# SCHOOL OF GRADUATE STUDIES INDIRA GANDHI NATIONAL OPEN UNIVERSITY

IMPROVING INTERMEDIUM TRANSPORT IN RURAL AREA AND IT'S ECONOMIC IMPACT: A CASE STUDY IN HULET EJU ENESSIE WOREDA

A RESEARCH PAPER SUBMITED FOR A PARTIAL FULFILLMENT OF REQUIREMENT FOR THE MASTER OF ARTS DEGREE IN RURAL DEVELOPMENT

BY
AEMIRO YIMER

JULY, 2013

## **DECLARATION**

I hereby declare that the dissertation entitled "Improving Intermedium Transport in Rural Area and It's Economic Impact: A Case Study in Hulet Eju Enessie Woreda" submitted by me for the partial fulfillment of the M.A. in rural development to Indria 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 any earlier work done by me or others.

Place : EthiopiaDate: July, 2013

• Signature:

• Enrolment No : **ID** 1216883

• Name : **Aemiro Yimer** 

Address: Debre Markos

### **CERTIFICATE**

This is to certify that **Mr. Aemiro Yimer Biswer** student of M.A. (RD) from Indira Gandhi National Open University, New Delhi has working under my supervision and guidance for his project work for the case MRDP-001. His project work entitled "Improving Intermedium Transport in Rural Area and It's Economic Impact: A Case Study in Hulet Eju Enessie Woreda" which he is submitting his genuine and original work.

• Place: Ethiopia

• Date: July, 2013

• Signature:

• Name: Dr. Ajay Babu Gangidi

• Address: Debre Markos

#### **ACKNOWLEDGEMENT**

I would like to express my deepest and grate full thanks to my advisor Dr. Ajay Babu Gangidi, Assistant Professor of Geography and Environmental Studies at Debre Markos University for his encouragement and constructive advice.

Above all I am most grate full to my wife W/o Yasab Ferede for her unreserved heartfelt advice and moral support in my education in general and facilitating the rewriting and printing of this paper.

Finally my special thanks for Hulet Eju Enessie Woreda Leders for cooperating at the time of data collection.

# **Table of Contents**

Contents Page	e No.
.cknowledgement	i
able of contents	ii
ist of tables	v
ist of Figures	vi
cronyms	vii
Chapter One: Introduction	
1.1 Introduction	1
1.2 Background of the study	1
1.3 Statement of the problem	3
1.4 Objectives of the study	4
1.4.1 General objective	4
1.4.2 Specific objectives	4
1.5 Research Questions	4
1.6 Significance of the study	5
1.7 Scope of the study	5
1.8 Organization of the paper	6
Chapter Two: Review of Related Literature	
2.1 Definition of Transport	7
2.2 What is Rural	8
2.2.1 Basic Rural	8
2.2.2 Develop Rural	9
2.2.3 Urban Boundary Rural	9
2.3 Characteristics of Rural Transport	10
2.3.1 Rural Geographic Challenges	11
2.3.2 Social, Demographic and Economic Trends	11
2.4 Role of Transportation	13
2.5 Rural Transport and poverty Reduction	16

		2.5.1	Roads and poverty Reeducation	16	
		2.5.2	How to minimize Transportation costs	18	
	2.6 Issue Affecting Rural Transport				
	2.7 Use of Rural Transport				
		2.7.1	Rural Transport in Latin America	19	
	2.8 Mean	ns of Rur	al Transport	21	
	2.9 What are stake holders for rural transport				
		2.9.1	Users of rural transport	23	
		2.9.2	Transport costs, Agricultural development		
			and impact of rural market	23	
	2.10	Impro	ving rural transport	23	
		2.10.1	Setting Priorities	24	
	2.11	Exper	ience adopted by other researcher about		
		impro	oving rural transport	25	
		2.11.1	Intermediate means of transport in		
		differe	ent countries	26	
	2.12	Non N	Motorized Intermediate Means of		
		Trans	port with indicative characteristics	27	
Chapte	er Three:	Descri	ption of the Study Area and Methodology		
	3.1 The \$	Study Ar	ea	28	
	3.2 Data	3.2 Data Sources			
	3.3 Data	3.3 Data Collection Instruments			
	3.4 Samp	oling Size	e and Sampling Technique	29	
	3.5 Meth	ods of D	ata Analysis	30	
Chapte	er Four: I	Data Aı	nalysis and Presentation		
	4.1 Farm	land Dist	tance from the Village	31	
	4.2 Avai	ilability	of Market around the Village	32	
	4.3 Repe	atedly Bo	ought and Transported Industrial Products		
	from	the Mar	ket	33	
	4.4 Kinds	s of Tran	sportation	35	
	4.5 Anim	al Back	Transport in Addition to Head Loading	36	

4.6 Average Crop Production Supply to the Market	37
4.7 Availability of Pulling Hand Carts	38
4.8 Suggested Ideas and Opinions for the Absence of	
Pulling Hand Carts	39
4.9 Importance Means of Transport	40
4.10 Demand of Improved Rural Means of Transport	41
4.11 Purchase Ability	42
4.12 Demand of Credit	43
4.13 Obstacles of Improving	43
4.14 Maintenance Accessibility	44
4.15 Responsible Bodies for Awareness	44
Chapter Five: Conclusion and Recommendations	
5.1 Conclusions	45
5.2 Recommendations	45
Bibliography	47
Annexure	49

# **List of Tables**

Table 2.1 Non Motorized Intermediate Means of Transport with	
indicative characteristics	27
Table 4.1: Farm land distance from the village	31
Table 4.2: Availability of market	32
Table 4.3: Repeatedly bought and transported industrial products	33
Table 4.4: Means of Transportation.	35
Table 4.5: Animal back transport in addition to head loading	36
Table 4.6: Average crop production supply to the market within a year	37
Table 4.7: Availability of pulling hand carts	38
Table 4.8: Suggested ideas and opinions for the absence of pulling hand courts	39
Table 4.9: Importance of means of transport	40
Table 4.10: The demand of improved rural means of transport	41
Table 4.11: Ability to purchase means of transport	42
Table 4.12: Demand of credit to purchase means of transport	43
Table 4.13: Obstacles of improving rural means of transport	43
Table 4.14: Access of maintenance of means of transport	44
Table 4.15: Responsible bodies for awareness creating to improve rural transport	44

# LIST OF FIGURES

Fig 3.1 Location Map of the Study Area	28
Fig 4.1 Females suffer due to lack of means of transport	32
Fig 4.2 Farmers travel more distance to get market	33
Fig 4.3 Farmers are different types of Industrial goods from the Market	34
Fig 4.4 Farmers uses different types of transport system	36
Fig 4.5 Farmers mostly use Donkey and Mule	37
Fig 4.6 Farmers supply excess product to the market	38
Fig 4.7 Puling carts used by farmers	39
Fig 4.8 Farmers suffer due to lack of transport	41

#### **ACRONYMS**

- ➤ BOFED = Bureau of Finance and Economic Development
- > ERA = Ethiopia Road Authority
- > IMT = Intermediate means of transport
- ➤ NGO = Non Governmental Organization
- > RRA = Rural Road Authority

#### **CHAPTER ONE**

#### 1.1. Introduction

In any country the development of agriculture or industry requires improvement in transport. That is why it is always said transport is the back bone of any economy. In Amhara region context, long distance transportation is relatively depend on means of public and freight transport but on the contrary local transportation is generally inadequate which relies either on head or animal back carrying that remains unchanged for generations.

