An Analysis
Of
Socio-Economic Impact of Investment on Roads
(A case Study of Local Bodies Investment on Rural Roads Kurule Tenupa VDC, Dhankuta)

A Thesis
Submitted to Tribhuvan University, Faculty of Humanities and Social Sciences, Department of Rural Development
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LETTER OF RECOMMENDATION

This thesis entitled **" An Analysis of Socio-Economic Impact of Investment on Roads"** has been prepared by Hukum Prasad Dahal under my supervision; I hereby recommended this thesis for examination by the thesis committee as a partial fulfillment of the requirements for the Degree of Master of Arts in Rural Development.

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LETTER OF APPROVAL

This is to certify that the thesis submitted by Hukum Prasad Dahal entitled **"An Analysis of Socio-Economic Impact of Investment on Roads"** A special case study of rural roads of Kurule Tenupa VDC of Dhankuta district has been approved by the Department as partial fulfillment of the requirement for the Master Degree of Arts and Rural Development.

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ABSTRACT

The present research makes an effort to analyze the local bodies' investment on Rural Roads at local level. This research is descriptive one, based on the primary and secondary sources of data. The data for the study was randomly collected from the users' groups and records of VDC office.

The required data were collected using observation as the data collection tool. The outcomes derived from the record of VDC, Rural Road users' committee and the source of respondents were listed, tallied and tabulated on the basis of data and linguistic characteristics. An effort has been made firstly to analyze the budget allocated by VDC, DDC and people participation. After that, the budget was analysed in comparison with the total budget and the budget used for dozer used. secondly, the budget allocated by VDC and DDC was analysed during five fiscal years since FY 2065-66 upto 2069-70. Therefore, the research has found out the total investment of local bodies in the sector of rural road construction.

The main objectives of this research are to find out the budget allocation by local bodies on rural road construction at VDC for rural development and to access the participation of local people on rural road construction. The research found out the investment of local bodies to construct rural roads for rural development. The main findings of this research is local bodies has regularly invested and allocated some budget to rural road construction but the local bodies don't regularly funding to some roads and there is very difficult to continue to maintain the rural roads by users' committee without investment of local bodies. The investment of local bodies had spent for dozer used to construct the roads by users' committee. The total number of roads identified in the VDC, the investment of local bodies to rural roads was in priority. This research has found out that the main priority to develop rural area is to construct rural roads. Though the regular budget flow has seen to rural roads, the roads are not maintain regularly and the corruption is seen during the development work.

TABLE OF CONTENTS

List of Tables

ABBREVIATION

AD	After Date
ADB	Asian Development Bank
BT	Black Top
CAC	Citizen Awareness Centre
CBS	Central Bureau of Statistics
CDR	Central Development Region
DDC	District Development Committee
DOR	Department of Road
DRSP	District Road Support Program
DTMP	District Transport Master Plan
EB	Equipment Based
EDR	Eastern Development Region
ER	Earthen Road
FfW	Food for Work
FY	Fiscal Year
GHS	Green House Gas
GR	Gravel Road
HDI	Human Development Index
HHS	House Holds
i.e.	That is
INFRIN	Infrastructure for Income
KM	Kilo Meter
LB	Labour Based
LGCDP	Local Governance Community Development Program
LRIP	Local Road Improvement Program
LSGA	Local Self Governance Act
LSGR	Local Self Governance Rules
MPI	Multi Dimentional Index of Poverty
MoFLD	Ministry of Federalism and Local Development
NGO	Non Governance Organization
NRS	Nepalese Rupees
RAP	Rural Access Program
RCIW	Rural Community Infrastructure Work
RIDP	Rural Infrastructure Development Program
Sq.	Square
TYIP	Tri Yearly Interim Plan
UNDP	United Nation Development Program
UK	United Kingdom
US $	US Dolor
USADP	Upper Sagarmath Development Program
USAID	US Agency for International Development
VDC	Village Development Committee
WCF	Ward Citizen Forum

CHAPTER I
INTRODUCTION

1. Introduction

This section of this study includes brief description of background of the study, introduction of the study area, statement of the problems, objectives of the study, limitation of the study and organization of the study.

1.1 *Background of the Study*

Nepal is a landlocked country. About 85 percent Nepalese people stay in rural area (CBS 2068). The land structure of Nepal is hill and mountains structure. Therefore, it is a huge challenge of Nepal for development. However, it is also an opportunity. When Nepal is success in rural development, it is also element the poverty. Rural area is remote area too. Road is a main component of access for remote area.

