

**ADDIS ABABA UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**  
**INSTITUTE OF HUMAN RIGHTS**

**Sedentarization: A Means to Promote the Right to  
Food, Health and Education**

*The Case of Karrayu Pastoralists of Eastern Ethiopia*

**A Thesis Submitted to the Institute of Human Rights of Addis Ababa  
University**

**In Partial Fulfillment of Obtaining Masters Degree in Human Right  
Studies from Institute of Human Rights**

**By Tsion Belay**

**February, 2011**

**ADDIS ABABA UNIVERSITY**

**Institute of Human Rights**

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**Thesis Advisor: Ayalew Gebre (Ph.D)**



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**Signature**

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## **List of Acronyms**

<b>ACHPR</b>	African Charter on Human and People's Rights
<b>CEDAW</b>	Convention on the Elimination of All Forms of Discrimination against Women
<b>CESCR</b>	Committee on Economic, Social and Cultural Rights
<b>CRC</b>	Convention on Rights of Child
<b>DFO</b>	Direct Field Observation
<b>EPRDF</b>	Ethiopian Peoples' Revolutionary Democratic Front
<b>FDRE</b>	Federal Democratic Republic of Ethiopia
<b>FGD's</b>	Focused Group Discussions
<b>GoE</b>	Government of Ethiopia
<b>HIV</b>	Human Immuno Virus

<b>HSEP</b>	Health Service Extension Program
<b>ICESCR</b>	International Convention on Economic, Social and Cultural Rights
<b>KII</b>	Key Informant Interviews
<b>MoFA</b>	Ministry of Foreign Affairs
<b>PASDEP</b>	A Plan for Accelerated and Sustained Development to End Poverty (PASDEP)
<b>SDPRP</b>	Sustainable Development and Poverty Reduction Program
<b>SNNPR</b>	Southern Nations, Nationalities and Peoples
<b>STD's</b>	Sexually Transmitted Diseases
<b>TVET</b>	Technical and Vocational Education and Training
<b>UDHR</b>	Universal Declaration on Human Rights
<b>UN</b>	United Nations
<b>EC</b>	Ethiopian Calendar

## Glossary of Amharic and Oromiffa Terms

<b>Afrasa</b>	Short rainy Season that occurs from February to April
<b>Birr</b>	Ethiopian currency (16.79 birr= 1USD, during February 2011)
<b>Derg</b>	Refers to committee, and the name of the government that ruled Ethiopia between 1974 and 1991
<b>Ganna</b>	Main rainy season in <i>Afaan Oromo</i>
<b>Injera</b>	Pancake- like bread; basic component of Ethiopian diet
<b>Kebele</b>	Lowest administrative unit in Ethiopia
<b>Kita</b>	Pancake; made of maize
<b>Merqa</b>	Porridge
<b>Ona Birra</b>	A grazing zone in which human and livestock stay during dry season.
<b>Waqe fanna</b>	believing in God (Waqefetta indigenous Religion)
<b>Wereda</b>	District

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## **Abstract**

*Poverty is the gravest human rights challenge facing pastoralists today. To address this problem and improve socioeconomic rights of Karrayu pastoralists, the Ethiopian government has introduced a sedentarization program –“the Fentale Irrigation Based Integrated Development Project (FIBIDP)” to improve the right to food, health and education of Karrayu pastoralists.*

*In order to examine the impact of sedentarization on the right to food, health and education of Karrayu pastoralists, this study employed both quantitative and qualitative approaches of data collection. These methods of data collection used were Household surveys, focus group discussions, key informants interviews, and direct field observation were the primary sources of data collection.*

*According to the findings, food, health and education rights of sedentarized pastoralists are found to be improved/better realized. The sedentarization program in Fentale wereda was found to be successful in terms of improving the realization of socio-economic rights of pastoralists. This is because, sedentarized pastoralist have better access to food as well as health and education services; better availability of means of production; improved utilization of food as well as health and education services. However, problems of soil salinity along with poor capacity of health and education institutions still pose a challenge to the realization of these rights in the area.*

*To extend the success of the sedentarization program and ensure progressive realization of socioeconomic rights (right to food, health and education), it should be noted that availability of means of production should be ensured in a sustainable manner and more budget and associated interventions should be put into practice by all stakeholders as to capacitate health and education institutions with the necessary human and material supply; thereby improving the lives of Karrayu pastoralists sustainably.*

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

Ethiopia is a country where more than half of the population lives under the poverty line and pastoralists stand on the front line. Pastoralists have been hit by recurrent drought and famine; and are characterized by high food insecurity and malnutrition; lack of adequate social services education and health and also frequent conflict with each other, mostly over resources (PASDEP, 2005/06). Pastoral areas are poor both in terms of low income and food consumption and social indicators such as literacy and education levels and health status are among the lowest in the country (PASDEP, 2005/06).

Pastoral way of life is deemed to support millions of Ethiopian pastoralist in the form of milk, dairy products, meat, draft and transport animals, leather and other mineral items, by which during the year 2005 (PADS, 2006) such products amounted to reach 2.5 billion USD. In spite of their economic contributions, the Ethiopian pastoralists have been subject to economic and political marginalization (PASDEP, 2005/06; Eyasu, 2008).

Economic, social and political aspects of pastoralists' life are ordered in relation to livestock and the environment in which they live in, and it is very much dependent on the availability of natural resources. Although natural resource and right to access to these vital resources is the determinant factor to sustain pastoral way of life, their land has been continuously alienated in favor of development projects by the state. Moreover, policies have been designed without sufficient knowledge of the complex and varied pastoral livelihood system and mode of production; and hence did not manage to adequately address the needs and circumstances of nomadic pastoralists (Ayalew 2001; Flintan, 2007).

In this regard, the Karrayu Oromo were the most severely affected by the development interventions compared with other pastoralists (Wondwosen, 1987). They have been

smacked by both natural (population growth and expansion of Lake Beseka) and man-made alienations. The state owned Metehara sugar plantation<sup>1</sup> and Awash National Park<sup>2</sup> have taken away the best dry season grazing land and denied them access to the major water points along the riverbank (Buli, 2006, Eyasu, 2008). These development projects caused the loss of prime dry season grazing; deprivation of access to water sources; intensify the inter-ethnic conflict caused by resource competition; displacement of pastoralists. This forces them to take up new settlements in the marginal, less fertile and less productive section of the region; exacerbate the vulnerability of pastoralists to draught and cause huge effect on the ecology due to the curtailment of their mobility (Ayalew, 2004).

These development interventions had resulted in further impoverishment of the Karrayu pastoralists. The process of water and land alienation for development projects had deprived Karrayu pastoralist of their basic economic and social rights, their own means of subsistence. And very little, if at all, attention and alternative arrangement for sustenance of livelihood had been given (Ayalew, 2001). The situation had made the people even more vulnerable to drought and famine; food insecurity and malnutrition due to diminished pasture and water and caused frequent conflict with their neighbors over the scarce vital resources.

## **1.2 Statement of the Problem**

For the first time in Ethiopian history, the government of Ethiopia acknowledged pastoralists and their livelihood in its policy document as well as the constitution. It has designed policies and strategies to improve the increasingly deteriorating life of pastoralists by reducing food insecurity and ensuring sustainable development through its rural development and poverty reduction programs. The current Growth and Transformation Plan also gives stress on these vulnerable groups; claiming they are neglected in every development strategy and policy.

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<sup>1</sup> The state owned Metehara sugar plantation expropriated over 15,000 hectares of prime grazing land of the Karrayu.

<sup>2</sup> Awash National Park covered around 80,000 hectares of land, and is located in the middle Awash Valley between Metehara and Awash towns.

The recently adopted development strategy of the Ethiopian government with the Karrayu pastoralists has been the establishment of water-based development intervention, aimed at introducing irrigation farm for those pastoralists who volunteer to settle. According to the policy strategies, mainly because of inadequate and erratic rainfall, pastoralists have been suffering, especially from food insecurity. These policies highlight that water-based development is one of the most appropriate intervention to get rid of the problem of food insecurity and the deep-rooted poverty in the short run and to ensure continuous economic growth and social development, and hence sustainable development in the long run (OWWDSE, 2009). Moreover, the sedentarization program is aimed at ensuring better social service provision for the Karrayu pastoralists (PASDEP, 2005/06).

States are required to take appropriate legislative, administrative, budgetary and other measures to fulfill the realization of economic and social rights of citizens (Maastricht Guidelines, Para 6). Ethiopia has adopted and ratified conventions and agreements at the international and regional level including the International Convention on Economic, Social and Cultural Rights (ICESCR) as well as federal and regional policy, strategy and guideline documents nationally (Pastoralist Forum Ethiopia, 2007). These poses an obligation on the state to respect, protect, and fulfill the realization of these rights.

Recognizing the fact that pastoralists are one of the most vulnerable groups in the country; the current Government of Ethiopia (GoE) had sedentarized Karrayu pastoralists, through Fentale Integrated Irrigation Based Development Project (sedentarization program) which is designed and implemented by Oromia Regional State. Previous studies (Wondwosen, 1987, Ayalew 2001; Buli, 2006; Flintan, 2007, Eyasu, 2008) have clearly pointed out how past policies and interventions undertaken in the area affected the rights and livelihoods of Karrayu pastoralists. However, little has been done to study the new approach of the current Ethiopian government, its policies and strategies towards pastoralists and specially the ongoing Irrigation project among Karrayu pastoralists. Therefore, this thesis examines the impact of the sedentarization program/Irrigation project in promoting the socio-economic rights of Karrayu pastoralists with respect to government's obligation to fulfill; giving specific emphasis to the 'Right to Food, Education and Health' in terms accessibility, availability, acceptability,

sustainability and utilization. In doing so, the thesis uses the ICESCR and the Ethiopian Constitution as the foundation of its argument. The thesis also reviews the human rights perspective of the sedentarization program through the basic principles of the right based approach to development and attempts to identify the perception of pastoralists towards sedentarization.

### **1.3 Objective of the Study**

#### **1.3.1 General Objective**

The main objective of this thesis is to assess the impact of water based development intervention (sedentarization program) from the human rights perspective in promoting ‘Right to Food, Education and Health’ of Karrayu pastoralists in terms of accessibility, availability and utilization. Further, it also aims to evaluate the prospect of such intervention in ensuring sustainable development and improving the livelihood of pastoral communities in the area.

#### **Specific Objective**

1. To examine the impact of sedentarization on the right to food, education and health of Karrayu pastoralists; and to evaluate the food, health and education right status of sedentarized Karrayu pastoralists after the sedentarization program.
2. To evaluate the sedentarization program in accordance with the basic principles of right-based-approach to development and poverty reduction; mainly participation and empowerment.
3. To assess the challenges sedentarized pastoralists face with regard to food, health and education and provide possible policy alternatives that can be instituted to improve the livelihood of Karrayu pastoralists.

## **1.4 Research Question**

1. What is the rationale behind sedentarization? What are the major livelihood changes brought by sedentarization and perception of Karrayu pastoralists towards sedentarization and its impact?
2. What are rights to food, health, and education with regard to Karrayu pastoralists? Are these rights improved through sedentarization? If so, in what ways did sedentarization improve the right to food, health, and education? Are these rights better realized through sedentarization by the government?
3. What are the challenges of sedentarization with regards to food, health and education? What possible policy alternatives can be instituted as to improve pastoralists' livelihood/ rights?

## **1.5 Research Methodology**

### **1.5.1 Methods of Data Collection**

This study employed both quantitative and qualitative approaches. The purpose of using the quantitative and qualitative approach is not due to researcher's interest, rather using both approaches enables the researcher in the study undertaken to fill the gap that might occur as a result of applying only one approach. Therefore, employing these two approaches base on the statement of the problem, objectives of the study and research questions; result in minimizing information and issues that might be glossed over by using only one approach.

### **1.5.2 Data Sources**

Primary data obtained from the field is the major source of data used in the course of writing this thesis. This source was aimed at gathering information about demographic, social, economic, cultural and related issues of sedentarized pastoralists. All research questions were answered by implementing this source of data. On the other hand, secondary data sources pertinent to the study were also used. These include books, journal articles, reports, study documents, and most importantly legal documents such as

FDRE Constitution and international conventions. It is believed that secondary sources serve as a means to affirm issues identified using primary source of data. In addition, comparison can be made with the findings of the study by taking into account other similar studies in the area.

### **1.5.3 Tools of Data Collection**

#### **Quantitative Approach**

##### *Household Survey*

Quantitative approach to a research provides a quantifiable information about a given study area. Specifically, it provides demographic and major economic characteristics of a studied population. Comparing and contrasting data using scientific statistical tools is possible under this approach. Therefore, household survey as a major tool will be employed in such approach.

The major aim of undertaking this study is to analyze the socio-economic rights and food security status of sedentarized Karrayu pastoralists. Hence, the instrument from household survey is designed in a way that it can address such issues as demographic characteristics, access to resource (land, water, different types of capital, extension service, and other natural resources important to secure one's livelihood), and food security status of sedentarized pastoralists of Karrayu. With regard to food security, food availability, accessibility, utilization, seasonality, safety and quality standardized questions were designed and implemented.

Both standard (pre-coded) and open-ended set of questions were used for household survey. The survey questionnaires were constructed carefully by avoiding vague, leading, hypothetical, offensive, double-barreled questions, which contain value judgments. In order to minimize the number of non-responses and to avoid ambiguous responses, the survey questions were constructed to be simple, and were made within the comprehension level of respondents. Before undertaking the actual survey, pre-testing was conducted in order to pick up unanticipated problems during the actual survey. The

survey questionnaire is organized into six parts: area of identification; household characteristics; economic status; food availability, access and utilization; health availability, access and utilization and education availability, access and utilization as well as perception towards sedentarization.

### **Qualitative Approach**

By its very nature, quantitative approaches do not provide information about a studied individual or groups' feeling, emotions, and behaviors. If they do, it is limited by providing a wider picture. It is through qualitative approach that issues that are glossed over by the quantitative approach can be captured. The qualitative approach helps in getting an in-depth opinion from the participants themselves (Dawson, 2002). There are different types of qualitative approach of data collection. However, the major ones that were employed in this study are: Focus Group Discussions (FGDs), Key Informants Interview, and Direct Field Observation. All these approaches though are categorized in one apron to a research, provide information to the researcher at different stage, level and scope and hence enable her/him to gather information intensively.

#### ***Focused Group Discussions (FGDs)***

In social science research like this, qualitative approaches to a study play a vital role. In FGDs, perception of participants towards sedentarization as a means of livelihood and the role of pastoralism was captured, as a general data gathering. Furthermore, information was gathered aiming to identify and compare socio-economic rights of sedentarized pastoralists with that of non-sedentarized pastoralists as well as to identify how participants perceive socio-economic rights; the associated challenges and mitigating mechanisms designed locally. It was undertaken for male and female beneficiaries and non-beneficiaries distinctively.

Accordingly, two FGDs were conducted for each sampled *kebeles* by dividing respondents based on their sex. For the sake of gathering information and probing questions, each FGD was undertaken by encompassing participants in different socio-economic strata. Therefore, there were a total number of 6 FGDs – whereby 3 of them

were fully comprised of female participants from the 3 selected *kebeles*. The number of participants for each discussion was between 8 and 14.

### ***Key Informants Interview (KII)***

Historical issues that pose a threat to pastoralism, perception towards agriculture, access to resource, conflict in relation to resource access and use, and related challenges were captured using key informants interview. Moreover, officers at different level who are responsible in designing, implementing, supervising and controlling the overall sedentarization program were part of this tool of data collection. Specifically, rationale of the program at different level, selection criteria of beneficiaries, sites and methods of intervention were gathered through this tool.

Consequently, key informants interviews were conducted with heads of different offices in Fentale *wereda* namely - Administration, Food Security, Land and Environment, Cooperative, Pastoral Development, Women Affairs as well as Education and Health offices at *wereda* level. *Kebele* managers, health extension workers, school directors and cooperative chairpersons were interviewed at *kebele* level. Moreover, elders from the selected *kebeles*, traditional leaders, and other individuals that are assumed to contribute to the study were part of this tool of data collection.

### ***Direct Field Observation (DFO)***

Field observation plays a major role in social science research for analyzing some of the issues raised in the other means of data collection. It gives an opportunity to observe realities directly from the area under study and fills the gap, which was glossed over in household survey. In addition, it will ease the researcher to prepare questions for potential respondents and cross check responses after household survey, FGDs, and key informants interview.

Systematic direct field observations were made at two levels. First, general direct field observation was made. It was aimed at observing the general housing, irrigation project, living style, markets, social infrastructures and other general social and economic interaction of studied groups. In the detailed observation or Systematic observation, the

study population was divided as beneficiary and non-beneficiary initially. Then, type of livelihood, change of livelihood as a result of sedentarization, specific roles and livelihood activities in a household, items produced, consumed and traded, social institutions, participations in these institutions and in the formal government hierarchy and related issues were made.

