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## Constraints of Pastoral and Agro-pastoral Livelihood Diversification in Eastern Ethiopia: The Case of Mieso District, Oromia Regional State

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### Abstract

The study was conducted in Western Hararghe of Eastern Ethiopia. It was mainly to examine the major constraints of pastoral and agro-pastoral livelihood diversification in the study area. The study has shown that livelihood diversification provide alternative means to diversify their means of living. The poor individuals and households are engaged in diverse activities because of pushing factors, while the better-off individuals and households are engaged in diverse activities because of pulling factor. The study has also shown that several constraints act as obstacles to livelihood diversification. The main constraints faced by the households in the study area are: poor asset base, lack of financial facilities, lack of awareness and training facilities, lack of infrastructure, and lack of opportunities in non-farm activity. The resource poor are particularly vulnerable and unable to diversify because of the entry barriers imposed by their weak asset base and lack of awareness. The study has suggested the need to develop different strategies especially for the poor pastoralist societies to create better opportunities to engage in diverse activities. This includes the development of rural infrastructure in terms of road, market, electrification, telecommunication, etc., awareness creation through training and education, and rural credit facilities.

**Keywords:** Constraints; Livelihood diversification; pastoral and agro-pastoral; pushing factor and pulling factor.

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## **1. Introduction**

Pastoralists and agro-pastoralists in Ethiopia inhabit the largest livestock population in Africa and more than 61% of its landmass [1]. They raise a large portion of the national herd, estimated about 42 percent of the cattle, 7 percent of the goats, 25 percent of the sheep, 20 percent of the equines and the total number of camels [2]. Pastoralists live mostly in dry, remote areas, whose livelihoods depend on their intimate knowledge of the surrounding ecosystem and on the wellbeing of their livestock. Pastoral systems take many forms, adapted to particular natural, political and economic environments. The types of livestock kept by pastoralists vary according to climatic and environmental conditions, and availability of water and other natural resources, and geographical areas. Due to these determinants, mobility is considered as a key feature qualifying pastoralism and its system [3]. Traditional pastoralism is based on the use of natural pasture and is practiced in dry environments where rainfall is generally unreliable for sustainable livestock-based livelihoods. There are some distinctions in pastoral typologies which mainly arise due to differences in the level of mobility, the type of species managed, and economic orientation [4].

In sub-Saharan Africa mobile pastoralism is predominantly practiced in arid and semi-arid lands which have low and erratic rainfall. There are limited livelihoods suited to this unpredictable environment, but pastoralism is particularly appropriate, because it enables people to adapt by moving livestock according to availability of water and pasture. Pastoralism makes a significant contribution to Gross Domestic Product (GDP) in many East African countries (around ten per cent in Kenya); it provides the majority of meat consumed in those countries; and provides a livelihood for more than tens of millions of people who live there. Pastoralists are the custodians of dry land environments, providing services through good rangeland management including biodiversity conservation, and wildlife tourism.

The pastoral areas of Ethiopia (constituting 60% of the national territory) are occupied by distinct ethnic and culture groups whose 10 million people employ transhumant and nomadic pastoralism as their primary mode of livelihood and land resource use. These areas occupy the lowlands of Ethiopia and cross internal and international boundaries [5]. These areas tend to have the highest incidence of poverty and the least access to basic services compared with other areas. In the pastoralist areas in northern Uganda, 64 per cent of the populations live below the poverty line, compared with 38 per cent nationally [6].

Mobile pastoral communities have been coping with changing environmental conditions for centuries. As a result, they have long established capacity for their adaptation. However, in recent years, changes in their environments from increased frequency of drought, rainfall variability, and occurrence of new livestock disease, land use change and natural resource degradation have undermined their adaptive strategies and increased their vulnerability. Trends point to a pattern of climatic hazards which attribute to more frequent disasters. One option for pastoralist and agro-pastoralists to cope up and adapt with the existing disaster is through livelihood diversification. Livelihood diversification is a process by which rural households construct a diverse portfolio of activities and social support capabilities in their struggle for survival and improvement in their standards of living [7]. Accordingly, in this study livelihood diversification refers to the attempts by pastoral and agro-pastoral community to find new ways of survival and vulnerability reduction, to different livelihood shocks.

A number of scholars have confirmed that pastoralist in East Africa and other pastoralist areas do not normally specialize in livestock, crop or fish production to the total exclusion of other income generating activities. Rather, a majority of pastoralists have diversified their productive activities to cope up with various stresses and shocks. Motivations for such diversification are multifarious, linked with wide range of possible activities, and associated with both pushing and pulling factors. This recognition has led many researchers to represent rural livelihoods as constructed from a portfolio of resources, or activities [8]. Even though livelihood diversification is an important means of survival strategy for the pastoral and agro-pastoral households in the study area, there are several constraints that determine the extent and magnitude of livelihood diversification.