Historically, rural communities have created local roads and other necessary infrastructure using both voluntary and paid local labour. Since the early 1990s, roads are an important priority for local government bodies (i.e. District Development Committee, Village Development Committee & Municipality) in Nepal. Rural roads, in operational, will open up versatile opportunities to enhance local livelihoods at grassroots level. When resources and authority began to decentralize through local government bodies from the central government, people participation on development work has been increased, such as road construction, electricity, drinking water, forestry preservation, schools improvement etc. Similarly, in the sector of road construction, the use of heavy equipment such as bulldozers and excavators started to increase during this period. Furthermore, the desire to establish road connections to district headquarter and local market centre, quickly also resulted in the increased use of unsustainable road construction approaches and methods by using this kind of vehicles in the country areas.

Unsustainable roads in this sense are those that have no any drainage arrangements, they are high gradient, there is no protection structures in critical places, no biological protection; no operation and maintenance arrangements or fund; etc.

Development is impossible, in the absence of the developmental infrastructure. Road, electricity, communication, buildings, education are the main infrastructure of development. Road transportation plays an important role in the region-integration and social and economic development of Nepal. Physical infrastructures, such as electrification, communication, buildings, fully depend on the development of transportation. Transportation is an essential factor of capital formation too. It brings people closer and exchange goods and services smoothly and promotes competition among different industries. In the context of Nepal, the road transportation is more relevant because it covers rural remote area and landlocked nature.

Similarly, the reality is that Nepal is the poorest country in the South Asian region on a number of poverty measurement indices—on the Human Development Index (HDI) used by United Nations Development Programme (UNDP), by per capita income used by the World Bank, and on the Multidimensional Index of Poverty (MPI) recently introduced by Oxford University researchers, which shows nearly 65 percent of the Nepalese population fall below the absolute poverty line. A major form of poverty in Nepal is spatial—geographically concentrated poverty caused by remoteness, which leads to lack of competitiveness owing to high transaction costs both in input acquisition and output sales. The occurrence of spatial poverty is demonstrated by the fact that 30 percent of the country's 3,915 Village Development Committees (VDCs) are yet to be linked to the road network. Hence, the development and expansion of road infrastructure in rural areas is obviously a consensus priority for local development at all levels from the centre down to VDCs and settlements. Although it has always been a major concern at the local level, it has gained added momentum since the promulgation of the Local Self-Governance Act 1999 (LSGA) and Local Self-Governance Rules 2000 (LSGR) that vested unprecedented development authority with local governments, along with the concomitant transfer of grant resources and the provision of taxing authority. This devolutionary policy intends and allows District Development Committees (DDCs) and VDCs to take charge of local development that contributes towards poverty reduction through inclusive, responsive and accountable local governance and participatory community-led development. Now, the condi-

tional and unconditional annual budgetary grant to VDCs ranges from a minimum of NRs 1.5 million to a maximum of NRs 3 million (with an average of about NRs 2.1 million), based on 11 minimum compliance criteria.

Having recognized the importance of access to markets, services and economic opportunities, a large chunk of resources available to local governments is being used to construct rural roads. In Nepal, nearly US$ 40 million (NRs 3 billion) has been spent annually in recent years on rural roads projects and programmes. In the past, local bodies used to transfer budgets from other heads (e.g., health, education, etc.) for road construction; however, this practice has now been stopped as other sectors have become more vigilant. In total, VDCs have spent an average of over NRs 1 million each on rural roads.

Road transportation plays an important role in sector integration and social and economic development of Nepal. Physical infrastructures such as communication and electricity fully depend on the development of transportation. Transportation is an essential factor of capital formation also. It brings people closer and exchange goods and services smoothly and promotes competition among different industries. In Nepalese context, the road transportation is more relevant because of rural remote area of landlocked nature.

A road is a thoroughfare, route, or way on land between two places, which typically has paved or otherwise improved to allow travel by some conveyance, including a horse, cart, or motor vehicle. Roads are an important priority for local government bodies in Nepal. This is because, if operational, they will open up a multitude of opportunities to enhance local livelihoods. Historically, rural communities have created local roads and other necessary infrastructure using both voluntary and paid local labour. Since the early 1990s, when resources and authority began to channelize through local government bodies, the use of heavy equipment for road construction such as bulldozers and excavators started to increase. Furthermore, the desire to establish road connections quickly also resulted in the increased use of unsustainable road construction approaches and methods. Unsustainable roads are those that have no drainage arrangements; high gradient; no protection structures in critical places; no biological protection; no operation and maintenance arrangements or fund; etc. The country side is normally unknown about social and environmental concerns. The action should be on sustainable rural

road construction tailored to different stakeholders-Nepal Government Agencies, District Development Committees, Village Development Committees (VDCs) and local communities.