Especially the rural areas where the national and regional economy base and comprises majority of the population lack either conventional or any efficient means of transportation which as a result ties the economy's back bone and born to be critical challenges of poverty reduction and development efforts. Nevertheless, this fact is over ride most of the times and has not yet given proper attention despite being put to be focused area in the national industry development strategy.

This study will create good opportunity to combat poverty and development in the rural and hence considered to be good experience and practice to sustainable develop rural transport which should be considered as foundation and precondition of social and economic development in urban of the region too.

#### 1.2. Background of the study

Transport as a physical moving of people and goods acceleration development and has played a crucial role in the gradual development of human society. The economic benefit of transportation system that increase size of the market by enabling products to be sold which in once opportunities for international trade which creates economic integration and development.

In many developing countries rural transport infrastructure the local and tracks foot paths and bridges used to make accessible to farmer markets and poor condition are problems for some all the year.

According to Ethiopian Road Authority (ERA) 2002, under the category of developing countries, Ethiopia has motorized transport service accounts only for about 20% of the total travel and transport demand of the country, 80% of the population depends on traditional means such as walking head loading. ERA also showed that, the existing high accessibility and mobility problems due to low transport and socio economic facilities and service cover age has improved serious transport burden on the rural community. It is believed that without efficient transport service economic development is unthinkable.

To ensure economic development in rural communities, transport should be organized in efficient and cost effective manner and addressed local needs (World Bank, 2001). Much of the policies of Ethiopia are to enable the rural and agricultural development centered, which brings rapid changes in the national economy development strategies.

The transport sector strategic directions are thus, an instrument to assist development. Ethiopia, as a federal state is divided in to eleven regional states including the Amhara National Regional State. Evidences show Amhara national regional state is located in the North West part of Ethiopia. It covers on an area of 170, 152 km<sup>2</sup>. It has a total population of about 1,72,14,056 with an average growth rate of 1.7% per year. Out of the population the rural resident's account 87.4% and 12.6% of the population are urban dwellers. In addition, over 91% of the population speaks Amharic, which is also the official language of the region.

There are ten (10) administrative Zones, 151 districts/Woredas, 38 city administrations, 3 metropolitan cities and 3129 kebeles in the region.

The total length of road in the region is about 6340.1 kms. Out of this 4800.1km (75.7%) is gravel and the rest 1540 km (24.3%) is asphalted. In addition data collected from 1820 rural kebeles 58% of the total kebeles. The rural road authority (RRA) shows that there are 9432.3 km community constructed seasonal roads, which indicates significant km of roads are constructed in the rest 1309 kebeles.

The annual movement from place to place is estimated to be 50 million. Intermediate means of transport that are found mainly in urban are 5676 animal carts. Since most of Amhara region people live in the rural areas and they cannot get these intermediate means of transport. Therefore, this study focused on Intermediate means of transport, which is mostly used in rural areas.

As the researcher observed through field visiting the main transportation are mainly served by walking, head loading, back loading and use of animals back. The rural community of Hulet Eju Enese Woreda is still found at low access of transport services, due to the fact that the transport coverage and transport facilities are in the worst face in this study area. This study focuses on transportation which is one the basic aspects of economic burden on rural community. Keeping above things in mind the study concerned and has the most direct influence on economic (particularly agriculture) in the rural area of the case study.

The researcher also tried to investigate the condition to improving the rural community that increases the level of income of rural house hold.

#### 1.3. Statement of the problem

Improved rural transport system can increase accessibility, reduced poverty and enhance economic development (Simon Ellis, 2002). Poor access to transport in the rural areas of developing countries constrains economic development and contributes to poverty (Pavel Starkey, 2002). The basic reason that initiates the researcher to conduct this research is that in the case study area the rural and feeder roads connection villages and farming areas to each other and to market centers are in adequate and poorly maintained; poor and in adequate rural transport services caused by the lack of different means of transport.

As the researcher observed the rural community carry goods between and within the village, roads and market is dependent almost entirely on waking and head or shoulder carry which another major problem in the case study area.

Without access to adequate transport rural communities in the case study are cut off from basic goods services and facilities flows hold have heavy transport work load just to carry wood for fuel and water usually on foot.

Travelling village to village, market to areas farm places and schools are hard to reach in many areas of the study area. Due to the above mentioned problems the study area is under the problem of transport services that affect the economy level of each rural community.

#### 1.4 Objectives of the study

#### 1.4.1 General Objective

The general objective of this study is an intention to understand the problems of rural transport and to investigate its impact on economic development.

#### 1.4.2 Specific Objectives

To achieve the above general objective the following specific objectives have been formulated.

- > To identify the kind of particular product of the study area.
- > To identify appropriate means of transport that might enhance the economic condition of rural community.
- > To determine the contribution of transport service to economic development.
- > To provide possible suggestions the transport system and transport facilities in rural and agricultural communities.
- > To provide some insights for researchers who are interested in conducting studies in the area.

#### 1.5 Research Questions

The major task of this study is to answer the following research question:-

- 1. Is there any surplus agricultural product that supply in the market?
- 2. What is the demand of the community towards industrial products?

- 3. What kind of means of transportation is needed for the case study area?
- 4. Do the rural areas afford to buy the improved means of transportation?
- 5. Does transportation affect the economy level of the area?

#### 1.6. Significance of the study

The study will have the following significances

- ➤ Local leaders of Hulet eju enessia woreda and other concerned bodies might recognize the important of transport in the economic development.
- > Appropriate measures that improve the existing transport condition can be given.
- ➤ Indicate that transport burden decreases with increase the level of income of the rural house hold to have means of rural transport
- Addressing the area that remains untouched and in adequately treated.
- > Shows the demand for transport service in rural and agricultural communities.
- ➤ Initiates civic society organization and other development agencies to engage in the provision of means of transport facilities to rural people.

#### 1.7 Scope of the study

In investigating on the improvement of transport in rural community and its impact on economic development different variables need to be considered. These will bring attitude change of local leaders and also assist the effort of Amhara trade and transport office. For improving the means of transport, generally this study will focus on the road transport and its suitability particularly for the rural roads. Moreover, the study will be done using information obtained from representative by taking sample of local leaders, teachers, health workers, agricultural agents and farmers who live around local area.

However, due to different constraints the study will be limited to specific areas in Eastern Gojjam at Hulet Eju Enessia Woredas.

#### 1.8 Organization of the Paper

This study organized into five chapters. The first chapter contains the introduction part that is background of the study, statement of the problem, objectives of the study, research questions, and significance of the study. The second chapter incorporates review of related literature. Chapter three contains description and methodology of the study area. Chapter four comprises the data analysis and interpretation of the study. The final chapter, that is chapter five discusses about conclusions and recommendations.

#### **CHAPTER TWO**

#### 2 Review of Related Literature

#### 2.1 Definition of Transport

Transport as a physical moving of people and goods accelerating development and has played a crucial role in gradual development of human kind towards organized human society (Atnaf Seged ,1988).

On simpler definition "Transport" refers to the movement of people and goods between destinations. So that transport is multifaceted sector that promotes economic and social development of any nation (Alemseged, 1988).

Transport permits the whole of civilized life, like the arteries and veins in the human body and also, transport services take people to place where they want to go and deliver goods to place to place where people require them (Temesgen, 2003).

Reliable transportation is critical to helping rural communities and community members remain healthy and productive, it is what binds community together and supports economic growth.

Rural residents need to receive medical care, get to work access child care, purchase food and house hold items, attend school events, and access many other services just as their urban counter parts.

Frequent accessibility is restricted or limited because of the distance to those services or opportunities and the lack of public and private transportation. Often special needs that can be alleviated through medical facilities, soil service agencies and educational programs are forgone because of the distance to be traveled.