#### **1.5.4 Sample and Sampling Procedure**

The type and extent of research tools to collect data necessitate a detailed sampling procedure. As the above research approaches and tools elaborate, there is a need to design samples in order to answer the research questions of the study thereby achieving the objectives mentioned.

Homogeneity of the population under study in terms of ethnicity, language, culture, means of livelihood, area of living, and other socio-economic and political features is believed to ease the difficulty of drawing samples. Initially, since the study aimed to analyze the impacts of sedentarization on Karrayu pastoralists, the population is divided into two – beneficiaries and non-beneficiaries.

There are 18 *kebeles* in the study area of which 10 *kebeles* are occupied by Karrayu pastoralists and agro-pastoralists. The other seven *kebeles* are inhabited by Ittu Oromo and the remaining one by members of the Amhara and Kambata ethnic groups. The sedentarization project and the study focus on *kebeles* inhabited by Karrayu pastoralists in Fenatle *wereda*. Hence samples were drawn from these groups.

Therefore, 3 *kebeles* were selected purposively from the total 10 *kebeles* inhabited by the Karrayu. It was purposive for two major reasons. Initially, *Kebeles* were divided as beneficiary and non-beneficiary. Secondly, socio-economic data of each *kebele* was analyzed; as the result of which two beneficiaries (economically enhanced and relatively poor) and one non-beneficiary *kebele* were selected.

After selecting *kebeles* based on beneficiary and socio-economic status, the research tried to identify the total population and related demographic features of the selected *kebeles*.

After that, samples were drawn randomly based on sex and socio-economic status. Based on annual income and success at irrigation, settlers were categorized as rich, medium and poor through data obtained from *wereda* administration office.

On the other hand, for qualitative tools of data collection, similar rules were applied. The selected *kebeles* were made to be part of focused group discussion, key informant interview, and direct field observation.

### **1.5.5 Field Study Experiences**

Undertaking social science research, particularly social change and the like, requires a wider connection of people and areas to be explored. In the whole process, I have experienced new ideas that contributed in developing my career and have positive impact in the future. Bearing this in mind, here is a brief summary of my experience from the field.

The Data collection took place from 18th October to 06 November, 2010. Prior to the data collection, visit was made to Fentale Wereda Administration Office. It was aimed at introducing and discussing matters of the study with officialdoms. This has made the data collection and the overall survey smooth and easy.

The data collection was carried out in three kebeles in Fentale district; Gidara, Turro and Dhebiti. The field survey employed household survey, FGD, key informants interview and direct field observation as methods of data collection. Paucity of the local language, Oromiffa, can be regarded as the single most challenge during the field survey. To overcome this problem and achieve the objective of the field study, the researcher used different mechanisms. To start with, questionnaires were translated and fielded by trained enumerators. For the FGD, key informants interview and direct field observation, local translators working in the area as Development Agents and Health Extension Workers were used to communicate with participants and also elaborate issues that require further explanation.

Other challenges the researcher faced during the survey are associated with inhospitality of the area due to its humid and dry nature. Farness of the study kebeles from Metehara Town (from where the research bases) exacerbated by poor infrastructure and transportation service has made the survey somehow difficult and exhausting. The study kebeles are found between 32-25 kilo meters distance from Metehara town. Due to absence of transportation service in the area, the researcher was forced to use small three wheel cars (BAJAJ) and rely on motor cycles of wereda and kebele staff who go to the study kebeles for office purposes.

The studied individuals were hospitable, in some cases enumerators and the researcher were invited for lunch and coffee ceremony. In addition, the general populace and officers in the studied kebele were very cooperative in coordinating FGD's, Key Informants Interview and Direct Field Observations at every juncture of the field survey. The whole path of the field survey was smooth and conducted under common understanding.

## **1.6 Scope of the study**

The scope of the study includes selected aspects of the water development intervention (sedentarization program) among the Karrayu pastoralist found in the Oromia Region. In terms of assessing the socio-economic rights of Karrayu pastoralists; this thesis focuses on right to food, health and education of Karrayu pastoralists with respect to the Ethiopian government's obligation to fulfill; in terms of accessibility, availability and utilization. Right issues that are not presented in the study are not the scope of the research. Nonetheless, it should be noted that these right issues have their own impact on the society, had they been taken into account they might have a significance role in the study.

## **1.7 Justification of the Study**

There are a number of rationales to select the issues in this study. Based on rules and regulations of the Human Rights Institute at the Addis Ababa University, availability of

time and finance, feasibility of the work and other personal and professional competence, the researcher selected the above study site, methodology and tools of analysis for the following major reasons.

- Analyzing the impact of development interventions in a larger scale on pastoralists can be easily identified and studied in Fentale district.
- The current sedentarization scheme in the Karrayu area introduced by the government is the first and largest in the country. Hence analyzing the overall impact of the program can be matched easily with the study's objectives and research questions.
- Analyzing development interventions and right based approaches to development can easily be studied in areas where there is livelihood changes and social transformations. Hence Karrayu pastoralists remain the best groups to capture anyone's interest in this context.
- The study is multifaceted and considers many different aspects. As a result, one research approach will not answer the questions mentioned above. Therefore, the study employed both quantitative and qualitative approaches with an additional support from Geographic Information System.

## **1.8 Limitations of the Study**

This study mainly tries to examine the impact of sedentarization on socio-economic rights, mainly the right to food, health and education among the Karrayu pastoralists. It also touches upon the right based approach aspect of sedentarization. Undertaking social science research, specifically on issues related with measurement of realization of rights requires identification and implementation of standardized indicators. Here are major limitations of the study.

The study takes authoritative interpretation of the committee on economic, social and cultural rights (CESCR) and a guideline prepared by the UN - *Office of the High Commissioner for Human Rights* - entitled "A Human Rights Approach to Poverty Reduction Strategies" as a framework in guiding the study. Variables and indicators were clearly identified from this guideline and implemented in instrument preparation, data

collection, and the analysis parts of the study. Hence, it should be taken into account that there are other guidelines that can be implemented. However, the guideline selected in this study match with the objectives and research questions of the research. Moreover, the guideline is comprehensive and reliable than other guidelines of similar type.

The definition, variables, and indicators of right to food, health and education are varied and complicated. However, only indicators - discussed in the conceptual framework section - were assumed to elaborate the objectives and answer research questions were selected and used at each juncture of the study. Therefore, specific variables are not considered in this research. Had there been the necessary finance and logistics, all issues related to right to food, health and education rights would have been used.

## **1.9 Organization of the Study**

The thesis is comprised of six chapters. The first chapter discusses the background of the study, statement of the problem, objectives, methodology, scope and limitations of the study. In chapter two, review of related literature where concepts of pastoralism and sedentarization are discussed. In addition, the theoretical and conceptual framework of the study is presented in this chapter. Historical background, challenges and other related issues of pastoralism in Ethiopia, policy making and development interventions planned and implemented by the three successive governments with their impacts are discussed in chapter three. The study area in terms of its economic activity, way of life, demography, and environment is also discussed in this chapter.

In chapter four, the socio-economic situation of respondents briefly discussed. In the fifth chapter, data presentation, discussion and analysis are made. Based on the methodology for conducting the research, the data gathered from respondents is discussed in accordance with the statement of the problem and objective of the study. The last chapter deals with summary of the study, conclusion and recommendation for further research and policy formulation.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Definition of Concepts**

##### **2.1.1 Pastoralism**

There exists a difficulty of achieving definitional precision for pastoralism on the basis of criteria mainly because of the continuous inventions and sheer variety of pastoral forms of adaptation to the demands of their environment (Markakis, 1993). But according to Baxter, now a days it is widely accepted that “pastoralism is a mode of perception as well as mode of production” (Baxter, 1990: v – cited in Markakis, 1993). Swift also defines pastoralism as production system in which 50% of gross household revenue comes from livestock and livestock-related activities, and use some form of mobility (Swift, 1988 cited in Hatfield and Davies, 2006; Rass, 2006; Gilbert, 2007).

Pastoralism is a socio-economic system that is based on the raising and herding of livestock, which is dependent on availability of pasture and requires constant or periodic movement in search of pasture in the arid regions (Markakis, 1993; Abdi, 2003; Weijer, 2003; Kandagor, 2005). It highly depends on access to wide tract of land to make full use of a resource base that is generally poor and unevenly distributed (Helland, 2006; Abukula, 2010, Filtan and Cullis, 2010).

Pastoralism is a very unique system of production which is well adapted to dry land environment, operates effectively in low and variable rainfall conditions and is highly adaptable to shifting environment (Ask, 2006; Pantuliano and Wekesa, 2008). As many scholars agree (Kandagor, 2005), pastoralism is an adaptation to arid and semi-arid areas which are not suitable to farming and cannot sustain without other supporting mechanisms such as irrigation water development from other areas. It is the optimum subsistence pattern that strives to operate in disequilibrium environment of the arid and semi-arid areas. It is an efficient way of using resource in the dry land, and is most viable production system and land use in the rangelands (Kandagor, 2005; WISP, 2008;

Abukula, 2010). Using the natural vegetations and natural resources, pastoralism plays key role in the protection and maintenance of the eco-system (Oslan, 2004; Abukula, 2010)

Pastoralism as a mode of production mainly employs traditional mode of production which makes it less dependent on modern production system. Access to pasture, livestock and labor are the three basic components essential for pastoral mode of production to operate (Weijer, 2003)

Going beyond a narrow understanding of pastoralism in economic terms, pastoralism constitutes the basic identity of the people. It also refers to code of dress, behavior and dialect of a society; and is how one identifies itself with (Weijer, 2003). For pastoralists, the pastoral aspect is more than an economic framework or mode of production. It is also a way of living and serves as a fundamental ground to understand the people (Prescott, 1995). This is mainly because pastoral economic and social life is basically ordered in relation to livestock and the environment in which they live in.

### **2.1.2 Types of Pastoralism**

People adapt different livelihood systems mainly depending on several factors such as geography, resource availability, history, economy as well as social construction. Mobility is one of the major features of pastoralists (Kandagor, 2005; Abukula, 2010). According to different scholars (Weijer, 2003; Ask, 2006) depending on their migration pattern as well as livelihood diversification; pastoralists can be classified as pure and Agro-pastoralists.

Pure pastoralism refers to stratified societies with high degree of specialization in pastoral system of production (Oslan, 2004; Ask, 2006). These are people who exclusively depend on herd rearing and livestock production to sustain themselves. Pure pastoralists have no settled habitation or cultivation (Markakis, 1993). They use the family labor entirely for livestock production. This makes them more prone to be affected by shocks occurring to their system, usually due to limited availability of pasture and water.

Agro-pastoralists are those groups who combine livestock keeping with agriculture and practice both pastoral and agricultural means of production and derive less than 50% of their income from livestock keeping (Abdi, 2003; Weijer, 2003; Rass, 2006). Agro-pastoralism shows a close integration of pastoralism with cropping (FAO, 2001 cited in Oslan, 2004). But these pastoralists engage in cultivation only to supply vegetables and cereals for subsistence (Kandagor, 2005).

### **2.1.3 Characteristic Features of Pastoralism**

#### **Food Consumption of Pastoralists**

Pastoralists reveal livestock-based diet in their food consumption though the amount varies depending on their primary mode of production. Hence, pure pastoralists' nutrition is mainly based on milk, butter and meat, whereas agro-pastoralists obtain lesser percentage of their diets from milk and milk products (Nathan, 1996). Agro-pastoralists obtain the rest of their consumption from agriculture products, which they cultivate for subsistence, mainly cereals and vegetables. Fresh and dried meat as well as animal blood also constitutes some portion of the pastoral diet (Weijer, 2003).

In the pastoral consumption, purchased food also constitutes the significant component of the diet particularly for the agro-pastoralists (Weijer, 2003), and in some cases also for pure pastoralists depending on availability of pasture and health status of the animals. As Ayalew (2001) has pointed out, pastorals are increasingly undergoing considerable change in terms of their consumption pattern, becoming more dependent on alternative sources of diet; grain being the prominent one. According to him, the major reasons for growing integration in to the market are livestock asset loss due to recurrent drought, increasing commercialization of livestock production, as well as increased market price for grain and other cereal products which force them to sell their animals (Ayalew, 2001).

#### **Capital**

Pastoralists' major capital is physical, natural and human. The physical capital of pastoralists mainly includes livestock and land, whereas the natural capital includes availability of pasture and water, which is seasonal. Animals are the most important and

valuable capitals (Williams, 1998). Herd accumulation among pastoralists is a primary means of increasing productivity and self-insurance (Macpeak and Barret, 2001; Halderman, 2004).

The human capital among pastoralists involves almost all member of the family. In terms of human capital, pastoralists have high illiteracy rate due to low access to social services such as schools and training facilities, health services as well as poor sanitation facilities (Ask, 2006; Abkula, 2010). But these communities have good knowledge in livestock keeping, good indigenous veterinary knowledge (Weijer, 2003) as well as good knowledge and practice in range land management.

### **Source of Income**

For pastoralists whose life mainly depends on livestock production, their main income comes from the sale of animals and dairy products (Weijer, 2003). However, pastoralists also engage in other activities such as agricultural production, livestock trade, charcoal production and fire wood collection and sale outside of the pastoral mode of production.

These pastoralists also take up labor in the livestock market as well as work as daily laborer to earn additional income. And in most cases, the income earned from these activities is spent to purchase food and additional livestock to increase the herd size.

### **Social Service Provision**

Pastoral areas are very much known for poorly developed infrastructure and social services such as education and health. Pastoralists highly suffer from poor access to social and economic services (Ask, 2006; Abkula, 2010). These areas have weak infrastructure. There is no adequate access to health and education facilities as well as limited access to market (Macpeak and Barret, 2001; Halderman, 2004; Mohammed, 2004). Pastoralists have very low access to education, and as a result have very low literacy level (Weijer, 2003; Sara, 2008). Pastoralists also have low access to health services and facilities mainly due to their distance from the center, mobility and low purchasing power (Weijer, 2003; Mohammed, 2004). Associated with inaccessibility of health care services and facilities is lack of information and low awareness regarding

prevention and control of diseases. There exists huge lack of information and consequently very low awareness among pastoralist communities on how to prevent and control diseases. As a result there is high probability for the prevalence of diseases such as HIV AIDS and STD's (Kipuri and Ridgewell, 2008; Talile, 2008), high vulnerability to water born and other diseases. This is more perceptible among the most vulnerable groups in the community, mainly women and children.

However, in some circumstances pastoralists also involve in other non-pastoral activities and start a more sedentarized way of life. Different scholars provide different explanations for this. The next section discusses sedentarization and related factors in its formation and development.

## **2.2 Sedentarization**

Sedentarization is the settling of former pastoralist population who used to keep livestock. Though pastoralists mainly depend and derive their livelihood from livestock and livestock rearing, they have been long involved in different economic activities outside pastoralism.

Sedentarization can be prescribed and enforced policy intervention in pastoral areas (Humanitarian Policy Group, 2009). In some cases, it is designed and implemented by the government with or without the will of the people in question. However, sedentarization is also a scenario which takes place in response to a number of internal and external pressures.

Different scholars explain the increased involvement of pastoralists in farming and other non-pastoral activities in different ways, though they all share certain points in common. Nathan (1996) explaining pastoralists shift to settled way of life, pointed out several points. He stated that many pastoralists settle and involve in other economic activities in response to drought induced livestock loss, political insecurity, pressure from population growth, encroachment of pastoral lands by agricultural population, expansion of national game parks that limits pastoral use, environmental degradation as well as attraction of famine relief, health and education opportunities (Nathan, 1996). Ayalew (2001) on his

part explains the involvement of herders in farming from different perspectives, including increased alienation of land, tenure insecurity, decrease in terms of trade for livestock products, increase in the price of crop and other non-pastoral production; declining livestock productivity due to animal disease and loss of pasture which results in pressure on available resources.

Traditional mobility within pastoralist system is compromised by declining rangeland resources due to internal and external factors including alienation of pastoral land, conversion of wet season pasture land to other state purposes, conflict and insecurity which rendered some areas inaccessible. There are growing numbers of landless pastoralists who have livestock but no land and no pasture for the livestock; and hence they are forced to settle.

From these, we can understand that the settlement or involvement of pastoralists in farming can be explained as a response to both natural and man-made changes that challenged the pastoral way of life. While the increase in human/animal population constitutes the major change that come naturally, the change in the availability of resources such as pasture caused by the encroachment of pastoral lands by agricultural population and expansion of national game parks as well as political insecurity constitutes the major challenges that are man-made. Drought and environmental degradation is also, to a great extent, attributable to man-made challenges facing pastoralism.

The above concepts and definitions provide a base to draw theories and conceptual frameworks. Accordingly, researchers in different fields of studies have formulated theories of their own. Underlining the rights that this thesis sets out to study, the following section discusses the major theories that framed this thesis.

## **2.3 Theoretical perspective and conceptual framework on socioeconomic rights: with special emphasis to Right to Food, Health and Education**

This section mainly deals with the obligation of the state to fulfill in relation to the three socio-economic rights: right to food, health and education, which are the prime focus of this thesis. It gives a clear picture on how the realization and fulfillment of these rights can be measured based on the General Comment of Committee on Economic, Social and Cultural Rights (CESCR), which is the authoritative interpreter of the International Convention on Economic, Social and Cultural Rights (ICESCR).

