

**“ASSESSING THE IMPACT OF FOOD AID ON LIVESTOCK PRODUCTION IN AFAR
REGION; ETHIOPIA THE CASE OF GEWANE WOREDA”**

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DECLARATION

I hereby declare that the Dissertation entitled, “**Assessing the impact of food aid on the livestock production of pastoralist in Afar region in case of Gewane Woredas**” submitted by me for the partial fulfillment of the M. A. in Rural Development to Indira Gandhi National Open University, (IGNOU) New Delhi is my own original work and has not been submitted earlier either to IGNOU or to any other institution for the fulfillment of the requirement for any course of study. I also declare that no chapter of this manuscript in whole or in part is lifted and incorporated in this report from any earlier work done by me or others.

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List of Abbreviations

| | |
|---------|---|
| NBE | National bank of Ethiopia |
| ILRI | International livestock Research Institute |
| ONCCP | Office of National Committee for Central Planning |
| IFIOGM | Impacts of food aid on grain marketing |
| IFIOGMP | Impacts of food aid on grain market Product |
| PSNP | Productive safety-net program |
| CSA | Central static's authority |
| EWA | Early warning assessment |
| DPD | Disaster prevention disk |
| IBC | Institute of Biodiversity conservation |
| TLU | Tropical livestock unit |
| GDP | Gross domestic product |
| NGO | No governmental organizations |
| FA | Food aid |
| FAO | Food and agricultural organizations |
| E.C | Ethiopian calendar |
| Ha | Hectares |
| PRA | Participatory rural appraisal |
| DAs | Development agent |
| SNNP | South nation and national population |
| WFP | World food program |
| ME DC | Minister of education and development commission |
| EWA | Early warning assessment |

Abstract

Having a better understanding on the impacts of food aid on the asset of pastoralist at micro level is required for the organization of technical research. Consequently, this study is expected to generate ideas that would be useful to reveal the factors affected the impacts food aid and identify the impacts of food aid on livestock production of the pastoralist households in the study area. This study was undertaken in Gewane district of Afar National Regional State. From ten Kebeles found in the district one kebeles from pastoralists and one Kebele from agro-pastoralist kebele were selected purposively, Totally 385 households were selected proportionally random sampling for the interview by preparing structured questioner. In addition to this, focus group members and key informants were selected to get dialed information.

In the study area, the improper beneficiary targeting were practiced in the time of targeting, lack of effective food management system leads to malpractice of food aid, concentration of distribution site at center which enforces the pastoralists to travel long distances and incurs high transportation cost on the food. The livestock supply decreased and the price of livestock increased after food aid. In addition to these, after food aid the livestock supply in the market decreased and the consumption patterns of community in the study area were improved.

Based on the collected data the result showed, there were many factors affecting food aid negatively in the study area. in the other hand the food aid had positive impact on livestock price and supply for the pastoralists who sell their livestock , but the livestock holding were decreased after food aid it means that food aid is not only responsible factor to increase or decrease the livestock holding there was other factors un mentioned

According the above conclusion, the factors affect the food aid negatively should be arranged, the livestock market improved and other factors is not assessed in this study which affect the livestock holding should be identified

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1: INTRODUCTION

1.1 Background OF The study

The pastoral and agro-pastoral areas of Ethiopia cover about 61 percent of the country's landmass with over 12 million people. Pastoralism is extensively practiced in the Somali and Afar Regions, Borana zone of the Oromiya Region and South Omo-zone of the Southern Nations, Nationalities and Peoples (SNNP) Region. Pastoralists are also found in areas of Tigray, Beneshangul and Gambella regions (CSA, 2006). Pastoralists constitute a minority group in Ethiopia, with 12-15 million people out of the total population of Ethiopia (CSA, 2006). Livestock in pastoral regions accounts for 40- 50 percent of the countries' total livestock population (CSA, 2006).

Pastoralists are food insecure and vulnerable to shocks/disasters such as drought, flooding and human and livestock disease and their areas are characterized by unpredictable and unstable climatic conditions. In general, they are living in fragile *environment*. In response to these hardships over the years pastoralists have developed mechanisms how to use dry land natural resources and are dealing with drought by moving, selling, buying and consuming livestock and its products. Pastoralists are using the dry ecosystem in common with agro-pastoralists for mutual advantage connecting livelihoods strategies and this condition makes them interdependent.

Afar region is one of the four major pastoral regions in Ethiopia located in north eastern part of the country. People in the region depend mainly on livestock production for their livelihood. Drought has become a common phenomenon in the Afar region causing serious impairment on livestock production, the main source of livelihood for the pastoralists in the Afar region, (CSA, 1987, E.C). More over livestock production is further constrained by seasonal water shortage,

livestock disease, poor infrastructure, and lack of markets. The government extension and animal health services are also very weak and few NGOs are operating in the region. The per capita livestock holding has declined alarmingly. As a result livestock production is unable to support the ever increasing human population in the region. More than 20 percent of pastoralists are dependent on relief food each year.

The regional disaster prevention and preparedness office estimated the number of people needing relief support to be in terms of 560,000. Out of which 472,229 of them in 32 Woredas of the region need continuous food assistance to meet their food demand. Hence, these beneficiaries have received 6 – 9 months of food ration on average 60,000 metric tons of foods per annum. Food has been mainly distributed to all beneficiaries as direct support.

1.2 Statements of the Problem

Until 1999 EC the total livestock population in Gewane woreda was 774,094. Livestock population has decreasing through the years and according to Gewane Woreda Pastoral Agricultural and Rural Development Office (2009) the number has reached 408,492. As a result the region is becoming heavily dependent on external food aid since 1984 and in 2004/2005 the number of the needy population has grown to 560,000 which are 45 percent of the regional population (Piquet, 2001).

Pastoralists normally face mini drought every year but this does not necessarily lead them to famine and external support. If they are confronted with failure of two or more consecutive rains they copped the drought with their traditional mechanisms. Recently the coping mechanism seems to fail and even failure of single rain has led them into a major crisis. The occurrence of such drought in pastoral area is not only associated to failure of the main rainy season but also

due to the cumulative effect of the past droughts and other triggering factors. The triggering factors, which lead to food insecurity and livelihood vulnerability, aren't well understood in the region. Thus, unless the root causes of the crisis are identified and addressed properly, the current severe food insecurity and livelihood problems of pastoralists will not improve.

Livestock production in the region depends on rain fed natural pasture. The productivity of pasture is declining as a result of recurrent drought, land degradation, encroachment of agriculture, conflict and invasion of weeds. The grass produced following the major rain will only last two to three months and then after pastoralists are forced to migrate. Compared with the other livestock species camels and goats are less affected by the ecological change. These processes have led to a declining in livestock production, reducing livestock body weight and, degradation of natural resources and ecological vulnerability that caused economic and cultural stress. Due to these factors most pastoralists have lost their livestock and started to depend on external food aid. To reduce livestock lose and save the live of affected pastoralists, Government designed PSNP in addition to emergency food aid to move roughly 15 million people out of food insecurity and supports 7.3 million chronically food insecure rural people. Considering the market availability and interest of pastoralists in chronically food insecure Woredas government provides aid in the form of food or kind to prevent livestock lose at household level and build assets at community level. Barrett and Maxell (2005) have reported that the timely food aid distribution in response to shocks may play an important role in reducing vulnerability and protect assets of pastoralists.

1.3 hypothesis and research question

H_1 = Food aid will increase livestock population of the pastoralist and agro-pastoralist.

H_0 = Food aid will not increase livestock population of the pastoralists and agro-pastoralist.

Food aid increases livestock population because it reduces the quantity of livestock to be sold by the households during chronically food shortage.

All factors that influence livestock population of pastoralists and agro-pastoralists are related to food aid. To address these problems on sustained basis the study has tried to find out the factors which have negative or positive impact on the livestock production. Keeping above problems as a challenge, the study has attempted to answer the following questions.

- Has food aid prevented household livestock depletion?
- What are the factors that lead to food aid dependency?
- Does food aid influence farm gate prices or other prices in the marketing chain?
- How does the timing of food aid distribution affect the household market price?
- What are the farmers' perceptions and preferences with regard to aid?
- How does the timing of food aid distribution affect the livestock holding?

1.4 Significance of the Study

Many studies in the area of food security focused mainly on identifying and measuring the impacts (positive or negative) only. There were so many unsolved and related issues such as role of food aid in preventing the livestock sector which is the main asset of pastoralist. The declining of livestock production aftershocks was one of the causes for cyclic food shortage which was not under due consideration. The studies helped to understand and identifying the root causes of food

shortage in the region in order to address the problems accordingly, also helped to understand the food aid create dependency among the community and helped to identify the impact of food aid in income generation of the pastoralist communities. This has also provided information to all concerned stakeholders about food aid.