The bureau of Transportation statistics show that 11% of rural residents live without the coverage of transport.

Transportation is also pivotal factor in determining whether the disabled and aged populations are able to remain in their homes and their communities.

Totally enhancing transportation opportunities for a rural community can be improve economic growth and community development that will ensure quality of life for residents in rural environments. (U.S. Rural population Transportation, 2010)

#### 2.2What is Rural?

"Rural" is considered to be non metropolitan areas outside the limits of any incorporated or unincorporated city or villages. Three general forms are described.

#### 2.2.1 Basic Rural

Is what we traditionally think of as "truly rural". These areas are dispersed countries or regions with few or no major population centers of 5,000 or more.

The economies of these areas tend to be predominately agricultural or natural resource based and characterized by typical "farm to market" localized rural transportation.

The fundamental issues facing basic rural areas are:

- Declining populations in many areas has reduced transportation funding for maintenance and preservation of the expansive system of roads and bridges.
- Funding new and/or upgraded roads outside the federal aid systems to support large scale agricultural operations and tourist attractions is difficult.
- The public transit dependent segment of the population is small and it is costly to service this segment.

These areas are generally most interested in preservation of existing transportation facilities and stimulating economic growth.

#### 2.2.2 Developed Rural

Developed rural can be thought of as dispersed countries of regions with one or more population center(s) of 5,000 or more and perhaps a metropolitan area(s) with 50,000 or more.

There are developed urban areas in the country or region, but there is still a significant amount of the region that is basic rural. Economies in these areas tend to be mixed industrial and service based in the cities and agricultural and natural resource based in the rural area. Populations in developed rural area tend to be stable or growing.

The fundamental issues facing developed rural areas are:

- Maintaining an effective regional system to enable access to regional service centers farm to market or ranch to market transportation.
- Funding is difficult to obtain for capacity improvements to roads off the federal aid system given where traffic growth warrants improvements.
- Public transportation choices are often unavailable.

#### 2.2.3 Urban Boundary Rural

Urban boundary rural refers to rural areas that are located just beyond the fringe of large urban areas.

Many of these areas are experiencing high rates of population growth from a low base in recent years, hence the impacts in terms of diminishing rural character and increasing transportation system requirements is great.

The fundamental issues facing urban boundary rural areas are:

 Areas must address the issue of supporting economic growth and development or attempting to limit growth to preserve the rural character of the area. In reality this usually involves a balanced approach between the two objectives.

- Traffic growth in many areas is making it difficult to keep up with maintenance and preservation on roads and bridges on and off the federal aid system.
- Funding is difficult for capacity improvements to roads where traffic growth warrants improvements, especially for those roads outside the federal aid system.
- There is often a lack of funding for providing adequate public transportation choices to accommodate travel demand growth or job access.

These areas are generally most interested in balancing economic growth and development with preservation of rural character.

Traffic growth and its impacts on maintenance and preservation of facilities is of key importance in these rural areas. These rural areas will typically have access to more and better trained staff than other rural area.

#### 2.3 Characteristics of Rural Transport

In many developing countries rural transport infrastructure, which is the local roads, trucks, foot paths and bridges used to access farms, market water supplies, school and clinic is often in good condition out of the year.

As World Bank Stated, in Sub-Saharan Africa much of rural transport involves walking or currying in some areas hand carts are used for very short distance transport, while the bicycles and animal drown curs provide wide circles of transport.

The rural transportation system is really a system is really a system of disparate parts. It is also very decentralized. Most roads are funded and maintained by different levels of Government, Cities, Countries, States and Federal.

#### 2.3.1 Rural Geographic Challenges

- Long distances between population centers.
- Steep grades, mountain passes
- More dramatic weather events and effects on road conditions.
- Dispersed system with high unit costs for service delivery operations and the maintenance.

A transportation network functions properly when it helps form vital social and economic connections.

Rural transportation is essential not only for connecting people to jobs, health care and family in a way that enhances their quality of life, but also for contributing to regional economic growth and development by connecting business to customers goods to markets and tourists to destinations.

Commodities including timbers fuel, and agricultural products must be moved from rural areas where they are produced to urban areas where they are consumed processed or sent out of the state or country.

Ultimately, transportation is a rural community's essential connection to the nation and the world. (Ibid)

#### 2.3.2 Social, Demographic and Economic Trends

The demand for transportation is known as a "derived demand". This demand is derived from economic activity that is the results of peoples' requirements to earn a living enjoy leisure activities and consumer goods and services.

The production, supply and distribution of goods and services create the demand for freight movements. Thus the social, demographic, and economic factors that create the demand for transportation will also determine the types of transportation system that will be necessary in the future.

This means that these factors must be considered when developing rural transportation plans. Here future rural transportation system needs:

#### A) Changes In Agriculture

Many rural economics were built on a foundation of agriculture, mining and forest products. These "basic" industries are heavily dependent on a net work of high ways, rail road's and intermedium transfer facilities for exporting their products.

Preserving the existing net work of High ways, Branch lines and mainlines will be important for these industries. For example, livestock production is changing and moving toward large operations that seek to maximize economies of social.

#### **B) Change Sin Industry And Employment**

One of major economic change creating new and different demands on the rural transportation system is the growth of the service sector private service industries such as health care recreational activities, legal services and business financial services are among the fastest growing sectors in many rural communities much of this growth is due to an aging and more affluent population growth in health related services a growing in demand for business support services and most importantly growth in tourism and recreation.

#### C) Economic Development Issues

The need to maintain linkages between rural and urban areas is very important to the economy public health and safety and the social structure of the country. Activities such as building new roads, interchanges, or construction bridges can result in various benefits for rural areas.

These benefits include improved access to services and jobs for rural resident's better access to customers for the businesses, and reduced transportation costs.

Other potential benefits include reductions in travel time for motorists lower vehicle operation costs safety and environmental gains and cost savings for local consumer goods and services become more competitively priced.

If an improved transportation net work leads to growth for an areas' economic base it may also bring higher wages for workers and greater net income for owners of local businesses. (Ibid).

#### 2.4 Role of Transportation

The role of transportation professionals is evolving and more frequently requires them to understand how transportation investments can be consistent with the principles and practices of land use planning and development.

Transportation system and can increase viable options for people to access opportunities, goods, services and other resources to improve the quality of their lives.

Coordination and use and transportation planning and development is commonly considered by as one face of "smart Growth" sustainable development new urbanism, or other similar concepts.

So we all need transportation: to work or school, to shop to visits friends and family, to go to church or keep an appointment whether we live in the city, country or small town. Ideal transportation is reliable, convenient, safe, affordable, and physically accessible. Here the unique

purpose of transportation is to overcome space, which is shaped by a variety of human and physical constraints such as distance, time administrative divisions and topography.

One thing doesn't forget is there would be no transportation without geography. Transportability refers to the ease of movement of passengers, freight or information. It is related to transport costs as well as to the attributes of what is being transported, perishable price.

Political factors can also influence transportability such as laws, regulations borders and tariffs. When transportability is high, activities are less constrained by distance.

The specific purpose of transportation is to fulfill a demand for mobility since transportation can only exists if it moves people, freight and information around.

Transport creates valuable links between regions and economic activities between people and the rest of the world.

Transport is a multidimensional activity whose importance is:

- i) **Historical**: Transport modes have played several different historical roles in the rise f civilizations, in the development of societies and also in national deferens.
- Social: transport modes facilitate access to health care welfare and cultural or artistic events thus performing a social service. They shape social interaction by favoring or inhibiting the mobility of people. Transportation thus support and may even shape social structures
- Political: Governments play a critical role in transportation as sources of investment and as regulators. The political role of transportations is undeniable as governments of ten subsidize the mobility of their populations. So transport thus has an impact on nation building and national unity, but it is also a political tool.
- iv) **Economic**: the evaluation of transport has always been linked to economic development. Transport sector is also an economic factor in the production of goods

and services. It facilitates economies of scale influences land (real estate) value and the geographic specialization of regions.