## **2. Materials and Methods**

### ***2.1. Description of the Study Area***

Mieso District is located at about 300 km from Addis Ababa, in West Hararghe administrative zone of Oromia Regional State. The District is located between 40°9'30.1' E and 40°56'44' E; and: 9°19'52'N and 8°48'12'N. It is bordered in the south by Guba Koricha district, in the West by the Afar Region, in the North by the Somali Region, in the East by Doba district and in the Southeast by Chiro District. The District has a total number of 46 Peasant Associations and 3 town dwellers associations [9].

Mieso district is surrounded by a chain of mountains in nearly all directions. The altitude of the District is ranging from 900m-2500 above mean sea level. The highest mountain is Asebot with altitude of 2500m above mean sea level, which is located in the northeast of Mieso town. The district has a total area of 257,344 Hectares of which about 82 percent is plain land, 9 percent is undulated land and the remaining 9 percent belongs to mountains [10]. The mean annual temperature for Mieso is around 18C°, while average annual rainfall is about 790mm. Most of the rainfall is received in only few months, where most of the months are dry. As a result, recurrent drought is a major problem, and is making relief aid a regular source of livelihood for many rural families. Rainfall is a major limiting factor for agricultural production in the area. From agro ecological point of view, the district is classified as lowland. The area receives a bimodal rainfall where the small rains are between March and April while the main rains are between July and September [9].

According to [11], the total population of the Mieso district is 155,981 out of which 79,811 and 76,170 are male and female respectively. From the 43 total population of the about 32,589 is urban dwellers whereas 123,392 is rural resident. The crude population density of the district is 104.5 Out of the total population of the district; about 50.83 percent is male while the female constitute about 48.51 percent of the population in the district. The Oromo, Somali and other ethnic groups are inhabited in the district. They are Cushitic speaking pastoralists. They have almost a similar religious practice called Islamic religion and more or less similar socio-cultural practices.

### ***2.2. Data collection and analysis***

Both primary and secondary data were generated through a variety of methods and approaches. Primary data were collected by using questionnaire, key informant interviews, focus group discussion and observation.

Respondents were selected purposively based on their sex, age, level of education and position in the society. Five focus group discussions, each comprising six to eight persons of homogeneous in sex and heterogeneous in age groups sampled from each village, were conducted in the area. For cross triangulation, interview was conducted with government officials, development agents, religious leaders and local elders.

In addition, secondary data were collected through an extensive review of existing literatures and official reports to cover current issues in relation to livelihood diversification in the area. Descriptive study analysis technique was employed to analyze, interpret and discuss the data. It involved typing and editing, tabulation and interpretation. While analyzing the collected data, the study employed both qualitative and quantitative approaches. Because the data gathered through, focus group discussion, document reviews and interview were qualitatively described. Individual narrative and case profiles obtained through questionnaires and the other tools were used to summarize and analyze the phenomena.

### **3. Result and Discussion**

#### ***3.1. The role of livelihood diversification***

Rural households or individuals engaged in diverse activities to survive and accumulate capital. In sub-Saharan Africa, a range of 30–50 per cent reliance on non-farm income sources is common; but it may attain 80–90 per cent in southern Africa. In south Asia, on average, 60 per cent of rural household income is from non-farm sources. A diverse portfolio of activities contributes to the sustainability of a rural livelihood because it can cope up from the adverse effects of trends, seasonality and shocks. Diversity promotes greater flexibility because it allows more possibilities for substitution between opportunities that are in decline and that are expanding [12]. Respondents pointed out that although rearing of livestock remains the backbone of the livelihood, pastoral and agro-pastoral societies are looking for diverse opportunities to increase and stabilize their means of living. They realized that they have no longer remained confining to livestock-rearing only but combining a range of occupations to construct diverse portfolio of activities is pertinent for their survival. Livestock-based livelihoods of pastoral and agro-pastoral communities are increasingly becoming unsustainable and highly vulnerable for natural disasters.

In pastoral and agro pastoral areas, the stock of natural resources particularly grazing lands, water sources and forest are shrinking from time to time as a result of many factors, including the occurrence of prolonged drought, high temperature, rainfall variability, environmental degradation, over grazing and land use change. There is no doubt that all these factors intensify resource scarcity and competition over pasture and water sources in the area. When pastoral groups compete to maximize their share of the limited grazing resources and water points, the struggle inevitably leads to conflict. Such type of conflict determines the livelihoods of pastoral and agro-pastoral community. People become unable to meet their basic needs for the family and of fodder for their cattle. As a result, the pastoral and agro-pastoral societies are forced to look towards diverse sources of additional income generating activities. If pastoral and agro-pastoral societies do not get enough output or fail to attain from one activity, they will look for other sources of livelihood activities that the household can fall back on. Making charcoal, selling of milk and milk products, petty trading, daily laborer, commercial livestock selling, remittance, cultivating crops for food, and contraband trading are the major livelihood diversification in

the study area.