### **2.3.1 Socio-economic Rights**

Socio-economic rights are fundamental rights to which all individuals are entitled to. These rights are part of the second generation of human rights which cover most of the basic needs and concerns of human beings.

Nonetheless socio-economic rights have been recognized under the UDHR and other international instruments, the primary UN human rights instrument dealing with socio-economic rights is the International Covenant on Economic, Social and Cultural Rights (ICESCR), which Ethiopia has ratified and incorporated as part of its law of the land (Rakeb, 2002). Article 9(4) of the Ethiopian constitution states that “All international agreement ratified by Ethiopian are an integral part of the law of the land”. The Ethiopian Constitution has recognized a number of socio-economic rights as human rights; though categorized under one heading ‘economic, social and cultural rights’ (Article 14).

#### ***Obligations Arising from Socio-economic Rights***

Human rights instruments are grounded in the fact that particular entities have to respect, protect and fulfill; and the holder of these rights can make claims on these duty bearers (Parr, 2008). The obligation to respect requires states to abstain from doing anything that violates individual’s freedom beyond what is permitted in the human rights systems,

whereas the obligation to respect requires states to take all appropriate measures to prevent others from violating the rights of individuals (Asbjorn, 1984; Dent, 2001). The obligation to fulfill, on its part, requires states to take the necessary measures to ensure the satisfaction of the needs of individuals which have found expression in the human right system (Dent, 2001; Asbjorn, 1984). The focus of this thesis lies on the obligation of states to fulfill.

### *Obligation to fulfill*

Human right fulfillment evaluation must address the extent of the obligation of the duty bearer as well as the extent of the enjoyment of the right holders. Obligation to fulfill involves undertaking policies and measures to ensure the realization of rights. Duty bearers have the obligation to take the necessary steps towards the achievement of this goal. Under the Ethiopian constitution, the duty to fulfill requires the State to take positive measures to assist individuals and group of individuals to obtain access to socio-economic rights. The duty includes the allocation of resources for the realization of the socio-economic rights (Art.41 (5)) and also direct provision of basic needs when no other alternatives are available (Rakeb, 2002).

Most of the socio-economic rights are qualified within the available means and allocation of ever increasing resource. This is essentially because the realization of these rights requires availability of economic resource. However, countries may not have enough resource to achieve simultaneous and immediate fulfillment of all economic and social rights (Parr, 2008).

Under Article 2 of ICESCR, state parties have taken legally binding obligation to take steps to the maximum of available resource to achieve progressively the full realization of economic and social rights (Art 2, ICESCR). Similar in formulation to qualifications attached to socioeconomic rights in the ICESCR, the Ethiopian constitution also qualifies the application of these rights only progressively (Rakeb, 2002). Art.41 (4) of the Ethiopia constitution also provides for the allocation of ever increasing resources to provide to the public, health, education and other social services.

In this view, assessing how well a country is doing in meeting its obligation to fulfill requires the incorporation of state's capacity as well as the resource allocated by the government to the realization of these rights into the measurement.

### **2.3.1.1 The Right to Food, Health and Education**

The right to adequate food has a crucial role to play in relation to poverty reduction. Ill health also contributes to poverty by destroying livelihoods, reducing worker productivity, lowering educational achievement and limiting opportunities (OHCHR Guideline, 2002). Education serves as the primary vehicle by which poor children and adults can lift themselves out of poverty (OHCHR Guideline, 2002: Para 125). These three rights are interdependent with one another. The enjoyment of these rights, individually and collectively, is instrumental in securing many other human rights (OHCHR: Para 89, 114, 125). With this understanding, this thesis puts its focus on these elements of the socio-economic rights and evaluates the fulfillment/realization of these rights under the sedentarization program. However, this thesis recognizes the indivisibility and inter-dependability of human rights and acknowledges the equal importance of the rights not included under this study to the lives of the people under study.

#### **I. Right to Food**

##### ***Definition and Normative Content***

Right to food is human right that protects the right of all human beings to be free from hunger, food insecurity and malnutrition. The right to food, or aspects of it, are recognized in numerous resolutions and declarations of the General Assembly, including the UDHR (Article 25, para 1), CEDAW (Article 12, para 2), CRC (Article 24 Para 2(c) and (e), as well as Article 27 Para 3) of the Protocol to the ACHPR on the Rights of Women in Africa (2003). But the instrument that deals most comprehensively with food rights is the ICESCR (Mechlem, 2004). Article 11 Paragraph 1 of ICESCR stipulates that 'States Parties recognize the right of everyone to an adequate standard of living including adequate food' and Article 11 Paragraph 2 states that 'States Parties recognize the fundamental right of everyone to be free from hunger' (ICESCR: Art 11: Para 1 and 2).

CESCR, the authoritative interpreter and monitoring body of the ICESCR has developed an interpretation of the content of the right to food adopting the General Comment No. 12 on the Right to Adequate Food in May 1999. The General Comment No. 12 defines the right to food as *'the right of everyone to have physical and economic access at all times to food, in adequate quantity and quality or to means of its procurement'* (General Comment No. 12; Para 6). In view of this definition, the right to food implies availability of food in a quantity and quality; and acceptable within a given culture as well as accessibility of such food in ways that are sustainable (Mechlem, 2004).

However, the above statements somehow fall short of including the importance of having access to basic natural resources with regards to the right to food and its realization. Recognizing the need to include the issue of access to resources and impose an obligation on the state, this thesis takes the definition of right to food as:

*The right of everyone to have physical and economic access at all times to food, in adequate quantity and quality or to means of its procurement; and also the right to have secure access and utilization of resources important to their livelihoods. (General Comment No. 12, Emphasis added)*

### ***States Obligation to Fulfill the Right to Food***

State obligation to fulfill, which is the primary concern of this study, encompasses range of activities and measures that state are expected to undertake. It entails that States must take positive measures to facilitate and provide for individuals' enjoyment of their rights (Mechlem, 2004). It also demands that governments must proactively engage in activities intended to strengthen people's access to and utilization of resources so as to facilitate their ability to feed themselves, and as a last resort, whenever an individual or group is unable to enjoy the right to adequate food for reasons beyond their control, States have the obligation to fulfil that right directly (ICESCR: Art 2; General Comment 12; Asbjorn, 1984.). This implies that states should invest in the eradication of hunger using the maximum of available resources.

### ***Measuring the Realization of Right to Food***

According to the Office of High Commissioner for human Rights guideline, right to food implies the availability and accessibility of food in sufficient quantity and quality to satisfy the dietary needs of all individuals in a form that is culturally acceptable, sustainable and not interfering with the enjoyment of other human rights (OHCHR, 2002; Para 92).

### ***Availability, Accessibility, Sustainability and Acceptability***

According to OHCHR's Guideline, availability of food refers either to the possibility of feeding oneself directly from productive land or other natural resources, or to the existence of a well functioning distribution, processing and market system that moves food from the site of production to where it is needed in accordance with demand (OHCHR, 2002; Para 93).

Accessibility of food encompasses both economic and physical accessibility (General Comment No. 12, OHCHR, 2002; Para 94). The guideline furthermore states that to ensure economic accessibility, the personal or household costs associated with the acquisition of food should be at such a level that the satisfaction of other basic needs is not compromised, and to ensure physical accessibility, adequate food must be accessible to everyone, including the disadvantaged and vulnerable groups. Accessibility of food also includes the acceptableness within a given culture as well as the accessibility of such food in ways that are sustainable and do not interfere with the enjoyment of other human rights (General Comment No. 12, Para: 6).

In addition, to ensure food security the people should also be free from vulnerability to hunger (OHCHR, 2002; Para 94). This means that people, in order to be food secured, they should be able to have access to food at all times and not be threatened of being starved or hungry again. Moreover, food produced should be acceptable and correspond to a given culture.

## **II. Right to Health**

### ***Definition and Normative Content***

Health is a basic human right, and government's effort to promote the right to health necessarily implicates a broad range of human rights (Gostin and Lazzarini, 1997). Right to health is found enshrined in Universal Declaration on Human Rights (UDHR), International Convention on Economic, Social and Cultural Rights (ICESCR, Article 12) and other international and regional human rights instruments as well as national legislations.

Right to health goes beyond the right to be healthy. Right to health is right to the enjoyment of a variety of facilities, goods, services and conditions necessary for the realization of the highest attainable standard of health (OHCHR,2002:Para 116). Right to health includes both freedom and entitlement i.e. freedom- right to have control over one's health and body, the right to be free from non-consensual medical treatment or experimentation; the right to access to equitable system of health protection as well as access to adequate sanitation, safe and potable water, (OHCHR,2002:Para 117; Tsion, 2008). It also refers to access to health care services, medicine and appropriate medical treatment. It encompasses efforts made by the state to ensure the conditions under which people can be healthy, including conditions of non-discrimination, provision of adequate access to health care and information (Gostin and Lazzarini, 1997).

### ***States Obligation to Fulfill the Right to Health***

Obligation to fulfill focuses on state obligation to take the necessary legal, financial and institutional measures to assure the realization of right to health (Dent, 2001). This includes adoption of laws and policy measures, provision of health care services, and allocation of sufficient budgeting to actualize this right.

### ***Measuring Realization of Right to Health***

The right to health includes a system of health care and protection that is available, accessible, acceptable and of good quality (General Comment No. 14: Para 12; OHCHR, 2002: Para 118).

Availability implies that functioning public health and health care facilities, goods and services are available in sufficient quantity within a state (OHCHR, 2002: Para 118). It deals with how the government is providing and distributing health services and health care facilities within the maximum available resources. It also addresses the issue of adequateness and quality of services.

Accessibility means that services and facilities are accessible to everyone without discrimination and has a number of dimensions, including physical, information and economic accessibility (OHCHR, 2002: Para 118). It also takes into account the expansiveness of services and distribution as well as the affordability of services by everyone with minimum payment. In this regard, states must ensure that the poor and vulnerable are not burdened with high expense for health care services. With regards to information, states must provide health related information to everyone freely to promote the right to health.

Furthermore, for services and facilities to be properly utilized by individual and societies, they should be culturally appropriate, respect the culture of the society and of highest possible quality (Tsion, 2008).

### **III. Right to Education**

The basic principle with regards to right to education is that, education should be available to everyone as a right rather than only to few as a privilege. It should be a right that everyone is entitled to by being human. Article 26(1) of the UDHR states that everyone has the right to education, and that primary education should be free and compulsory; technical and professional education available and higher education equally accessible to all (UDHR, 1948: Art 26(1)). In addition, the ICESCR further states that fundamental education shall be encouraged for those who have not received primary education (ICESCR, Art 13 (2/d)).

#### ***States Obligation to Fulfill the Right to Education***

Obligation to fulfill requires States to take necessary measures to ensure the realization of rights (General Comment No. 13; Dent, 2001). This includes adoption of supportive

policy measures and provision of access to primary education for all. In addition to providing free and compulsory primary education for all children, States have an obligation progressively to introduce free and equal secondary education (including vocational training) for all and equal access to free higher education on the basis of capacity (OHCHR Guideline, 2002; Para 126). They also have an obligation to intensify fundamental (basic) education, leading above all to the elimination of illiteracy, for adults who have not satisfied their basic learning needs (OHCHR Guideline, 2002; Para 126).

States under this obligation are required to establish sufficient number of public schools, hire the required number of qualified teachers and provide for the quality of education as laid down in international human rights law (OHCHR, 2002; Para 128).

### ***Measuring the Realization of Right to Education: Availability, Accessibility and Utilization***

The right to education availability implies that sufficient number of public schools should be established to ensure free education for the people. Furthermore, to ensure the realization of the right to education, States should hire the required number of qualified teachers and provide for the quality of education as laid down in international human rights law (OHCHR, 2002; 128). This will, to a greater degree, impact on the poor and most vulnerable groups in a society.

Accessibility implies that primary education should be free for all; secondary education (including vocational training) should be progressively made accessible for all and free higher education should be equally accessible to all on the basis of capacity. In addition to providing free and equal access to education, States are expected to make sure that the vulnerable and marginal, including girls, disabled, minorities and those living in the remote areas are able to utilize these opportunities. The State has to take measures to support these segments of the society and make sure that the dropout rates is not significantly higher than those for other groups in society (OHCHR, 2002: Para 133).

Different dimensions have been employed to measure the realization of right to food, health and education as well as to assess how well a country is doing in meeting its

obligation to fulfill. Acknowledging the fact that socioeconomic rights such as right to food, health and education require progressive realization, the conceptual framework of this study takes the authoritative interpretation of the committee on economic, social and cultural rights (CESCR) as a base and measures the realization/fulfillment of these rights in terms of availability, accessibility, acceptability, utilization and sustainability. The interpretation is more comprehensive in answering such issues and the authoritative nature of the interpreter builds the foundation of the framework. The data obtained from the field will be interpreted and analyzed in this context.

The next chapter discusses historical background of development intervention and policy making in Ethiopia and in Karrayu in particular.

## **CHAPTER THREE**

### **HISTORICAL BACKGROUND OF DEVELOPMENT INTERVENTION IN PASTORAL AREAS OF ETHIOPIA**

#### **3.1 The Context of Pastoralism in Ethiopian**

Ethiopia has the largest livestock population in Africa, and more than 60 percent of the country's land is occupied by pastoral groups. According to the Pastoralist Area Development Studies (PADS) report of 2005, pastoralists are found in the regions of Afar, Somalia, Oromia, SNNPR, Gambella, Benshangul and Dire Dawa, covering a total of 624,880 km<sup>2</sup> ( 60 percent of the total area of 1.1 million km<sup>2</sup> of the country). With regard to population distribution, pastoralists are estimated to be 15 million and cover 12-15% of the county's total population (EPRDF and MoFED, 2002; Halderman, 2004; PADS, 2005; Eshetu, 2007).

Pastoral areas in Ethiopia are located primarily in the lowlands around or below 1,500m altitude, and are mostly situated in the peripheral regions of the country characterized by unpredictable and unstable climatic condition (Halderman, 2004; Eshetu, 2007). Pastoralism as a way of life is deemed to support millions of Ethiopian herders in the form of milk, and dairy products, meat, draft and transport animals, leather and other mineral items, by which during the year 2005 (PADS, 2006; WISP, 2007) such products amounted 2.5 billion USD. The sector also contributes 20% of the total GDP (Aklilu, 2002, cited in Halderman, 2004). In 2008, the direct financial value of pastoralism was estimated to be 1.22 billion USD per annum, while its indirect economic value is estimated to exceed 458 million USD (Filltan and Cullis, 2010). The total economic value of pastoralism in Ethiopia is estimated to be 1.68 billion USD per annum (EFA, 2004/2005; SOS Sahel, 2008).

In spite of their economic contributions and high importance for poverty reduction, Ethiopian pastoralists have been subject to economic and political marginalization (Ask, 2006; Eyasu, 2008). They lack political representation to influence government policies

which affect their lives. Pastoralism as a production system has not been well reflected on policies and strategies. Moreover, government policies for many years had aimed at increasing agricultural production to achieve food security, neglecting the pastoral mode of production (Halderman, 2004). As a result, pastoral areas in Ethiopia are characterized by poverty, which is deep-rooted, complex and multi-dimensional. These areas are also characterized by low human development feature, manifested by very low primary and secondary school gross enrollment rate (2-3% only), very low immunization rate (10% only), very low per capital calorie intake and very high land area exposed to malaria epidemics (93%) (Eshetu, 2007). In addition, in these areas food security and hunger are the greatest concern, as estimated by UN, 42 million people receiving below the minimum nutritional requirement with insecure land tenure and low investment in rural infrastructure development. They have inadequate livestock markets and veterinary services, poor water development as well as very poor social services (FDRE & MoFED, 2002; Eshetu, 2007).

## **3.2 Historical Background of Policy and Policy Making**

### **3.2.1 Policy Making in Ethiopia**

As many scholars would agree, policy making and implementation in Ethiopia has been strongly influenced by the long history of centralization, marked by strong political, cultural and social dominance of Northern part of the country and followed a top-down approach (Halderman, 2004; Ask, 2006). This had impacted negatively on societies living in other parts of the country, especially pastoralists who are poor. Policies that were instituted for pastoral areas were based on a very poor understanding of the people and their way of life. This had affected pastoral development policies and strategy by all Ethiopian governments (Halderman, 2004).

The policies and strategies designed for the pastoral sector, mainly in the past four decades, had been inappropriate and ill devised. They have not been well studied and planned for the sector. Hence, these policies deprived pastoralists of their land rights, restrict their mobility as strategy of resource management, and opened doors for highland settlers (Abkula, 2010). Moreover, most of the policies and development interventions

were mainly aimed for commercial purpose rather than human development, and hence failed to meet the needs and interests of the local livestock keepers (Ayalew, 2001).