Transport is both a factor shaping economic activities and is also shaped by them.

v) **Environmental**: Despite the manifest advantages of transport, its environmental consequences are also significant. They include air and water quality, noise level and public health.

All decisions relating to transport need to be evaluated taking into account the corresponding environmental costs.

Transport is a dominant factor in contemporary environmental issues.

Totally transportation studies are therefore a multidisciplinary that can involve hard (engineering) or soft sciences (economics) depending on the dimension being investigated such infrastructure provision operational management of planning.

Transport problems, such as capacity transfer reliability and integration of transport systems. There are three basic geographical considerations relevant to transport geography.

a) Location: as all activities are located somewhere, each location has its own characteristics conferring a potential supply and a demand for resources, products, services or labor.

A location will determine the nature, the origin, the destination the distance and even the possibility of a movement to be realized.

**b)** Complementarily: Locations must require exchanging goods, people or information. This implies that some locations have a surplus while at hers have a

deficit. The only way an equilibrium can reached is by movements between locations having surpluses and locations having the demands.

c) Scale: Movements generated by complementarily are occurring at different scales pending the nature of the activity.

Scale illustrates how transportation systems are established over local regional and global geographies (Ibid).

#### 2.5 Rural Transport and Poverty Reduction

All communities require access, service facilities and opportunities. Here poor rural people often have to spend much time and effort to access basic necessitates, and the reduction of isolation and inaccessibility are fundament to poverty reduction (Pavel Strkey, 2002).

Poverty reduction refers to a process involving some strategies aimed at reducing the levels of poverty in a given society. This is done by increasing the availability of basic human needs or increasing disposable income required to provide for these needs.

Basic human needs in this case include health care clean water, food and education including transportation.

#### 2.5.1 Roads and Poverty Reeducation

Depend on the wealth of the country and its will to distribute it. Here poverty and isolation are linked. Social justice also require that as many as possible should have at least the possibility of using motorized transport or traditional transport if only emergency situations.

In the very long run every one may benefit from growth. In the shorter term the one we live in, those already well off are too often the best placed to take advantage. Traditional criteria for roads prioritization have been clearly ineffective in targeting poverty.

Roads may contribute to mobility, but the poor are often the worst placed to profit from it. Economic benefits are captured by the better off.

The basic access approach using a criterion based on the maximum acceptable distance to be covered on foot to get to a motorable road provides a way of identifying rapidly the poor and isolated and offers an effective strategy for targeting poverty through the road investment.

However, providing road access to poor and isolated areas requires road network improvements and extensions, costly to maintain and not necessarily sustainable since motor vehicles are few ensuring access to the major hubs of activity, capable of being maintained by a mix of local and national funding to a standard that satisfies user needs for basic year round motorable access. So without this network poverty targeting will be unsustainable and ineffective.

In conclusion, economic criteria relying on motor vehicle benefits are very blunt instruments. However they are useful to identify the sustainable core network on which poverty reduction initiatives themselves normally unsustainable without subsidy must be built.

More precisely, which show where they are and determine whether roads are likely to be of any use and if not, how best can the services they need be made more accessible to them.

Motor vehicles play a minor role in the lives of the poor, so measures which target isolation and explore a wide range of ways to increase mobility for example by introducing appropriate means of transport will be the most effective.

Intermediate means of transport (IMT), the inverse local transport capacity and reduce drudging at relatively low cost and they are also pointed out that, intermediate means of transport are most commonly used for relatively for distance of up to 30km, here some are non motorized (hand carts, bicycles, animal powered transport).

#### 2.5.2 How to minimize Transportation costs

Since transportation involves the movement of goods and raw materials. This includes shipment of raw materials to the manufacturer and movement, of finished or unfinished product to the customer. Transportation also includes the movement of parts to assembly areas as they are assembled.

So the easiest way to minimize, transportation costs is to eliminate unnecessary transportation. You can do this by finding closer suppliers. You can reduced the transportation costs by consolidating shipments buying partially assembled products from vendors and reducing the number of trips needed to ship in raw materials.

Have work stations with in the factory close to each other minimize material transportation which is a non value added labor cost. Consolidating transportation service providers increases the volume each transportation firm provides and can allow for a negotiated volume discount.

Here for rural poor people "IMT" is cost effective mode of transport.

#### 2.6 Issue Affecting Rural Transport

According to World Bank (2002), many governments and donor to rural transport have focused on expanding road net work giving little attention to sustainability the development of transport means and services on the roads or the needs of transport users' especially rural poor.

In recent years, however, recognition has been growing that without an integrated approach to transport infrastructure and services investment in transport is unlikely to bring to measured economic and social benefits.

Several studies have stressed the importance of local transport solutions with complementary infrastructure and transport services.

Government in developing country and being encouraged to create favorable policies and operating enrolments enabling the private sector to play important roles in new rural transport initiatives.

#### 2.7 Use of Rural Transport

Means of rural transport are bought and operated by men and women with a range of personal needs. Because users are not homogenous groups which offer according to gender, income occupation, age etc.

World Bank (2002), stated that transport solution differ according to the condition needs and preference of transport users gender is the important issue to examine when planning transport intervention.

Most transport services are owned and operated by men even in countries where women are the main transporters.

Women's transport burdens are increased by the fact that from the general fewer resources that we have cannot give attention for transport services.

#### 2.7.1 Rural Transport in Latin America

World Bank has declared that although economic growth assists the population in overcoming or significantly improving their living conditions it does not have the same effect on that population living in extreme poverty.

One of the main obstacles to poverty eradication is the lack of access to adequate education.

World Bank adds that half of the poor populations who live in Latin America live in rural areas and most of them are actually living in extreme poverty especially the indigenous inhabitants.

One of the reasons for this difference is definitely related to transport difficulties in getting to school in rural areas, thus the poorly educated students have little opportunity of overcoming their poverty.

Members in Latin America and the Caribbean consider that appropriate rural transport can play an important role in removing obstacles which hinder the development of poor rural communities by facilitating transport and access to a series of basic services, such as education, health, food supply, water energy, farming and handicraft supplies in addition to allowing poor rural inhabitants to export their farm produce to other areas.

Totally, there seems to be two problems to overcome, firstly to link hundreds of small dispersed rural communities, which currently have no access to roads and secondly to adequately maintain the length of all those rural roads which do exist. The use of the rural communities themselves in labour intensive works seems very appropriate in these circumstances.

It is quite common, that the vehicles which provide the transport services are not designed to carry passengers and cargo or the transport schedules offered do not fit in with the local farming activities or economic or social requirements of the rural communities.

In addition, frequently the poor rural inhabitants simply do not have money to pay for public transport and prefer to walk or use the traditional animal driven means of transport with or without the use of intermediate technology (mainly carts or bicycles etc). Thus, maintaining their complete independence.

The cost of implementing these programmes would be much less than programs would be much less than programmes for four wheeled vehicles and the actual geographical coverage could be more extensive. Similarly why can't specialists design and implement appropriate policies to promote the manufacture and use of animal traction IMTs, tricycles and similar technologies that appropriate for rural zones.

The subject rural transport has rarely come under serious study and is not even considered an important component of rural development despite the frequent references made to "Integrated" rural development. The case studies recommend much further research into the subject and significant work to raise "awareness" among transport development agencies and authorities.

