household survey, 87.2% of respondents have said to be displaced. 89.4% have also answered they were informed about the displacement strategies but their displacement was sudden. 34.1% of the respondents have answered that they have lost huts and livestock because of the flooding. During the unplanned displacement, 82.6% of the respondents replied to have received relief aids. Though, 95% of respondents said they are not compensated for their losses.

100% of respondents replied that they have not been resettled and 75% answered they have been asked where to be resettled. However, 76.6% of respondents said projects encouragement of community's participation in the resettlement programs is low. Opinions on resettlement program are presented in Table (5.9). And, 61.7% of respondents say they have a potential concern in the overall displacement and resettlement programs.

Table 5.9: Opinion on community's participation on resettlement programs.

Values	Frequency	Percentage
Very good Good Satisfactory Low Very low	- - 8 36 3	- - 17.6 76.6 6.3
Total	47	100

Sources: field survey, 2008

From the FGDs, participants were concerned about their sudden displacement which lessened the role of community participation for them. It was unplanned and was in a manner that did not reflect their interest. Pastoralists were also concerned about the survival of their animals if conditions they were in are prolonged due to shortage of fodder. The camel is the most valuable of all their assets. Though it survived the flood, the aftermath made camels to be highly vulnerable.

Citing what one pastoralist said:

When the water lay on the lands, it killed bushes and shrubs .The problem is camels don't graze much they feed on small trees and shrubs. Thus, there is huge shortage of fodder for them.

Quoting other pastoralist expressions:

Every thing is dry. It is caused by the project activities. They told us we would be compensated, resettled and benefit from the development appropriately. However, the problems on our herds are unbearable since there are no enough grazing. We are waiting in agony and some talk the flood is deliberate to take our land.

The project resettlement attempts on Gasyos-Laos residents and on other Mille Woreda displaced were prone to different shortcomings caused by implementation gaps when related to affirmed goals. Resettlement implementation gaps are partly caused by incomplete socio-economic feasibility studies on program preparation phases. The main

reasons forwarded by government officials for absence or incomplete socio-economic impact assessments on resettlement programs were consultancy firm costs and the amount of time studies take. The approach it follows seems to be working progress and dealing with social issues and problems when they arise. The project does not follow the conventional project planning and implementation methods. Nevertheless, there were visible coordination problems and unintended outcomes in implementation from lack of proper preparation.

According to Development Project Studies Authority (1990) and Gittinger (1984), project preparation could cost 7 to 10% of the total investment and take up to 2 years for study completion. But, postponing preparation of non-technical and engineering issues like financial, economic and institutional aspects over weighing the bearing costs could have consequences in later phases. Inflexible structure with little freedom to decision making, falling behind schedules and wasting scares resources with low return could be the outcomes of inadequate preparations. Therefore, proper preparation increases efficiency and help ensure its smooth implementation by visualizing forthcoming events. Decision makers are able to evaluate and analyze alternatives by complete feasibility studies in project preparation phases. From the study findings, the decision makers in the displacement-induced resettlement program were not equipped with feasibility studies and other project preparation advantages of the conventional project planning and implementation methods.

According to Wet (2004), there are 2 views in explaining why resettlement programs may have the unintended outcomes exacerbating social, economic and psychological conditions of the resettled. One is the Inadequate Input Approach explaining resettlement failures by lack of proper or over looking necessary inputs in preparing programs. Absences or inadequate inputs such as national legal frameworks and policies, political will, funding, *pre-resettlement survey*, planning, *consultation,* lack of careful implementation and monitoring cases could lead to failure of resettlement programs.

As Mathur (2000), mentions, development projects have multiple dimensions such as phases like designing and construction that incur implementation costs. As a result, basing on some Asian countries experiences resettlement programs on the development-induced displaced will not be prioritized in allocating adequate inputs. Thus, from this approach, proper planning and preparation with the necessary inputs could make resettlement flaws dispensable and manageable. Or else, lack of proper preparation with adequate inputs would be a cause for resettlement failure.

The other approach for clarifying causes for resettlement program failure forwarded by Wet (2004) is the Inherent Complexities Approach. It explains not only lack of inputs but additional issues contribute to unintended outcomes. The complex different dimensions involved other than "inputs" also lead to uncertainty in resettlement programs. Complexities arising from lack of inputs (from the Inadequate Inputs Approach), imposed special changes that lead to new resources tenures, accelerated socio-economic changes and these scenarios happening simultaneously or in short duration could lead to unintended outcomes. Thus, grounds for resettlement program failure go beyond proper planning and dimensions are not fully predictable or manageable.

Nevertheless, the Gasyos-Laos Kebele compulsory displacement and resettlement process could be better explained by the Inadequate Inputs Approach and some spillovers of inappropriate planning.

Before resettlement programs studies on socio-economic issues have to be undertaken and analyzed. Studies as a main component should also incorporate pastoral enriched livestock rearing and communal property management systems. In pastoral communities, valuable resources like camels and grazing lands are property of the whole clan and are administered by communal property regimes (Abdi Abdullahi, 2006). Likewise, the resettlement programs and the irrigated pasture developments in particular should be considerate of the existing property usufruct regimes and other social norms. If not, the resettled could be vulnerable to alter in resources tenures, accelerated socio-economic changes, and other dimensions for resettlement failures described by the Inherent

Complexity Approach. From Gasyos-Laos Keble, Adaytu and other Mille Woreda resettlement planning and implementation experiences, programs could be prone to failures for reasons that are held in the Inherent Complexity Approach.

5.4 Development of Irrigated Pasture and Livestock Rearing

The project has proposed to develop 25,000 hectors of modern irrigated pasture to support the pastoral livestock rearing. The overwhelming of the irrigated pasture totaling 15,000 hectors is to be located in Dubti Woreda. In 2006 and 2007 the aim was to develop shortage mitigating irrigated pasture that covers 2,500 hectors in the Woreda. The plan was underpinned since constructions of the irrigation main canal from the dam reservoir and sugarcane plantations have taken up agricultural and grazing lands in Dubti Woreda. In addition, a total of 3,600 hectors of pasture are to be developed in different Woredas in 2008 fiscal year.

The irrigated pasture apart from their economic importance, they are also viewed as a way of compensating pastoralists for their social asset losses. The plans coincide with the national Rural Development Policies as it intends to preserve the potential values and methods of pastoralist livestock rearing. On the other hand, it is emphasized that proposed rangelands need scientific management which is totally different from customary practices of pastoralism. Thus, apart from encouraging potential values, awareness creation and facilitating trainings on modern livestock management are prioritized issues.

Dabalkee/Calibare Kebele is one project site in Dubti Woreda where sugarcane has been planted and is where the main canal from the dam reservoir cuts right trough passing to other main areas like Det Bahery and Assayta. Pastoralists in the Kebele have lost their grazing and arable lands for the project constructions.