### **3.2. Motives for Diversification**

Individuals and households are engaged in diverse portfolio of activities because of pull and push factors. The pastoral people opted to engage in range of activities when there are better returns from non-farm activities compared to rearing of livestock. The higher return activities usually need higher capital. As a result the rich individuals and households invest their asset on higher return activities to generate better profit. The poor people in pastoral and agro-pastoral area were engaged in diverse activities because of pushing factors. When the existing activities are unable to support their family life, they decided to engage in range of activities to generate means of living [13]. Respondents replied that pushing factors are the main driving factor for diversification in the study area. Scarcity of key natural resources (pasture land, water sources and forest), decline of livestock population, occurrence of prolong drought, existence of extreme temperature, outbreak of animal diseases and vulnerability to rainfall variability are the major factors that push pastoral and agro-pastoral people to be engaged in low returning activities (table 1). They have less income and less opportunity to invest their capital in better income generating activities to accumulate additional wealth rather in order to survive their families. However, few better-off households and individuals have better opportunities to choice and invest their capital on profitable activities to accumulate additional capital. The choice or the pulling factors motivate pastoral and agro-pastoral households to diversify their livelihoods in order to secure better profit by adapting the existing means. Generally, livelihood diversification for the poor households and individuals is considered as a survival strategy while livelihood diversification for the better of households is considered as an important opportunity to accumulate additional capital.

**Table 1:** Major motives for livelihood diversification in the study area

<b>Motives</b>	<b>Frequency</b>	<b>%</b>
Pushing factors	83	90.2
Pulling factors	9	9.8

Source: Field survey

### **3.3. Constraints to Diversify**

Livelihood diversification in rural area is an important strategy to survive and accumulate asset. However, there are several constraints that determine the pastoral and agro-pastoral society to engage in successful livelihood diversification. The major constraints to livelihood diversification in the area includes poor asset base, lack of financial facilities, lack of awareness, lack of rural infrastructure, and lack of opportunities in different activities.

Poverty of asset is the most important factor that determines the participation of individuals and households in range of activities in the study area. The majority of the respondent (33.7%) put poor asset base as a primary constraint to diversify the livelihoods of the household and individuals. Accessibility and ownership of a small asset enables the households to take opportunities in the non-farm sector. Most of the pastoral and agro-pastoral

people in this area do not have sufficient asset which acts as a big barrier to livelihood diversification. Scoones [14] describes that the extent and magnitude of rural household livelihood diversification is determined by availability and ownership of different assets and the level of risk association with alternative options. Swift [15] states that the poorest households have least option to diversify their activities and these are less likely to provide sustainable outcomes. Thus, poor asset base is the major constraints to diverse means of household income.

**Table 2:** Ranks of major constraints of livelihood diversification in the study area

<b>Constraints</b>	<b>%</b>	<b>Rank</b>
Asset scarcity	33.7	I
Lack of finance	23.9	II
Lack of awareness and training	19.6	III
Lack of infrastructure	14.1	IV
Lack of opportunity	8.7	V

Source: Field survey

Lack of finance is a deterrent factor in livelihood diversification in the study area. In the absence of financial capital and access to rural credit, the resource poor households are unable to engage in range of non-farm activities. The only resource of poor individuals and households in rural area is their labor. Many households in the study area reported that even though there are different opportunities to diversify their means of living, there is no accessibility of rural credit institutions that considers local context of the area. As a result, they could not start their own business due to lack of finance and credit. Gordon and Graig [16] point out that access to financial capital or credit is one of the principal problems for the rural households and individuals to start a business. With only little or no start up cash available for investment, households or individuals are restricted to a small number of activities, which result poor returns. Reardon [17] states that access to credit institutions is one of the determinants that result in variation in household involvement in livelihood diversification.

Pastoral and agro-pastoral households and individuals in study area are not aware of the strategies provided by the government for the development of rural sector. Lack of awareness and training is also another major factor to engage in better income generating activities in the study area. They have few opportunities to improve their knowledge, skill, and attitude how to improve their means of living. Knowledge, skill and attitudinal change through training and education enable households to pursue diverse activities and can sustain their means of living.

Gordon and Graig [17] states that educated people have better opportunity than non-educated family members to exploit the existing resources in the area. Better educated individuals have more chance to engage in various employment opportunities in other areas, and also can share their experience through advice to other people how to improve their living conditions.