### **3.2.2 The Imperial Regime and Derg Regime**

The imperial regime, in an attempt to modernize the agricultural sector, designed economic strategy aimed at the expansion of large-scale commercial farms in pastoral areas, mainly along the Awash River basin (Ayalew, 2004; Buli, 2006). The process was taken as a means to supply raw material for the domestic industries as well as produce surplus for the would-be factory laborers (Buli, 2006). It was in this period that large scale commercial farms proliferated in the country, mainly by the Awash Valley Authority (AVA) (Ayalew, 2004). The large scale irrigation was established taking huge hectare of lands from the dry season grazing lands, and without any form of compensation for the people who lost their lands (Getachew, 2001). And even after the collapse of the imperial regime, the farms were expanded incorporating more and more grazing areas.

When the Derg took power, large-scale agricultural development expanded, particularly in the middle and upper Awash valleys with major emphasis on cotton production (Ayalew, 2001). Additional hectares of land were expropriated from the pastoralists for large-scale state owned plantations. The 1975 Land Reform Proclamation overturned the semi-feudal land lord system of the Imperial Regime, making all rural lands and its natural resources state property (Halderman, 2004) and the 1988 constitution People's Democratic Republic of Ethiopia (FDRE) constitution, which pursued resettlement as a major development alternative were the major policy measures that affect pastoralist in this regime. In this period, alienation of pastoral grazing land continued and many state plantations were established, denying pastoralists their rights to their own land.

### **3.2.3 Post 1991**

The EPRDF government, which took power in 1991, declared the 1995 Ethiopian constitution which provides the basis for the devolution of extensive decision making power and responsibility to the regional governments and two city administrations

(Halderman, 2004). The primary objective of decentralization was to promote 'Ethnic Federalism' and to right the century old wrong of the past. The decentralization process enables the regions to have their own government and to develop their own policies (Halderman, 2004). Making a reference to pastoralists, Article 40 (5) of the 1995 constitution provides that "Ethiopian pastoralists have the right to free land for grazing and cultivation as well as the right not to be displaced from their own lands" (1995 constitution). However, EPRDF's pledge for further devolution of power had faced difficulties due to lack of capacity at the local level, which resulted in diminished influence on the government. As Halderman puts it, "the emerging regions in pastoral areas have limited local capacities and hence are highly influenced by the EPRDF party" (Halderman, 2004).

Moreover, giving recognition to pastoralists, EPRDF establishes a Parliamentary Standing Committee on Pastoral Affairs in 2002, included a Pastoral Development Department in the Ministry of Federal Affairs as well as declared an official Pastoralists day to be celebrated every year since 1999 (Markakis, 2004). This gives pastoralists a voice and representation to influence policies that affect their lives.

### **3.2.4 Current Policies towards Pastoral Areas**

The government of Ethiopia has instituted different policy measures to improve the increasingly deteriorating life of pastoralists by increasing food security and ensuring sustainable development through its rural development and poverty reduction programs. The country has adopted and ratified conventions and agreements at the international level, and also developed its own federal and regional policy, strategy and guideline documents (PFE: 2007).

Ethiopia has formulated policies which have high tone of emphasis on poverty reduction activities and outcomes (PFE, 2007). The Sustainable Development and Poverty Reduction Program (SDPRP), which was published in July 2002, states that the government sets up a pastoral development forum and contains a section on development approach and intervention in pastoral areas (EPRDF & MOFED, 2002; Halderman, 2004; Hoghas, 2005, cited in Ask, 2006). In this document, pastoralism was given a section for

the first time in the Ethiopian history of policy making. It identifies livestock development as one of the ten areas for actions in agricultural and rural development. The livestock development approach of the SDPRP includes livestock marketing, veterinary services, improved breeds as well as forage development which were intended to be implemented through agricultural extension packages (Halderman, 2004). But the approach fails to incorporate the traditional knowledge, perspective as well as primary needs of the people themselves (Halderman, 2004) and fails to recognize pastoralism as a way of life. And more importantly, the formulation and preparation of the SDRPR was not participatory of the pastoral population. The only civil society organization that participated and strongly advocated for pastoral right and inclusion in the poverty reduction paper was Pastoralists Forum of Ethiopia (PFE) (Ask, 2006).

Most of the policies and strategies of the government towards the pastoral areas focus on sedentarization. While these policies and strategies plan to support pastoral production system in the short and medium term, they mainly focus on settling pastoral population along the major river basins in the long term (FDRE and MoFED, 2002; Halderman, 2004). The Ministry of Federal Affairs' development vision for pastoral areas, approved by the council of Ministers identifies the long-term plan as sedentarization of the pastoralists on irrigated land along the banks of major rivers (EPRDF and MoFED, 2002).

Moreover, as it is mentioned in the government's poverty reduction programs and strategies for pastoral areas, sedentarization of pastoralists would facilitate the government in establishing better administration and provision of social services such as education and health services. In an attempt to address problem of pastoralists, the Ethiopian government has stated that irrigation development schemes must be introduced and strengthened for those who are willing to settle (PASDEP, 2005/06). The new Growth and Transformation Plan formulated based on the PASDEP (2010/2011), also explains that irrigation along major rivers will be the main instrument that will be implemented in pastoral areas, to make water available for drinking as well as irrigated agriculture.

### **3.3 Karrayu Pastoralists**

#### **3.3.1 Study Area: Fentale District**

Fentale district is found in East Shewa zone of the Oromia Regional State. It is one of the 258 *weredas* found in the Regional Government of Oromia. The Fentale Irrigation Based Integrated Development Project (FIBIDP) is mainly located in Fentale district.

According to a socio-economic survey conducted by Oromia Water Works Design and Supervision Enterprise (OWWDSE, 2009), the project area is located at about 194 km east of Addis Ababa. The project area is around 940 to 960 m.a.s.l. and is characterized by hot and dry climate. The total area of the main intervention district, Fentale, is 133964 hectare' of land. There are 18 rural and 2 urban *kebeles* (Metahra and Haro Adi) in the *wereda*. In addition, out of the 33 *kebeles* found in the neighboring Boset district two *kebeles*, (namely *Qawamirqisa* and *Huluqohuruta*) are incorporated in the irrigation development project.

#### **3.3.2 Physical Characteristics and Climate**

As a portion of the Great African Rift Valley, the project area is situated in the Upper Awash Valley. The physical feature of the area is mainly extensive plain land and is situated along the Awash River. Awash River is the main and the largest water body in this arid and semi-arid area. In the north and north-west of the irrigation project, there is a river called Bulga, which again has its origin in the highland areas.

The report from the same enterprise shows that Basaqa Lake forms another physical feature of the land in the project area. This lake is situated at the northern side of Metahara Sugar Estate and on the western fringe of Metahara town. The lake is expanding at alarming rate. Its surface area has increased ten times its original size, from 3.5 square kilometer to 35 square kilometer in the last 20 years (OWWDSE, 2009). It has strong salt content so that it cannot provide any service for both animal and human water needs. Basaqa Lake occupied a large portion of one of the traditional Karrayu grazing ground and ecological category called *Ona Birra*. There are also small seasonal rivers and other springs.

The climate of Fentale area exhibits typical characteristics of arid and semi-arid environments. The yearly maximum temperature ranges from 32 to 42 degree centigrade while the minimum temperature ranges from 9.6 to 22 degree centigrade. The mean annual rainfall is 553 mm. Rainfall of the area is very erratic and scarce occurring two or three times yearly. The main rainfall season, which accounts for the largest total rainfall of the year occurs from July to September, and this season is locally termed as *Ganna*. In good years the area also experiences some amount of rainfall in the month of December. The other rainfall regime, called *Afrasa*, occurs from February to April. This one is very important for the Karrayu pastoralists in particular, since it comes at the point when herds and human are exhausted by the long dry season (OWWDSE, 2009).

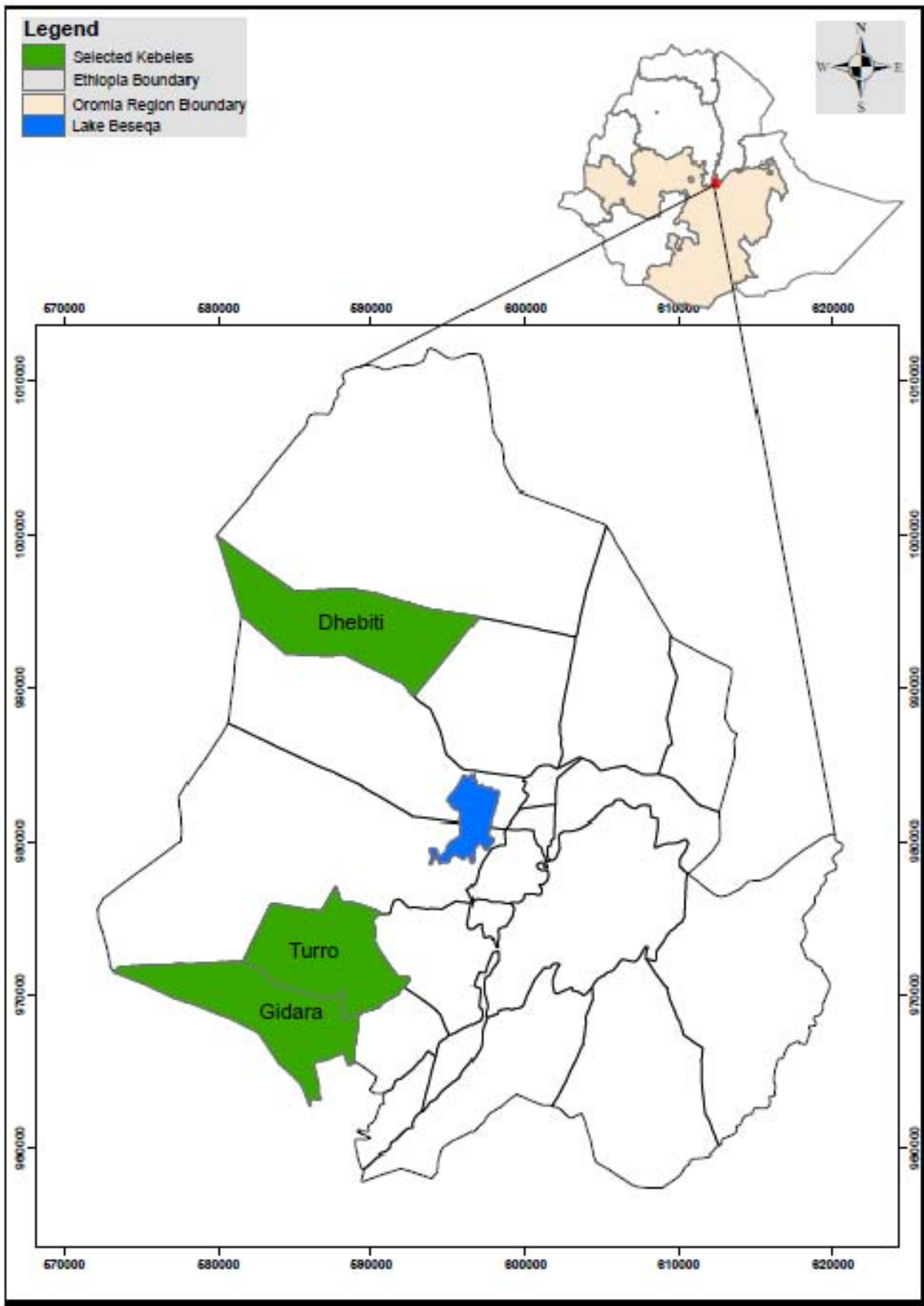


Figure 1 Map of Study Area

### 3.3.3 Previous Development Interventions and Their Impact

Among pastoralists in Ethiopia, the Karrayu Oromo are the most severely affected compared with other pastoralists (Wondwosen, 1987). Up until the 1940's and 1950's, the Karrayu pastoralists had been the dominant land users, who used to practice rain-fed and small irrigated agriculture, apart from livestock herding (Ayalew, 2004). But in the past three to four decades, their livelihood had been under a serious pressure.

They have been smacked by both natural (population growth and expansion of Lake Beseka) and man-made alienations. A number of state and private owned large-scale plantations were established in the Karrayu territory. The state owned Metehara sugar plantation<sup>3</sup> and Awash National Park<sup>4</sup> have taken away the best dry season grazing land and denied them access to the major water points along the riverbank (Buli, 2006, Eyasu, 2008). These development projects caused loss of prime dry season grazing; deprivation of access to water sources; intensify the inter-ethnic conflict caused by resource competition and displacement of pastoralists. This forces them to take up new settlements in the marginal, less fertile and less productive section of the region; exacerbate the vulnerability of pastoralists to draught and cause huge effect on the ecology due to the curtailment of their mobility (Ayalew, 2004).

The development interventions and policy measures have resulted in the impoverishment of the Karrayu pastoralists. The process of water and land alienation for development projects had deprived Karrayu pastoralist of their basic economic and social rights, their own means of subsistence. And very little, if at all, attention and alternative arrangement for sustenance of livelihood had been given (Ayalew, 2001). The situation made them even more vulnerable to draught and famine, high food insecurity and malnutrition due to diminished pasture and water and caused frequent conflict with their neighbors over the scarce vital resources.

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<sup>3</sup> The state owned Metehara sugar plantation which takes up over 15,000 ha of land caused loss of prime dry season grazing land.

<sup>4</sup> Awash National Park which covers around 80,000 hectare affected Karrayu's access to the fled plain pastures and Awash River.

### **3.3.4 Current Government Policy on the Karrayu (Fentale District): The Rationale for sedentarization**

As has been discussed above, previous development interventions in Karrayu have had adverse outcome on the economic, social and other rights of the Karrayu community. The interventions have made the very basic means of production less accessible for Karrayu pastoralists.

Moreover, pastoral areas such as Fentale district are also known for their erratic climate condition and minimum rainfall. There has been frequent drought in Karrayu district. The drought has significantly affected pastoralists; causing asset loss, high food insecurity and malnutrition, livestock death as well as increased conflict over resources. According to key informant interview and FGD held with elders and community members, drought occurs every 5 to 6 years, and the situation has become more frequent and devastating through time. The study found out that there is an increase in terms of the severity of the drought and its consequences.

With regard to social service provision and status, pastoral Karrayu are one of the least. There is very low literacy rate and poor health status, mainly due to inaccessibility of services, lack of knowledge as well as inappropriate services provided for the unique pastoral way of life.

The government's poverty reduction strategy for pastoral communities such as Fentale Irrigation Based Development Project (FIBDP) initiated and implemented by the Oromia National Regional State<sup>5</sup>, which focuses on sedentarization of pastoralists along the major river basins, aimed at ensuring food security and improving social service provision. Pastoral areas, such as Karrayu are frequently hit by recurrent drought, highly food insecure and get no or minimum rainfall within the year. Moreover, these areas have very poor social service provision. As has been pointed out in the poverty reduction strategy papers, pastoral mode of production which requires frequent mobility has made pastoralists inaccessible for social service provision.

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<sup>5</sup> Oromia National Regional State is one of the nine regions in Ethiopia.

Recognizing the shortage of water and inadequate social services provision in the area, sedentarization through irrigation development is aimed at ensuring food security by making basic means of production accessible. In addition, sedentarization is also intends to ensure better social service provision such as education and health by settling the people and making them more accessible. In doing so, sedentarization can bring about both economic and social development as well as secure a better tomorrow for the people.

## CHAPTER FOUR

### SOCIO-DEMOGRAPHIC CHARACTERISTICS

This chapter focuses on socio-demographic characteristics of sedentarized Karrayu in the studied *kebeles*. The socio-economic characteristics in terms of demography and economical aspects, where details of sex ratio, dependency ratio, marital status, educational level, age pattern, major source of income, annual income and major assets in the household, are discussed in this chapter.

#### **Project Profile**

To improve the agricultural production and productivity in the country, a shift from rain fed to irrigate agriculture, wherever possible, is one of the majors strategy designed by the Oromia Regional State<sup>6</sup>. The regional government has devised a program for irrigation based development studies on a number of potentially irrigable areas, among which are Fentale Irrigation Based Development Project is one.

The Fentale Irrigation Based Integrated Development Project (FIBIDP) is mainly located in Fentale district, East Shewa zone of the Oromia Regional State, and also incorporates limited part of Boset district which is found adjacent to some part of Fentale district. The project area is situated along Awash River. Awash River, which has its origin in the highlands around Dandi and Ada'a Barga districts of West Shewa zone of Oromia region, is the main and largest water body in the area. It is about 1200 km long and is one of the largest rivers in the country.

The FIBIDP aims to bring the area under irrigation based agricultural development and transform the lives of Karrayu pastoralist inhabitants to a sedentary farming community. The project, which is initiated, designed and implemented by Oromia Regional State<sup>7</sup> with the cost of 3500 to 4000 million birr, is intended to find permanent solution for food security problem and encourage the local community to produce cash making export

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<sup>6</sup> Oromia Regional State is one of the 9 regions in the country and forms part of the government.

market crops. The overall project area covers 18,000 hectares; and the total area of the main intervention district, Fentale, covers about 133964 hectare of land. In the district, there are about 18 rural and 2 urban kebeles (Metahra and Addis AKetema).