From the household survey, 92% of agro-pastoralist and 52.3% pastoralist respondents were aware of the alternative strategies developed for livestock rearing. 56.0% and 71.1%

respondents of agro-pastoralists and pastoralists noted to have concerns on the strategies developed. Furthermore, 42.2% of pastoralist respondent's opinions were very low to strategies designed to support the livestock rearing. In addition, 100% of respondents had no information about the training to be given on rangeland or livestock management. Table (5.10) preset opinions of pastoralists on the strategies developed.

Table 5.10: Opinions on strategies designed to support livestock rearing

Values	Frequency	Percentage
Very good	-	-
Good	1	1.4
Satisfactory	19	26.7
Low	19	26.7
Very Low	30	42.2
Total	69	97.1
Missing system	2	2.8
Total	71	100

Sources: field survey, 2008

Findings of FGDs support the survey results. Participant clan representatives believe that the irrigated pasture developments are not the priority of the project; thus, were not undertaken in parallel with the sugarcane plantation. To support their views, participants said the planed 2,500 hectares of irrigated pasture which where to be developed in 2006 and 2007 has not materialized. Yet, with in the same fiscal years sugarcane has been planted, forest has been cleared and grazing lands have been taken for construction sites. Thus, the activities have shrunk the available fodder and have created shortages.

Participants stipulated that the pastoral communities are well aware of the sugar initiative being weighed on for the national and the regions economy development. Moreover, in these areas, pastoralists are well informed about the forward linkage benefits derived from later phases of the project. But, their worries were the implementation gaps in sequential phases. Developments being taken without providing alternatives or respect to their values shadowed the aimed objectives for pastoral communities. Participants during discussions noted that there could have been other ways through which the national and

regional goals may be obtained without huge disruptions on their livelihoods. All participants said firstly the irrigated pasture should have been developed prior to sugarcane plantation or other encroachments on grazing areas.

In the discussions, participants were discontented by administrative measures taken on prioritizing issues. They amplified that it is known residents in the area are pastoral communities which their subsistence mainly dependents on grazing land productivity. Thus, when grazing areas are confiscated without alternatives, it is evident that the livelihood uncertainty of nomadic pastoralism increases.

In addition, participants at the time of the discussions could not really picture how they would pass the existing problems and integrate themselves with long term objectives of the project. In their view, the then decision making system least prioritized the pastoral communities. Participants basing on their experiences were worried that when and how the irrigated pastures are going to be developed. They stressed, since government undertakings either take longer time or are delayed to be implemented the durations without alternatives to grazing lands which are the mainstay to pastoral livelihoods could be unbearable.

Problems are even worse with pastoralists when compared to agro-pastoralists given that pastoralist's means to support their livelihood other than livestock rearing are minimal. Their lives are closely tied with grazing lands productivity which has shrunk in size and are overcrowded by both animals and humans.

To quote family representative of more than 20 households of pastoralists:

The destruction of bushes and trees in short durations have created shortage of fodder and goats are dieing from starvation. Animals are over crowded in the remaining grazing areas since there are no alternatives provided. Goats especially, runaround construction sites searching for whatever is found. The problem is construction vehicles go really fast in these areas and many times there are accidents which kill livestock.

Quoted from deputy clan leader for Arebta clan:

They have destroyed shrubs and bushes in no time. Our camels have little to eat and to make things worse it is the dry season. There are no discussions about solving problems between clan leaders and project officials. But, the conditions of pastoralists are worsening as they are dependent on livestock production. Some pastoralists propose to resist but things could be easier if there are discussions with the pastoral communities.

Statements that need worth quoting from a participant

Afars share information and it is part of our custom. In places where the project has not yet reached, they are well aware of what is going on here. It is likely for the project to face some challenges and resistances in further places. They have taken lessons from our experiences.

From Key informants of the NTPIRDCO, the reasons that the irrigated pastures were not developed are because there are no complete studies. The locations and sizes of the lands are not differentiated in the different Woredas and Kebeles. Thus, before developing the irrigated pasture systems, studies had to be complete to show and answer important issues that involve usufruct and land holding rights. It is intriguing how such development initiatives could be attempted with such study gaps. At the time of data collection there were no complete studies on:

- Usufruct rights on the irrigated pasture; is it going to be on household bases or as a common property? If it is on household bases, what is the size of the land that will be allocated for each household?
- In each irrigated pasture sites, how many and which pastoralists are going to be beneficiary?
- If the irrigated pastures are beyond the consumptions of the residential clans, how can other Afar clans or sub-clans from other areas could have access to the pastures?
- What are the necessary trainings that have to be given to pastoralists on irrigated pasture utilization?

Not being well prepared on irrigated pasture development strategies or absence of completed feasibility studies before beginning other project activates like dam and cannels constructions are weighing on the pastoral communities. In Dubti Woreda, the pasture development schemes are falling behind schedules and flaws pertaining to improper planning of sequential events are also visible. There is lack of clarity on expected outcomes again caused by absences of studies. Referring to Gittinger (1984) the incomplete studies in the areas of land holding and usufruct rights made implementation phases not to be flexible in decision making. Thus, addressing the concerns of the affected pastoral communities was challenging for the project.

Though project officials understood the problems created by shortages of grazing and arable lands they could not develop mitigating measures. Absences of complete studies for location, size, and ways of accessing or holding rights on lands made officials not to take effective measures despite visible problems. Without anticipating outcomes on accessing and land holding rights they could not allocate lands for grazing and other purposes. Nevertheless, it is assumed beneficiaries that are bearing the difficulties caused by the flawed planning and preparation system.

5.5 Project Encouragement of Non-Pastoral Livelihoods

Recent developments show that nomadic pastoralism is facing different environmental and man made challenges to sustain as a livelihood. It is also viewed as a hindrance for long term sustainable development and is prone to changes by the national rural development policies. Furthermore, the project implementation is exerting additional pressure on pastoralism and it can not provide employment opportunities for all affected. To be developed rangelands will not sustain the incremental population of pastoralists and their livestock. In modern rearing methods, area size and number of livestock ratio are limited unlike the customary practices of pastoralism. As a result, pastoralists by their compensation are encouraged to engage in non-pastoral activities like petty-trading businesses, production of construction materials, milk processing, transportation etc which reconcile with the national long tern policy objectives.

The mentioned activities are proposed to be profitable by project planners since potential markets will be create by the sugar development processes. The huge movements of track drivers, employees and labors that will be created by the development are the potential targets. Training on saving, banking and on other managerial skills are to be undertaken with the compensation process.

From the key informants; Human Resources Management Department Head at Ministry of Water Resources (MoWR); Planning and Programming Services Head at Tendaho Sugar Factory Project and the NTPIRDCO, implementation of non-pastoral activities have faced challenges. Delayed payments by the project and pastoral communities cultural norms which do not encourage saving are the main bottlenecks.