Nepal is a hilly country. Land structure is difficult nature. Only 15% earth surface of Nepal lies on Terai region. Rest surface area is hill and mountain nature. The total area of Nepal is 1,47,181 sq. km. and total population is 2,64,94,504(CBS. 2012). 86% people stay in rural area and they are dependent on agriculture. Few people have settled on facilitative town area. According to TYIP (2064-067), mortar road will touch all 75 districts headquarters on this plan period, though progresses of plan have just been starting.

Roads are the number one priority for local communities and, rightly so, considering the spatial nature of poverty in rural areas. However, if roads cannot be plied or the poor do not adequately benefit from them (because the roads are not developed properly), the present high priority allocated to them can itself become a source of problems. LB roads are more pro-poor than EB roads and can provide employment to the poor. Hence, rural road construction can be made into a pro-poor initiative with the use of LB technology.

1.1.1 History of Labour Based (LB) and Equipment Based (EB) technology in Nepal

The use of labour for rural infrastructure construction including roads is historically at the core of Nepali rural communities. In the past, as in the present, community infrastructure has been constructed using voluntary and, to a certain extent, paid labour. Each community assigned a person (urdi) to inform everyone about the date and time for community infrastructure construction or maintenance work, and any

failure to participate without an acceptable excuse was subject to a penalty. As Nepal was effectively isolated from the rest of the world, communities did not have access to heavy equipment for infrastructure construction or maintenance. Since the 1980s, they started to build green roads with support from donors in a more organized way by forming labour groups and user committees. In contrast, the history of technology based on heavy equipment is quite short in Nepal—about 40 years for state infrastructure (national roads and others) and only about 15 years for rural roads. In the beginning, a Heavy Equipment Division was constituted within the Department of Roads (DoR). The DoR imported heavy equipment which was rented out to contractors as a package on infrastructure construction contracts. Most contractors retained the equipment for periods longer than the stipulated time and on-rented it to private individuals

and communities at rates much higher than they actually had to pay to the DoR. When demand for heavy equipment for infrastructure construction began to escalate at the local level, the government allowed construction companies to import their own equipment, charging a highly subsidized customs tariff of only four percent in comparison to about 250 percent charged on private vehicle imports. Individuals were not allowed this privilege and were subjected to paying the same customs rate as for private vehicles.

1.1.2 Features of Equipment Based (EB) roads in Nepal

The use of heavy equipment for construction of rural roads in Nepal started some 15 years ago when resources for local government bodies increased and local priorities became quick road construction. EB technology now is characterized by unplanned

roads with no drains or protection structures. Road lengths are often unduly increased at the cost of forests and other resources in order to avoid agricultural land. This practice, however, has decreased in recent times as land values near operational roads have sky-rocketed. The tremor of heavy machines (particularly bulldozers) and the use of rock-blasting materials affect surrounding geological formations and hill slopes, causing destabilization. The cut–throw method is used, causing heavy mass wasting and substantial damage to slope vegetation cover, which in turn causes a significant increase in the occurrence of landslides. More advanced EB methods are used for national roads in Nepal but very seldom for rural roads construction as yet.

In the beginning, a Heavy Equipment Division was constituted within the Department of Roads (DoR). The DoR imported heavy equipment which was rented out to contractors as a package on infrastructure construction contracts. Most contractors retained the equipment for periods longer than the stipulated time and on-rented it to private individuals and communities at rates much higher than they actually had to pay to the DoR. When demand for heavy equipment for infrastructure construction began to escalate at the local level, the government allowed construction companies to import their own equipment, charging a highly subsidized customs tariff of only four percent in comparison to about 250 percent charged on private vehicle imports. Individuals were not allowed this privilege and were subjected to paying the same customs rate as for private vehicles. Hence, not a single piece of heavy equipment has been imported to Nepal by a private individual. To import goods, the government issues a let-