#### 2.8 Means of rural transport

As already mentioned in the above bicycle are the most available affordable means of transporting people and small loads for short distance they are mainly used for distance of one to then kilometers.

Tricycles also increase the weight and volume that can be safely transported it is mainly used in urban areas they may be used in rural areas to carry peoples and goods. Animal transport is common and increasing in many parts of the world.

According to Ellis (1996) Oxen area available and strong but slow and expensive, donkey are small but cheap are found mainly in semiarid areas donkeys, camels are also more specialized transport niches. His finding should animals can be used 50kg (single small pack animals).

According to Starkey (1996) animals transport is often appropriate and affordable in rural area especially, animals drown costs can carry significant to rural incomes.

Here due to the shortage of other transport, so that it is not advisable to use because the rural community can't afford its cost. Due to the shortage of other transport options in rural areas tractors are used on roads as multipurpose vehicles for longer distance.

Totally according to some writers in this area pointed out that for short distances and low over all demand bicycles animal carts motorcycles carts and tractors carts become cost effective for the longest distances comparatively from current transportation system.

#### 2.9 What are stake holders for rural transport

According to Hine and Anna Temle, (2002) the macro stake holders for rural transport are users operators and regulator, in addition, there are many stake holders influence the provision price quantity, and quality of transport means and services and should all be included when planning and implementing transport intervention.

They also stated there are major institutional stake holders in the public and private sector such as national government, local government, transport agencies, funding institutions training organization.

This can be summarized that the main immediate customer of rural transports the user which is rural community.

#### 2.9.1 Users of rural transport

The means of transport are bought and operated by men and women with a range of personal needs. We users are not homogenous group, which differ according to gender income, occupation, age etc. (Pavel Starkey, 2001)

World Bank, (2002) stated that transport solution differ according to the condition needs and preference of transport users gender is the important issue to examine when planning transport intervention.

The most transport services are owned and operated by men even in countries where women are the main transportation. Dawson also transport takes and in access differences exist in the perception of many means of transport. According to Barwell women's transport burdens are increased by the fact that the generally have fewer resources to pay for transport services. (Barwell, 2001)

#### 2.9.2 Transport costs, agricultural development and impact of rural market

High cost for transporting commodities short distance can hinder agricultural development and reduce house hold profit (Ellis, 1998).

If family labor is used to carry goods from fields to roads or villages there are opportunity cost in time and efforts. According to Hine, (1988) crops remain un harvested, or are spoiled after harvest, because of an inadequate supply better transport lowers the cost of setting produce to market increase efficiency and reduce crop waste.

As a result markets were within reach of intermediate means of transport allowing direct contact between farmers and buyers.

There are big differences within and between countries in the price of transport. There disparities suggest that in many parts of the world there may be intervention that could lower costs (Rizet and Hine, 1993).

According to Hince, Ebden and Swan (1997) Factors that affect rural transport costs in Africa including our country Ethiopia.

- Poor condition of transport infrastructure poor vehicle operations and maintainer practice.
- High price of means of transport and limited competition among suppliers.

This implies that low demand of rural transport can contribute to low means of transport use and also competition among supply encourages low cost price in many ways.

#### 2.10 Improving rural transport

A recent review of efforts to promote local transport solution star key (2001) high lights the importance of participatory processes in planning implementing and evaluating promotion programs.

According to Howe and Barulell, (1987) Promotion and subsides have long term effect unless the transport means being promoted are appropriate to the environment and to peoples real and perceives needs.

#### 2.10.1 Setting priorities

Improving rural transport services to meet the needs of rural area thus first requires setting priorities.

According to Lalnna (2000) and star key (2001) in determining priorities for intervention to improve rural transport, planners should asset level of economic demand for rural transport.

- Cost of means of transport
- Type and quality of infrastructure
- Availability of arrange of appropriate and affordable of transport
- Police regulation and government budgets.

Simon Ellis and Johan Hiner (2002) stated that government and planners can take steps in three areas to improve rural transport services they are financial regulatory and complementary action. Thus, improving of rural transport services requires holistic approaches.

Havard and Faye, (1988) said that, the main financial consideration for improving rural transport are credit and subside for rural community from those consideration. Havared emphasized the availability of credit is an important component in improving transport service.

Faye also pointed out that credit interventions are most likely to be required when transport interventions are intended for poor people and rural residents. Havard and Faye, (1988) pointed out that credit can dramatically speed the adoption of intermediate means of transport.

According to Sismar, (1999) and starkey (2001) were finding in general large, scale cart production affected by credit policies on the other hand sales were high in the 1960's and 1970's because credit was given for rural community to by rural transport. They also showed that the sudden termination credit in 1980 caused improving rural transport.

From this we can understand that improve rural transport credit is the main financial consideration. Thus innovative credits have enabled the community with little cash to own various means of rural transport. The short term credit may encourage some people to purchase and asses a technology their finding was that if a product is not popular credit provisions will not lead to sustained adoption. An example of this was seen in Guiena Bissaw when initially "Oxcarts" qualified for credit but donkey carts did not.

# 2.11 Experience adopted by other researchers about improving rural transport

It is known that intermediate means of transport are those of means of transport which are intermediate between the traditional on the head shoulder or back.

According to Tony Airey (1993), Arrange of types of non motorized intermediate means of transport around wheel barrow is a single wheeled load which allows a person to move a header load than is possible by head loading they are also used for building and road construction activities and are often found in the market centers as means of short distance load transport.

The hand carts is a two or four wheeled load carrier which allow a person to move a greater load than possible with a wheel barrows it can be made of wooden or steel construction and are usually made in small work shop Ian Barwall (1993). Using hand carts is advisable because its costs are very low.

Pack donkeys are particularly suitable for use in hilly terrain where it is difficult wreaked vehicles. Pack donkeys are widely used in certain parts of Africa, for example in Ethiopia and Lesotho, to carry loads (Barwell, 1993).

On the other hand ox drawn sledges are the simplest and cheapest way of carrying loads using oxen. This should that Animal drawn carts pulled by oxen or donkeys.

Stand berg finding also should that animal drawn carts have the highest load capacity in terms of the village that can be carried. He also should the carts can be made from wood are steel in factories or in small workshops. Thus the carts can be purchase at a reasonable price. (Tom stand berg, 1993).

His finding was the best that donkey drawn carts are a cheaper investment than an ox cart, the speed of the travel is higher.

Another option of improving rural transport is bicycle; it has higher travel speed within a small accompanying load they are used for personal travel and also for some agricultural activities (Jon Airely, 1993).

#### 2.11.1 Intermediate means of transport in different countries

In Ghana hand trucks, four wheel load carrying plat form trolleys or hand trucks are widely used for short distance transport mainly in rural market centers. Hand carts are mainly used for delivering and collecting goods with a journey of 2-3 kilometers (KM).

In Ghana, more of rural transport does involve small loads short distance; Bicycles are the most means of transportation (Ellies,1998)

In the South of Guinea there are relatively few intermediate means of transport because rainfall is heavy and forest growth is strong (Ellis and Hine,1998).

As report workshop Guinea, (1998) should there are few cattle in mountain in Southern and Western areas of Guinea. Thus implies that climate condition influence weather improving not improving rural transport.