Informants forwarded that compensations paid in some areas have been spent without creating alternative sources of income making some pastoralists greatly vulnerable. There are also trends among pastoralists not to engage in laborious activities. In Dubti as well as Assayta areas pastoralists have a history of renting their lands to investors cultivating maize and cotton rather than cultivating it themselves. But, these areas are now important sites for out-growing strategies and for other non-pastoral activities of the project.

Despite job openings most pastoralists only have a tendency to be employed as a security guard rather than laborers. To substantiate, the project have more security guards than required for creating employment opportunities. Surprisingly, many former pastoralist employees only come on payment days or there are frequent absenteeism in both guards and the few daily laborers. These trends are making employment and other non-pastoral activities challenging.

Practical problems faced by executors are project construction and implementation being forerunner to the attitudinal changes that are expected from pastoralists. Regardless of the numerous positive advantages gained from integrating with the project, pastoralists are highly resistant to changes that alter nomadic pastoralism. Their main concern remains to be livestock rearing in customary ways. Other initiatives even though feasible for

securing livelihood incomes face resistances. Intensive work on awareness creation and attitudinal changes await the different stakeholders for acceptances and trials of non-pastoral livelihoods by pastoralists.

Informants also added, from the project side there are shortcomings. Even though, the Tendaho Dam and Irrigation Project (TDIP) began its construction and other implementations in late 2005, the stakeholder (the NTPIRDCO) which coordinates the locals to integrate with the project only became functional in January 2008. The stakeholder has responsibilities of giving various trainings on saving, construction, recruiting the locals for employment etc. Thus, satisfactory work has not been done in awareness creation and in providing the necessary training.

Compensation programs were also delayed in some areas. In the interviews, informants did not present reasons why the compensation programs were delayed or why the NTPIRDCO did not undertake its role until January 2008. But, officials from the NTPIRDCO noted lack of coordination is visible among the different main stakeholders of the project. In some areas construction phases have started without providing trainings to pastoralists for opened job opportunities. Moreover, without compensation payments there have been expropriated properties for constructions. The reasons were activities are done by different ministries and bureaus each undertaking their responsibility independently with different chain of command and accountability. And, there are no documents serving as a guideline to coordinate sequential works of these bureaus. Stakeholders at the time of data collection were discussing to generate guiding documents especially for the next fiscal year.

In the prominent stakeholders there has been push and pull of responsibilities in regards to the pastoral communities. The absences of guiding documents and studies had an effect on scheduling activities and allocation of responsibilities. Uncoordinated work with feasibility study gaps are major contributors for the problems caused on pastoralists. Major stakeholders are outlined with their main responsibilities.

1. Ministry of water Resources: mandates the construction of social and physical infrastructures, out-growing of sugarcane strategies, compensation and resettlement programs.

2. Water Works Construction Enterprise: undertakes the construction of canals, dam and irrigation.

3. Ministry of Work and Urban Development: Coordinates Tendaho housing development. It constructs houses, offices and infrastructures for Tendaho employees.

4. Tendaho Sugar Factory Project: land preparation and plantation of cane. They are the final owners of the project.

5. Ethiopian Sugar Industry Support Center: Employees staffs of Tendaho gives capacity building training to cultivators.

6. Water Works Design Supervision and Control Enterprise: Design and control the technical aspect of the construction

7. The Afar Regional Government. It is important stakeholder but the role it has was not clear until January 2008 with the establishment of Namalifa-Tendaho Project Integrated Rural Development Coordination Office, under its auspices which coordinates and facilitates the interaction between the pastoralists and the project; since ,the project is under the Federal Government.

From the household survey, 100% of agro-pastoralist who were compensated replied, trainings of any kind has not been given to them on how to utilize their compensation money. And only 28% of respondents answered they would engage in non-pastoral activities the rest prefer nomadic pastoralism. It is an indication for the awaiting challenges on awareness creation for long term backward and forward linkages with pastoralists.

Based on the FGDs, since training on technical and vocational activities has not been given pastoralists could not enjoy the new jobs created in their areas adding difficulties on the encouragement of non-pastoral activities. Their socio-economic settings make them unfamiliar to most of the new activities to exploit opportunities.

Quoting a clan representative

The government should have at least arranged vocational training 6 month earlier than the construction phases. Afars want to work but most pastoralists do not have the necessary skills. Now, laborers migrating from Amhara and Tigray regions are the ones enjoying the new job opportunities. But, it is the pastoralists and their herds bearing the consequences. The project wants educated people but it does not give training. People around here are unfamiliar to most of the requirements except being a security guard. Agricultural and grazing Lands taken, forest cleared no alternative job; imagine the difficulties.

Quoting another participant

Communities around here are victims of the saying Afar man do not want to work. But, the predominant nonionic livestock rearing can not sustain pastoralists as the surrounding has changed. There is over crowdedness caused by shortages of land and water. People now are left with no option they would do any thing if arranged and organized.

Quoting Afar women representative in the Kebele

Afar women are willing to work and we are hard workers. Women here always ask the project to give them opportunities. Currently there are around 40 women employed as daily laborers.

Project encouragements of non-pastoral livelihoods through job openings and by using compensation payments are areas of pertain for the pastoral communities. Absences of socio-economic studies again made pastoralists not to enjoy the new job opportunities. Gaps in studies, led to uncoordinated works and undertakings that did not reflect pastoral realities. At the time of data collection, it is not the affected pastoral communities that are enjoying job opportunities or other petty-trade activities but migrants from other regions of the county.

At least, the available man power in different vocations should have been clearly identified from the pastoral communities. Or else, short term vocational trainings in construction fields should have been facilitated prior to the construction beginning. Know it is the local pastoralists bearing burdens as their livelihoods have been disturbed by constructions but, they could not enjoy the lucrative.

Promoting non-pastoral livelihoods through the compensation payments need commitments. Without awareness creation, providing suitable alternatives, and enhancing pastoralist's skill through saving and micro finance trainings feasible changes can not be expected. It is possible to say, the implementation process of compensation payment is partly responsible for the wastage of the compensated money without creating sources of income. Even though the project has paid a delayed compensation it has not provided any training on how to utilize payments showing gaps in sequential activities. Nevertheless, the confiscation processes have altered the predominant livelihood systems of pastoralists and had them uncertain in what to perform. Hence, some agro-pastoralists could be vulnerable since their arable lands are taken and if they have spent the compensation payments unwisely. It is a likely situation considering the saving habits of Afar pastoralists.

In the FGDs, participants stipulated that they have been affected because of the coordination gaps. They could not identify the responsible agency that coordinates the discussion for solving problems. A scenario that substantiates the communication and organization gaps by quoting participants *versions* of what had taken places at the beginning of constructions in Dabalkee/Calibare Kebele:

19 bulldozers came without informing pastoral communities or notifying clan leaders and destroyed the bushes in less than a week. When the local community tried to ask and resist, the answer was coercive measures by the military and federal police. They imprisoned women and in Afar tradition that is the worst punishment. Officials said pastoralists who disrupt the construction vehicles would pay their rentals in hourly bases. They said paying compensation is not their responsibility.