1.5. Objective of the study

1.5.1. General objective

General objective of the study is to overview the impact of food aid on household livestock production in afar region Gewane Woreda.

1.5.2. Specific objectives

Specific objectives of the study were derived from the general objectives and they were to assess:-

- the impact of food aid on the number of livestock holding
- influence of food aid on local market price (livestock market)
- factors affecting the impact of direct food aid on the community livelihood

1.6 Limitation of the study

During the data collection process, the study has faced a number of problems. These problems were associated with pastoralists living condition i.e. pastoralists do not stay in one place for the long time. Therefore, getting the respondents at right time was difficult. In order to minimize these problems the interview was conducted at the night in the form of discussion at their residence.

Due to the absence of transparency getting secondary information from different organizations was difficult. To avoid this problem, study used easiest approach/strategy, i.e. through communication with relevant stakeholders and explaining the purpose of the study in different meeting places.

In order to minimize the problem, students and development agent who were familiar with pastoralists and speak local language were involved in data collection.

1.7 scope of the study

This study was carried out in Gewane woreda and has restricted to food insecure people or productive safety net program users. Therefore the remaining populations who were food secured were not included in this study. Furthermore, in this particular study the focus was much on the assessment of impact of food aid on household livestock production.

1.8 Organization of the Study

Chapter one gives the brief introduction of the study, the remaining part of the thesis is organized as follows. Chapter 2 contains literature review on relevant topics in the study. Chapter 3 deals with the description of the study area and the explanation of research methodology employed in the study. Chapter 4 deals with explanations of results and discussions, based on the primary and secondary data collected through the presented questionnaire in the study area. Chapter 5 summarizes the findings of the study and provides policy recommendations for policy makers.

2. REVIEW of LITERATURES

The main objective of this literature review was to specify the basic concepts and definitions related to the study and overview of the empirical studies that give better understanding to identify gaps for the research.

2.1 Definitions and concepts of pastoralist

Pastoralists are people who live mostly in dry, remote area. Their livelihood depends on their intimate knowledge of the surrounding ecosystem and on the well-being of their livestock (FAO, 1992).

Mohammed et al (2003) explained that pastoral systems take many forms and are adapted to particular natural, political and economic environment, water and other natural resources, and geographical area, and may include camels, goats, sheep, yaks, horses, llamas and vicunas. Pastoralist is therefore an economic and social system well adapted to dry land conditions and characterized by complex set of practices and knowledge that has permitted the maintains of sustainable equilibrium among pastures, livestock and people (Sand ford, 2006).

According to Mohammed et al (2003) pastoralist inhabits zones where the potential for crop cultivation is limited due to low and highly variable rain fall conditions, steep terrain or extreme temperatures. Within this unpredictable, vulnerable and dynamic environment, they have developed successful mechanisms, adaptation to maintain an ecological balance between themselves and the natural environments According to Sand ford (2006) pastoralist are people who derive more than 50 percent of their income from livestock and livestock products, while agro-pastoralists are people derive less than 50 percent of their incomes from their livestock products, and most of the remaining income from cultivation.

2.1.1 An overview of pastoral system in the Horn of Africa:

In Africa pastoralists range across the climatic zones, being found in the sub-humid zone of Nigeria (1300–1500 mm rainfall) right through to the arid zone of northern Kenya (150–400 mm rainfall) (Quinan,2000). Countries of the Horn of Africa region are among the thirty-six countries in which most of the land belongs to the arid and semi-arid environment. These arid and semi-arid environments are characterized by extreme variability and unreliability of rainfall both between different years and between different places in the same year. Consequently, these areas are characterized by the scarcity and seasonal variability of vegetation, and vulnerability to drought (Quinn, 2000).

The pastoral people of arid and semiarid Africa primarily raise livestock to produce milk for household consumption. These livestock also provide a means for wealth accumulation, meat production, and cultural expression (FAO, 1992).

Pastoralist in the Horn of Africa is one of the most important economic activities from which millions of people derive their livelihoods. The sector involves substantial parts of the population in each country. For example, out of the total population, pastoral and agro-pastoral population are about 60 percent in Somalia; 33 percent in Eritrea; 25 percent in Djibouti; 20 percent in Sudan and 12 percent in Ethiopia (Mohammed, 2003). Pastoralists in this region keep a significant part of the livestock wealth. Pastoralist is a way of living in vast arid agro-ecological zones of Afar, Somali and Borena rangelands and in the semi-arid areas of the Southern Nations, Nationalities and Peoples Region. In these areas, land ownership at household level is not a common practice. Despite their vast size, pastoral areas are sparsely populated compared to the other farming systems.

Crop production is not a feature of the system and subsistence is almost entirely based on livestock and livestock products. The main source of food is milk. Consequently, pastoralists tend to keep large herds to ensure sufficient milk supply and income. Although most of the farm animal species, excepting horses and mules, are reared in this system, it is dominated by goats, cattle, sheep and camels (Institute of Biodiversity Conservation, 2004). However, the pastoral production system in Ethiopia and elsewhere in Eastern Africa is said to be under a critical situation in the sense that it has become unable to support the basic needs of people whose very survival is strongly linked to the performance of this sector (Mkutu, 2001).

Sand ford (2006) noted that this dismal performance is attributed to several interrelated factors including population growth, recurrent drought, conversion of rangelands into other uses, weak governance, increasing insecurity, political and economic marginalization, policy and program related constraints to mention but a few. He further stated that pastoral human population in most parts of Eastern Africa has roughly doubled over the last 25 years while the pastoralists' total livestock population (in terms of biomass or Tropical Livestock Unit –(TLUs), taking an average over good and bad years together, has remained constant or even declined. Livestock rearing is the main means of livelihood of the population in the Borana rangeland. This indicates that an increase in productivity of animals would have a significant effect on improving the livelihood of the community. The sale of animals and animal products constitute the main sources of cash income (Mohammed, 2003).

Similarly, a previous study conducted by Cop pock (1994) reported that sales of livestock and dairy products constitute the main source of cash income in the North-Central Borana plateau. According to the cop pock explanations pastoralists rely more on livestock than any other population category in Ethiopia. He further stated that in pastoral areas livestock are regarded as

producers of milk and meat, income generators, and stores of wealth. However, recently with the growing demand for livestock product and marketing the situation of cattle production with regard to market access in the Borana pastoral system is not well understood.

2.1.2 Mobility of pastoralist

Mobility, whether nomadic or transhumant, and whether over short or long distances, will to a large extent determine the capacity of pastoral populations to cope with drought. Mobility is clearly a matter of life and death for pastoral populations in the arid environment, but can be also beneficial in higher potential areas (CSA, 2007).

Diversity and mobility characterize the pastoral production systems. Pastoral production systems are diverse in order to minimize risk in unpredictable conditions. Pastoralists engage in multi-resource economies and usually maintain large, varied herds. Pastoral nomads often occupy specific tribal territories. Lands within a tribal territory are often partitioned into 'wet season and 'dry season ranges. Wet season ranges are the product of seasonal rains. These areas are dominated by annual vegetation and, except for a short period of the year, remain waterless and uninhabited. Dry season ranges, on the other hand, are high potential areas. In a general sense the entire concept of nomadic may be considered as a means of coping with and exploiting highly variable resources. This is made possible in part through the ability of nomads to maintain several species of diverse herds of livestock - camels, cattle, sheep and goats - and by their geographical mobility (Mkutu, 2001). He farther stated that the movement can be between short distance landscapes as applied for the majority of north Afar people or between long distance rangelands. The latter is applied when drought strikes over wider area and when local movements become useless. He further stated that, in essence, each cluster of pastoral

households has its own territorial home range where they have an exclusive access right to grazing their animals.

2.2 The future of pastoralist in Ethiopian

Livestock production plays an important role in Ethiopia's economy. Estimates indicated that livestock production contributed one-third of agriculture's share of GDP or nearly 15 percent of total GDP. Hides and skins constituted the second largest export earner, averaging about 15 percent of the total export value; live animals averaged around 3 percent of the total value of exports (CSA, 1987).

Although varying from region to region, the role of livestock in the Ethiopian economy was greater than the figures suggest. Almost the entire rural population was involved in some way with animal husbandry, whose role included the provision of draft power, food, cash, transportation, fuel, and, especially in pastoral areas, social prestige. In the highlands, oxen provided draft power in crop production. In pastoral areas, livestock formed the basis of the economy. Per capita meat consumption was high by developing countries' standards, an estimated thirteen kilograms annually. According to CSA (1987), beef accounted for about 51 percent of all meat consumption, followed by mutton and lamb (19 per cent), poultry (15 per cent), and goat (14 per cent).