Among the 18 *kebeles* in Fentale *wereda*, 11 *kebeles* are occupied by Karrayu pastoralists and agro-pastoralists. The rest seven *kebeles* are inhabited by Ittu Oromo and one by members of the Amhara and Kambata ethnic groups. The sedentarization project and the study focus on kebeles inhabited by Karrayu pastoralists and are under the sedentarization program.

Of the 11 *kebeles* incorporated in the project, so far 5 *kebeles* (Gidara, Turro, Illala, Tuttuti, and Deresedien) have been settled. The other *kebeles* (including Dhebiti) are to be integrated in the program in the near future. To examine the impact of sedentarization on socio-economic status of sedentarized pastoralists, the thesis selected two sedentarized *kebeles* based on socio-economic status in consultation with the *wereda* administration office. Accordingly, one economically well-off (Gidara) and one economically weak (Turro) *kebele* were selected. Aiming to address issue of perception and examine the socio-economic status of the non-sedentarized *kebeles*, one *kebele* (Dhebiti) was selected from the non-sedentarized *kebeles* that are going to be sedentarized in the next phase. Overall, 3 *kebeles* were selected. After that, samples were drawn based on sex and socio-economic status.

**Table 1 Population Size and samples drawn**

<b>Kebele</b>	<b>Household</b>			<b>Population size</b>			<b>Sample Drawn</b>		
	<b>Male</b>	<b>Female</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Gidara	345	147	492	1718	1362	3080	31	10	41
Turro	281	148	429	1042	798	1840	29	10	39
Dhebiti	274	120	394	1184	1184	2368	22	8	30
<b>Sub-total</b>	<b>900</b>	<b>415</b>	<b>1315</b>	<b>8491</b>	<b>8162</b>	<b>16653</b>	<b>82</b>	<b>28</b>	<b>110</b>
<b>Total (18 kebeles)</b>	<b>7280</b>	<b>2416</b>	<b>9696</b>	<b>31139</b>	<b>27763</b>	<b>58902</b>	<b>Sample % = 110/1315*100 8.35 % of the household</b>		

Source: Fentale District Administration Office

### 3.1 Socio-Demographic Characteristics of Respondents

The respondents in the study *kebeles* are composed of both male and female headed households. Table 2 presents sex distribution of respondents in the study

**Table 2 Distribution of Respondents by Sex**

<b>Sex</b>	<b>Gidara</b>		<b>Turro</b>		<b>Dhebiti</b>	
	<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
<b>Female</b>	<b>10</b>	<b>24.64</b>	<b>10</b>	<b>24.39</b>	<b>8</b>	<b>26.67</b>
<b>Male</b>	<b>29</b>	<b>74.36</b>	<b>31</b>	<b>75.61</b>	<b>22</b>	<b>73.33</b>
<b>Total</b>	<b>39</b>	<b>100</b>	<b>41</b>	<b>100</b>	<b>30</b>	<b>100</b>

*Source: Household Survey, Oct-Nov 2010*

As can be seen from table 2 of the total respondents who participated in the household survey, 24.64% in *Gidara*, 24.39% in *Turro* and 26.67% in *Dhebiti* were female respondents while the remaining were male respondents in all respective sample *kebeles*. As the sample size prevails female respondents were given due emphasis, by which on average a quarter of them are female. This has its own positive impact on capturing the overall impact of the sedentarization program on each sects of the society.

In regards to age distribution of respondents, since the irrigation project benefits all peoples in the *kebele*, the settlers in the two *kebeles* are from all categories of age groups. But most of the respondents in the study *kebeles* (69.3 %) fall in the age categories of 18-40.

With regards to ethnicity, more than 97% of the respondents in each *kebeles* are from the Oromo ethnic group. Furthermore, from the religion point of view, most of the respondents in all the study *kebeles* are Muslims. According to the household survey, 94.9% of the respondents in *Gidara*, 85.4% in *Turro* and 76.7% in *Dhebiti* are Muslims. The respondents in all the study *kebeles* which are not Muslim belong to the Orthodox Christian and *Waqefetta* traditional religions. According to the household survey, all of the respondents from *Gidara* and *Dhebiti* and 92.6% of the respondents from *Turro* are indigenous inhabitant to the area. The non-native respondents (7.3%) from *Turro* in the household survey indicated that they came to the area in search of better job from Amhara and Southern Nations Nationalities and Peoples' Regions.

With regards to the sedentarization and year of settlement, the household survey indicates that sedentarization took place from 1997 to 2001 in the two study *kebeles*, *Gidara* and *Turro*. *Gidara* was the first *kebele* in *Fentale wereda* to benefit from the irrigation project. Most of the people living in *Gidara kebele* started using irrigation in the period from 1997 to 2000 E.C (2004/5- 2007/2008 G.C). *Turro kebele* on its part, started using irrigation for agriculture production around 2001/2.

In bring about development education plays a key role. Education is the primary vehicle by which people can lift themselves out of poverty. Lack of education, mainly manifested by high illiteracy rates, constitutes a dimension of poverty (OHCHO Guideline, 2002). To identify the educational status and literacy level of the population in the study *kebeles*, questions were raised to the respondents. Table 3 shows distribution of respondents by educational status.

**Table 3 Distribution of respondents by educational status**

Education Status	Name of <i>Kebeles</i>					
	Gidara		Turro		Dhebiti	
	Count	Percentage	Count	Percentage	Count	Percentage
Illiterate	34	87.2	29	70.7	22	73.4
Can read and write	2	5.1	4	9.8	5	16.7
Grade 1-8	2	5.1	7	17.1	3	9.9
Grade 9-12	1	2.6	1	2.4	0	0
<b>Total</b>	<b>39</b>	<b>100</b>	<b>41</b>	<b>100</b>	<b>30</b>	<b>100%</b>

*Source: Household Survey, 2010*

According to the survey, the illiteracy rate is high in the study *kebeles*. 87.2% of the respondents from *Gidara*, 68.3% from *Turro* and 73.4% from *Dhebiti* cannot read and write. The respondents who can read and write or have educational status above grade 1 are only 12.8% in *Gidara*, 29.3% in *Turro* and 26.6% in *Dhebiti kebeles*. Such rate has its own adverse impact on promoting modern agriculture to the community and creating awareness in areas of social and economic issues.

In regards to population, in Ethiopia population number is growing at an alarming rate. This has also been the case in many pastoral areas including the Karrayu, where population growth has become one factor that greatly exacerbated problems such as resource scarcity and food shortage. In many pastoral societies it is common to find men married to more than one wife. As a result there is a great chance of having a bigger family size, and consequently huge population number. Table 4 presents the number of people per household in the study *kebeles*.

**Table 4 Number of People per Household**

<b>Number of People per Household</b>	<b>Name of Kebele</b>					
	<b>Gidara</b>		<b>Turro</b>		<b>Dhebiti</b>	
	<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
<b>Two</b>	3	7.7	2	6.2	1	3.3
<b>Three</b>	2	5.1	5	8.8	2	6.7
<b>Four</b>	12	30.8	11	28.8	1	3.3
<b>Five</b>	5	12.8	6	13.8	3	10
<b>Six</b>	5	12.8	3	10.0	0	0
<b>Seven</b>	3	7.7	6	11.2	4	13.3
<b>Eight</b>	3	7.7	1	2.4	6	20
<b>More than 8</b>	6	15.4	7	17.1	13	43.3
<b>Total</b>	39	100	41	100	30	100

*Source: Household Survey, Oct-Nov 2010*

As the household survey shows, 43.6% of the respondents in *Gidara*, 42.2% in *Turro* and 76.6% of the respondents in *Dhebiti* have more than 6 members in the family. Low literacy level and lack of knowledge with regards to family planning have considerable impact on the number of children in the house. That is, the lesser the knowledge the greater the chance of having more children in the family. This is also evident in the case of the *Karrayu* population. According to the survey, 38.5% of the respondents in *Gidara*, 29.4% in *Turro* and 86.6% in *Dhebiti* have more than 4 children in house.

The low literacy rate, coupled with the tradition of having more than one wife, have significant contribution to having large number of children in the household. This is also

reveled in the household survey conducted in the Fentale *wereda*. Table 5 shows the number of wife per person in the study *kebeles*.

**Table 5 Number of Wives for Male Respondents**

Number of Wives per Husband	<i>Kebele</i>					
	Gidara		Turro		Dhebiti	
	Count	Percentage	Count	Percentage	Count	Percentage
<b>One Wife</b>	22	57.5%	26	42.4%	16	53.3%
<b>More than one Wife</b>	17	42.5%	15	32.4%	14	46.7%
<b>Total</b>	39	100%	41	100%	30	100%

*Source: Household Survey, Oct-Nov 2010*

According to the table, of the total male respondents in the study *kebeles*, 42.5% in Gidara, 32.4% in Turro and 46.7% of the respondents in Dhebiti indicated that they have more than one wife. This significantly contributes in having bigger family size.

### **Economic aspect**

#### ***Annual Income***

Part of identifying the impact of the sedentarization program is asking about issues related with annual income and its source. Therefore, this study forwarded questions for the respondents in regards to annual income and its source. The table below presents the average annual income of respondents in the study *kebeles*<sup>8</sup>.

**Table 6 Distribution of average Annual Income in the Study *Kebeles***

Annual Income (Birr)	Distribution of annual income by <i>Kebele</i>		
	Gidara in %	Turro in %	Dhebiti in %
Below 500	5.1	12.2	56.6
501-2000	33.3	39	16.7
2001-4000	41	9.8	16.7
4001-6000	15.4	12.2	6.7
6001-8000	5.1	22	3.3
Above 8000	0	4.9	0
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

<sup>8</sup> Income of the respondents was considered by calculating income earned through sale of agricultural as well as livestock and livestock products within a year.

Source: Household Survey, Oct-Nov 2010

As the table illustrate, the annual income of the study *kebeles* ranges from less than 500 to above 8,000 Birr per year. According to the household survey, 38.4% of the respondents in Gidara and 51.2% in Turro are getting below 2,000 Birr per annum, whereas 61.5% of the respondents in Gidara and 48.9% in Turro have annual income which is more than 2,000 Birr. However, in Dhebiti, most of the respondents (56.6%) have less than 500 Birr income per annum.

### **Primary Source of Income/Economic Activity**

Among the Karrayu, the major economic activity has been pastoralism. All the respondents (100%) in the study area indicated in the survey that their major source of livelihood used to be pastoralism. But with the increasing shortage of resource, animal/human population growth as well as environmental change, the major economic activity has gradually shifted to a more sedentarized way of life, especially in Gidara and Turro. Particularly, with the introduction of irrigation development project, the major economic activity in the studied area has shifted to settled farming with livestock production on the side. Though these societies had already taken up cultivation and rain-fed agriculture, they haven't been able to produce enough to feed their family mainly because of the erratic climate and shortage of rainfall in the area. Thus, the major source of income continued to be livestock and livestock products.

**Table 7 Source of Income in the studied *Kebeles* before Sedentarization**

Primary/Major Source of Income	<i>Kebele</i>					
	Gidara		Turro		Dhebiti	
	Count	Percentage	Count	Percentage	Count	Percentage
<b>Agriculture</b>	3	7.7	2	5	1	3.3
<b>Livestock and livestock products</b>	36	92.3	39	95	29	96.7
<b>Total</b>	<b>39</b>	<b>100</b>	<b>41</b>	<b>100</b>	<b>30</b>	<b>100</b>

Source: Household Survey

However, with the irrigation project, some changes have been registered. According to the survey, all of the respondents in Gidara and 97% of the respondents in Turro

described agricultural production as the primary source of income. Using the irrigation project, significant numbers of households in the sedentarized study *kebeles* have managed to produce crops (mainly Maize) and vegetables (mainly Onion and sweet potato) for the household consumption and for the market as well. As a result, agriculture is now becoming a major source of income for the settlers in these *kebeles*. In Dhebiti, however, pastoralism is still serving as the major source of income and livelihood base for the people. This is because irrigation project has not reached there yet and resources necessary for agricultural production, mainly water, is not available in the *kebele* forcing them precede pastoral way of live.

### ***Major Asset***

With regards to assets as described by the respondents the major household assets are livestock, house, land and agricultural tools. Table 8 clearly shows major assets possessed by respondents after the introduction of sedentarization.

**Table 8 Major Assets of Respondents**

<b>Major Assets</b>	<b>Name of <i>kebele</i></b>		
	<b>Gidara</b>	<b>Turro</b>	<b>Dhebiti</b>
<b>Livestock</b>	<b>87.2%</b>	<b>12.8%</b>	<b>76.7%</b>
<b>Land</b>	<b>94.9%</b>	<b>85.4%</b>	<b>33.3%</b>
<b>House</b>	<b>94.9%</b>	<b>82.9%</b>	<b>63.3%</b>
<b>Agricultural tools</b>	<b>97.4%</b>	<b>63.4%</b>	<b>26.7%</b>

*Source: Household Survey*

Major economic activity and education status has significant impact in determining the type and value of assets in a society. Formerly, in pastoral communities where the primary source of livelihood used to be pastoralism, the major asset was livestock. With constant mobility and communal land system practiced in pastoral communities, land was a communal property. Individual land ownership was only exercised by settler farmers who came from the highland.

The irrigation project and the introduction of irrigation based farming had changed the livelihood base of sedentarized Karrayu pastoralists; hence, 97.4% and 63.4% in Gidara

and Turro respectively own agricultural tools. Moreover, 94.9% in Gidara and 85.4% in Turro own land for agricultural production. Along with the sedentarization and farming, individual land ownership was introduced. People also started building houses and collect agricultural tools. But for the non-sedentarized ones, such as Dhebiti, the communal land holding system persists.

## **CHAPTER FIVE**

### **IMPACT OF SEDENTARIZATION ON THE RIGHT TO FOOD, HEALTH AND EDUCATION**

#### **5.1 Introduction**

This chapter discusses the right to food, health and education status of sedentarized Karrayu pastoralists. The chapter specifically seeks to analyze the realization of right to food, health and education of sedentarized Karrayu pastoralists in terms of availability, accessibility, and utilization taking the general comment of the CESCR as a framework. In areas where it is relevant, issues of acceptability and sustainability were discussed.

Moreover, the chapter discusses sedentarization with regards to the basic principles of right-based approach to development, mainly participation and empowerment. The gender aspect of sedentarization is also briefly dealt with under this chapter.

#### **5.2 Right to Food**

##### **5.2.1 Impact of sedentarization on the Right to Food of Karrayu Pastoralists: Availability, Accessibility, Acceptability and Sustainability**

The general concept of food can be broken down into several elements. It incorporates the issue of availability of food products both in market and in the household; accessibility of resources necessary for food production; cultural acceptability as well as quality and sustainability of food availability. In socio-economic development process, individuals should be active participants and should strive to improve their livelihoods by

using resources (Eide, 2005). But for this to come about, they ought to have access to the means of production.

### **5.2.1.1 Availability of Food and Means of Production**

Means of production is the major necessity when it comes to food and food production. Without access to these resources, it is impossible for people to survive. The voluntary guideline developed by FAO on the right to food states that “States should facilitate sustainable, non-discriminatory and secure access and utilization of resources consistent with their national and with international law and protect the assets that are important for people’s livelihoods (FAO, 2005: Guideline 8.1). **However, pastoralists have been denied access to the very basic resources to their existence including grazing land and water.** According to the general comments, availability also refers to the possibilities either for feeding oneself directly from productive land or other natural resources (General Comment No. 12, Para: 7). This requires availability of resources necessary for production.

Water availability, its appropriate development, and use are vital for the development of arid and semi-arid areas like Fentale. The poverty reduction strategy, duly highlights that water based development is one of the essential intervention areas to get rid of the problem of food security and the deep-rooted poverty in the short run and to ensure continuous economic growth and social development, and hence sustainable development in the long run (OWWDSE, 2009). Accordingly, irrigation development was introduced for Karrayu pastoralists aiming to ensure access to water mainly for agricultural production, as well as livestock consumption. This aimed at enabling people feed themselves using land and irrigation water. In light of this, it was found appropriate to learn about the availability of means of production for the sedentarized Karrayu after the introduction of irrigation farm. Table 10 presents the data on availability of means of production in the sedentarized study *kebeles*.