As shown above, constructions of the main canal are done by Water Works Constructions Enterprise (WWCE). Paying compensation and mobilizing the pastoralists is not the responsibility of WWCE officials. Moreover, in the last months of 2006 when constructions began in the Kebele, the NTPIRDCO which is the main stakeholder that coordinates the locals for smooth relation was not functional.

Another participant said

Cattle and goats were bulldozed. 30 camels were stack by the construction dust for 3 days. We have lost goats being frightened and some have been eaten by beasts. Finally, the government compensated by paid 300 Birr for each goat that was lost because of construction dust. The pastoralists live scattered in the bushes; this would not have taken place if pastoralists were informed to collect their livestock. It is very difficult to expect cooperation from pastoralists when not respecting their values and wants.

The 300 Birr paid for each goat buried by construction dust was done by Ministry of Water Resources (MoWR). There were also discussions held between clan and ministry representatives in solving problems. However, discussions for facilitating further arrangements in the Kebele could not continue since the ministry has no responsibility to coordinate the Afars.

5.6 Sugarcane Out-growing Strategies and Compensation Programs

The project has different proposals to compensate the affected communities and is responsible for their social and physical asset losses. Due to project constructions, prior-irrigation schemes, cotton, maize, sesame and haricot been plantations have been lost from agro-pastoralists, state farms and private investors in the project areas. In recognition, the project in 2007 has paid a sum of 12 million Birr as compensation. Out of which, 9 million is paid to Afar agro-pastoralists. In the incumbent year, the project estimates to pay 30 million Birr for further losses created by constructions. Previously, payments were done to clan leaders and clan leaders distributed the money by customary rules to affected agro-pastoralists. However, in some Kebeles of Dubti Woreda based on

the experiences of the customary practices, compensations were done on household level individually.

The compensation is for the production interruption caused on lands they cultivated. In the later phases, these agro-pastoralists would be out-growers of sugarcane to the factory. It is clearly indicated that from the total of 70,000 hectares of sugarcane plantation 28,000 hectares are reserved for agro-pastoralist cultivators. Out-growing method is assumed to raise household income up to 9,000 Birr per year. 2 and ½ hectors of land would be allocated to each household for out-growing programs. The plan is to be and being conducted in Assayta, Afambo and partially in Dubti Woredas. The project will cover construction costs of the irrigation system on household lands and the cultivators cost will be the land preparation and transportation of sugarcane to the factory gate.

Construction of 28 villages is planed and is on progress for the out-growers in the different Woredas. Construction of Social and physical infrastructures such as primary schools, slaughter areas, health centers, Mosques, telecommunication and postal services, green area, transportation systems and etc are to be on national standards. A total of 6 primary school, 4 health centers and 4 Mosques will be built for the villages. In the incumbent year there is a budget held by Ministry of Water Resources (MoWR) for constructing 3000 houses.

As showed by Temesgen and Mathewos (2005) Socio-Economic Impact Assessments on Tendaho Dam and Irrigation Project, compensation is to be paid 6 month earlier than the interruptions of the livelihood incomes. In the case study Dabalkee/Calibare Kebele compensation has been paid to agro-pastoralists and residents are part of the project's out-growers scheme.

From the interview with Key Informants like the NIPIRDCO officials, and Head of the Human Resources Department at Ministry of Water Resources (MoWR); compensation has been paid for the production interruption. The project paid 5,200 Birr per hectare for lands cleared and cultivated by agro-pastoralists. And, 5600 Birr per hectare for lands

which were state farms lands in Derg regime but returned to the Afars between 1991 and 1993 E.C following the change of government and ever since cultivated by agro-pastoralists.

Project officials believe the amount paid is appropriate since it has considered the labor cost of the agro-pastoralist and the market values of the production per hector. In some Kebeles, compensation payments were done to the clan leaders and clan leaders distributed the money by customary rules. But this compensation method resulted in violence and discontent among clan members. In the Dabalkee/Calibare Kebele payments were done individually on household bases.

From the household survey; 100% of the compensated respondents replied they were compensated in cash for their losses. 92.0% answered after their cultivation was interrupted that they were compensated. And, 64% said, compared to their losses the compensation paid is low. About, the compensation process, 40% respondents answered the implementation process was very low in meeting their expectations. Table (5.11) and (5.12) present opinions on compensation payments meeting their losses and its implementation process respectively.

Table 5.11: Opinions on compensation payments

Values	Frequency	Percentage
Very good	-	-
Good	-	-
Satisfactory	3	12.0
Low	16	64.0
Very Low	6	24.0
Total	25	100

Sources: field survey, 2008

From the FGDs, agro-pastoralists views are comparable to the findings of the survey. Participants said they were not formally notified that the compensation paid is for production interruption. In addition, there were no discussions on compensation programs

even with clan representatives. The project allocated the amount paid per hectare without any community involvement.

Moreover, participants are worried that the compensations paid could be for expropriating lands. Though agro-pastoralists said they have informally heard about the out-growing strategies, they are not notified by any authority whether the payments are for the fiscal year interruption or until the out-growing plan begins or else. Clan representatives believe the reason why pastoral communities are not formally notified about the out-growing package is that, the project is going to take arable lands with these insignificant compensations. Their justifications are the 5200 and 5600 Birr compensation paid per hectare are a lesser equivalent to the market value of the per year productions earned from the lands rather than the values of the lands.

Table 5.12: Opinions on compensation implementation process

Values	Frequency	Percentage
Very good	-	-
Good	1	4.0
Satisfactory	2	8.0
low	11	44.0
Very low	10	40.0
Total	24	96.0
Missing system	1	4.0
Total	25	100

Sources: field survey, 2008

Supporting the findings of the household survey, participants from the FGDs said cultivators have huge reservation on the compensation process. Their reasons are payments were done a year after the production interruption and expropriation of arable lands. They blame the project executers for the difficulties they had to shoulder for a year without cultivating the lands or compensation paid.

From observation, the lands covered by sugarcane plantation in the Kebele are lands which were under state cotton farms. On the expropriated lands there were no sugarcane

plantations yet. Thus, the lands for more than a fiscal year were cultivated neither by the project nor by agro-pastoralists wasting the available man power and the resource at hand.

Quoting clan representative

It came very late after one year and half since the land has been taken and we were forced to stop cultivating. You could imagine the suffering we encountered. The maize we cultivated was used for household consumption and also for market. The by-product of the maize use to feed 3000 cattle in addition to the grazing land.

FGDs participants stated that they do not know why the projects failed to initiate discussions on the compensation programs with agro-pastoralists. Their suggestions were it could be from lack of answers to questions that could be raised by pastoralists. Agro-pastoralists may demand more payments or might ask what the money is for, or else ask for how long is production interrupted? And participants feel the project has no answer to these kinds of questions, thus prefer to coerce. In addition, as discussed above, the cultivated land size of households determined the amount of compensation. But, clan representatives said agro-pastoralists in the Kebele have reservations on land measurements.