Ethiopia has great potential for increased livestock production, both for local use and for export. However, expansion was constrained by inadequate nutrition, disease, a lack of support services such as extension services, insufficient data with which to plan improved services, and inadequate information on how to improve animal breeding, marketing, and processing. The high

concentration of animals in the highlands, together with the fact that cattle are often kept for status, reduces the economic potential of Ethiopian livestock, (Cop pock, 1994).

According to Assefa (2005) Cattle in Ethiopia are almost entirely of the zebu type and are poor sources of milk and meat. However, these cattle do relatively well under the traditional production system. About 70 percent of the cattle were in the highlands, and the remaining 30 percent were kept by nomadic pastoralists in the lowland areas. Meat and milk yields are low and losses high, especially among calves and young stock. Contagious diseases and parasitic infections are major causes of death, factors that are exacerbated by malnutrition and starvation. Recurring drought takes a heavy toll on the animal population, although it is difficult to determine the extent of losses. Practically all animals are range-fed. During the rainy seasons, water and grass are generally plentiful, but with the onset of the dry season, forage is generally insufficient to keep animals nourished and able to resist disease.

Ethiopia has the largest livestock population in Africa and has been estimated at around 35 million tropical units.(TLU),which includes 30 million heads of cattle,42 millions of heads of sheep and goats ,about 7million equines, one million camels ,over 53 million chickens ,10million bee colonies, and 40 thousands ton annual harvestable fish,(FAO,1993). 60 percent of Ethiopia's land area is semi-arid lowlands, dominated by livestock economy, (CSA 2007). In most parts of Ethiopia 41 million sheep and goats are raised by small farmers who used them as a major source of meat and cash income. About three-quarters of the total sheep flock is in the highlands, whereas lowland pastoralists maintain about three-quarters of the goat herd. Both animals have high sales value in urban centers, particularly during holidays such as Easter and New Year's Day. Most of the estimated 7 million equines (horses, mules, and donkeys) are used to transport produce and other agricultural goods. Camels also play a key role as pack animals in areas below

1,500 meters above the sea level. Additionally, camels provide pastoralists in those areas with milk and meat.

Pastoralists are experts at maximizing the use of rangelands and moving between seasonal grazing areas and they will achieve high level of productivity taking strategic advantages of different forage and water sources as they become available. (Cop pock, 2004). Pastoralist is uniquely well adapted to dry land environments. As an economic and social system, it operates effectively in low and high variable rain fall conditions. However, in Ethiopia pastoralist's livelihood systems are becoming increasing vulnerable, (Sanford, 2006).

According to the FAO 2005 reported, the pastoral population occupies a disproportionately large number of livestock of Ethiopia and produce much more than its share of national livestock output. The livestock sector in Ethiopia contributes one third of the total agricultural Gross Domestic Product (GDP) and provides livelihood for 65 percent of the population. CSA (2007) reported that Pastoralists in Ethiopia are mainly found in four low land regions, Afar, Oromiya, Somalia, SNNP regional states. Pastoral groups are also found in Gambella and Beneshangul areas.

The pastoral areas represent about 60 percent of the country's land mass and are home to 12 percent of human and 26 percent of livestock population, (cop pock, 1994). The main pastoral communities in Ethiopia are surviving in Somali 53 per cent; Afar 29 per cent, Borena 10 percent and balance is 8 percent are found in the south western part of the country respectively, (Sand ford, 2000).

2.2.1 Economic contribution of livestock in Pastoralist Area

This livestock sector has been contributing considerable portion to the economy of the country, and still promising to rally round the economic development of the country. It is eminent that livestock products and by-products in the form of meat, milk, honey, eggs, cheese, and butter supply the needed animal protein that contributes to the improvement of the nutritional status of the people (CSA, 2007). According to same source livestock also plays an important role in providing export commodities, such as live animals, hides, and skins to earn foreign exchanges to the country. Livestock as well confer a certain degree of security in times of crop failure, as they are a “near-cash” capital stock.

According to CSA (2007) the total livestock population for the country is estimated to be 43.12 million cattle, 23.63 million sheep, 18.56 million goats, 1.66 million horses, 4.5 million donkeys, 0.33 million mules, 0.62 million camels, and 34.2 million Poultry.

Assefa (2006) reported that the livestock sector contribute 12-16 percent of total GDP and 30-35 percent of the agricultural GDP. Livestock account for 37–87 percent of the total household cash income. The higher share of livestock is indicating that cash income come primarily from livestock, particularly in the pastoral areas. Even though, information on absolute numbers and distribution vary, it is estimated that about 30 percent of the livestock populations are found in the pastoral areas.

2.2.2 Rangelands conditions in pastoralist Area

Natural resource in the pastoralist area is managed by traditional cultural resource management system. Almost all the pastoralists indicated that management is based on community interest and highly influenced by community elders ,tribal leaders and to some extent religious leaders

.They indicated that almost all available lands are used for grazing lands for livestock production under traditional resource managed rules. The main resources in livestock production system are the range lands and domestic animals.

They explained the nature of range land resources, forage and water; dictate the mobility of the pastoralists in searching feed and water for livestock. The rangelands of Ethiopia support more than five million people and are the main source of livestock and livestock products in the country. The Afar Region is situated in the north-eastern rangelands of Ethiopia and the livelihoods of the Afar in these extensive rangelands are mainly dependent on pastoral livestock production. The region is characterized by arid to semi-arid climate with short rains (Segum) occurs in March/April and main rains (Kerma) occurs from June to September (Diress, 1999).

2.2.3. Water sources in the pastoralist area

In general, in Afar region is among the areas, which have been affected by severe drought and famine for several years. Even though there are some wells and springs, one of the critical problems of the area is scarcity of water for livestock, irrigation, water supply and domestic use. The present supply of water for the small towns of afar region in general and Gewane area particular is from wells, springs, and rivers. Diress (1999) indicates that people living in most parts of Gewane area travel 10 km to fetch water for domestic use and 2 to 3 days to get water for livestock in the dry seasons.

The rapid growth of population in small town and rural areas has tremendously raised the water demand for various purposes. These consequently resulted in acute water shortage in Gewane area. The pastoralists and agro-pastoral a society depends highly on flood water coming from highlands to produce dry crops, for livestock and for drinking, (Dress et al., 1999).

2.2.4. Animal health services

In Ethiopia, the government is the major animal health service provider. There is also limited involvement of the private sector and NGOs in the provision of drugs and animal health services. A few years back, there have been attempts to promote privatized veterinary services, but has not effectively materialized. Due to the nature and variability of livestock production system in Ethiopia, some animal health services have public good characteristics. The widespread nature of killer diseases, limitations in accessibility, cross-border animal movement and drug supplies, lack of adequate infrastructure and the presence of incomplete markets contribute to market failure in the provision of animal health services. This situation is not different from many African countries (Direse, 1999). He further indicated that in Ethiopia, public sector involvement and support has often been associated with disease surveillance, eradication campaigns, vaccine production, drug and vaccine quality control, quarantine, and food hygiene and inspection measures. Eradication and control programs of killer diseases call for national and international efforts, and surveillance and control measures often require national coverage including remote and inaccessible areas. However, the public sector has been limited by lack of adequate resources to deliver the services. Shortage of manpower (quantity and quality), lack of transport, availability of drugs and other supplies, poor information, communication and reporting systems, and limited finances are some of the reasons frequently raised by the professionals in the field. The major complaint and dissatisfaction of livestock keepers is unavailability of professionals, lack of communication, unavailability or shortage of drugs, poor diagnostics capability and lack of confidence in the quality of the service. Public or private service provisions could include diagnostic services, vaccination, vector control, and treatment. However, private sector animal health service provision is limited in Ethiopia due to a number of factors.

2.3. Relief dependency and pastoralists

Quism (2003) in the study on the need of human food aid and feed supplements for livestock concluded that in the horn of Africa, pastoralists are food aid dependent and need permanent relief interventions. Even if pastoralists are skilled livestock herds and have developed extensive knowledge of livestock husbandry he further explained that pastoralists live in the harshest and risk-prone environment in the world with limited available water and vegetation have to understand their environment to survive.

Sand ford (2006) described the history of food aid to pastoralists in Ethiopia and indicated that the first food aid to pastoralists, which involved external funding, took place in 1973 in Afar region. Food aid to pastoralists becomes a regular feature of Ethiopia's over all food-aid and relief effort. Relief aids during drought periods are cereals (wheat, sorghum and maize), powder milk, oil, etc. The relief assistance is not geared to initiate terracing and digging of water wells or ponds. It is not like 'food for work programs'.