ter of credit to the exporter, which can entail a process of 4–5 months. Some contractors could not wait that long and imported equipment directly, which cost them more than when it was imported with a letter of credit, for example, an excavator costs NRs 400,000 more. The number of heavy equipment importing companies has now reached 260, and they have recently formed the Heavy Equipment Association. Most of these companies have taken up the enterprise solely for the purpose of renting out to local bodies and user committees for road construction and, to some extent, to brick kiln operators, crushing industries, etc. Initial imports were reconditioned/used equipment from Japan at about half the original price. The Heavy Equipment Association has, up till now, been opposing the import of reconditioned equipment; however, they are rethinking their stand on this because reconditioned equipment is financially more viable. Initially, bulldozers were imported for use in rural road construction. This has now been almost fully substituted by excavators. Other heavy equipment includes rollers, tippers, levelers, and some attachments such as breakers. Photos of heavy equipment used in road construction are shown here. Initial imports were solely from Japan, but heavy equipment supply has diversified and become fiercely competitive. Now, suppliers give incentives such as visits to selected foreign locations to encourage equipment purchase. Companies such as Hitachi, JCV (British), Caterpillar (American) and some Chinese brands have also appeared in the market. Currently, a popular brand is one that manufactures in India under a Japanese joint venture and produces an excavator with an attached loader. This is much cheaper than those imported from other countries. All heavy equipment have numbers such as PC 120 or PC 200, with these numbers representing the weight (or capacity) of the equipment, e.g., 120 means 12 t in weight. Surprisingly, however, prices are more or less the same for each weight group. Importers have to register imported equipment with the government by paying a fee of NRs 30,000. There is an annual insurance charge of NRs 50,000 per piece of equipment. The practice for renting is to charge the cost of transportation from source up to use point and back, which is about NRs 192 per km. Heavy transporters are involved in the rental chain.

In this way, road transportation is an essential infrastructure for landlocked country like Nepal. Road is a network of one place to another place. Social and economical development can achieve by road transportation. It supports on expansion of facilities and goods distribution. Water transportation is not possible for Nepal. Air transportation is more expensive, but Nepali

economy is poor. Thus, road transportation is the main option of transportation. Road transportation is cheap and affordable for Nepal. Therefore, the main base of development of Nepal is road transportation only.

Road transportation contributes on industrial development, economic development and socio-cultural development. Easy distribution of goods and product is possible caused by road transportation. Road transportation plays vital role on import, export and distribution of raw- materials, rural/local production. People of one place contact with other place people easily and in short time by transportation. So, socio-economic development is possible caused by transportation. Therefore, the transportation is an infrastructure of infrastructure. In this way, the role of road is staying on both sector-production sector and distribution sector.

Nepal is a village-surrounded country. More people settle in rural area. Their main occupation is agriculture. Therefore, development of agricultural sector is development of Nepal. Agricultural development is also rural development. Rural development is achievement of development of Nepal. This development achieves with connection of rural areas with market centers. That connection medium is transportation. Road transportation is main infrastructure of rural development. Most of the people are living at countryside. The access of the people to headquarter through transportation is poor. Each village development committees has investing their budget to rural roads but the qualities of the roads are not maintaining well. Therefore, the analysis of rural roads' investment of local bodies is import to provide feedback to the stakeholders and service providers.

Facilities are supply and enhancement in the remote area, by rural transport. Essential knowledge and technology related to agriculture and cottage industries are import through transportation. Production of rural area exports to town market by road transportation, and rural people can obtain economic advantages. Centre of education, consciousness and development transfer into rural area through the transportation network. In this way, the transportation plays vital role on social and economic development of rural areas.

Rural market centre is so important for rural development. When road transportation is expanding, rural market centre initiates gradually. These market centres contact with other bigger market centers directly. These market centers bring town production and facilities into village area. In addition, these centers export rural production to the other market centers. Centre of

rural finance is also rural market. Interaction centre among the rural people is also rural market centre. That activities develop the consciousness, i.e. social development, acquire. Economic aspect affects social and human development. Moreover, social development affects economic development too. Centre of both of them is also rural market centre. Moreover, base of rural market centre is road transportation and the important investment and participation of local people to construct roads needs to analyze.