To quote a family representative of 24 house-holds use to cultivate 24 hectares of lands

In this area there were 300 hectares of lands developed by agro-pastoralist for cultivating maize. Compensation for developers has been paid. But, payments were done to agro-pastoralist a year and half late or after the expropriation in January 2008.

There were no community participation in allocating amounts or agro-pastoralists were not asked how much they used to earn from the lands. Officials only paid what they thought are equivalent to per hectare production. 5,200 Birr per hectare was paid to the developers. The problem is payments were only done to 56 hectares. Officials said that is

the size of the land but agro-pastoralists have measured the land for the purpose of using fertilizer and better seeds with experts working on rural development.

Key informants from the NTPIRDCO and Ministry of Federal Affairs (MoFA) forwarded that there are no complete studies done on land holdings and usufruct rights. Thus, through explanations could not be given to agro-pastoralist on important issues pertaining land holdings except broad objectives. There are no complete designs and demarcations on:

I. Issues on land holdings

— Which areas are cultivated by the government, their location and size?
— Which areas are cultivated by local agro-pastoralists, their location and size?
— Identifying arable lands that will be used for cultivating crops other than sugarcane?
— For cultivating sugarcane, what is the land size by hectare that will be allocated for each out-grower household?

II. Issues on usufruct rights

— Lands cultivated by out-growers, will it be distributed to households or be held as a common property?
— What alternatives are prepared if agro-pastoralists cultivating sugarcane find it unprofitable and want to change cropping?
— What are the necessary trainings that have to be given to out-growers and other agro-pastoralists?

Representatives of pastoralist address that they are the ones with the heaviest burden compared to agro-pastoralists. Given that land is public property, there was no compensation for the natural grazing lands used by nomadic pastoralists. They explained, grazing lands and watering sites are collectively owned by the specific pastoral community and administered by clan leaders. Since, land tenures among pastoral communities have been long held from forefathers, demarcations of clan lands are clear. Thus, following these demarcations other clans and sub-clans do not share their grazing

lands with others however the natural pasture being a public property. An attempt to use other Afar clans land or Somali ethnic pastoral lands could be a dangerous cause for serious conflicts. In Afar and other pastoral communities it is the customary rules that govern usufruct rights on lands.

Quoting a representative participant

For grazing lands there was no compensation or alternative fodder provided for livestock. Pastoralists were told since land is the property of the government there are no compensation money. Payments are only for capital investments on the lands but, pastoralists in the area use natural pasture. However, because of shortages of grazing lands cattle are starving and there is lack of milk for children and calves.

CHAPTER SIX

Concluding Remark

Governments have responsibilities to allocate their country's human, natural and financial resources for optimal development purposes. And, citizens have a right to participate in, control and enjoy economic, social and political developments as part of their fundamental human rights. In these respects, the Ethiopian government has responsibilities to gear the country's enormous irrigation potential for the betterment of the national economy and for balancing development gaps between regions and peoples. On the other hand, no matter how attractive irrigation initiatives look the government has to take the necessary steps in planning and implementing irrigation schemes. As shown in Ali (1997); Ayalew (2001); Temesgen and Mathewos (2005) and Lankford (2003); large scale irrigation developments are expensive and need the necessary due care in project planning and implementation to enjoy the positive outcomes.

The Tenhaho Dam and Irrigation Project is a large scale irrigation intervention by the government in the lower Awash basin. It involves construction of dam and using massive plains for sugarcane cultivation on lands which were and are used by pastoral communities. As discussed, the project implementation is accompanied by development-induced displacement, compensating for expropriations and integrating the affected communities with development or making they part of the beneficiaries. Consequently, it is stipulated in project documents that the national and regional objectives to be in parallel to the benefit and development of the affected pastoral communities. Otherwise, it would be ironic to what the development project stands for.

Basing on the findings of the study, in the two and half years experiences of project planning and implementation issues that deeply concern the affected pastoralists are not well maintained in accordance to established objectives. Resettlement and compensation programs, irrigated pasture developments and out-growing strategies are some of the areas that need better scrutiny in planning and implementation to address the desired objectives.

Apparently, the project is not sufficiently prepared and organized in handling the pastoral communities. Project encouragement and level of the pastoral communities' participation in the different activities mentioned above are minimal. To validate, despite the beginnings of constructions in 2005, the governmental stakeholder (NTPIRDCO) that coordinates and directs the pastoral communities with project activities only became functional in 2008. As a result, issues brought by pastoralists on employments, displacement and resettlement, compensation processes or pasture developments could not be answered in satisfactory manners. Moreover, it shows, for more than 2 years the project was not in better lot for integrating with pastoralists. It is likely that these situations could result in negative consequences for the construction as well as sugar and ethanol production phases.

It is verified by numerous studies that previous regimes commercial plantation initiatives by large had resources centered approaches in the lower Awash valley with negligible concerns to pastoralists. From past experiences, there are already developed grievances among pastoralists on irrigation and commercial farms. And, dissatisfactions are manifested by purposeful vandalisms of the then cotton and now sugarcane plantations by pastoralists. Thus, no matter how attractive the sugar development objectives look to the national economy implementations could be challenged if pastoralists feel left out from beneficiaries. Otherwise implementations without integrating or owning acceptances from pastoral communities would be preparing the project similarly to its predecessors. That is to say, the initiative would contribute to the wastage of scares resources, create environmental pressure and above all worsen livelihood difficulties for pastoral communities.

It is evident that the project has ambitious plans for trying to attain desired objectives in short duration without the necessary inputs. Project officials have made explicit that consultancy firm costs and the amount of time studies take forced implementation of the project without complete socio-economic impact assessments. Nevertheless, implementations have faced the drawbacks of rushed planning that are developed from

incomplete pre-feasibility studies. Study gaps on land usufruct rights and in the areas of distributing irrigated pasture benefits are optimal examples. Thus, further studies that show proper means for attaining both national and pastoral communities' objectives have to be developed and priorities have to be reoriented.

There is also a need to base the project irrigation schemes on complete socio-economic studies to anticipate outcomes and to be flexible in solving arising problems. As illustrated by Lankford (2003) the success of irrigation schemes need to consider other sectors and livelihoods inter-connected in the basin. Hence, proper land and water management institutions as well as conflict mediation mechanisms have to be installed. Or else, the irrigation would add to what Ali (1997) and Ayalew (2001) explained of irrigation developments being a contributor to the decline of livestock production in pastoral areas. It is cited in these studies that, water saving mechanisms have tapped the flood used to maintain grazing contributing to rising conflicts over limited pasture. In addition, irrigation systems are factors for soil salinity and for water born diseases. Consequently, it is important to consider the necessary managerial and conflict resolution institutions with appropriate studies. And, the Tendaho Dam and Irrigation Project have to make sure it has proper studies in theses areas at inception.