It was free assistance that did not encourage development activity. Each household has received 10kg cereal/month over 10 months and 3 liters of edible oil regardless of family size, and socio economic group. The amount is not enough to support the family in difficult situation for a month. Aid has been given from February to May due to absence of the short rain, (Sand ford, 2006). He also stated that from the selling relief items, they also buy fodder for the livestock. The worst incidence of this part of the scenario is the introduction of noxious weeds that caused ecological disasters along cereal relief assistance. People are adapted to use of cereal-based foods due to food aid intervention, and this has encouraged the pastoralist to settle and involve in agricultural activities in environments where crop production is not popular and unsustainable.

2.4. Food aid and its roles to control destruction of livestock

Natural disasters, financial crises, and other economic shocks can have significant negative consequences for uninsured households. Barrett and Maxwell (2005) stated that when the resulting destruction of assets and changes in economic activity are sufficient to prevent recovery, these shocks lead to poverty traps with lasting effects on household welfare. In this setting, food aid or other assistance given in the aftermath of an economic shock may insure households from deleterious shock effects. Barrett (2002) explained that emergency food aid intended primarily to sustain short-term food and nutrition security may also serve as a safety net, protecting welfare in the long run and possibly reducing the need for further assistance in the future.

Quisumbing (2003) reported that food aid programs such as food distribution or food-for-work have a small impact on food consumption or nutrition and only a short-run effect on aggregate consumption. However, there is little evidence about whether timely food aid distribution in response to a shock may play an important safety net role by reducing vulnerability and protecting asset. Preserving stocks of productive assets or savings during a crisis, emergency food aid may have a positive impact on future asset holdings and a persistent effect on welfare.

2.5. Impact of food aid on the household economy

For the poorest people in highly chronic food-insecure areas, food aid can have a live-saving effect and prevents them from losing assets that they otherwise might sell to buy food. But in general, food aid does not really have an effect on asset building, (Barrett, 2005). Food recipient households often sell part or even all of their received food aid grains, particularly wheat on the market in order to pay for household expenses or to buy other food items they prefer more for

consumption. No clear evidence was found of food aid recipients shifting to cash crops or changing production patterns because of food aid. It is clear that many food aid households have reduced their production over the years and decreased the application of fertilizer, but to what extent this can be attributed to continued food aid is not easy to determine. However, in certain areas continuous food aid was said to have led to the development of a dependency syndrome. Many food aid respondents also acknowledge that the food aid is a disincentive which creates less production of local grain.

2.6. Livestock marketing

2.6.1. Concept and definition of livestock marketing

Livestock marketing involves the sale, purchase or exchange of products such as live animals, milk, wool and hides for cash or goods in kind. When sales are made in cash, the price paid to the producer is known as the market price. This price may be set by a government-appointed marketing agency (e.g. a marketing board), or negotiated by the free interaction of buyers and sellers at formally recognized market centers (e.g. auction yards), or it may be agreed upon informally (e.g. between neighboring producers or between producers and rural butcheries). Informal marketing also occurs when livestock or livestock outputs are exchanged for goods in kind, (Ahmed, 2002).

2.6.2 Market structure in pastoralist area

According to Solomon (2004) the livestock marketing structure in the pastoralist areas follows four tiers:-these are bush, primary, secondary and terminal markets. The basis of such classifications is mainly number of animals supplied and market participants per market day. Bush markets are markets where animals are exchanged weekly between the pastoralists and small scale traders for breeding purpose or sells in the primary markets. Primary markets are district town markets where the sells volume does not exceed 500 animals per week. The major sellers are pastoralists and small scale traders, whereas the major buyers are assemblers (agents) and medium scale traders. Secondary markets are major towns markets where the weekly supply volume is between 501 and 1,000 animals. Here, the major market participants are medium scale traders acting as sellers and the big traders as buyers. Tertiary/terminal markets are those markets located at the big cities of the country where weekly over 1,000 animals are supplied. Big traders are major sellers whereas butchers and consumers are the major buyers.

2.6.3 Power of pastoralist on price decision

Piquet (2001) identified, livestock traders and middle men set the price, because of the communication gap between Afar pastoralists and, highland and urban traders. Furthermore, in terms of marketing information, pastoralists are generally not aware of prices and marketing conditions elsewhere. Due to market segmentation and the sheer total lack of market and trading information of the Afar pastoralists, highland traders and middlemen exploit them and hence, fully benefit from the Afar pastoralists' unawareness. He further explained that, the decision to sell animals by the primary producers in Ethiopia is usually based on urgent cash requirements. Producers come to the markets with no information beforehand on the going price of the day and

farmers may take back their animals, the price offered is too low to try their luck next time in the same or in another market nearby. Pastoralists take the same measure if the market happens to be close to where they graze their animals. But, if the market is of some considerable distance from where they reside then they will be persuaded to sell their animals, however low the price is on the day, as they can't afford to return empty handed without buying grain and other necessities for their families. Profit becomes a motive for sale only at farmer-trader level and above.

According to Ahmed (2002) the causes limited marketed off take in Ethiopia and Kenya is lack of information and cash transaction costs to market participation. Limited access to financial savings instruments does not appear to limit livestock marketing. The main constraint on livestock marketing appears to be the limited attractiveness of alternative and non-livestock investments in the region.

2.6.4. Impact of food aid on livestock market

Distributed food aid has a positive effect on marketing as it decreases the demand and the price of grain for pastoralists who sell their livestock to buy grain. The quantities of livestock decreased in the market and the demand for livestock is high leads to increasing the price of livestock. In the other hand food aid is also considered a constraint for inter-regional grain trade between surplus areas and food-deficit areas as it discourages local traders or farmer assemblers to purchase food from those areas.

Ahmed (2002) indicated that cash aid results in higher prices on the market due to increased demand. This is positive for the producers but negative for local consumers/buyers/recipients of cash aid. In most cases the cash was said to be insufficient and of less value than the food distribution ratios. The lack of linkage of cash aid to prices on the grain market is considered a

major problem. Cash has at least a temporary positive effect on the local economy after distribution as it results in higher consumption of goods and services, but it is not a very long term impact. Most beneficiaries bought food with the amount they received, but some also bought agricultural inputs.

3. METHODOLOGIES

3.1 Study area

Gewane district (figure 1) is one of 32 districts of Afar National Regional State. It is located 365 km away from Addis Ababa. It has boundaries with Burimodayto at the north, Undafoqo at the south, Dire Dawa at the east and Dalefagae at the west. The rainfall is irregularly distributed with high intensity and short duration. It has total population of 34,452 out of this 19,200 and 15,252 male and female, respectively. It has 10 sub-districts with 9,780 households chronically food insecure and need food aid permanently. The total livestock population of the district was 218,784 goat, 210,500 sheep, 143,600 camel, 2,874 donkey, 198,336 cattle in 1999 E.C. and 132,142 cattle, 85,000 sheep, 72,000 camel, 630 donkey and 118,720 cattle in 2009 E.C. Gewane district has one the districts found at zone three. The district is the 3rd most food insecure district