# 2.12 Non Motorized Intermediate Means of Transport with indicative characteristics

Table 2.1 Non Motorized Intermediate Means of Transport with indicative characteristics

No	Kinds of IMT	Load (Kg)	Speed (Kmph)
1	Carrying/head load	20	5
2	Hand cart	150	4
3	Pack donkeys	80	7
4	Bicycles	80	7
5	Cycle rick show	150	8
6	Donkeys cart	400	6
7	Horse cart	1000	7
8	Ox cart	1000	5

Source: Starkey, 2001

The above indicatives might be different with in the country due to the people, the environment, the infrastructure and having different animals. He also indicated the most appropriate convenient and affordable local transport solution where loads are light. Moreover, Oxcarts and carts pulled by cows, donkeys, horses and other work animals important for farmers in Africa.

#### **CHAPTER THREE**

#### DESCRIPTION OF THE STUDY AREA AND METHODOLOGY

#### 3.1 The Study Area

East Gojjam is one of the administrative zones of the Amhara national regional state. There are 18 Administrative Woredas in this Zone including Hulet eju enesie woreda.

According to Bureau of Finance and Economic Development (BOFED, 2004/05) the population of Hulet Eju Enesie Woreda is 238046 from which 5576 were living in urban area and remaining 132470 were living in rural area. This implies that majority of the people live in rural area. An average of annual rainfall 1520 millimeters and the nature of topography is level 60% Mountain 30% and other 10%. This implies that the topography, temperature and rainfall are suitable for agricultural activities. The location map of the study area (Hulet eju enesie woreda) is shown in

fig 3.1.



Fig 3.1 Location Map of the Study Area

Through the region has a very wide range of topography, 63% of it lies between 1500 and 3000 meters about sea level. Moreover, the annual rainfall ranges between 1600 to 2000 mm, and the mean annual temperature ranges from 21 to 27°C. Among the three modes of transport air, water and road, road transport as a means of travel accounts 90% in the region.

The study takes place at in Hulet Eju Ensia Woreda of Eastern Gojjam in Amhara National Regional state.

#### 3.2. Data Sources

In this study both primary and secondary data sources were applied. In the primary data sources the researcher has got the information directly from the respondent through questionnaire.

From the secondary data, a literature review methods were employed, and data were gathered from government documents and internet sources.

#### 3.3 Data collection Instruments

The main data gathering instruments in this study were questionnaire and documents that are found in different sectors such as (Trade and Transport office and Agricultural development Office) also assessed.

#### 3.4 Sampling Size and Sampling Technique

Out of the total population 1684 of the study area "60" participants were selected, which is equivalent to around 3.5 % of the total population. In this study simple random sampling technique was used to select the respondents from the total population of the study area.

## 3.5 Methods of data Analysis

In order to analyze the data, the researcher used both qualitative and quantitative data analysis techniques. In quantitative data analysis tables and percentage were used. The qualitative data are analyzed in the description manner.

#### **CHAPTER FOUR**

#### DATA ANALYSIS AND PRESENTATION

This part of the study describes data analysis and presentation of the research undertaken. The information obtains through the questionnaire analyzed and presented as follows:

#### 4.1 Farmland distance from the village

Table 4.1 Farm land distance from the village

Item Respon		onses	
An average distance of farm land from the village	In number	In percent	
1 km	5	8.33	
2 km	8	13.33	
3 km	42	70	
4 km	5	8.33	
Total	60	100	

Source: Questionnaire, 2013

As we can see from the above table 4.1, 5 (8.33%) of the respondents said that an average distance of farmland from their village is 1km, while 8 (13.33%) of them responded 2 km is far away from their village, the rest 42 (70%) of them responded 3 km far away from their village and the remaining 5 (8.33%) of the community said that farm land distance from the village is 4 km and above.

These results show the majority of the rural respondents responded an average distance of farm land from the village is 3 km. This implies that rural community wants to on farm mode of transport to travel their farm tools and production from village to farm and from farm to village. Fig 4.1 shows how females suffer due to lack of means of transport.



Fig 4.1 Females Suffer due to lack of means of transport

## 4.2 Availability of Market around the Village

Table 4.2.1 Availability of Market

Item	Responses				
	Yes		No		
Is there a market spot in your village	In number	In percent	In number	In Percent	
	0	0	60	100	
Total	0	0	60	100	

Source: Questionnaire, 2013

As indicated in table 4.2 we can realize that 60 (100%) of the community respondents said that there is no a market spot in their surrounding area.

The outcome of the responses implies that to find available market for exchanging goods (products) want on road mode of transport system. Fig 4.2 shows how Farmers travel more distance to get market.



Fig 4.2 Farmers travel more distance to get market

#### 4.3 Repeatedly Bought and Transported Industrial Products from the Market

Table 4.3.1 Repeatedly bought and transported industrial products

Item	Responses	
	In Number	In Percent
Kind of Industrial products that can be bought and transported		
- Farm tools	10	16.66
- Tin	15	25
- Oil, Soap, fertilizer and other commodities	35	58.33
Total	60	100

Source: Questionnaire, 2013

From the above table 4.3, 10 (16.66%) community respondents responded that repeatedly bought and transported industrial product is farm tools, while 15(25%) respondents that industrial

product (tin) that can be bought and transported repeatedly, the rest 35(58.33%) responded oil soap, fertilizer and other commodities.

From the above outcome we can draw a rank of community response for repeatedly bought and transported industrial products. According to the percentage response the rank as follows:

Product Items		Rank
-	Oil fertilizer soap and other commodities	$1^{st}$
-	Farm tools	$2^{\text{nd}}$
_	Tin	$3^{\rm rd}$

This shows that whatever the degree of products are different there are repeatedly bought and transported industrial products to transported these industrial product on road mode of transport is a must. Fig 4.3 shows how farmers are carrying different types of Industrial goods from the market.



Fig 4.3 Farmers are carrying different types of Industrial goods from the market

#### 4.4 Kinds of Transportation

Table 4.4.1 Means of Transportation

Kind of transport	Kind of transport Responses		No Responses	
currently used	In Number	In percent	In Number	In percent
Head loading	35	58.33	0	0
Animal drawn back	12	20	0	0
Hand carts	8	13.33	0	0
Motorized vehicles	5	8.33	0	0
Total	60	100	0	0

Source: Questionnaire, 2013

According to table 4.4, 35 (58.33%) kinds of transportation currently used is head loading while 12 (20%) of them answered is that animal drawn back means of transportation currently used the others 8 (13.33%) responses that hand carts are the means of transportation which can be used currently, the rest 5 (8.33%) used motorized means of transportation after arising the main roads.

From the above findings, it is possible to generalize that most of the people are currently depended on head loading transportation.

Fig 4.4 shows how farmers use different types of transport system for their daily activities.



Fig 4.4 Farmers Using different types of transport system

#### 4.5 Animal Back Transport in Addition to Head Loading

Table 4.5.1 Animal back transport in addition to head loading

Kinds of animal back	Responses		No Responses		
transport in surrounding area	In Number	In percent	In Number	In percent	
- Donkeys	22	36.66	0	0	
- Horse	32	53.33	0	0	
- Mule	6	10	0	0	
- Camel	0	0	0	0	
Total	60	100	0	0	

Source: Questionnaire, 2013

As stated in the table 4.5, 22 (36.66%) of respondents use donkeys back transport 32(53.33%) of respondents said that they transport goods or products by horseback and 6 (10%) of them said they uses mule back transport none of them uses camel transport.

From the finding it is possible to generalized community who live in the surrounding area their means of transportation in addition of head loading are horse and donkey respectively.

Fig 4.5 shows how farmers mostly use Donkey and Mule for their transportation.