In Nepal, there are broadly two main road construction technologies in use for rural road construction/rehabilitation, operation and maintenance: labour-based (LB) and equipment based (EB). These technologies have their own characteristics in terms of time taken, costs incurred, benefits/losses delivered, employment, poverty impacts, sustainability, etc. The extreme of LB technology, at one end of the scale, is the 'green road' where all operations are done by organized human labour groups with the use of appropriate small tools of mostly indigenous origin. The extreme of EB technology, at the other end of the scale, is 'non engineered' roads built solely with heavy equipment. In between, there is a continuum of combinations of LB and EB methods. These combinations come in two forms:

separate technologies on different sections of the same road; and

the mixing or blending of technologies on a single section of the road. This latter is less common, although improvements using LB technology such as stone pitching can be seen (e.g., on the Mude–Melung road in Dolakha) particularly when EB roads precede LB roads; this is because the performance of the LB road could be jeopardized by the preceding EB road.

In Nepal, the technological development of low-cost, environment-friendly, rural roads based on people's participation has been taking place since the mid-1980s. The Local Road Improvement Programme (LRIP), supported by GTZ and Helvetas in Palpa District, implemented the environment-friendly improvement and construction of 96 km of road in 1986. GTZ supported the construction of 65 km of environment-friendly road in Dhading District in 1987. After the successful outcomes of these pilot projects, the concept was widely adopted in other districts by various donor-funded projects. The Rural Community Infrastructure Works (RCIW) programme known as Food for Work (FfW) supported by the World Food Programme (WFP), GTZ and the government through the Ministry of Local Development started in 1995 and

has implemented the concept in 20 districts. Other donor projects such as the Rural Access Programme (RAP) funded by the UK's Department for International Development in seven districts, the District Road Support Project (DRSP) funded by the Swiss Agency for Development and Cooperation, the Upper Sagarmatha Agriculture Development Project (USADP), the Rural Infrastructure Development Project (RIDP) funded by the Asian Development Bank (ADB), and the Infrastructure for Income (INFRIN) project funded by the US Agency for International Development (USAID) also applied this concept. As of 2008, the length of rural roads in Nepal totalled more than 20,000 km, of which about 3,000 km were constructed following the green roads approach.

In contrast to green roads, EB technology in Nepal uses only bulldozers to construct roads in an unplanned way. More advanced EB methods e.g., using excavators and tipper trucks for transporting excavated materials to safe dumping sites, using cut-and-fill methodology with retaining walls to minimize excavation of (unstable) slopes, using compressors and jack hammers for controlled blasting, and other nvironmental-friendly technology is not used for rural road construction in Nepal as yet.

1.1.3 Features of green roads in Nepal

The green road concept is an approach that refers to an environmentally sound, participatory, technically appropriate, labourbased rural road or trail construction/maintenance methodology. The features of green roads constructed in Nepal are as follows:

- Minimum disturbance to vegetation cover along the road corridor
- Phased construction for natural compaction (track opening of 1.25 m in first phase, widening to 3 m in second phase and final widening to 5 m in third phase; then drainage, bypasses and bioengineering works phase). The gradient is kept to less than 12 percent.
- Additional vegetation cover developed on barren earth slopes
- Outward slope to ensure water drainage and establishment of dispersed drainage system
- Local labour organization and use
- No use of heavy equipment
- Excavated material transformed into construction material
- Mass balancing and controlled tipping
- Use of public audits and cost transparency

- Other social and poverty alleviation components emphasized along the road corridor

1.1.4 Steps for green road construction in Nepal

The prescribed steps for green road construction in Nepal are as follows:

Technical Steps:

- Preparation of District Transport Master Plan (DTMP)
- Road alignment selection, survey, design and report
- Preparation of training materials
- Training of user committee members, local supervisors, foremen, masons and labour groups
- Preparation of project schedule and planning
- Supervision of construction work
- Facilitation for site office and store management
- Measurement and valuation of work done by road building groups
- Quality control of work
- Progress reporting and monitoring
- Assessment and implementation of preventive maintenance on road during construction period

Social mobilization Steps:

- Dialogue and meetings with VDC and community
- Formation of user committee
- Achievement of political balance and consensus
- Training of user committee, road building groups, record keepers, etc.
- Facilitation of user committee for mobilization of road building groups and social welfare of workers
- Facilitation of user committee for payment of workers
- Assistance to user committee for maintenance of Project Book
- Guidance of road building groups to operate group saving
- schemes and income-generating activities

Decision-Making Processes, Unsustainable Roads and Implications

There are broadly two modes of decision-making as regards rural road construction in Nepal:

(i) well-planned, with complete feasibility and environmental studies and with transparent participation processes; and

(ii) Political or elite-influenced, without serious studies and without open and transparent processes.