**Table 8 Availability of Means of Production (land and water)**

<b>Kebele Name</b>	<b>Means of Production Distribution (In Percentage)</b>				
	<b>Very high availability</b>	<b>High availability</b>	<b>Medium availability</b>	<b>Low availability</b>	<b>Total</b>
<b>Gidara</b>	<b>79.5%</b>	<b>15.4%</b>	<b>2.6%</b>	<b>2.6%</b>	<b>100%</b>
<b>Turro</b>	<b>36.6%</b>	<b>4.9%</b>	<b>58.5%</b>	<b>0%</b>	<b>100%</b>

Source: Household Survey

As can be seen from table 9, after the introduction of the irrigation program, 95% of the respondents from *Gidara kebele* and 41.5% from *Turro* have indicated that they have between very high and high access to these resources while 58.5% of the respondents in *Turro* responded that they have medium access the resource they require to produce food. The respondents also indicated that the level of income has increased as a result. Seventy nine percent of the respondents from *Gidara* and 56% from *Turro* have stated that they now have much better income compared with others in their locality. Hussien Boru, one of the FGD participants in *Gidara kebele* said:

*We are benefiting a lot from agriculture now, we are making good money. We use the money to buy ox for farming and to get prepared for the next round of farming. We save the remaining money in bank. Now we can inherit things for our children too.*

Another female FGD participant from *Turro kebele* added:

*...it is through the sedentarization program that I acquired the necessary agricultural tools of production and other means of production; mainly land and water. In doing so, my children are getting enough food in amount and type*

### **5.2.1.2 Food Adequacy**

One of the things required for the right to food to be realized is acquisition of adequate consumable food, in quantity and quality. According to women FGD participants in the study kebeles, food adequacy refers to the availability of food items in sufficient amount in household or a community. Talking about the availability of adequate food in their family, women FGD participants in *Turro* stated that they used to skip meal because they didn't have enough food to feed the family. In this regard, measuring the number of times individuals consume on usual basis can be one very good indicator to measure availability of adequate food. Accordingly, a question was presented to the respondents whether they

were able to produce enough food sufficient for their consumption. Table 10 presents the distribution of respondents by number of meals they consume per day.

**Table 10 Distribution of respondents by number of meals they consumed per day before and after sedentarization.**

Number of meals consumed per day	Percentage distribution by <i>Kebele</i>							
	Gidara (Before sedentarization)		Turro (Before sedentarization)		Gidara (After sedentarization)		Turro (After sedentarization)	
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage
Once a day	29	74.4	12	34.2	0	0	0	0
Twice a day	9	23.1	23	56.1	1	2.6	10	24.4
Three times a day	1	2.6	4	9.8	36	92.3	24	58.5
More than three times a day	0	0	0	0	2	5.1	7	17.1

*Source: Household Survey*

As can be read from table 10, after the sedentarization program most of the people living in the two sedentarized *kebeles*, Gidara (97.5%) and Turro (75.5%), are consuming three and more than three times per day on regular basis. According to the data, compared to the situation before the introduction of irrigation, it shows an increase by 94.9% and 63.4% in Gidara and Turro respectively. But in the non-sedentarized study *kebele*, Dhebiti, 90% of the respondents indicated that they eat only twice or less a day.

### **Source of Food**

Aiming to identify the basic source of food for the people in the study *kebeles* before and after sedentarization, questions were raised for respondents. Table 11 presents the basic source of food before sedentarization while Table 12 presents basic source of food after sedentarization in the sedentarized study *kebeles*.

**Table 91 Source of Basic Food before Sedentarization Program**

Source of basic food	Percentage distribution by <i>Kebele</i>			
	Gidara		Turro	
	Count	percentage	Count	Percentage
<b>Own Farm</b>	3	7.7	4	9.8
<b>Own Livestock Produce</b>	23	59.0	19	46.3
<b>Purchase from Market</b>	25	64.1	23	56.1
<b>Food aid</b>	26	66.7	27	65.9

*Source: Household Survey*

**Table 12 Source of Basic Food After Sedentarization Program**

Source of basic food	Percentage distribution by <i>Kebele</i>			
	Gidara		Turro	
	Count	%	Count	%
<b>Own Farm</b>	39	100	29	70.7
<b>Own Livestock Produce</b>	21	53.8	17	44
<b>Purchase from Market</b>	15	38.5	9	22
<b>Food aid</b>	0%	100	2	54.9

*Source: Household Survey*

As can be seen from table 11, only 7.7% of the respondents from Gidara and 9.8% from Turro were feeding their families producing food from own land, and 66.7% of the respondents in Gidara and 65.9% in Turro indicated that they used to get their basic food mainly from food aid provided by the government. But as table 12 illustrates that after sedentarization all of the respondents in Gidara and 70.7% in Turro indicated that they are feeding their family producing food from own land. In addition, table 12 also shows that the number of people who depends on food aid decreased to 0% in Gidara and 5% in Turro after sedentarization.

Moreover, according to the information gathered from Kedir Musema, *wereda* Food Security Office head, Gidara has fully graduated from the safety net program in 2008 and in Turro, the number of households who graduated from the program is increasing after sedentarization. The same source stated that Turro and the other sedentarized *kebeles* (Illala, Tuttuti and Deresedien) are expected to fully graduate from the program in 2010 and 2011. This is mainly because the sedentarized pastoralist are getting their basic food from their own farm and own livestock products. In the focused group discussion, sedentarized pastoralist indicated that availability of water was one of the main factors limiting agricultural production. The irrigation project has made water accessible to the people, making agriculture production profitable. However, in Dhebiti access to water still persists as the major problem. In the FGD held with pastoralists in Dhebiti, participants stated that water is the major problem for agricultural production. They voiced up:

*We depend on food aid for our survival because agriculture production is not productive without enough water. When the irrigation project reaches here, we will be able to produce and become self-sufficient.*

### **Livestock Productivity**

According to interview held with key informants Bulga Roba and Boru Bulga, community elders in Turro, livestock productions had been affected by shortage of pasture and water causing intra and inter clan conflicts over these scarce resources. Moreover, due to scarcity of these resources, pastoralists were forced to move from place to place, aggravating the problem of provision social amenities and other infrastructures difficult. But with the irrigation project and subsequent increased access to water, livestock productivity has shown an increase. In this respect, 97.4% of the respondents in Gidara and 95% in Turro stated that they have better access to water for livestock; while 64% in Gidara and 56% in Turro indicated that their livestock have better access to fodder now than they had before sedentarization. This has resulted in an increased livestock productivity which, in turn, has a huge impact on food consumption and diet combination of pastoralists in the sedentarized study *kebeles*. With increase in livestock productivity, there is also a great probability for strengthened dietary diversity and

improved consumption of dairy products which has high nutrition value. This is mainly because ensuring changes in availability and access to food supply most likely positively affects dietary composition and intake. Jemila Johara, a mother of 5 in Gidara, said:

*...Now, thanks to the new project our livestock have enough water to drink. We don't have to take them long distance to get water. They are now more productive than they were before; my children are drinking more milk and becoming stronger...*

However, in Dhebiti 90% of the respondents indicated that they have low access to water and fodder for livestock even when compared to the situation before. Hence, they have low livestock productivity.

### **5.2.1.3 Affordability and Food Price**

According to the data collected, food price has shown a big increase in the market. Especially in September 2010, most of the respondents (89.7% in Gidara, 97.6% in Turro and 60% in Dhebiti) indicated that the price has shown high increase. The major reason for price increase, according to them, is the rising cost of living in their *Wereda* and the country as a whole. But most of the respondents from Gidara and Turro (100% in Gidara and 56.1% in Turro) spend income obtained from sale of produces to cover health expenses, buy agricultural tools, pay loan and save. Before sedentarization, only 41% of the respondents in Gidara and 54% in Turro were taking their products to the market and they were using most of the money they earned to purchase goods from market. This shows that the people have better production, better income and hence increased purchasing power to purchase goods from the market. Ahemed Fentale, who lives in Gidara, is producing maize for the third time now. He said:

*My land is not that big, because I am not married I was given only 0.7 hectare of land. But with irrigation, production is good. I even took my produces to the market. I have better income now. From the last sale, I have earned around 15,000 Birr. Those who have a bigger land are producing and earning more money from the sale...*

This is also revealed on the responses given by the respondents in the study area, 97.4% of the respondents in Gidara *kebele* and 95% in Turro described that they have better

access to food items now than they used to have before sedentarizing. All of the respondents in Gidara and 97.6% in Turro also responded that they have enough food to satisfy the needs of their family.

In Dhebiti, since production is low the percentage of respondents selling their products to the market remains low resulting in low income and purchasing power. In the FGD held with women in Dhebiti, participants stated that the only produce they have is livestock products and with the increasing shortage of pasture and water, livestock productivity has decreased. Thus, they barely get produce to feed their family, let alone to take to the market. In the survey, only 10% of the respondents indicated that they have better access to basic food items. Moreover, 56.6% of the respondents indicated that they skip meal to cope with food shortage, though the situation varies in frequency from household to household.

#### **5.2.1.4 Acceptableness**

When it comes to accessibility and adequacy of food items, the issue of acceptability has a very significant value. Besides having food, which is adequate and sufficient, the available food should also correspond and be acceptable to the cultural traditions of the people to which the consumers belongs to (General Comment No. 12, Para: 6). One domain of food insecurity is having limited choices in the type of food that a household consumes. People usually consume food which is not acceptable or which is less preferable to the culture when there is shortage of food production or low/no income to purchase from the market. When there is adequate food or strong purchasing power, there is a little or no chance for the people to be forced in consuming culturally unacceptable/less preferable food items.

The household survey conducted also revealed that there is a reduction in the number of people consuming less preferred food items after sedentarization. According to the survey, before sedentarizing 26% of the respondents in Gidara, 34.2% in Turro and 26.7% in Dhebiti used to consume less preferable meal at least once in a week. But after sedentarizing, the number of people consuming less preferable food items at least once in a week decreased to 5.2% in Gidara and 9.7% in Turro. Moreover, 92.8 % of the

respondents in Gidara and 64% in Turro indicated that they don't eat less preferable food items at all. Kedija Hussien, a mother of five children in Gidara says the following:

*Since we do not produce enough amount of milk and cereals, our children used to consume dry Kita (bread) made of maize. I didn't have money to purchase from the market. Therefore, we were forced to consume such food items which are not common in our society unless you are deprived and poor. But now, we are producing enough cereals and due to the availability of pasture and water, our cattle are more productive. Our daily food consumption is changed to Merqa<sup>9</sup> and milk. Injera<sup>10</sup> is consumed more frequently; which was unthinkable in previous years.*

As the above key informant reveals, due to frequent drought, less preferred food items were part of the daily meal. Children were unable to get enough milk. The customary food item *Merqa* (porridge), which has high nutrient value was hard to find. Now, it is served in most of the houses accompanied by fresh milk. *Injera*, which is the basic component of Ethiopian diet, is being occasionally consumed in most studied households in the sedentarized *kebeles*. However, in Dhebiti, 30% of the respondents indicated that they still eat less preferable food items at least once a week.

#### **5.2.1.5 Sustainability**

In addition to studying households' accessibility of food, sustainability is another rather imperative matter that needs to be taken into consideration. As it is included in the General comment of the committee on economic, social and cultural rights (CESCR), accessibility of food also deals with accessibility of food from own farm or market which is culturally acceptable in ways that are sustainable. The notion of sustainability is very much associated with the notion of food security, and implies that food should be accessible for both present and future generations (General Comment No. 12, Para: 7). It basically deals with the long-term availability and accessibility of food supplies so that the people will not be threatened to hunger in the future.

In the case of Karrayu pastoralists, this can be related to and viewed from sustainable availability and accessibility of the means of production required for food production

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<sup>9</sup> Merqa is Porridge, famous food among the Karrayu pastoralists.

<sup>10</sup> Injera is Pancake- like bread; basic component of Ethiopian diet

including water and land. It also can be related to the suitability of the land for agriculture which will to a great extent determine the sustainability of production. In this regard, a question was forwarded to the respondents concerning suitability of the land for agriculture. Accordingly, All most all of the respondents in the study area (97.4% in Gidara, 100% in Turro; 90% in Dhebiti) described their land as suitable for crop and livestock production. In the FGD held with male community members in Turro *kebele*, the participants indicated that though the land has salinity, it is still suitable for agricultural production. The *wereda* administration also confirmed the salinity of the soil and affirmed that there is a probability that the salinity of the soil may increase in the future. This can significantly affect production and hence sustainability of food availability for the people in the future. Moreover, there is little movement to address the issue of salinity.

Moreover, though the situation varies, 87.8% of the respondents in Turro *kebele* stated that they have encountered crop failure after sedentarizing. As the people pointed out both in the survey and in the FGD held in the study *kebeles*, though there is a better access to water for them and for their livestock, the water provided in the *kebele* is not yet enough for agricultural production and is causing crop failures. As the findings also indicate, the water systems in the *kebele* either has not properly being constructed or completed to ensure water access to all parts of the *Kebele*. But the responsible body, including the *wereda* administrator, stated that the system is under construction and will cover/benefit all parts of the *kebele* when completed.

## **5.3 Right to Health**

### **5.3.1 Impact of sedentarization on the Right to Health of Karrayu Pastoralists: Availability, Accessibility and Utilization**

According to the CESCR's general comment, the right to health involves the issue of availability, accessibility, acceptability and quality. This thesis takes availability to include availability of functioning public health and health-care facilities, goods and services in sufficient quantity, including the underlying determinants of health such as safe and potable drinking water and adequate sanitation facilities, hospitals, health posts

as well as trained medical and professional personnel and essential drugs. Accessibility deals with physical and economic accessibility of health facilities to all while acceptability deals with health facilities, goods and services culturally appropriate and designed to improve the health status of the people, while quality deals with skilled medical personnel, scientifically approved and unexpired drugs and hospital equipment, safe and potable water, and adequate sanitation being in place (General comment 14, Emphasis added).

### **5.3.2 Accessibility and Availability**

Good health is a prerequisite for the socioeconomic development of any society. The right to health comprises the enjoyment of facilities, goods, services and conditions necessary for the realization of the highest attainable standard of health (OHCHR, 2002:Para 116; General Comment 14: Para 9). It is possible to register good record in health by making progress in the provision of public health and promotion of primary health care. When it comes to health, accessibility and availability has a great role in terms of creating opportunity and ensuring the realization of rights. Health facilities will need to be made more accessible, properly stocked with drugs and other equipments, properly staffed and improved in terms of infrastructure relevant to the social and physical environment.

In this regard, Karrayu pastoralists were found at the losing end. They had very poor access to health care institutions, which resulted in poor health status and high prevalence of preventable diseases such as malaria and diarrhea. As one of its objective of ensuring social service provision, the sedentarization program among Karrayu is aimed to bring about change in the health sector in terms of making health care services more accessible and available to the people.

As has been revealed during the discussion held with community members in Gidara and Turro *kebeles*, the major problem for the community used to be inaccessibility and unavailability of health care services. In the survey conducted, 94% of the respondents in Gidara and 92.7% in Turro stated shortage of health institutions as the major problem of health before sedentarization. But with the introduction of a more settled way of life,

pastoralists' access to health institutions has improved. Accordingly, the percentage of respondents who stated shortage of health care institutions has decreased to 25.6% in Gidara and 29.3% in Turro. But in Dhebiti, 96.7% of the respondents still believe that shortage of health institutions is the major problem of health in the area. Hawa Roba, one of the participants in the FGD held with women community members in Dhebiti stated:

*From the health post in our kebele, we only get Malaria and polio vaccination; pain killer and family planning services. But when we move to other places in search of pasture and water, everything stops. We don't get vaccination, family planning or other services in the new places, so we suffer...*

During direct field observation, it was also possible to witness that there is one health post (Tena Kela) in each *kebeles* of the *wereda* which are found within 5 to 15 km approximately. According to the information gathered from the community as well as *wereda* health office, these health posts were constructed in 2008 and do not have the required human and material resource. Moreover, the services provided by these health posts are limited to education (with regards to disease prevention, sanitation and hygiene); family planning and delivery service as well as vaccination and distribution of materials such as mosquito net (Agober). Medicines provided are also limited to exigency diseases such as malaria and diarrhea. To access other health services, the people still have to go to the health center (Tena Tabiya). Currently, there are only three health centers (Tena Tabiya) in the *wereda*. These centers, though serve people coming from the whole 18 rural *kebeles*, are found outside of the *kebeles* covered by the sedentarization program namely Kenifa, Qobo and Alge. Except that of Alege, which was functional three years ago the other two started functioning last year. There is also one hospital inside the vicinity of Metehara Sugar Estate, which mainly serves employees of the factory. People living in the rural *kebeles*, other than where the health centers are found, travel long distance on foot to access these health centers. This is mainly due to the fact that health centers are found far from most *kebeles*, a problem further exacerbated by very low infrastructural amenities.

### 5.3.3 Quality and Functionality

As described by the FGD participants in the study *kebeles*, these centers are not well facilitated and well equipped to serve the community. The women FGD participants in *Gidara kebele* said,

*We go to health centers when we encounter health problem. But we only get consultation and birth service in the health station found in our kebele. We don't get other medical services. We have to go to Metehara, Addis Ketema or Bole to get medical service. We need a functioning health center which gives us medical care service, have adequate human resource and medicine as well.*

According to the survey, 80% of the respondents in *Gidara* and 92.6% in *Turro* described the services rendered by these health institutions as poor before sedentarization. Also in *Dhebiti*, 86.7% of the respondents described the services rendered by these institutions as poor. The major reasons the community pointed out includes shortage of professional medical workers, shortage of medical equipments and too much focus given to prevention rather than cure which paralyzed the health posts.