Fig 4.5 Farmer mostly use Donkey and Mule

#### 4.6 Average Crop Production Supply to the Market

Table 4.6 Average crop production supply to the market within a year

Item	Responses		
	In Number	In percent	
How much crop production supplied to the market			
per quintal per year			
5-10 quintal			
10 – 25 quintal	14	23.33	
20 – 25 quintal	9	15	
Above 25 quintal	6	10	
Total	60	100	

Source: Questionnaire, 2013

As indicated in table 4.6, 31 (51.66%) of the respondents said 5-10 quintal that supply crops production per year, 14 (23.33%) of them replied that 10 - 20 quintals of crops production to the market 9 (15%) said that 20 - 25 quintals of production supply to the market, 6 (10%) of them

responded that above 25 quintals of responded that above 25 quintals of production is being supplied to the market.

The result indicated that the rural community now a day supplied large amount of crop production to the market. Thus it should be needed on road means of transportation for transporting their surplus product to market. As indicated Ellis (1998) high cost of transporting commodities can hinder agricultural development and reduce house hold profit.

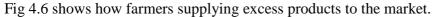




Fig 4.6 Farmers supply excess product to the market

#### 4.7 Availability of Pulling Hand Carts

Table 4.7 Availability of pulling hand carts

	Response				
Item	yes		No		
	In number	In percent	In number	In percent	
Are there any pulling	5	8.33	55	91.66	
hand carts in your					
surrounding area?					

Source: Questionnaire, 2013

As indicated in table 4.7, 5 (8.33%) of the respondents said that yes, there is pulling hand carts in our surrounding area the rest of them 55 (91.66%) responses there is no pulling hand carts in our surrounding area, mean there is no an intermediate means of transports. The result implies that majority of the community transport system is head bedding and animal back.

Fig 4.7 shows how farmers are using puling carts for their transportation purposes.



Fig 4.7 Puling Carts used by farmers

#### 4.8 Suggested Ideas and Opinions for the Absence of Pulling Hand Carts

Table 4.8 Suggested ideas and opinions for the absence of puling hand carts.

Item	Responses			
	In number	In percent		
What is the presence for the				
absence of pulling hand carts				
Lack of awareness	38	63.33		
2. Unable to purchase	6	10		
3. Road comfort	16	26.66		
Total	60	100		

Source: Questionnaire, 2013

From the above table 4.8, 38 (63.33%) of the responses responded that each of awareness on the other side 6 (10%) of them unable to purchase and the rest 16 (26.66%) lack of road comfort is suggested ideas and opinions for the absence of pulling hand cart.

The result indicates that suggest ideas and opinions for the absence of pulling hand carts is lack of awareness, unable to purchase and lack of road comfort respectively. This implies that there is no promotion for improving rural transport.

In addition rural transport for rural transport infrastructure which is the local roads bridges are the most important for improving rural transport.

#### 4.9 Importance Means of Transport

Table 4.9 Importance means of transport

Item	Response			
	Yes		No	
What is the importance of using rural means of	Number	Percent	Number	Percent
transport system?				
- Time and energy (Human power)	42	70	0	0
minimization				
- For cost effectiveness	18	30	0	0
- Reduced wastage product	0	0	0	0
Total	60	100	0	0

Source: Questionnaire, 2013

As shown in table 4.9, 42 (70%) of the respondents agree that the contribution of means of transports helps to minimize time and human power the rest 18 (30%) of the respondents responded that improving means of transportation is useful for cost effectiveness which reduce cost.

This finding indicates that majority of the community agreed using means of transport helps to reduced time and power suggestion of Ellis (2002) improved rural transport system can increase access ability which reduce poverty and enhance economic development.

The other respondent agreed that improving rural transport is useful for minimizing their personal cost. This shows that improving means of transport is not only reduced time and human power but also cost effective. Fig 4.8 shows how farmers suffer due to lack of transportation.



Fig 4.8 Farmers suffer due to lack of transport

## 4.10 Demand of Improved Rural Means of Transport

Table 4.10.1 The demand of improved rural means of Transport

Item	Response			
	7	Yes		lo
	In Number	In Percent	In Number	In Percent
Do you have the demand of improved	56	93.33	4	6.66
intermediate means of transport? (IMT)				

Source: Questionnaire, 2013

Table 4.10 shows that 56 (93.33%) respondents responded that the rural community have the demanded of improved intermediate means of transport, 4 (6.66%) of them said that they have no demand of improving intermediate means of transport.

The result that almost all respondent demanded improved means of transport that might be non motorized, such as hand carts animal pulling carts in general intermediate means of transport.

#### **4.11 Purchase Ability**

Table 4.11 Ability to purchase means of transport

Item	Response			
	Yes		No	
	In Number	In Percent	In	In
			Number	Percent
Do you have any ability to purchase means of	23	38.33	37	61.66
transport?				

Source: Questionnaire, 2013

According to table 4.11, 23 (38.33%) of the respondent responded that rural community have purchasing power to buy means of transport, 37 (61.66%) of them said that they have no ability to buy means of transport.

These results implies that majority of the rural community can't cover the cost of means of transport. The ability to purchase also influences the demand of means of transport regarding this poor access to transport in the rural areas of developed countries, constraint economic and social development. (Starvy, 2002).

#### 4.12 Demand of Credit

Table 4.12 Demand of credit to purchase means of transport

Item		Response			
	Y	Yes		No	
	In Number	In Percent	In	In	
			Number	Percent	
Do you need to have an access of credit	60	100			

Source: Questionnaire, 2013

As indicate in table 4.12, 60 (100%) respondents responded that the community needs to have an access of credit in their surrounding area.

The finding implies that the majority of the rural community needs to have an access of credit.

#### 4.13 Obstacles of Improving

Table 4.13 Obstacles of improving rural means of transport?

Item	Response			
	Yes		No	
	In Number	In Percent	In	In
			Number	Percent
Is there any obstacle to improving rural means	57	95	3	5
of transport? If the answer is yes what is that?				

Source: Questionnaire, 2013

As table 4.13 indicates 57 (95%0 of the respondents agree that there is obstacle of improving means of transport, 3 (5%) of them said that there is no obstacle of improving means of rural transport.

The result implies that the majority of the community agrees that obstacle to improving rural means of transport is very high. Respondents that give response "yes" says that there is no concerned body to improve rural means of transport.

#### **4.14 Maintenance Accessibility**

Table 4.14 Access of maintenance of means of transport

Item	Response			
	Yes No		0	
	In Number	In Percent	In Number	In Percent
Is there any maintenance of cart in your	0	0	60	100
surrounding area				

Source: Questionnaire, 2013

According to table 4.14, 60 (100) of them responded that there is no any maintenance of carts around the village. This result shows that the reason that presence of little means of transportation that is why one of the problem in the rural area shortage of maintenance work shops occurred.

#### **4.15 Responsible Bodies for Awareness**

Table 4.15 Responsible bodies for awareness creating to improve rural transport

Item	Response			
	Yes		No	
	In Number	In Percent	In	In
			Number	Percent
Are there any responsible body for creating of awareness to improve rural transport	3	5	57	95

Source: Questionnaire, 2013

Table 4.15 illustrates, 3(5%) of the respondent agree that there is a responsible body for creating of awareness to improve the rural transport, 57 (95%) of them that replied no responsible body for creating of awareness to improve rural transport.

This finding implies that the majority of the communities do not recognize who take the responsibility for creating awareness to improve rural transport. This shows that there is no any attention to improve rural transport.