In terms of the time for road construction/rehabilitation, Nepal's budgetary process, with budget release mainly at the end of the fiscal year (June–July) and budget freezing in mid-July, often forces roads to be constructed during the monsoon period when local people are busy with agriculture. This obviously discourages the choice of LB technology. The pressure to reduce time taken for construction is also increasing the tendency to choose EB technologies.

As a consequence of inappropriate technologies and poor construction timing (whether deliberate or from necessity), not only is the sustainability of most rural transport infrastructure uncertain but the social and poverty reduction impacts of rural roads are also questionable.

Some roads are constructed without adequate economic feasibility and environmental studies. Road lengths are increased unduly to avoid agricultural lands. Construction methods cause substantial damage and increase the probability of landslides. Deoja estimates that 400–700 m3 of landslide occur per km per year along mountain roads, and 3,000–9,000 m3 occur per km during construction (Deoja, 1994)

1. Area damaged by thrown material is about three times higher than area actually covered by road. Around the world, faulty road construction is one of the principal reasons for deforestation and forest degradation, contributing to 18 percent of total Green House Gas (GHG) emissions in developing countries (Stern, 2006)

2. In the context of climate change, rainfall is expected to become increasingly intense in Nepal and, hence, unsustainable and unstable roads are likely to cause increasingly greater environmental damage.

1.1.5 Means of Transport in Nepal

Horse, donkey, yak etc. were used to goods transport in Nepal from long time ago. Animals were means of transportation in the world before modernization. These means of transportation did not need wide and less sloppy path. But they were more expensive, less faithfull and more

delay. Man has developed modern transportation medium for reducing these disadvantages. Now, airbus, ships, vehicles have been made.

Existing government processes, particularly budgetary processes, result in long delays in fund release, which limits the working season for road projects. This is not favourable for construction, especially with LB technology, and instead encourages or compels the choice of EB technology for 'last-minute' work. Current price trends (threefold increase in wages over the last 10 years and more than 50 percent reduction in heavy equipment rental rates in the same period) have increased the economic feasibility of EB technology. The use of EB technology has a strong correlation with the unsustainability of roads. This is caused by, amongst other things, higher risk of too-steep gradients; lack of adequate water-draining structures; an absence generally of road stabilizing and protection structures; significantly higher environmental damage which causes high environmental costs; and a high risk/occurrence (about five times higher) of landslides compared to LB roads. There are certain situations when EB technology can be efficient and less damaging. These situations are in

(i) road widening;
(ii) ridge alignments; and
(iii) long alignments

through unpopulated areas that require the establishment of labour camps under LB methodology. Similarly, EB technology allows for breaker attachments on excavators, which can be moreefficient for breaking very hard rock than LB technology that often uses skilled labourers for tedious chisel-cutting. EB technology can be economical and is faster, but is still not necessarily associated with high rates of return. In contrast to this, the returns from LB methods are about 30 percent higher than for EB methods. In Nepal, most non-functioning and seasonal roads have been constructed using EB technologies.

There are several known instances of corruption and other financial abuses, but none have been formally investigated or penalized. This indicates a clear state of impunity and lack of financial discipline. The risk of corruption is significantly higher with EB methods, since beneficiaries and communities in general have far less involvement in decision making and in monitoring of alignment selection, tendering for work, and actual construction. Whenever and

wherever possible, a blend of LB and EB technologies should be used for rural road construction to harness the positive features of each technology cheaper and faster from EB technology, and sustainable and poverty-reducing from LB technology.

Road is the best transportation for Nepal. Road transportation plays vital role for social and economic development of Nepal. Bridge between remote rural area and bigger market center is also road. Road supports to carry not only goods but also social consciousness carry. So we can say-road brings possibility of development.