For this reason, the respondents indicated that they used to prefer to go to the town (*Metehara* and *Addis Ketema*) to access the health institutions which require them to pay higher price. But with the new settled way of life, these communities have seen some changes. According to the survey conducted, indicating the relative improvement of the quality of service provided, 71.8% of the respondents in *Gidara* and 63.8% in *Turro* described the services provided as good in the past few years.

With regard to medicine, the *wereda* health office indicated that community members get medicines from health posts through extension workers for free. These medicines mainly are meant for diseases such as malaria and diarrhea. They also get medicines from health centers. But in the discussion held with community members in *Gidara*, participants said:

*We don't get enough medicines either from the health center or health posts. The only medicine available in these institutions is for malaria and diarrhea. When we are sick, we go to the nearby town to get medicines with higher prices because we cannot find them in the local health institutions.*

This was also revealed in the FGD held with members of community in the other two study *kebeles*.

#### **5.3.4 Health Coverage**

One of the goals under the health policy is to cover all rural *kebeles* with the health service extension program (HSEP) to achieve universal primary health care coverage (PASDEP: 2005/06). As it has been described in the above discussion, in Fentale *wereda*, including *kebeles* that are not incorporated in the sedentarization program, there are 18 health Posts, 3 health centers and one hospital. According to the health coverage measuring system used by the health policy, the *wereda* health office explained that the *wereda* is 100% health covered, even before the sedentarization program. However, though the *wereda* is said to be 100% health covered, the health service provision is poor and many people, especially in the non-sedentarized *kebeles*, are not getting the health service they require, i.e. other than education on prevention and control. The major constraint here is that health coverage is calculated by the capacity that these institutions can serve rather than the actual figure they served and spatial distribution.

#### **5.3.5 Affordability**

To serve the poor and most vulnerable parts of the society, going beyond physical accessibility, basic health care services also needs to be affordable. Otherwise, the most vulnerable segments of the society will be left out of the picture. They will have their rights denied and be pushed further back to deep rooted poverty. Therefore, any policy, strategy or program which aims at bringing an impact on the health sector should take this into consideration. Accordingly, in connection to questions raised in relation to cost of health services before sedentarization, only 38.5% of the respondents in Gidara, 26.8% in Turro and 33.3% in Dhebiti described as 'fair'; while 41.1% of the respondents in Gidara, 73.2% in Turro and 50% in Dhebiti indicated as it is expensive/unaffordable. But with the new settled life, the percentage of respondents who describe the cost as fair increased to 79.5% (31) in Gidara and 65.8% (27) in Turro; though the situation remains the same in the studied non-sedentarized *kebele*. Nevertheless, it can be understood that this is attributable to the increased income and purchasing power of the people in the

*kebele*, and therefore cannot be viewed in terms of a decrease in the price of services rendered by the health institutions.

### **5.3.6 Access to health-related information**

In the right to health, access to health-related information and education has a key importance (OHCHR, 2002: Para 116). Specially, in a society with a very low literacy level and low living standard, the importance of health related information is paramount. This is why the country's health policy also places high importance in health education and prevention. With regard to health information, before sedentarization 80% of the respondents in Gidara and 77% in Turro indicated that lack of awareness to disease prevention used to be one of the major health related problems in their community. In Dhebiti, 73.3% of the respondents also stated the same. Many scholars state that pastoral way of life is challenging when it comes to the provision of services mainly because of its mode of production which requires continuous mobility. The main problem contributing to lack of information/awareness to disease prevention among Karrayu pastoralists is their movement from places to places in search of pasture and water. The health office is giving due emphasis to health education and health extension workers are working to raise the awareness of the community in regards to disease prevention, as well as sanitation and hygiene. As Kedija Hussien, the health extension worker in Turro *kebele* indicated, accessing pastoral Karrayu used to be difficult for them to provide health care services said:

*During the period of vaccination or vaccination campaign, it was difficult to access the people because they frequently move from places to places. Children miss their vaccination. Women also miss their vaccination/medicine for family planning. And even when they want to remind them to come for vaccination and also to teach them on how to prevent disease; how to keep their children and clean home; and also to distribute mosquito net and monitor its proper usage, we can't find them. This makes it hard for us to execute our task and bring about the change required. But now this had improved. People are living a settled life in the villages and we are doing our job...*

According household survey results, after sedentarization 87.2% of the respondents in Gidara and 90.2% of the respondents in Turro indicated that they are getting education on disease prevention and control. But the situation remains the same for the non-

sedentarized study *kebele*. 73.3% of respondents in Dhebiti are not getting education on disease prevention and control.

**Table 13 Education on disease prevention and control in the studied *kebeles***

<i>Kebele</i>	Education on disease prevention and control											
	Before sedentarization						After Sedentarization					
	Respondents getting education		Respondents not getting education		Total		Respondents getting education		Respondents not getting education		Total	
<b>Gidara</b>	5	12.8%	34	87.2%	39	100%	38	97.4%	1	2.1%	39	100%
<b>Turro</b>	4	9.8%	37	90.2%	41	100%	35	85.4%	6	14.6%	41	100%

Source: Household Survey

### 5.3.7 Most Common Disease

According to the information provided by the *wereda* health office expert, the most common diseases in the studied *wereda* are malaria, diarrhea, intestinal parasite and upper respiratory infection. Due to extreme hotness of the area and expansion of Lake Beseka, there is a very high incidence of malaria. To specifically address this, the health extension workers provide education on how to prevent the disease, supply medicines and also distribute mosquito net to the people. They also monitor proper usage going house to house. In the FGD held with community members in the *Gidara* and *Turro kebeles*, the participants described education as the primary factor to bring change in malaria prevalence and confirmed that their new settled way of life has positively affected the situation in their *kebele*.

Another major health related problems observed in the *wereda* was malnutrition, particularly among children. The following table clearly shows food related problems before sedentarization and impact of the sedentarization in the study *kebeles*.

**Table 104 Children suffering from food related health problems in the studied *kebeles*, before and after sedentarization**

<b>Children suffering from food related health problems</b>	<b>Gidara</b>		<b>Turro</b>	
	<b>Before Sedentarization</b>	<b>After Sedentarization</b>	<b>Before Sedentarization</b>	<b>After Sedentarization</b>
<b>Yes</b>	89.7% (35)	10.3% (4)	65.8% (27)	22% (8)
<b>No</b>	10.3% (4)	89.7% (35)	34.1% (14)	88% (33)
<b>Total</b>	100% (30)	100% (39)	100% (41)	100% (41)

*Source: Household Survey, Oct-Nov 2010*

As observed from the survey and FGD, children in the studied *kebeles* suffer from food related health problems especially before the sedentarization program. But with the new system of production and better income earned from agriculture production, the situation has improved in the sedentarized *kebeles*. Children as well as the other family members are now consuming more milk and dairy products, and hence richer combination in their diet. However, in Dhebiti the situation remains the same. According to the survey, 56.7% of the respondents encounter health problem due to shortage of food.

### **5.3.8 Water and Sanitation**

The right to health includes access to potable water and adequate sanitation which are the underlying determinants of health (OHCHR, 2002: Para 116; General Comment 14: Para 11). According to the information provided by the *wereda* health office, following malaria, diarrhea and intestinal parasites are the major health problems in the *wereda*. These are mainly caused by poor access to clean drinking water as well as poor hygiene and sanitation. The country's health strategy aims to address problem of hygiene and sanitation by providing education on personal and family hygiene. Health extension workers in the study *kebeles* also provide house to house hygiene and sanitation education, including how to construct and use latrine for the community.

Amina Abduraheman, a health extension worker and key informant of the study in *Gidara* said:

*The sedentarization program has made information/education more accessible to the community and the community can access extension workers easily. Now the people have better knowledge on how to keep their home, children and food utilities clean; and most of them are using latrine...*

*Dureti Fentale, a mother of four in Gidara, added the following during an FGD.*

*.....health extension workers are teaching us on how to prevent ourselves and our family from diseases, they also distribute Agober (mosquito net) and give us education on hygiene and sanitation. I have better information regarding health and other health related issues now.*

With regards to the provision of clean drinking water, the *wereda* faces a huge problem. The community uses ground water for drinking which has high Florien content. As the *wereda* health office expert explained, the fluorine content goes from 15-30 in boreholes. Though the irrigation project has made water accessible to the people, the water comes directly from the Awash River and is not potable for the people; though they don't seem to have any choice at the moment. This has huge effect, both internal and external, on the health of the community.

To address the problem of clean water in the community, the *wereda* health office explained that there is an ongoing project (Gimbichu water project) which intends to bring potable water from a place called Gimbichu Cheffe Donsa, a place found 40km from Debre Ziet. When the project is finalized, it will make potable water accessible to the people and will improve the health status of the people, as the *wereda* health office explained.

## **5.4 Right to Education**

### **5.4.1 Impact of sedentarization on the Right to Education of Karrayu pastoralists: Availability, Accessibility and Utilization**

The key problems of education are “access to schools, incompatibility with pastoralist lifestyles, and quality and efficiency problems due to shortages of trained staff, and cultural taboo towards sending girls to school” (PASDEP, 2005/06). Hence, the aim of improving education right of communities, such as Karrayu pastoralists, should begin with making schools accessible and available.

### 5.4.2 Availability of Schools

Though obtaining a quality education is a fundamental right for all children, in areas where schools are not available or where families move from places to places, children might miss months or even years of schooling. As Daniel (2005) rightly puts it “Inequality in educational opportunity” in both service and access to formal education between regions and communities resulted in high illiteracy rate, particularly among pastoralists such as Karrayu. Lack of education and information as well as access to schools has greatly influenced educational status of pastoral communities. Similarly, absence of school used to be the primary problem regarding education in Fentale *Wereda*. In Gidara, 77% of the respondents and in Turro 78% indicated that absence of school used to be one of the primary problems of education for their children. As it is stated in the general comment of the CESCR, availability implies the existence of sufficient public schools to serve the community. As the household survey respondents in Gidara and Turro *kebeles* reply, there were no primary schools in their or neighboring *kebeles* before sedentarizing. Thus, they used to send their children as far as Metehara to get primary education.

However, the situation has improved after sedentarization. According to the survey, after sedentarization 80% of the respondents in Gidara *kebele* and 83% in Turro state that there is at least one nearby primary school in their *kebele*, found within 5-10 km radiuses. According to the survey, children now travel from less than 30 minutes in Gidara to 30 minutes to an hour in Turro.

Nonetheless, absence of school is not the sole factor that affects education among Karrayu pastoralists. For instance, in Dhebiti though 100% of the respondents state in the survey that there is at least one nearby primary school in their *kebele*, most of them (60%) indicated that they do not send their children to school, especially girls. Hence, in order to identify problems regarding education and reasons for drop out, questions were raised for respondents from the sedentarized study *kebeles*. The table below presents problems and reasons for drop out in Gidara and Turro *kebeles*, before sedentarization.

**Table 15 problems related to Education and Reasons for Drop out in the sedentarized study *kebeles* (Before Sedentarization)**

Reason for Drop Out	Kebele Name							
	Gidara				Turro			
	Before Sedentarization		After Sedentarization		Before Sedentarization		After Sedentarization	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Displacement of family members	24	61.5	2	5.1	15	36.6	1	2.4
Demand for child labor		57		12		89		23.7
Lack of awareness	30	76.9	4	10.3	21	51.2	3	7.3

Source: Household Survey

As can be seen from the table above, frequent movement of family and demand for child labor are two of the problems affecting education and students enrollment in schools in the study *kebeles*. This is mainly because pastoralism employees the whole family labor and sometimes forces children to drop out of school. Especially when the family moves to another place in drought season, children leave school and take the livestock to far places in search of pasture and water. Before sedentarization, 57% of the respondents in Gidara and 89% in Turro described demand for child labor as one problem of education in the study *kebeles*. But with the introduction of irrigated agriculture and a new way of life, in the sedentarized *kebeles* children no longer have to drop school and move from place to places. The need for child labor is not the same as it used to be. As a result, the percentage of respondents who describe the demand for child labor as a problem to education decreased to 12% in Gidara and 23.7% in Turro. Also with regards to frequent changing place of living, before sedentarization, 61.5% of the respondents in Gidara and 36.6% in Turro indicated family movement as the major reason students dropping out of school. But with the introduction of sedentarization and settled farming, the percentage of respondents who indicated family movement as a major factor for students drop out decreases to 5.1% (2) in Gidara and 2.4% (1) In Turro. This has a huge impact on education, particularly with that of school dropout rate. But in the non-sedentarized study *kebele* (Dhebiti), family movement continues to be major problem for students dropping out of school. 53.3% of the respondents still describes changing place of living as a major reason for drop out.

Lack of awareness is also another factor contributing to high student dropout rate in Karrayu pastoral community. 76.9% of the respondents in Gidara and 51.2% in Turro stated lack of awareness used to be one reason for students drop out in their community. After sedentarization the percentage has shown a decrease to 10.3% in Gidara and 7.3% in Turro. In the FGD held with women community members in Turro, the participants said

*We now have a better understanding of the importance and benefits of sending children to school. We want our children to learn and secure a better future for themselves and for us too.*

However, in Dhebiti 60% of the respondents still describe lack of awareness as one of the major problem related to education in their community.

### 5.4.3 School Facility

With regards to school facility, all primary schools in the studied *kebeles* are new. They have one section for each grade. Moreover, as explained by the school directors of sedentarized study *kebeles*, there is shortage of teachers, both in qualification and number, who can provide quality education for the children. Both Turro Primary school (1-5 grades) and Gidara primary school (1-4 grades) have only four teachers each for the entire school. Moreover, all schools lack basic teaching materials and books.

**Table 16 Teachers Qualification, Number of class and Student per Class in Schools found in the studied Beneficiary *kebeles***

<b>Kebele Name</b>	<b>Teachers Qualification</b>		<b>Number of Students in a Class (Average)</b>	<b>Number of Class</b>
	<b>TII</b>	<b>Diploma</b>		
<b>Gidara</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>4</b>
<b>Turro</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>5</b>

Source: KII, Oct-Nov 2010

### 5.4.4 Secondary School

As is stated under general comment 13, secondary education as well includes the elements of availability, accessibility and utilization and shall be made generally

available and accessible to all (General Comment 13, para 11 & 13). However, there is no any secondary school in all rural *kebeles* of Fentale district, including the study areas. There are only two secondary schools in the two urban *kebeles*, Metehara (inside the vicinity of Metehara Sugar Estate) and Addis Ketema.

Consequently, even if students in rural *kebeles* manage to complete their primary in schools in their *kebeles*, they will be forced to drop out of school or move to the town to continue their secondary education. This affects pastoralists' right to education and sustainability of education in the area under study.

#### **5.4.5 Vocational and non-formal Education**

In terms of vocational education, technical and vocational education and training (TVET) forms an integral element of education (General comment 13, Para 15 (2)). There is only one TVET college which serves students coming from different places including the 18 Karrayu *kebeles*. As is frequently pointed out, relevance of education has a significant impact with regards to meeting the target, and brings about change in the community. It also increases the acceptability of education in a community.

As described by the *Wereda's* Education Office Head, assessment was done to identify the resources available and knowledge gap in the area. Aiming to make the education more relevant to the people, the TVET College has included new fields of studies such as small scale irrigation, industrial crop production, sheep and goat production as well as root and tuber fields of studies. Bearing in mind the well-developed knowledge in livestock and livestock production, the impact of incorporating these fields of study in the TVET College will have a positive impact on improving productivity and output of these communities. Acknowledging the lack of knowledge the rural population have in relation to education, awareness raising campaign is being held at *kebele* level. This will help improve the knowledge and understanding of the people and hence result in a better utilization of these opportunities by the community, including the vulnerable and marginalized girls.

As we all know, pastoralist's knowledge is related with livestock and their engagement in agriculture production is only a recent phenomenon. This might result a knowledge gap in terms of farming including proper utilization of agricultural tools, fertilizers, insecticides and pesticides. Aiming to improve Karrayu pastoralist's knowledge with regards to farming and business development, short term trainings are being given by the *wereda* in some *kebeles*, such as Gidara. As indicated by the *Wereda* TVET Office Expert, after the sedentarization program the farmers training centers (FTC's) which was not functional, has now started operating in some *kebeles*, and the rest *kebeles* will follow. This can result in better utilization of the resources available and hence better production. In regards to alternative basic education (ABE), though it can significantly improve pastorals' livelihood and reduce illiteracy rate in the community, such program has not been designed for pastoralists in all the study *kebeles*.

#### **5.4.6 Accessibility**

As formulated in article 13 (2) (a), primary education should be both "compulsory" and "available free to all" (Article 13, ICESCR); that is, primary education should be free for all. In the study *kebeles*, families do not pay school fee for their children on regular basis. However, the families indicated that they are sometimes required by the school to pay some amount of money per children. On the discussion held with school directors in the study areas, it was affirmed that, though not as a regular school fee, parents are asked to share some education cost aiming to enrich the library with books and other teaching materials.