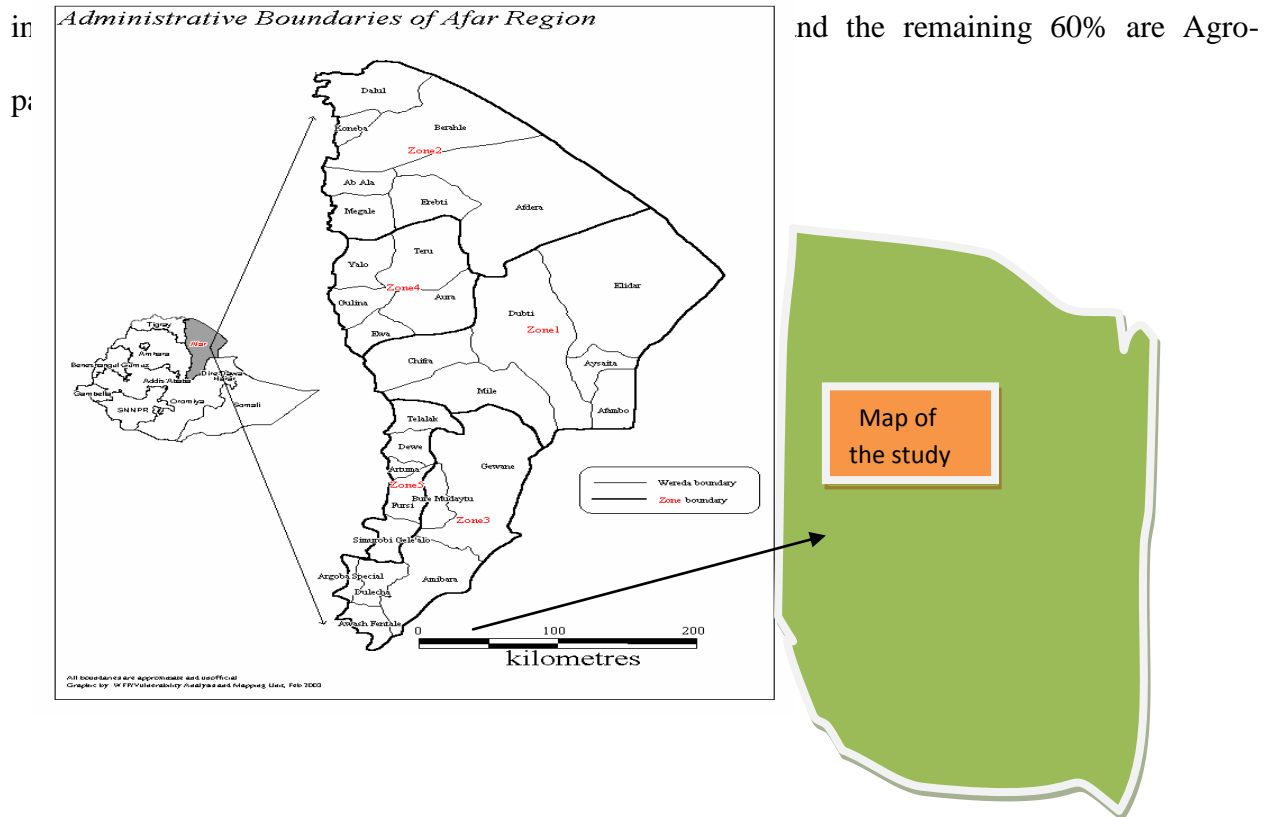


Figure 1:- location of the study area

3.2 Research design and sampling method

Gewane district has 10 sub-districts and are characterized by different livelihood styles. Out of which 6 sub-districts are agro-pastoralists 4 sub-districts are pastoralists.

Pastoralists and agro pastoralists in Gewane district have similar culture, religion etc. Thus, based on livelihood status one pastoralist and one agro-pastoralist sub-districts were selected purposively. Accordingly to their beneficiary number 180 households from pastoralist sub-district and 205 households from agro-pastoralist sub-district were selected by simple random sampling method. Therefore, total sample size was 385 households.

3.3. Tools for data collection

The primary data was collected from the main stockholders using structured questionnaire. The questionnaire contained both open and close ended questions on demographic characteristics and issues related to impact of food aid on livestock production. Individuals who were considered to be influential (i.e. community leaders, elders, local women's association etc) were considered for interview and focus group discussion. Materials such as periodic report and publications were reviewed to obtain relevant additional data.

3.4. Data analysis

The collected data were sorted out and information were analyzed by simple statistical method and presented in the form of tabular, diagrams and figure.

4: RESULT AND DISCUSSION

4.1 Household profile

4.1.1 Age of respondents

Table 4.1 showed the age structure of respondents. The majority of respondents in Yigille and Kadabaeda sub-districts were middle aged and elders. About 55% and 44% in Yigille and 77% and 17% in Kadabaeda were middle aged and elders, respectively.

Table4.1: Distribution of respondents by the age in the study area

| Name of sub-district | Percentage of respondent (%) | | | Total number of respondents |
|----------------------|------------------------------|----------------------------|---------------------------|-----------------------------|
| | Young (20-30 years of age) | Middle(30-50 years of age) | Elder(50-70 years of age) | |
| Yigille | 0.98 | 55.12 | 43.90 | 205 |
| Kadabaeda | 10.56 | 72.2 | 17.2 | 180 |
| Total | | | | 385 |

4.1.2. Educational status

Education is one of the major socio-economic factors that influence person's behaviour and attitude. Literacy is associated positively with income of households for health and nutrition. Education also influences their type of occupation. The survey result showed that majority of the respondents did not attend regular schools. Over ninety per cent of the respondents in Yigille and 88.89% of the respondents in Kadabaeda were illiterate while the remaining small proportion represents those who attended either basic education or primary school.

Table 4.2: Education status of households in the study area

| Name of sub-district | Proportion of respondent (%) | | | | Total number of respondents |
|----------------------|------------------------------|-----------|--------------|---------|-----------------------------|
| | Illiterate | Read only | Read & write | Primary | |
| Yigille | 90.24 | 2.43 | 6.82 | 0.48 | 205 |
| Kadabaeda | 88.89 | 6.11 | 1.67 | 3.33 | 180 |
| Total | | | | | 385 |

4.1.3 Status of sex composition

Most of the respondents in Yigille (85.36%) and the majority in Kadabaeda (65.00%) were females (table 4.3). This showed that participation of females outside their homes was limited due to their home based activities such as cooking of foods, caring of children etc. The biological characteristics of women have imposed multiple roles on them; primarily bearing and taking care of children as mother limited their participation in economic activities in the area. In addition, the traditional division of labour on sex basis and subordinate status of women in society acted as barriers on their participation. In the area, women participated also in livestock rearing and related issues.

Table 4.3: Status of sex composition of households in the study area

| Name of sub-district | Proportion of respondent (%) | | Total number of respondents |
|----------------------|------------------------------|--------|-----------------------------|
| | Male | Female | |
| Yigille | 85.36 | 14.64 | 205 |
| Kadabaeda | 65 | 35 | 180 |
| Total | | | 385 |

4.1.4 Marital status

Information on the basic characteristics of respondents was essential for the interpretation of the results. Table 4.4 depicted that in both sub-districts most of the respondents were married (about 93% in Yigille and Kadabaeda Kebeles sub-district).

Table 4.4: Distribution of respondents by marital status in the study area

| Name of sub-district | Proportion of respondents (%) | | | Total number of respondents |
|----------------------|-------------------------------|--------------------|----------|-----------------------------|
| | Married | Single (unmarried) | Divorced | |
| Yigille | 93.65 | 1.95 | 4.39 | 205 |
| Kadabaeda | 93.33 | 1.67 | 5 | 180 |
| Total | | | | 385 |

4.1.5. Characteristics of focus group members

All selected group members were married except one DA from Agro-pastoralist area and one DA from pastoralist area. Regarding their educational status, five of them had diploma, one was 10+2, and one was 8 grades complete. The head of PA and clan leader were illiterate and two of FGD members had first degree (Table 4.5).

Table 4.5 Characteristics' of focus group members

| Positions of the members | Sub-district | Age | Sex | Educational status | Marital status |
|--|---------------------|------------|------------|---------------------------|-----------------------|
| DA's from pastoralist | Kadabaeda | 28 | m | degree | single |
| DA's from pastoralist | Kadabaeda | 25 | m | diploma | married |
| DA's from pastoralist | Kadabaeda | 23 | f | diploma | married |
| DA's from agro- pastoralist | Yigille | 24 | m | diploma | single |
| DA's from agro-pastoralist | Yigille | 26 | f | diploma | married |
| DA's from agro- pastoralist | Yigille | 22 | f | diploma | married |
| Head of sub-district from agro-pastoralist | Yigille | 30 | m | illiterate | married |
| Head of sub-district from pastoralist | Kadabaeda | 30 | m | illiterate | married |
| Clans leader | From centre | 55 | m | illiterate | married |
| Food security division | From centre | 29 | m | degree | married |
| Store keeper | From centre | 26 | m | 12 complete | married |
| Head of women affair office | From centre | 29 | f | 8 complete | married |

4.2. Factors affecting food aid

4.2.1. Selection criteria

Regardless of their wealth status, almost all inhabitants in the target district and sub-district were receiving similar amount of ration of food aid without considering their family size (Afar Regional DPFS Bureau Mission Report, 2009)

Mr.Hamedu Ali, the head of Agriculture and Rural Development Office of Gewane district, explained that when the programs started no one was aware of the operational procedures of the program and hence the fixed number of beneficiaries were apportioned for ten sub-district in the district; i.e. the limited amount of food aid was distributed to all households available in the sub-district. There were no criteria used to select the most appropriate beneficiaries.

When respondents were asked about the distribution criteria there was no agreement among the respondents on the type of selection criteria used in their respective areas. The most common beneficiary selection criteria used according to the respondents were livestock number, income status, family size and wealth status (Table 4.6).

Table 4.6: Beneficiary selection criteria used (reflection of the respondents).

| Name of sub-district | Proportion of respondent (%) | | | | Total |
|----------------------|------------------------------|--------------|-------------------|--------------|------------|
| | Livestock based | Income based | Family size based | Wealth based | |
| Yigille | 43.41 | 20 | 30.24 | - | 205 |
| Kadabaeda | 28.33 | 23.88 | 34.44 | 13.33 | 180 |
| Total | | | | | 385 |

4.2.2 The status of respondents' suggestion on best selection criteria

The criteria used by Agriculture and Rural Development Office of the district to distribute food aid to beneficiary households has reduced the amount of ration to each household and, thus, had negative impact on the poor households. To correct this problem, the respondents have suggested the following criteria depicted in Table 4.7. The most common criteria suggested by respondents in Yigille sub-district according their order of importance were income status, livestock number, family size and wealth status. In the case of Kadabaeda, the recommended criteria in the order of their importance were family size, livestock number, and income and wealth status. The

respondents recommend that livestock based criteria would be the best since livestock is the main indicator of wealth and income source in the area.