#### **CHAPTER FIVE**

#### 5. CONCLUSION AND RECOMMENDATIONS

#### **5.1 CONCLUSIONS**

- 1. Basically the study indicates that there is a potential to supply a crop production to the market but there is no sufficient means of transport for transporting and this may be the problem of community awareness about the merits of using means of transport.
- 2. The rural community demanded highly industrial products to satisfy their basic needs and to improve their living standard. But they are sufficient to transport those products to their village mostly they transport using head loading and animal drawn back.
- 3. According to the findings in the rural communities have the demand of intermediate means of transport but most of them do not have an ability to buy an intermediate means of transport this may be lack of awareness about the important of the intermediate means of transport and problem of how to use it in addition the cost may not be affordable but still some of them responded that they can able to buy intermediate means of transport.
- 4. It is generally believed using means of transport helps to minimize time labor and comparatively it has an advantage of economic transformation because rural community can easily transport agricultural products to wards industrial area of the market.

#### **5.2 RECOMANDATIONS**

In order to suggest possible solution to the problem the writer forwarded the following recommendations.

 As the study indicates in the rural community there is no sufficient means of transportation, those intermediate means of transport should be local transport solution it is better to spread in rural areas including the bicycles horse courts and donkey and hand courts. Adoption of such transport innovation has tended to result in social and economic differentiation.

Those are able to profit from investments in transport gain more time more income generating options.

- 2. To improve rural transport in the rural area stake holders should be involved for better institution and provision of infrastructure.
- 3. The finding implies that majority of the community are not aware of the importance of intermediate means of transport. There for the government has to aware the rural community.
- 4. Even though the rural community has the demanded of rural transport it is not necessarily to have intermediate means of transport for each community because it is wastage. Thous it will be better taken over by some individuals privately and this helps to create employment opportunity.
- 5. To full fill the scarcity means of transport it is better to improve the supply and distribution of intermediate means of transport.
- 6. The government has to promote private ownership mean s of transport by considering economic option ways to adopt participatory planning explain the benefit and also enhance human capacity.

### **Bibliography**

Almeseghed Ghibre, (1986): Geography of transport and development, Ethiopia.

Atnafeseged Kifle, (2002): Transport management, Ethiopia - transport planner and traffic engineer at freelance consultant, Addis Ababa, Ethiopia.

Barwell, (2001): Use study on the intermediate means of transport and Women transport burdens, Manuscript Preparation Guidelines for the CIGR-Ageng Conference, Available at: www.cigr.ageng2012.org/images/fotosg/tabla 137 C2343.pdf.

Christina Malmery calle, (1994): Case study on role of women in rural Transport.

Ellis, (1996): Availability of animals, Available at : www.asian-efl-journal.com/sept 05 re.pdf

F.D.R.E Era, (2002): Ethiopian Rural Travel Transport Programmed formulation.

Havard and Faye, (1988): Sub-Saharan Africa Transport Policy Program - SSATP - World Bank, Available at: www4.worldbank.org/afr/ssatp/Resources/HTML/.../1 eng references.ht...

Hince, Ebden and Swan (1997): Transport and the millennium development goals in africa - World Bank, Available at: www.worldbank.org/transport/transportresults/regions/.../afr-tr&mdg.pdf

Lalnna (2000) and star key (2001): Investing in intermediate means of transport in Madagascar, Available at: www.piarc.org/ressources/.../9142,5.3 TC3-20 2002 Starkey.pdf

Paul rurkey, simon Ellis, Sohan Hine and Anna Tenell, (2002): Options for Developed motorized and memorized transport in rural Areas.

Paul Starkey, (2001): Local Transport solution people paradise and program.

Rizet and Hine, (1993): The provision of rural transport services: an agenda for World Bank, Available at: www.worldbank.org/.../Module%204%5C4\_2a%20RTS%20Agenda%2

Simon Ellis and Johan Hiner (2002): Wake Forest Magazine December 2002 - Past Issues - Wake Forest ...Available at: www. archive.magazine.wfu.edu/archive/wfm.2002.12.pdf

Sismar, (1999) and starkey (2001): Improving Rural Mobility been constrained by a lack of credit and a shortage (in rural areas) of appropriate axles - World Bank, Available at: www.worldbank.org/afr/ssatp/Open.aspx?id=19

Starkey, Paul G. & Starkey, Janet (2001): Unfolding the Orient: Travelers in Egypt and the Near East, Durham Middle East Monographs Series. Ithaca Press. Available at: www.dur.ac.uk

Temesgen Aklilu, (2003): Rural Transport Strategy for South Africa.

Tony Airey (1993): Transport and the Village: Findings from Africa, World Bank, Available at: www4.worldbank.org/afr/ssatp/Resources/WorldBank.../WBDP344.pdf

U.S. Rural population Transportation, (2010): A Report on U.S. Rural Population and Scheduled Intercity Transportation. Available at :

ww.rita.dot.gov/...transportation...us\_rural\_population/2010/.../entire.p

#### **ANNEXURE I**

#### **Questionnaire for Community Members**

#### Dear sir/Madam,

I am conducting a study on "Improving Intermedium Transport in Rural Area and It's Economic Impact: A Case Study in Hulet Eju Enessie Woreda" In this context I request you kindly fill up this questionnaire and return to me at your earliest. I assure you that the information given by you will be kept confidential and will be used only to prepare my dissertation which is a part of Master of Arts in Rural Development of Indira Gandhi National Open University (IGNOU).

#### Yours sincerely!

# Put " $\sqrt{}$ " inside the box that you want to choose A) Personal Information 1. Age: 18-25 46 and above 26-35 36-45 2. Marital status Married Divorced Widow Widower 3. Size of Family 1-6 7 - 10Above ten 4. Religion: Christian Muslim Protestant Any other

5.	Education status				
	Illiterate		9 – 12 grade		
	1-4 grade		Diploma level		
	5-8 grade		Degree and above	level	
6.	Occupation				
	Farming		Labour		
	Household		Business		
	Farming and house	hold $\square$	Employer		
7.	Possession of land				
	Below one hectare				
	One to two hectare				
	Three to five hectare				
	Above five hectare				
8.	Family Monthly Income				
	Below 100 birr [				
	100 – 500 birr				
	501 birr – 1000 birr [				
	Above 1001 birr [				
9.	Period of stay in the villag	e			
	1-5 years	$\neg$			
	6-10 years	_			
	Above 10 years	_ _			
	,	<b>—</b>			

# B) Transportation related information

# Put " $\sqrt{}$ " inside the box that you want to choose

1.	An average distance of farm land from the village
	1 km 3 km
	2 km
2.	Is there a market spot in your village
	Yes No
3.	Repeatedly kind of industrial products that can be bought and transported from far
	four village
	Tin
	Oil, soap, fertilizer and other commodity
4.	What type of transport currently used?
5.	<ul> <li>Head loading</li> <li>Animal drawn back</li> <li>Hand carts</li> <li>Motorized</li> <li>Kind of animal back transport in the village</li> </ul>
	• Donkeys
	Mule
	• Horse
	• Camel
6.	Average crop production supply to the market with in the year
	• 5-10 quintal
	• 20 -25 quintal

• 10-20 quintal
Above 25 quintal
7. Is there any pulling hand carts in your surrounding area
Yes No No
8. Do you have any suggested idea and opinions for the absence of pulling hand carts
• Lack of awareness
Unable to purchase
Due to road comfort
9. What is your idea about the importance of using intermediate transport system?
Time minimization
Human power minimization
For cost effectiveness
Reduced wastage of product
All are true ideas
10. Do you have the demand of improved intermediate means of transport (IMT)?
Yes No
11. Do you have ability to purchase and use intermediate means of transport?
Yes No
12. Are you volunteer to have a credit to by intermediate means of transport?
Yes No
13. Is there any obstacle to improving mean of transport?
Yes No
14. If your answer yes what is the reason
15. Is there any cart maintenance shop in your surrounding?
Yes No
16. Is there any responsible body for creating of awareness to improve rural transport?
Yes No