Activities that alter the predominant livelihood systems have to be carefully analyzed in relation to forthcomings. Developments involving phases have to be sequentially implemented with the necessary planning and feedbacks. Gaps in implementations of sequential phases could raise unintended outcomes. As the study show, the affected pastoralist's livelihoods are even at greater risks of uncertainty and vulnerability because of gaps in implementing succeeding phases. Subsistence means for pastoralists and agro-pastoralists have been disturbed by the project however; their destiny and integration are not supported by appropriate studies. If project objectives are not supported by proper pre-feasibility studies, it is blurred to anticipate outcomes. It is clear uncertainty is inevitable as development interventions introduce new changes nevertheless, some could be managed through calculated risks and by appropriate development project planning methods.

References

Abdi Abdullahi, 2006, On the Move Understanding pastoralism in Ethiopia. Pastoralists Concern Association of Ethiopia, Addis Ababa.

Abdul B. Kamara, 2001, Property Rights, Risk and Livestock Development In Southern Ethiopia. Kiel Wissenschafts Verlag Vauk Kiel, K G.

Ali Sadi, 1997, Resource Use Conflict in the Middle Awash Valley of Ethiopia: The Crisis of Afar Pastoralism. In Richard Hogg (ed.), Pastoralists, Ethnicity and the State in Ethiopia. Haan Publishing, London.

Assefa Abebe, 2001, Conflict in pastoral communities. In Pastoralism in south Omo: Towards on Integrated Development. Proceeding of the work shop held in Jinka (South Omo) October 11-15 2001. Ethiopian Pastoralists Research and Development Association (EPaRDA). Addis Ababa, Ethiopia.

Ayalew Gebre, 2001, Pastoralism under Pressure, Land Alienation and Pastoral Transformations among the Kerrayu of East Ethiopia, 1941 to the Present. The Hague: Institute of Social Studies, the Nether Lands.

Beruk Yemane, 2003, Drought and Famine in the Pastoral Areas of Ethiopia. In Pastoralist Forum Ethiopia: Proceedings of the third National Conference on Pastoralism and Sustainable Pastoral Development. December 23-24, Addis Ababa.

Cernea, Michael M., 2000, Risks, Safeguards, and Reconstruction: a Model for Population Displacement and Resettlement. In Harimohan Mathur (ed.), Development, Displacement and Resettlement. Focus on Asian Experience. Vikas Publishing house PVT LTD.

Cohen and Weintraub, 1975, Land and Peasants in Imperial Ethiopia. The Social Back ground to a Gevolution. Vas Gorcum &Comp. BV Assen, The Nether Lands.

Creswell, John W., 2003, Research Design Qualitative, Quantitative and Mixed Methods Approaches. Second Edition. University of Nebraska, Lincoln. SAGE Publication, London United Kingdom.

Degefa Tolossa and Axel Baudouin, 2005, Pastoralism in the Horn of Africa. Annotated Bibliography 1980-2005, Working papers on Population and Land Use

Change in Central Ethiopia. Department of Geography, Faculty of Social Science and Technology Management, NTNU, Trondhein, Norway and Institute of Development and Research, Addis Ababa University, Ethiopia.

Dejene Aredo, 2001, Review of Theories on Land Tenure and Country experience. EEA/ Ethiopian Economy Policy Research Institute (EEPRI). Working paper No.4/ 2002.

Development Project Studies Authority, 1990, Offices of the National Committee for Central Planning. Guidelines to Project Planning in Ethiopia (Revised), January 1990, Addis Abba.

Dinku Lamessa Bato, 2004, Socio-Cultural Dimensions of Conflict Induced Displacement. The Case of Displaced Person in Addis Ababa. In Alula Pankhurst and Francois Piguet (eds.), People, Space and the State Migration, Resettlement and Displacement; in proceeding of the work shop held by the Ethiopian Society of Sociology Social Works and Anthropologist and The United Nations Emergencies Unite for Ethiopia; 28-30 January 2003. The Ethiopia Society of Sociologist, Sociology and Anthropology, Addis Ababa University. Addis Ababa, Ethiopia.

Getachew Kassa, 2001, Dimensions of Pastoral Poverty in Ethiopia. In Yacob Arsano (ed.), Pastoralist Forum Ethiopia; Proceeding of the Second National Conference on Pastoral Development in Ethiopia. Poverty Reduction Strategy and Pastoral Development. May 22-23, 2001. Imperial Hotel Addis Ababa. Pastoralist Forum Ethiopia. Addis Ababa, Ethiopia.

Getnet Alemu, 2002, Aid-driven Import Substitution and the Agriculture. Maastricht, Shaker, The Hague.

Gettinger, J. Price, 1984, Economic Analysis of Agricultural Projects; Second Edition, completely revised and expended. EDI Series in Economic Development. The John Hopkins University press, Baltimore and London

Helland, Johan, 2001, Participation and Governance in the Development of Borana; Southern Ethiopia. In Mamhoamed. (elta), African Pastoralism Conflict, Institution and Government Organization. SSREA, Pluto press. England.

Israney, S.M, 1999, The Art and Craft of Research Methodology in Social Science with Special Reference to Economic and Commerce. Universal Publishing Corporation, Bombay. India.

Kothari, C.R., 2002, Research Methodology Methods and Techniques. Wishwa Prakashan, New Delhi, India

Lakford, Bruce, 2003, Irrigation Based Livelihood; Trends in River Basins, Theory and Policy Implementation for Irrigation Development. In The horn of Africa pastoralist Communication Initiative; Pastoralism, Productivity, Governance and Services. Reading Material volume 1. 7th July to 1st August 2003. Institute of Development Studies at the University of Sussex, UK.

Manger, Leif, 2000, East African Pastoralism and Underdevelopment: An Introduction. In Leif Manger and Abdel Ghaffer M. Ahmed (eds.), Pastoralist and Environment, Experience from the Greater Horn of Africa. Proceeding of the regional work shop on Africa Dry Lands, Addis Ababa and Jinja. Organization for Social Science Research in East and South Africa (OSSREA), Addis Ababa.

Markakis, John, 2004, Pastoralist on the Margin Minority Right Group International MRG, UK.

_____ 1993, Conflict and the Decline of Pastoralism in the Horn of Africa. Antony Rowe Ltd Chippenham, Wiltshire, Great Britain.

Mc cay, Bonnie, 2000, Amplifying Loral Voices; striving for Environmental Justice. Proceeding of the Africa Public Interest Law and Community Based Property Rights Work Shop. August 1-4 2000 Usa River, Arusha, Tanzania.

Melakou Tegegn, 2001, Introduction. In yacob Arsano (ed.), Pastoralist Forum Ethiopia Proceeding of the Second National Conference on Pastoral Development in Ethiopia. Poverty Reduction Strategy and Pastoral Development. May 22-23, 2001. Imperial Hotel Addis Ababa. Pastoralist Forum Ethiopia. Addis Ababa, Ethiopia.