Table 1: Status and Types of Roads

Year	Description	Total length of Road (km)	Influenced population (no. per km)	Road density (km/100 sq. km)
1923	During Rana Regime	0	-	-
1951	Year of Democracy	376	21250	0.3
1956	1st (five year) Plan	624	13609	0.4
1962	2nd (five year) Plan	11931	7970	0.8
1965	3rd (five year) Plan	2049	5130	1.4
1970	4th (five year) Plan	2504	4600	1.7
1975	5th (five year) Plan	3173	3800	2.2
1980	6th (five year) Plan	4940	2844	3.4
1985	7th (five year) Plan	5925	2840	4.0
1990		7330	2579	5.0
1991	8th (five year) Plan	8328	2217	5.7
1993		9534	1939	6.5
1998	9th (five year) Plan	13223	1398	9.0
2000		15905	1163	10.8
2002		16834	1375	11.4
2004	10th (five year) Plan	17280.60	1340	11.70
2006/07		18828.01	2463	12.79

Source: NRS, 2008

In Nepal, expansion and development activities of road were initiated from Rana's period but road construction was limited in town areas. Up to 2007 BS, total length of road was only 365 km. The length of road was 16,834 km. in 2058/059 BS. (NRS- 2002). Until 2006/07, the length of road was 18828.01 Km. Similarly, the influenced pupolation of the roads was 2463

per km and the density of the road is 12.79 per km. It is increasing during this past five years' period but the government didn't update the latest information. The table-1 presents this information in detail.

Table 2: Status of Road Transportation in Nepal

Comparative Chart of Strategic Road Network Length Influenced Population and Density (1998 - 2006/07)

Year AD	Description	Length			Total	Influenced Population (no. per km)	Density km/100 sq.km
		BT	GR	ER			
1998	9th (five year plan) 2054	2905.00	1656.00	179.00	4740.00	3901.08*	3.22
2000		2974.00	1649.00	171.00	4794.00	3857.13*	3.26
2002	10th (five year plan) 2058	3028.74	1663.84	168.38	4860.96	4762.73**	3.30
2004		3494.73	883.51	614.49	4992.73	4636.23**	3.39
2006/07		4258.20	2961.70	3079.48	9399.38	2463.08**	6.39

* = Population Census 1991
** = Population Census 2001

Source: TYIP- 2063/064

Table 2 shows that target of TYIP- 2063/64 is expansion of road length up to 31,000 km. The target of completely new road construction is 780 km. Railway, ropeway are the option of land road. Construction of those types' optional ways will be developing during this planning period.

1.2 Introduction of study area

Kurule Tenupa is a rural area. It is a remote VDC of Dhankuta district. It is located at Chaubise area of the district. It has not afforded to probability of development. It has either hot or cold climate. It has decorated naturally. It has seen like a hilly nature.

History of Kurule Tenupa VDC has related to a pleasing story. A long time ago, there were local kings of Limbu tribe, Meyonghang and Soyonghang with their five brothers in the village. Among the five brothers, the name of one brother was Kurudemba whose name had modified into the name Kurule and the name of the village had called the same name Kurule. Similarly, another part of the village was Tenupa that had named by the Limbu tribe. Tenjuppa had named as a place of meeting of local kings, Meyonghang and Soyonghang that became Tenupa

as a name of village. So, the combination of Kurudemba and Tenjuppa had become the name of VDC called Kurule Tenupa.

The next so-called history of the name of this VDC was in the name of flora 'Kurilo'. This place was famous for kurilo, this flora determined the name of the place, and it became Kurule. At first, the place danda gaun and thula gaun at present was the name of Kurule but now a days, ward no 2, the center point of the VDC where the VDC office, health post and higher secondary school located is called kurule. Similarly, ward no. 5 & 9 have mainly called Tenupa area. Differect toles can be found in this VDC, like Falametar, Bhainse, Bhadaure, Khani gaun, Bajthala, Danda gaun, thulagaun, Sogum, Gadhigaun, Aandheri, Dandatole, Tersotole, Bakhrekhola, Limbu gaun, Magar gaun, etc.

1.2.1 Location of the Study Area:

The selected area of the study is Kurule Tenupa VDC as rural VDC is a rural area among 3915 VDCs of Nepal. It lies in Dhankuta district of Koshi zone. It is located on eastern side of the district.

Kurule Tenupa VDC is the eastern VDC in all of 35 VDCs of Dhankuta district. This VDC has associated with Durdimba VDC of Panchthar district and Mudhebas VDC of Dhankuta district in the east, Mauna Budhuk and Bodhe VDCs of Dhankuta in the west, Mauwa VDC of Panchthar district, Tamor River and Terhathum district are in the north and Mudhebas and Basantatar VDCs of Dhankuta district are in the south area.

The VDC has divided into 9 wards. The total area of this VDC is 3836.94 hectors. This VDC is 11 miles far from eastern direction from the Dhankuta district headquarter. It is located in the 26°54'40" to 26°59'15" north latitude and 87°26'30" to 87°31'45" east longitude.