Table4.7: selection criteria as suggested by the respondents.

| Name of sub-district | Proportion of respondent (%) | | | | Total number of respondents |
|----------------------|------------------------------|--------------|-------------------|--------------|-----------------------------|
| | Livestock number based | Wealth based | Family size based | Income based | |
| Yigille | 31.21 | 0.48 | 29.75 | 38.53 | 205 |
| Kadabaeda | 28.33 | 13.33 | 34.44 | 23.88 | 180 |
| Total | | | | | 385 |

4.2.3. Frequency of food aid in the area

All the respondents in Kadabaeda and the majority in Yigille kebele sub-district indicated that they received food aid three times in a year. The detail is presented below in Table 4.8

Table 4.8; Number of times food receive in the study area

| Name of sub-district | Proportion of respondent (%) | | | Total number of respondents |
|-----------------------------|-------------------------------------|------------------|--------------------|------------------------------------|
| | Two times | One times | Three times | |
| Yigille | 38.53 | - | 61.46 | 205 |
| Kadabaeda | - | - | 100 | 180 |
| Total | | | | 385 |

4.2.4. Food aid distribution modalities in the area

The food aid distribution chain of the study area is depicted in (figure 2.)



Figure -2 Distribution channel of food aid in the study area

4.3. Influence of food aid on consumption

In highly chronic food-insecure areas, food aid can have a live-saving effect on the poor and prevents them from losing their assets. But in general, food aid does not really have an effect on asset building. Food recipient households often sell part or even all of their received food aid grains, particularly wheat on the market in order to pay for household expenses or to buy other food items they prefer (Barrett, 2005).

The majority of the respondents in Yigille pointed out that food aid do not have impact on food consumption pattern while the majority in Kadabaeda indicated that it does have some impact (Table 4.9). The finding in Yigille was not in line with report of Barrett (2005) which claim food aid has impact on food aid consumption pattern. It was found that many households, who were receiving food aid, reduced their food production over the years and decreased the application of fertilizer, but to what extent this can be attributed to food aid was not easy to determine. However, food aid has led to the development of a dependency syndrome in certain areas. Many food aid respondents also acknowledge the food aid is a disincentive which creates less production of local grain.

Table 4.9:- Impact of food aid on food consumption pattern.

| Name of Sub-district | Does food aid change your food consumption pattern? | | Total number of respondents |
|----------------------|---|-------|-----------------------------|
| | Proportion of respondent (%) | | |
| | Yes | No | |
| Yigille | 36.58 | 63.41 | 205 |
| Kadabaeda | 62.22 | 37.22 | 180 |
| Total | | | 385 |

4.3.1 Influence of Food Aid on Feeding Habit

There was a change in food habit. For example, pastoralists have started preparing and eating local bread “enjera”. The local bread has replaced ‘genfo’. This was mainly due to the fact that preparation of ‘genfo’ requires more flour than the preparation of ‘enjera’. In addition to this, the traditional pattern of using milk as the main food has now changed. Most of the respondents in Yigille eat two times while in Kadabaeda, the majorities eat three times in a day (Table 4.10)

Table 4.10:- Influence of food aid on feeding habit

| Name of Sub-district | How many times do you eat in a day? | | | Total number of respondents |
|-----------------------------|--|------------------|------------------|------------------------------------|
| | Proportion of respondent (%) | | | |
| | Three times | Two times | One times | |
| Yigille | 42.92 | 57.07 | - | 205 |
| Kadabaeda | 93.88 | 6.11 | - | 180 |
| Total | | | | 385 |

4.3.2. Main types of food source

Table 4.11 shows that there was no major change in the type of food source before and after food aid in both Sub-districts and the major source of food are livestock production.

Table 4.11:- Major types of food source

| Name of sub-district | What is/was your major source of food? | | | | | |
|----------------------|--|-----------------|---------------|----------------------|-----------------|---------------|
| | Number of respondent | | | | | |
| | Before food aid | | | After food aid | | |
| | Livestock production | Crop production | Food received | Livestock production | Crop production | Food received |
| Yigille | 203 | 2 | - | 167 | 30 | 8 |
| Kadabaeda | 180 | - | - | 180 | - | - |
| Total | 383 | 2 | - | 347 | 30 | 8 |

Note;

LP livestock production

CP crop production and

FR food receive

4.3.3 Livestock holding

Livestock are the most common form of saving in pastoralist regions. For smallholders livestock offer much better rate of return (through appreciation, reproduction and through the products and services they provide) than banks or credit and savings institutions interest. They are also more accessible and frequently liquidated to meet both planned and unplanned expenditure. Households sell the smallest animal when food aid delays or is absent or to cover other expenditures. Livestock population has declined in the Afar pastoralist region particularly in the study area. The change in number of goat, sheep, cattle and camel and the remaining livestock species showed similar trend in both sub-districts. The result showed also that the number of households with smaller herd size with different livestock species increased after food aid while those of households with larger herd size decreased (Table 4.12).

Above explained that, the number of livestock holds by the hands of Pastoralists before food aid (1999/2000) in yigille Kebele was 4200 goat, 1420 cattle, 3633 sheep, and 2120 camels. The average livestock holding before food aid was 37 goats, 12.5 cattle, 32 sheep and 18.5 camels. This indicates in yigille most of pastoralists have more numbers of goat than cattle, sheep and camels.

Table 4.12 Livestock holding before and after food aid

| Livestock herd/flock size | Number of respondent by sub-district | | | |
|---------------------------|--------------------------------------|----------------|-----------------|----------------|
| | Yigille | | Kadabaeda | |
| Goat | Before Food Aid | After Food Aid | Before Food Aid | After Food Aid |
| 1-15 | 0 | 68 | 0 | 7 |
| 16-30 | 20 | 116 | 1 | 96 |
| 31-45 | 73 | 18 | 34 | 59 |
| 41-60 | 112 | 3 | 145 | 18 |
| Sheep | | | | |
| 1-15 | 2 | 73 | 0 | 49 |
| 16-30 | 37 | 125 | 30 | 99 |
| 31-45 | 86 | 6 | 40 | 24 |
| 46-60 | 80 | 1 | 110 | 8 |
| Cattle | | | | |
| 1-15 | 24 | 54 | 54 | 157 |
| 16-30 | 70 | 64 | 64 | 21 |
| 31-45 | 74 | 21 | 21 | 2 |
| 46-60 | 36 | 0 | 41 | 0 |
| Camel | | | | |
| 1-15 | 25 | 147 | 46 | 144 |
| 16-30 | 74 | 24 | 61 | 32 |
| 31-45 | 36 | 4 | 25 | 4 |
| 46-60 | 70 | 0 | 48 | 0 |

4.3.4. Types of livestock market

The Ethiopian government designed food aid program for food insecure areas to protect households and their own livestock. In the pastoralist area the number of livestock in the market decreases after food aid. In this study the highest change was recorded for camel in Yigille followed by goat, cattle and sheep. In Kadabaeda, the highest change was observed in camel followed by cattle, sheep and goat (Table 4.13)

Table 4.13:- Change in types of livestock in market

| Name of sub-district | Which type of livestock do you bring to market? | | | | Total number of respondents |
|----------------------|---|-------|-------|--------|-----------------------------|
| | Proportion of respondent (%) | | | | |
| | Goat | Sheep | Camel | Cattle | |
| Yigille | 24.39 | 12.68 | 51.22 | 11.70 | 205 |
| Kadabaeda | 18.89 | 23.89 | 30 | 27.22 | 180 |
| Total | | | | | 385 |

4.3.5 Purpose of livestock holding

Almost the entire rural population is involved in animal husbandry, whose role included the provision of food, cash, transportation, fuel and especially in pastoral areas social prestige. In pastoral areas, livestock formed the basis of the economy. Per capita meat consumption was high

by developing countries' standards, and estimated at thirteen kilograms annually. The results of this study showed that almost all respondents believe that livestock has multipurpose in their livelihood (Table 4.14)

Table 4.14:- Purpose of livestock holding

| Name of sub-district | For what purpose do you retain livestock? | | | Total number of respondents |
|----------------------|---|---------------|-------|-----------------------------|
| | Proportion of respondent (%) | | | |
| | Prestige | Income source | Both | |
| Yigille | 0.48 | 0.48 | 99.04 | 205 |
| Kadabaeda | - | - | 100 | 180 |
| Total | | | | 385 |

4.3.6. Types of livestock used for sell

Table 4.15 depicted that all livestock are sold to generate income but the most common ones are small ruminants; goat in Yigille and sheep in Kadabaeda. Pastoralists and agro-pastoralists are

not having access to generate income because they don't have wage or salary they are used their livestock to solve every problems they occurred. So, the most times pastoralists and agro-pastoralists used to sell goat and sheep.