Ministry of Information; Press Audiovisual Head, 2003, The Federal Democratic Republic of Ethiopia Government. Rural Development Policies, Strategies and Plans. November 2002, Addis Ababa (published in Amharic)

Ministry of Water Resources, 2005, The Federal Democratic Republic of Ethiopia: Ministry of Water Resources. Tendaho Dam and Sugar Project final Report Sugar Production Agronomy and Farm Machinery. Addis Ababa.

Mathur, Hari Mohan, 2000, The Resettlement of People Displaced by Development Projects Issues and Approaches. In Michael M. Cernea and Christopher M.c Dowell (eds.), Risk and Reconstruction Experiences of Resettles and Refugees. The World Bank, Washington D.C.

Mohammud Abdulahi, 2003, Pastoral Development Strategies/Policies in Ethiopia: A Critical Analysis and Evaluation. In Pastoralist Forum Ethiopia: Proceedings of the Third National Conference on Pastoralism and Sustainable Pastoral Development, December 23-24, Addis Ababa.

Mwanje, Justus Inonda, 2001, Issues in Social Sciences Research. Social Sciences Methodology Series Module 2. Organization for Social Sciences Research in Eastern and Southern Africa (OSSREA), Addis Ababa, Ethiopia.

Nemalifun- Tendaho Project Integrated Rural Development Coordination Office, 2007, The Nemalifun- Tendaho Project Integrated Rural Development Coordination Office; 2000 E.C Fiscal Year Budget, November 2007, Semera. (Amharic Version)

Nicol, Alan, 2002, Prevention of Violence, Conflict and the Coherence of EU policies Towards the Horn of Africa. EU, Policies and the Risk of Conflict in Ethiopian's Awash Valley.

Pankhurst, Alula, 2004, Long Term Implications of Resettlement in Ethiopia. In Alula Pankhurst and Francois Piguet (eds.), People, Space and the State Migration, Resettlement and Displacement; in proceeding of the work shop held by the Ethiopian Society of Sociology Social Works and Anthropologist and The United Nations Emergencies Unite for Ethiopia; 28-30 January 2003. The Ethiopia Society of Sociologist, Sociology and Anthropology, C/O Department of Sociology and Anthropology Addis Ababa University. Addis Ababa, Ethiopia.

Swift, Jeremy, 2003, Pastoralist and Mobility in Dry Lands; United Nation Development Program, Global Dry Lands Imperative Challenge Paper. In The horn of Africa

Pastoralist Communication Initiative, Pastoralism Productivity, Governance and Services. Reading Material Volume 1. 7th July to 1st August 2003. Institute of Development Studies at the University of Sussex, UK.

Temesgen Yimer and Mathewos Teferra, 2005, Socio- Economic Impact Assessments on Tendaho Dam and Irrigation Project. May 2005, Addis Ababa.

Tesfaye Teklu, 2003, Rural Land and Evolving Tenure Arrangement in Ethiopia. Issues, Evidence and Policies. FSS, Discussion paper No. 10. Forum for Social Studies, May 2003, Addis Ababa.

Tesfaye Tafesse, 2007, The Migration, Environment and Conflict Nexus in Ethiopia. A Case Study of Amhara Migrant Settlers in East wollega zone. Organization for Social Sciences Research in Eastern and Southern Africa (OSSREA), Addis Ababa, Ethiopia.

Teshome Workie, 1990, Seminar on Manpower Development for Industry. Manpower Planning and Utilization in Project Implementation, February, 1990, Addis Ababa.

Wet, Chrisde, 2004, Why Do Things So Offend Go Wrong in Resettlement Projects. In Alula Pankhurst and Francois Piguet (eds.), People, Space and the State Migration, Resettlement and Displacement; in proceeding of the work shop held by the Ethiopian Society of Sociology Social Works and Anthropologist and The United Nations Emergencies Unity for Ethiopia; 28-30 January 2003. The Ethiopia Society of Sociologist, Sociology and Anthropology, C/O Department of Sociology and Anthropology Addis Ababa University, Addis Ababa, Ethiopia.

Yacob Arsano, 2001, Pastoralism in Ethiopia: the Issue of Viability. In Yacob Arsano (ed.), Proceeding of the Second National Conference on Pastoral Development in Ethiopia. Poverty Reduction Strategy and Pastoral Development. May 22-23, 2001. Imperial Hotel Addis Ababa. Pastoralist Forum Ethiopia, Addis Ababa, Ethiopia.

Yirgalem Assegid and Eyasu Elias, 2001. Challenges and Prospects of Common Property Resource Management in the Middle Awash Valley Afar Region. FARM- Africa and SOS-Sahel Sept-2001, Addis Ababa.

Appendix-1
Addis Ababa University
Institute of Development Research
Rural Livelihood and Development

A household questionnaire for the Study of Effects of Commercial Agriculture Enterprise Development on the Livelihoods of Afar Pastoralists: The case of Tendaho Dam and Irrigation Project.

A: Background Information
To be completed by the interviewer

A.1 Identification of House-hold **Date of interview**

-Name of Kebele_____ **Day**_____
-Name of Village_____ **Month**_____
-House-hold code_____ **Year**_____

-Name of Enumerator _____
- Comments _____
_____
_____
_____
_____
_____
Signature _____

A.2 House-hold profile

1. Name _____
2. Sex 1. Male 2. Female
3. Age
   1.15—24 2. 25—34 3. 35—45
   4. 45—55 5. Above
4. Occupation
   1. Pure pastoralist 2. Agro- Pastoralist
   3. Other specify _____
5. Educational statues in grade completed
   1.1-5 2. 6-8 3. 9-10 4. 11-12 5. above 12
   6. illiterate
6. Marital status
   1. Never married 2. currently married 3. Separated
   4. Divorced 5. Widowed

7. House-hold size _____
8. Name of clan _____

B. Information about communities' participation in concerned project activities.

9. Are you informed about the activities of Tendaho Irrigation Project that involves local community's participation? If (NO) pass to question 26.
   1. Yes 2. No
10. If (yes) mention some project activities that involve local community's participation?

    1. _____
    2. _____
    3. _____
    4. _____
11. Have you ever been engaged in project activities? If (No) pass to question 17.
    1. Yes 2. No
12. If (yes) at what stages of the project?
    1. Designing 2. Implementation 3. Both
13. Your opinion on level of community's participation in project activities.
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
14. what is your reason?

    _____
    _____
    _____
    _____
15. In the activities you were or are engaged in the project, were or are you allowed to present your opinions?
    1. Yes 2. No
16. Your opinion on the project roles in encouraging community's participation.
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
17. Your opinion on project activities in targeting areas of concern in the community.
    1. Very good 2. Good 3 Satisfactory 4. Low
    5. Very Low
18. How do you see activities of the project being appropriate to alleviate problems of the community?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
19. Your opinion on the activities of the project in accommodating interests and values of the community?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
20. what is your reason?