### **5.5 Right Based Approach to Sedentarization: Participation and Empowerment**

Development intervention that follows top-down approach for long has not been successful in terms of bringing about sustainable change in a society. When we see participation in relation to pastoralists, it can be understood to mean that pastoralists should make the agenda concerning the kind of development they want to pursue (Ask, 2006). The process should follow bottom-up approach, involve the community at each

stage and most of all should not interfere with the enjoyment of other rights. The figure below depicts the community involvement in the project activities.

**Table 17 Participation in the project**

<b>Types of Participation in the project</b>	<b>Gidara</b>		<b>Turro</b>	
	<b>No.</b>	<b>Percentage</b>	<b>No.</b>	<b>Percentage</b>
<b>Initiating the Idea</b>	34	87.2	40	97.6
<b>Selecting Sites</b>	18	46.2	19	46.3
<b>Designing the project</b>	10	25.6	6	14.6
<b>Following implementation work</b>	26	66.7	22	53.7
<b>Monitoring Impact</b>	19	48.2	6	14.6
<b>Never Participated</b>	7	18.4	0	0

*Source: Household Survey, Oct-Nov 2010*

As can be read from the table, 87.2% of the respondents in Gidara, 97.6% in Turro and 53.3% in Dhebiti indicated that they have participated in initiating the idea of sedentarization and irrigation based development.

Also in the FGD held both in the sedentarized and non-sedentarized *kebeles*, it was revealed that prior to the establishment of the project, government officials have made discussion with the community, women and men separately. As Roba Boru, community elder in Gidara *kebele*, explained the idea to establish irrigation agriculture first came from the community. He said:

*...explaining the problem of water shortage in our community, we expressed our interest for irrigation to be established for us by the government. Then the government discussed the issue with us and introduces the irrigation project...*

Subsequent to the initiation of the idea, the next step that followed was site selection, bush clearing, beneficiary selection and then implementation. As it was revealed by FGD participants in the sedentarized study *kebeles*, although most of the community members were involved in bush clearing, it was the elders and representatives from the community who participated in site selection, beneficiary selection, implementation and monitoring

of the project. The community was also involved in the allocation and distribution of land together with the *wereda* officials. In pastoral communities, elders and traditional institutions play great role, and this was the reason for involving elders in such process. As to beneficiary selection, all community members, except children below the age of 18, were made to benefit from the project.

Once the project is implemented, follow up of project implementation was done by the Irrigation cooperatives established by the *wereda* in each of the sedentarized *kebeles*. As explained by the *wereda* cooperative office head, cooperatives are established to organize the people in managing and administering the resources. Their major tasks are water administration, maintenance and provision of agricultural input (fertilizer and seed) for the community. The establishment of these cooperatives will enable the community will empower the people by enabling them to manage their activities on their own, and hence ensure sustainability. The establishment of cooperatives is to continue in other *kebeles* which are to be sedentarized in the near future.

## **5.6 Perception**

When it comes to implementation and sustainability of development intervention/project in community such as Karrayu, perception towards the project to be implemented plays a significant role. This is mainly because the more the people have a positive perception on the project, the higher the success. In this regard, participation also plays a key role. It enables the people to make informed decision and ensure sustainability. In light of this, it was found important to identify the perception of the community both in the sedentarized and non- sedentarized *kebeles*. Hence, questions were raised for FGD and key informant interview participants regarding perception towards sedentarization and agricultural production.

In the FGD held with community members in Gidara and Turro *kebeles*, all of the people in the studied sedentarized *kebeles* indicated that they like the shift from pastoralism to agriculture production. They believe that they have better opportunity and future with farming. The participants also believe that they have better living standard than the non-

sedentarized Karrayus. Hajji Hassen Hussien, community elder in Gidara, explaining his perception towards sedentarization said:

*Our ancestors were pastoralists and were rich, but we are not. We love pastoralism but it's not working for us anymore. We had suffered a lot. We are benefiting a lot from agriculture now and we want to continue farming.*

This has also been revealed in the survey conducted in the desedentarized *kebeles*. In the FGD held in Dhebiti, the respondents indicated that they have positive view towards agriculture and want to sedentarize. They believe that the sedentarized Karrayu have better living standard, better access to health and education compared to them. They said:

*We believe that agriculture is more benefiting because we have seen those who have access to water benefiting from it; changing their lives, building houses. If we get water, we will farm and change ourselves just like them.*

## **5.7 Gender Aspect of Sedentarization**

There is an imbalance in terms of food production, resource sharing, consumption and ownership among pastoral communities, and women are amongst the most marginalized groups segment of the society (PASDEP: 2005/06). Pastoral women had been denied access to resource and excluded from decision making activities both in the family and the community. Their major rights have been overridden for centuries. Husbands own and control all the property in the house, women only have usufruct right.

To address such inequalities and the problem of women, provision of access to resource plays significant role. In this regard, the sedentarization project has paid due consideration to these marginalized groups. In the allocation and distribution of land, women have been given equal right as men to have access and control over land. And in a family where there exists more than one wife, while the first wife shares land with the husband, the other wives are treated as an independent family and provided land to their own. This will strengthen women's decision making power and ensure better realization of their rights.

Similar with other less developed areas in Ethiopia, Karrayu women have very low literacy rate and poor health status. As Tewabech Bekele, *Wereda* Women Affairs Office head explains, the primary problem of women among Karrayu is frequent movement and illiteracy. Karrayu women were not able to benefit from health and education services mainly because they move from places to places, mostly together with their children, in search of pasture and water. This had made them inaccessible for the health extension workers to provide health related information and distribute family planning and other medicines. As a result, on top of other diseases which prevail in the area, women are open to unplanned/unwanted pregnancy and also HIV AIDS and other STD's (Kipuri and Ridgewell, 2008; Talile, 2008).

The impact of sedentarization on women can be viewed from different angle. According to Tewabech, head of the *Wereda* Women Affairs Office, from the health perspective, women now have become beneficiary of health services than before. She explains,

*.... their demand and utilization of the health services has increased with the new settled way of life. Because they are settled and accessible now, extension workers are giving them village and house based health related education including hygiene and sanitation which will have an impact on the family health at large. They are also providing them family planning services on time...*

Moreover, to address the problem of maternal mortality and extend delivery service to the women, the *wereda* health office is training Traditional Birth Attendants (TBA) from the community. As the *wereda* health office expert explained, the extension workers assist the TBA's by going to the villages whenever they need help. In this way, community based health extension program (HEP) is now more efficient in providing health services directly to women in Karrayu.

In terms of property right, Karrayu women now have equal possession right over land. In the FGD held with women in Gidara, participants said:

*Now, we cultivate equally as men; we own property/land equally as men. And we have a say on matter at home, regarding money and other matters.*

This will have a significant impact in strengthening women's decision making power in the house as well as in the community. But in a very patriarchic society such as Karrayu, having possession right by itself does not guarantee whether women are benefiting from the fruits of the land or equally participating in decision making with regards to property. For real change to be materialized there must be a change in the understanding of the society and the women themselves. At this juncture, education can serve as an important instrument.

By the same token, aiming to reduce the literacy rate the *Wereda* Women Affairs office head has explained that it has designed Adult Education Program for women. Under this program, women are getting Adult Education in settled *kebeles*. Nonetheless, there are challenges to duplicate this in non-sedentarized Karrayu families due to the nature of their livelihood. Organized through the extension workers, women are also being given Business Development Trainings (BDS's) which can widen up their understanding of the market and business environment.

Moreover, according to FGD held with women in the sedentarized study *kebeles*, education about equality of men and women is provided. The *wereda* women affairs office is also working together with traditional and religious institutions to reduce/stop traditional harmful practices, such as FGM, early marriage and also polygamy, which negatively affects women health and other rights.

## **5.8 Problems and Challenges of Sedentarization in Improving the Rights of Karrayu Pastoralists**

Any development project aimed at improving the livelihood of pastoralists has both positive and adverse impact on the beneficiaries. Particularly, irrigation based projects on making beneficiaries agro-pastoralists from pure pastoralists poses socio-cultural and economic related challenges. Crop production, as an example, is stranger in terms of means of production, tool preparation and utilization, land preparation, type of food produced and consumed, and other related features might facade a challenge. Based on the findings, there are different challenges that affected the overall livelihood situation of

Karrayu pastoralists. For the case of simplicity, they are divided and presented as follows:

### **5.8.1 Right to Food**

- Though the project has made water available for irrigated agriculture, in some places of the sedentarized *kebeles* such as Turro, not enough water is provided causing crop failure and food insecurity. There is also quality problem on the water system constructed, mainly in Turro causing water wastage in some areas and shortage in others.
- Other than water, means of production are available scarcely in quantity and variety. Particularly, modern agricultural inputs and techniques are given less emphasis.
- The salinity of the soil is increasing over time; threatening sustainability of food production in the area. There are hardly any activities to tackle the problem.
- There is high market inaccessibility which affects both price of goods and income of pastoralists. Pastoralists travel long distances to purchase as well as sell their products in the market. This has made them more vulnerable to brokers who came to purchase the products from the farm for much lower price. This has been further exacerbated by poor infrastructure and lack of adequate market information.

### **5.8.2 Right to Health**

- The services provided both in health posts and health centers have poor quality. This is mainly because these institutions are not equipped with the necessary human and material facility. There is shortage of professional medical workers, shortage of medical equipments and drugs.
- Services provided in health posts focus on disease prevention and control, making other health care service inaccessible for the people within the nearby institutions.
- Health centers which provide services are found in far *kebeles*. Poor infrastructure and spatial distribution still affects accessibility of health care service in the *wereda*. Moreover, the alternative health services in the towns are expensive.

- Even though a project is underway, lack of potable water is highly affecting the health right of Karrayu pastoralists.
- Livelihood is transformed, food consumed are different; other social amenities are new in relative terms. Health related impact of such issues and cultural acceptability of health workers are given minimal emphasis.

### **5.8.3 Right to Education**

- There are no secondary schools and alternative education programs in the rural *kebeles*.
- Moreover, schools lack the necessary human and material competency. There is high shortage of teachers, both in qualification and number as well as teaching materials and books to provide quality education.

## CHAPTER SIX

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Summary

This study focuses on obligations of the government to fulfill, aimed at assessing the role of sedentarization in improving the right of pastoralist and meeting its objective. Accordingly, it assessed the impact of sedentarization on the right to food, health and education of Karrayu pastoralists. The major findings are summarized as here after.

##### 6.1.1 Right to Food

- More than 90% of the respondents in Gidara and 41.5% in Turro responded that there is high availability of water and land for food production. However, half of the respondents in Turro stated that though the situation has improved, they are not getting enough water to sustain agriculture production and have encountered crop failure after sedentarizing.
- In the sedentarized *kebeles*, (97.4% in Gidara and 95% in Turro) respondents described that they have better access to food items now. As the result 97.5% of the respondents in Gidara and 75.5% Turro are consuming three and more than three times per day on regular basis. However, 56.6% of the respondents in Dhebiti indicated that they skip meal because they don't have enough food for consumption.
- All of the respondents in Gidara and 70.7% in Turro are getting food from own farm; whereas only 6.7% of the respondents in Dhebiti are getting their food from own farm. As the result, households in Gidara and more than 50% in Turro are now food secured and graduated from the safety net program.
- With the high availability of water and pasture for livestock, livestock productivity has increased in the Sedentarized *kebeles* resulting in better consumption of diary products and hence improved diet combination. But in 90% of the respondents Dhebiti have low access to water and fodder for livestock.

- In the sedentarized *kebeles*, 92.8 % of the respondents in Gidara and 64% in Turro indicated that they don't eat less preferable food items at all.
- All of the respondents in the studied *kebeles* described their land as suitable for agriculture production.

### **6.1.2 Right to Health**

- Though there are health posts in all the studied *kebeles*, people go far distances to access health services because these institutions are only engaged in prevention and control education and vaccination.
- Moreover, the health institutions (both health posts and health centers) don't provide quality service due to lack of the required human and material capacity, including drug supply.
- Though health expenses are not that high in the local health institutions, People pay high price for health service going to the towns since the local services are poor and far.
- With regards to health information, after sedentarization 87.2% of the respondents in Gidara and 90.2% in Turro indicated that they have better information regarding disease prevention and control as well as hygiene and sanitation which can improve their health status.
- Sedentarization has helped improve Malaria prevalence by making people more accessible for information and distribution of materials such as Agober. However, lack of clean water still remains to be major source of health problem in the *wereda*.

### **6.1.3 Right to Education**

- Sedentarization increased availability of schools in the studied sedentarized *kebeles*. Now, 80% of the respondents in Gidara *kebele* and 83% in Turro state that there is at least one nearby primary school in their *kebele*.
- With the introduction of sedentarization, the major reasons for low enrollment and high drop out in schools have been challenged, resulting in better utilization of the available schools.

- However, sedentarization has very little, if not at all, role to play with regards to improving quality of education. There exists high shortage of teachers, both in qualification and number as well as teaching materials and books reducing the quality and consequent impact of education.

## 6.2 Conclusions

The sedentarization programmed designed by the Ethiopian government, as one of its strategy to discharge its obligation to fulfill is improving the socio-economic rights of Karrayu pastoralists. Considering the nature of socio-economic rights and their progressive realization, the sedentarization program is improving the food, health and education right of Karrayu pastoralists.

In regards to the right to food, it can be concluded from the finding that the people have better access to means of production, mainly land and water. As the result, most of sedentarized households are producing more than they did before. They have better access to culturally acceptable food items, positively affecting their utilization/consumption pattern. But market inaccessibility and poor infrastructural amenities are critical problems that negatively affect price and income for pastoralists. Moreover, salinity of the land is rather a threatening issue that can seriously influence sustainability of food production for the pastoralists.

Sedentarization also has a positive impact towards improving the right to health of Karrayu pastoralists. Sedentarized Karrayus have better access to health care services mainly with regards to prevention; including health information and education on diseases prevention and control, family planning, vaccination as well as hygiene and sanitation. But when it comes to curing, sedentarization has very little impact. Sedentarized pastoralists are not getting health care services and goods in sufficient quality and quantity; health institutions do not have the required human and material capacity to function properly; including drugs. More importantly, ill-functionality of health posts and farness of health centers exacerbated by poor infrastructure negatively affects availability of health service in the *wereda*. Moreover, absence of safe and potable drinking water is still affecting the health condition of these pastoralists.

With regards to education, sedentarization is improving education right of Karrayu pastoralists by making education more available and increase utilization of these institutions. As the result of the livelihood change of sedentarized Karrayu pastoralists, the major reasons for students' not missing out and drop out of school has changed. This has increased enrollment rates and decreased drop out rates. But schools are poorly facilitated. They do not provide students with quality education mainly because they do not have the required skilled professionals and teaching materials. Moreover, there are no secondary schools and alternative education designed to educate above-school ages to read and write.

In general, with the understanding that socio-economic rights are to be progressively realized, sedentarization have improved the right to food, health and education of sedentarized Karrayu pastoralists. Moreover, the sedentarization program could be viewed as one example of participatory approach to program development and implementation in the Ethiopian history of development intervention. However, sedentarization should not be viewed as sole option and panacea to improve the right of pastoralists; a number of aspects need to be addressed to contribute to the better realization of rights.

### **6.3 Recommendations**

In order to further extend the improvement of the right to food, health and education of Karrayu pastoralists; some of the major areas recommended to be considered and paid significant attention are illustrated below.

#### **6.3.1 Right to Food**

- With regards to availability of means of production, attention should be given to the quality of system constructed and the *wereda* needs to make sure that all members of the sedentarized *kebeles* benefit from the program.
- Farmers' Training Centers and related institutions should be constructed to overcome the problem of means of production, modern agricultural input and

technique utilization, agricultural marketing, and production of high quality food items.

- To ensure sustainability of food production, intensive agronomy and soil research should be carried out to reduce the salinity of the soil. Moreover, pastoralists should be given consistent education and training regarding soil salinity and treatment.
- To make market accessible, a nearby market should be established where pastoralists can purchase goods as well as sell their products, more importantly perishable products. Moreover, mechanism should be set up to update pastoralists on market price and better inputs for production. Infrastructure development should also be given due consideration in this regard.

### **6.3.2 Right to Health**

- To increase the quality of services provided and by the health institutions in the studied *kebeles*, government should allocate more resource that can be used to hire qualified professionals, purchase necessary equipments and medicines as well as build infrastructure such as water and sanitations facilities.
- Current health related activities should be transformed to preventive strategies without glossing over care and/protection strategies. Moreover, culturally acceptable strategies should be designed as to improve the health sector of the studied area.
- The ongoing water project should also be completed shortly and potable water should be made available to improve the health situation of the people.

### **6.3.3 Right to Education**

- To increase the quality and efficiency of schools, more resources should be allocated to properly staff and equip schools with the necessary teaching materials.
- Further study should be made to assess the gap and need of the society and design more relevant education programs that can serve the community in improving their livelihoods and ensure better utilization.

- Alternative basic education programs should be designed to improve the education right of above-school-age member of the community.

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