Table 4.15:- Types of livestock for sell

| Name of sub-district | Which type(s) of animal(s) do you own? | | | | Total number of respondents |
|----------------------|--|--------------|-------------|-------------|-----------------------------|
| | Proportion of respondent (%) | | | | |
| | Goat | Sheep | Camel | Cattle | |
| Yigille | 61.95 | 26.34 | 5.85 | 5.85 | 205 |
| Kadabaeda | 31.67 | 66.11 | 2.22 | - | 180 |
| Total | | | | | 385 |

4.3.7 Types of livestock drought resistant

As perceived by the respondents in both sub-districts, camel is the best animal in resisting drought as compared to cattle, sheep and goat (Table 4.16). In this regard, cattle and sheep were the least rated animals. In the case of afar the most drought resistant livestock are camel because the region weather condition is desert and most of the time happen water problem, so camels are resist for two weeks there for most of the time afar community needs to hold camels but due to consecutive drought the number of camels are decreases.

Table 4.16:- Drought resistant livestock

| Name of sub-district | Which type(s) of livestock is drought resistant? | | | | Total number of respondents |
|----------------------|--|-------|-------|--------|-----------------------------|
| | Proportion of respondent (%) | | | | |
| | Goat | Sheep | Camel | Cattle | |
| Yigille | 3.90 | - | 94.63 | 1.46 | 205 |
| Kadabaeda | 0.55 | 1.11 | 98.33 | - | 180 |
| Total | | | | | 385 |

4.4. Market problems

4.4.1. Market distance

Gewane town is a very important market center for the district and the surrounding villages. There are, however, a number of other important towns which serve as market centers for livestock, food crops and non-food commodities for wider areas such as Werer, Dalifage and livestock markets in the neighboring region such as Metahara and Asebeteferi etc are also used as markets for pastoralists. The main commodities sold in the markets are livestock and livestock products. After selling their livestock, pastoralists buy cereals, sugar and different household

items. In most cases, market centers are located far from high potential livestock areas. Thus, pastoralists have to travel long distance to access markets which result in livestock body condition deterioration on the way. By the time livestock reach the market, they fetch lower price due to body weight loss. This is serious during drought seasons. During dry season when weakened livestock travels long distances often die on the way before reaching market places.

Table 4.17: Market price of livestock before and after food aid

(Number of respondents)

| Name of kebeles | yigille | | kadabaeda | | Total |
|-----------------|---------|-------|-----------|-------|-------|
| Before food aid | Before | after | Before | after | |
| goat | | | | | |
| 1-100 | 91 | 0 | 73 | 0 | |
| 101-200 | 99 | 0 | 98 | 0 | |
| 201-300 | 7 | 0 | 4 | 0 | |
| 301-400 | 8 | 1 | 4 | 0 | |
| 401-500 | 0 | 16 | 1 | 0 | |
| 501-700 | 0 | 55 | 0 | 3 | |
| Above 700 | 0 | 133 | 0 | 177 | |
| sheep | | | | | |
| 1-100 | 133 | 0 | 141 | 0 | |
| 101-200 | 55 | 0 | 34 | 0 | |
| 201-300 | 14 | 1 | 2 | 0 | |
| 301-400 | 2 | 9 | 2 | 2 | |
| 401-500 | 1 | 29 | 24 | | |
| 501-700 | 0 | 150 | 115 | | |
| Above 700 | 1 | 16 | 1 | 39 | |
| camel | | | | | |
| 1-100 | 0 | 0 | 0 | 1 | |
| 101-200 | 0 | 0 | 0 | 1 | |
| 201-300 | 0 | 0 | 0 | 10 | |
| 301-400 | 0 | 2 | 0 | 107 | |
| 401-500 | 0 | 68 | 0 | 54 | |
| 501-700 | 0 | 130 | 0 | 7 | |
| Above 700 | 205 | 5 | 180 | 0 | |
| cattle | | | | | |
| 1-100 | 0 | 0 | 0 | 0 | |
| 101-200 | 0 | 0 | 0 | 0 | |
| 201-300 | 0 | 0 | 0 | 0 | |
| 301-400 | 0 | 0 | 0 | 0 | |
| 401-500 | 0 | 0 | 0 | 0 | |
| 501-700 | 0 | 1 | 0 | 0 | |
| Above 700 | 205 | 204 | 180 | 180 | |

4.4.2. Price of livestock

The survey result indicated that food aid has a positive effect on market through its influence on the demand and the price of grain. As a result of food aid the quantity of livestock in the market decreased and the demand for livestock becomes high. This has increased the price of livestock. On the other hand, food aid was found to be a constraint for inter-regional grain trade between surplus areas and food-deficit areas as it discourages the purchase food grain from those areas by local traders or farmer. The results of this study revealed that the price of livestock increased after food aid distribution in both Yigille and Kadabaeda sub-districts (4.17)

Table 4.17: Price of livestock during food aid

| Name of sub-district | Does price of livestock fall after food aid? | | Total number of respondents |
|----------------------|--|----|-----------------------------|
| | Proportion of respondent (%) | | |
| | Yes | No | Total |
| Yigille | 100 | - | 205 |
| Kadabaeda | 100 | - | 180 |
| Total | | | 385 |

4.4.3:- Reason for livestock price change

The common reason for the increase in the price of livestock during food aid was the decrease in the supply of livestock to the market (Table 4.18).

4.18:- Reason for livestock price change

| Name of sub-district | What is the cause for livestock market price reduction? | | Total number of respondents |
|----------------------|---|--|-----------------------------|
| | Proportion of respondent (%) | | |
| | Number of livestock availability at market decrease | Livestock holding of pastoralists increase | |
| Yigille | 94.14 | 5.85 | 205 |
| Kadabaeda | 100 | - | 180 |
| Total | | | 385 |

The results indicated that when grain was available in the market, due to relatively good rain season and/or availability of relief food assistance, the price of grain in the market declined while that of livestock increased.

On the other hand when the food aid stopped temporarily the livestock price declined and the price of grain automatically increased. This indicates that in the study area food aid has great impact on the livestock market.

4.4.4. Factors influencing price of livestock

Livestock sector has been contributing considerable portion to the economy of the country. It is eminent that livestock products and by-products in the form of meat, milk, honey, eggs, cheese and butter supply the needed animal protein of the people. In this study, the majority of the respondents in Yigille and Kadabaeda sub-districts agreed that the most important factor influencing livestock price is the increase in the supply of livestock to the market. Some of the respondents in the two sub-districts agreed also that food aid distribution has effect on livestock market prices (Table 4.19).

Table 4.19 Factors influencing price of livestock

| Name of sub-districts | Proportion of respondent (%) | | | Total number of respondents |
|------------------------------|-------------------------------------|---|-----------------------------------|------------------------------------|
| | Food receive | Increase supply of livestock in market | Non availability of market | |
| Yigille | 20.97 | 78.53 | 0.48 | 205 |
| Kadabaeda | 21.67 | 78.33 | 0 | 180 |
| Total | | | 0.25 | 385 |

4.4.5. Market supply of livestock

This study revealed that the number of livestock supplied to the market decrease when food aid was available in both sub-districts (Table 4.20)

Table 4.20:- Supply of livestock to market

| Name of sub-district | Does market supply of livestock decrease during food aid period? | | Total number of respondent |
|----------------------|--|----|----------------------------|
| | Proportion of respondent (%) | | |
| | Yes | No | |
| Yigille | 100% | - | 205 |
| Kadabaeda | 100% | - | 180 |
| Total | | | 385 |

4.4.6. Reason for decrease of livestock in number at market when food aid available

The main reason for the decrease of livestock supply at market in both Yigille and Kadabaeda is not the increase in livestock holding capacity of pastoralists when food aid is available but decrease supply of livestock at market (Table 4.21).

Table 4.21 Reason for decrease of livestock supply to market

| Name of sub-district | What is the cause for the decrease in livestock supply to market? | | Total number of respondent |
|-----------------------------|--|--|-----------------------------------|
| | Proportion of respondent (%) | | |
| | Decrease supply of livestock at market | Increase the holding capacity of pastoralists | |
| Yigille | 97.08 | 2.92 | 205 |
| Kadabaeda | 98.89 | 1.11 | 180 |
| Total | | | 385 |

4.4.7. Market food price when food aid delays

When food aid delays the price of food remained unchanged in Yigille sub-district while it increased in Kadabaeda (Table 4.22).