    _____
    _____
    _____
    _____

21. Have you contributed to the efforts of the project by your participation?
    1. Yes 2. No
22. If (yes) in what way?

_____
_____
_____
_____

23. How do you see the overall efforts of the project in meeting community's interest?
    1. Very good 2. Good 3. Satisfactory
    4. Low 5. Very low
24. Do you have concerns on project implementation?
    1. Yes 2. No
25. From your participation what major challenge/s did you observe? Not more than 3.
    1. None 2 challenge/s _____
    _____
    _____
    _____

26. General views and opinions on Tendaho projects on community participation.

_____
_____
_____
_____
_____
_____

C. Information about Displacement and Resettlement.

27. Are you displaced? If (yes) pass to question 29
    1. yes 2. No
28. Are you a potential to be displaced?
    1. Yes 2. No
29. If (Yes) Were/are you informed about the displacement strategies prior to the displacement program?
    1. Yes 2. No
30. Did you in counter losses because of displacement?
    1. Yes 2. No
31. If (yes), physical asset losses

_____
_____
_____
_____
_____

32. Estimated amount of physical asset losses in Birr _____
33. Social asset losses

_____
_____
_____
_____
_____

34. Have you received problem mitigating measures in the process of displacement?
    1. Yes 2. No

35. Have you been compensated? If (NO) pass to question41.
    1. Yes 2. No
36. If (yes) compensation in form of----
    1. Cash 2. Kind
37. When were you compensated?
    1. Before displacement 2. After displacement
    3. In the process of displacement
38. How do the compensation programs meet to your losses?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
39. Have you received training on how to utilize your compensation effectively? If (NO) pass to question 41.
    1. Yes 2. No
40. If (yes) your opinion on the importance of the trainings gives to you?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
41. What are your reasons?

    _____
    _____
    _____
    _____
    _____

42. Are you interested to engage yourself in activities other than pastoralism by the compensations and trainings you received?
    1. Yes 2. No
43. Your opinion about compensation process and implementation?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
44. Have you been resettled?
    1. Yes 2. No
45. Have you been asked where to be resettled?
    1. Yes 2. No
46. How do you see the relocation area suitability?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
47. What is your reason?

    _____
    _____
    _____
    _____
    _____

48. Your opinion on the resettlement program addressing community's interest?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low

49. Are there provisions of social and physical infrastructures in the resettlement area?
    1. Yes 2. No
50. If (yes), what kind of infrastructures:
    1. Primary schools 2. Health centers 3. Veterinary centers 4. water supply
    5. roads 6. Houses 7. Others specify _____
    _____
    _____
    _____
51. Your opinion on the level of social and physical infrastructures provided in the resettlement area.
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
52. How do facilities meet your expectations?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
53. How was your participation in the resettlement process and implementation?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low
54. Form your participation, what major challenge/s did you observe in the resettlement process and implementation? Not more than 3.
    1. None
    2. Challenge/s _____
    _____
    _____
    _____
55. What gains and benefits do you expect form the resettlement program?
    _____
    _____
    _____
    _____
    _____
56. Do you have concerns in the overall activities of the displacement and resettlement programs?
    1.Yes 2. No
57. General views and opinions on what the displacement and resettlement programs should consider.
    _____
    _____
    _____
    _____
    _____
    _____

D. Information about accessing and utilizing resources

58. Have you lost physical resources for Tendaho Project site area?
    1. Yes 2. No

59. If (yes) what kind of resources?
    1. Grazing lands 2. watering sites 3. Forests
    4. Irrigated pastures 5. Arable lands 6. others _____
    _____
    _____
    _____

60. Are you informed about compensatory and alternative strategies developed by Tendaho for physical resources lost to the project?
    1. Yes 2. No

61. If (yes), to what kind of resources?
    1. Grazing lands 2. watering sites 3. Forests
    4. Irrigated pasture 5. Arable lands 6. others _____
    _____
    _____
    _____

62. Are you informed about the trainings given on how to utilize resources scientifically?
    1. Yes 2. No

63. If (yes), are you trained on how to utilize resources? If (No) pass to question 65.
    1. yes 2. No

64. If (yes), how do trainings meet your expectations?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low

65. If (No) what is your reason?
    1. Lack of opportunity 2. Lack of information 2. Did not want
    3. Shortage of trainers and facilities
    4. Other specify_____
    _____
    _____
    _____

66. What major challenge/s do you observe on the strategies? Not more than 3.
    1. None 2. challenge/s_____
    _____
    _____
    _____

67. In your opinion how do strategies designed by the project for resource utilization meet community's interests?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low

68. How do utilizing and accessing rights to resources meet your expectations?
    1. Very good 2. Good 3. Satisfactory 4. Low
    5. Very Low

69. Do you have potential concerns on the strategies developed?
    1. Yes 2. No

70. General views and opinions on what the strategies on accessing and utilizing resources for the community should consider.
    _____
    _____
    _____
    _____

Appendix-2
Addis Ababa University
Institute of Development Research
Rural Livelihood and Development

Qualitative Methods

Key informant Check List

► Project planning and level of community participation?

► Methods and processes of implementation of project activities?

► Compulsory displacement and resettlement programs and processes of the project?

► Projects compensation programs, methods and processes?

► Mitigating mechanisms of negative effects on Pastoral communities?

► Project's role in livestock production? (rangeland developments)

► Project's role in accessing resources among the different entities?

► Perception and attitude of affected people in the view of the project officials?

► Perception of officials and plan executors about project activities?

► What are the achievements of the project with regards to the pastoralists?

► Interactions between pastoralists and the enterprise for sustainable implementation of the project.

→ Employment and job opportunities
→ Utilization of resources
→ Provision of social and physical infrastructures
→ Veterinary services
→ Capacity building and training
→ Fishery development
→ Urban development
→ Agro industry development
→ Development of businesses and trading activities
→ Cultural development and diffusion

Appendix-3
Addis Ababa University
Institute of Development Research
Rural Livelihood and Development

Qualitative Methods
Focus group discussion Check List

► How do you see the Tendaho Project in involving local communities?

►How do you see the projects activities in addressing areas of concern in the community?

►How do you see the project accommodating interests and values of the community?

► How do you see the efforts of the project in meeting the interest of the community?

► How do you see compulsory displacement and compensation methods?

► Opinion on resettlement program.

► Opinion on your livestock production and project support to the rearing?

► How do you see the trainings provided by the project on various areas?

→ Saving and banking

→ Management of range land

→ Sugar agronomy

→ On various vocational activities

► What do you expect form the project?

► What merits and benefit have you gained form the project?

► What constraints to you see in the project and what should be done?

Declaration

I, the undersigned, declare that the thesis is my original work, has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

Declared by:

Klondwossen Yemane

Candidate

Confirmed by:

Advisor