Rural Infrastructure has better opportunity for the rural people to create various alternatives to engage in range of activities. However, Infrastructure in pastoral and agro-pastoral areas is found at early stage. Infrastructure has an influential role in the improvement of rural livelihoods. Improved communications help easy access to market which is important for both buying and selling of goods and services and for getting non-farm jobs.

Opportunities for diverse activities, within or around the study area, are low. The pastoral and agro-pastoral area are not endowed in natural resource as other high land part of rural area. The area is characterized with scarcity of rain fall, high temperature, recurrent drought, fragile soil and inaccessibility of infrastructures. Therefore, the households and individuals do not have much opportunity to diversify their livelihood portfolio.

#### **4. Conclusion**

The livelihood of pastoral and agro-pastoral society does not entirely depend on rearing of livestock, but it rather relay on diverse survival activities which foster the accumulation of additional capital. Although rearing of livestock remains the backbone of their livelihood, the pastoralist communities are looking for diverse opportunities to minimize the negative effects of natural disasters. Livelihood diversification provides various coping alternatives and means of survive for the poor community, and enhance livelihood security and improve the well-being of better-off households and individuals.

There are two motives to engage in a range of activities: pushing and pulling factors. The majority of the people in the study area are engaged in diverse activities because of pushing factor. Poor pastoralist households regarded diversification as a means to combat disasters or coping with vulnerability where risk remains high and reaction to crisis, while wealthier pastoralist households take advantage of the pull factors in order to secure higher return by adapting from the existing option. The poor households and individuals are vulnerable and unable to diversify because of the entry barriers. The major constraints faced by the pastoral and agro-pastoral communities are of various in kinds. The main constraints of livelihood diversification faced by the households and individuals in the study area are: poor asset base, lack of financial facilities, lack of awareness and training, lack of rural infrastructure, and lack of opportunities. The study has suggested the need to develop different strategies especially for the poor pastoralist societies to create better opportunities to engage in diverse activities. This includes the development of rural infrastructure in terms of road, market, electrification, telecommunication, etc., awareness creation through training and education, and rural credit facilities.

#### **Reference**

- [1] Pastoralist Forum Ethiopia. Millennium Development Goals and Pastoral Development: Opportunities and Challenges in the new Ethiopian Millennium; Proceedings of the Fourth National Conference on pastoral development in Ethiopia, UN ECA Conference Hall, Addis Ababa, 2008.
- [2] Pastoralist Forum Ethiopia, et al. Pastoralism and land: Land tenure, administration and use in pastoral areas of Ethiopia, 2010.
- [3] International Fund for Agricultural Development (IFAD). Livestock and Pastoralists. Community of

Practice for pro-poor livestock and fisheries/Aquaculture, 2009

- [4] Pratt, D.J., et al. Investing in Pastoralism Sustainable Natural Resource use in Arid Africa and the Middle East. World Bank Technical Paper, 1997, No. 365.
- [5] Jon D. Unruh. Changing conflict resolution institutions in the Ethiopian pastoral commons: the role of armed confrontation in rule-making, Department of Geography, McGill University, 2006.
- [6] Oxfam International. Survival of the fittest: Pastoralism and climate change in East Africa. Oxfam Briefing Paper, 2008.
- [7] Ellis, F. Survey article: Household strategies and rural livelihood diversification. *Journal of Development Studies*, 1998, **35**(1): 1-38.
- [8] Ellis, F. *Rural Livelihoods and Diversity in Developing Countries*, Oxford: Oxford University Press, 2000.
- [9] Sofia, T. Effects of Biofuel Production on Farmers' Livelihood in Mieso District of West Hararghe Zone, Oromia Region, Haramaya University, 2010.
- [10] Mieso District Coordination office. Pastoral Community Development Project -II Intervention report: Mieso, 2014.
- [11] Central Statistical Agency. Statistical Abstract: Addis Ababa, 2013.
- [12] Ellis, F. Rural Livelihood Diversity in Developing Countries: Evidence and Policy Implications. Natural Resource Perspectives Number 40 April 1999, Overseas Development Institute, 1999.
- [13] Davis, J.R. and Pearce, D. The Rural Non-farm Economy in Central and Eastern Europe. Discussion paper No. 2000/04, Chatham, UK, Natural Resource Institution, 2000.
- [14] Scoones, I. Sustainable Rural Livelihoods: A frame work for analysis. IDS working paper, No.72, Brighton: Institute of Development Studies, 1998.
- [15] Swift, J. Why is Rural People Vulnerable to Famine? Institute of Development Studies Bulletin, 1998, 20 (2).
- [16] Gordon, A. and Graig, C. Rural Non-farm Activities and Poverty Alleviation in Sub-Sahara Africa: London, the University of Greenwich, 2001.
- [17] Reardon.T. Rural Non-farm in Developing Countries. In the state of food and agriculture in United Nations, 1998.