Table 4.22:- price of food in market

| Name of sub-district | Does the food price change when food aid delay? | | | Total number of respondents |
|-----------------------------|--|-----------------|-----------------|------------------------------------|
| | Proportion of respondent (%) | | | |
| | Increase | Decrease | Constant | |
| Yigille | 39.51 | - | 60.48 | 205 |
| Kadabaeda | 98.89 | 1.11 | - | 180 |
| Total | | | | 385 |

5: CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusion

The study result showed high percentage of pastoralist remains under vulnerable groups due improper beneficiary targeting practiced in the area and late delivery of food aid due to lack of effective food management system and passing long channel to reach the beneficiary.

Having only one distribution site in the Worads enforces people to travel long distance and incur high transportation cost and some of them sold in the market.

The result show positive impacts on the livestock supply and price in the market for pastoralist which expected selling less amount of livestock and getting high price in, but high decreasing in livestock holding in hand of house hold after food aid programme. This result also showed the food aid is not only responsible factor to decrease or increase livestock holding there are others factors which is not assessed in this study in the study area. Based on the result food aid has positive impact on pastoralist economy as have seen in the study part most of the household's changes their consumption patterns.

In addition to this, food aid has positive impact on pastoralists who sell their livestock in the market to buy food and related items by decreasing the price of grain and increasing the price of livestock in the market. The researcher observed from the analysis when the food aid available in the market the livestock price increases and the price of grain decreases. In another hand lack of cooperative involvement in the market to avoid monopoly in the market, lack of market days in the weak to create alternative for pastoralist sellers, lack of road facility between the market centre and the villages around it and lack of animal health clinics in the study area were negatively affect the performance of market in the study area.

Afar Pastoralists in the study area are having more and more difficulties to cope with the actual drought that highlights most of the chronic and structural problems that need to be addressed. These problems hindering proper development of gewane woredas are mainly provision of basic human and animal health and water supply infrastructure, and animal marketing, animal feed and human food. The problems of the woreda are exacerbated by its semi-arid nature which means many parts are extremely remote and inhospitable. People in the woreda therefore depend mainly on livestock production for their livelihood. Drought has become a common phenomenon in the study area causing very serious impairment on livestock production, the main source of livelihood for the pastoralists in the woreda.

Generally food aid has positive impact on house hold economy unless the factor mentioned the above who are negatively affect the impact of food aid corrected.

5.2 Recommendations

Based on the conclusion the following recommendation provided

- To reduce vulnerable group and protect the asset depletion retargeting should take place in the Afar region at whole and Gewane Woredas particularly by under the consultation of the community.
- Local coping strategies must be encouraged
- Food distribution should be on time without any delay of time and
- Close monitoring should be available to minimize food aid corruption
- To minimize the long channel of food aid and high transportation costs incurred on the food Expansion of distribution centres in each kebeles should thing

- According to the pastoralist suggestion the factors negatively affected the market performance should be corrected
- Further study should takes place to identify the factors affected livestock holding in the study area
- The food aid programme not only solution for food insecurity problem so another food security programs should get attention

The traditional coping strategy of pastoralists during drought is migrating to areas where there is sufficient pasture. Traders and pastoralists used to access the three markets (Gewane market held in a Thursday, Dalefage market held in Monday and werer held in Saturday) held once in a week and which no more accessible for every time of drought. So given the limited size and concentrated in one or two places of animal market in the study area both two sub-district pastoralists and agro pastoralists, the provision of markets needs to be revisited to enable communities in woreda to cope with their loss of market access. A transport subsidy is one option to encourage traders to venture further into the woreda.

In addition, movement of livestock in search of feed and water is a traditional coping strategy though the process is not normally supported by external agencies.

Pastoralists lose livestock during such movements due to lack of feed, water and medical support. So that support is recommended during their return. On the other hand promoting reducing livestock in the time of drought will enable livestock capital to be salvaged. It will also support the purchasing power of pastoralists. Mobile slaughter houses should be utilised. Mobile units avert the need for the cattle to travel extensive distances and thereby minimize their suffering.

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Introduction of the questionnaire

This questionnaire is prepared to answer questions raised in the research questions and to verify objectives listed. Moreover it is prepared based on the geographical and livelihood of the community which is selected for the interview. It has three parts to make clear for readers and explained by simple language and to avoid confusion between the participants of the research and respondents.

Questionnaire part-1

1. Woredas -----

2. Kebele -----

2.1 Kebele type -----

a. Agro-pastoralist

b. pastoralists

3. Code of household-----

4. Age -----

5. Sex-----

6. Martial status-----

A. mirage C. single D. divorced

2.5 educational statuses-----

A. primary B. secondary C. read and writes D. only reading

4. What were the criteria to select you as beneficiary-----?

a. Wealth based b. Livestock based c. family no based d. Income level

4.1 What types of criteria mostly you satisfied among the above mentioned?

4.2 What is your comment regarding to the selection criteria? -----

5. How many times you receive food aid in the year -----?

b. Two times b. three times c. one times d. continuous nine months

6. What is the alternative for you when the food aid delay? -----

6.2 Who decide the transfer time of food? -----

a. Assessment based b. based on community interest based c. based on drought

6.3 What do thing about transfer time of food?

A. It is normal .B. delay c.very delay

6.1 Does food aid has influence on consumption or how many times you eat daily?

A three times B. two times C. One time D .none

6.1 What is the difference from the previews? -----?

6. What is the mechanism used for the distribution of food aid

A. Household based B. family size C. Home based

7. How many kg/person-----

8. Who distribute the food for the community?

a. Local community based committee b. By expert c. each household take from store

8.1 who pay the cost for distributors-----?

9. do you have transportation cost on the food you received?

A. yes b. No

9.1 If yes what is the means of transportation-----?

9.2 Who pay the transportation cost for you-----?

10. What is the price margin-----
 -----?

11. What is the main type of food source before and after food aid?

| | Types of food resource | before food aid | after food aid | remark |
|---|-------------------------|-----------------|----------------|--------|
| 1 | A. Livestock production | | | |
| 2 | crop production | | | |
| 3 | food aid receive | | | |
| 4 | remittances | | | |
| 5 | others | | | |

Part-2

12. How much the number of livestock you had before and after food aid (base year 10 year data will take for comparison)

| Livestock type | Before food aid | after food aid | remark |
|----------------|-----------------|----------------|--------|
| Goat | | | |
| sheep | | | |
| camels | | | |
| cattle | | | |
| others | | | |

14. Which types of livestock shows proportionally high change?

- A. Goats B. sheep C. camel D. cattle E. others

15. For what purpose you keep livestock?

1. Milk 2. Meat 3. Prestige 4. Income source 5. For transportation 6. All

15. Which types of livestock is more affected by time of food aid?

| Livestock type | Before food aid | after food aid | Remark |
|----------------|-----------------|----------------|--------|
| Goats | | | |
| sheep | | | |
| cattle | | | |
| camel | | | |
| others | | | |

16. What types of livestock you used for sell for time of hard or absence of food aid? -----

17. Which type of livestock drought resistant? -----

Part-3

17. Do you have market to sold livestock in your locality? 1.Yes 2.No

17.1 If yes mention the name of the markets-----

17.2 How much km far from your home? -----

18. **What is the market price of livestock before and after food aid (at average price)?(10year s based)**

| Type of | Market price | before food aid | After food aid |
|---------|--------------|-----------------|----------------|
| goat | | | |
| Camel | | | |
| sheep | | | |
| cattle | | | |
| others | | | |

18. Is the price of livestock increases when the food aid available? 1. Yes 2. No

18.3 If yes what is the reason? 1. ----- 2. -----

3. ----- 4. -----

19. Is the price of livestock decreases when food aid stops temporarily? 1.Yes 2.no

19.2 If yes what is the factors influencing the price of livestock 1. -----

2. ----- 3. -----

21. Is the number of livestock decreases in market when food aid available in the market? -----

-----1. Yes 2.No

22. If yes what is the reason? -----

22. What is the price of food in the market when food aid delay-----

Part – 4 for

Questionnaire for Focus group and key informants

1. What are the criteria mostly adapted for selection of beneficiary in your area
2. What are the criteria for wealth category in terms of livestock and other resources?
3. Develop the village map for your locality based on by using Geographical map to show livestock dispersion additionally dividing economical based
4. What is the type of targeting you used?
5. Develop the market channel in your area
6. What is the market related problems in your locality and what is the available solution?
7. What the problems occurred in the food management system in the your Woredas
8. What is the effect of food aid on the livestock market (compare when the food aid available and not available the price of livestock as the same time price of grain)
9. What do you think about livestock holding before and after food aid