1.2.2 Relief of the Study Area

The study area is a hilly region. The geographical structure is sloppy. There are some hill-tops. The upper hill area is more than lower hill area. The village area is sloppy about 25° to 45°. Some area of the VDC is sloppier than 45°. The hight from the ocen side is 730 mitre upto 1500 meters. The center ward no. 2 Ghadhigaun is located in 1400 meters hight from the ocen side. This VDC is located at Tamor river bank. The geographical height of the VDC is 1500 metres in the average. (VDC Profile- 2067)

1.2.3 Climate of the Study Area

Kurule Tenupa VDC is located in the hilly region, but not Himalayan. So semi-hot temperature is realized on the low level land area. But mainly tropic climate is found on the other area. Medium temperature has realized on the road coverage area. In the winter season, minimum temperature decreased. In the summer season, maximum temperature is increased up to 35°C near Tamor River that was the lower part of VDC. As a whole, tropic (semi-cold) climate found there.

1.2.4 Soil of the Study Area

Kurule Tenupa VDC lies in the hillside. There can be found sticky and light type clay. Stony and light type clay has found on sloppy land. Sticky type clay has found on the area of plain structure. Therefore, appropriate soil is not available there for agriculture. There is mainly lack of water sources. The scarcity of drinking water is very high. Therefore, irrigation possibility is also rare. All over the land of VDC is mainly sloppy type. Thus, there is found slant agriculture.

1.2.5 Vegetation of the study Area

Kurule Tenupa VDC is a tropical climate area. Sal, Shakhuwa etc. can found on the low-height area. Forest of Salla, Sakhuwa, Katus, Uttis, Chilaune etc. can be found on the upper area. About one dozen community forests have formed in the VDC and the roads have backcrossed through these forests. Mainly Salla, Sakhuwa, Chilaune etc are found on the roadside forest area. Dukur, Kalij, Jureli, Haleso, Dumshi, Kharayo (hare), monkey etc wild-life can be also found there.

1.2.6 Settlement:

Most settlement of the VDC is scattered. Agglomerated settlement can meet only small market centre, which is located on the side of road. As a whole, less than 15% population has stayed on agglomerated settlement. Clustered settlement have based on service centre approach. Market pattern of the VDC is dendrites type. Local market centre contacts with Dharan directly. The main market is in adjoining Mudhebas VDC, i.e. Sukrabari Weekly Hatiya. Local market at Gadhigaun is managed twice a month.

1.2.7 Population:

The total population of the VDC is 5148. The total male population is 2621 and total female population is 2527. The total households are 886 in the VDC. The total population of Tamang is 975, which caste is greatest in population of the VDC. The second greatest caste is Limbu, whose population is 841. (VDC Profile- 2067)

Table 3: Total Population of Kurule Tenupa VDC

Ward No	1	2	3	4	5	6	7	8	9	Total
Population	948	561	528	425	555	485	630	527	489	5148

Source: VDC profile-2067

1.2.6 Religion:

More people are faithful on Hindu religion. People who has high concept of religion are Brahman, Chhetri etc. The hindus, Buddha, Cristian and Kirant religions are found in the VDC. So the Hindu religious population has seen high. Hindu religious population is 57% of the total population. The Buddha religion population is 21% and Kirant religion is in the third position with 20%. Christian is the third and last in position with below 1%. People of these four religions are in the VDC.

Table 4: Religion VS HHS of Kurule Tenupa VDC

Religion	HHs	Populations
Hindu	535	2974
Buddha	186	1120
Kirant	162	1033
Christ	21	162
Total	886	5148

Source: Kurule Tenupa VDC Profile-2067

1.2.7 Literacy:

Now, there are nine primary schools and two are lower secondary school and one higher secondary school. The no. of literate population is 3757 (80.73%). Among them, women are 1708 (45.46%) and men are 2049 (54.54%). Many people have completed school level education and high-level education. Although, literacy rate is acceptable and altogether 897 (19.27%) are still illiterate in this VDC. (*VDC Profile-2067)*

1.2.8 Occupation:

Many people of the VDC involve on subsistence agriculture sector. After road arrival, agricultural activities have changed slowly, but not have achieved modernization. Next environment of the population is in foreign employment. Young males have gone foreign countries, who are active worker age group. Some people are involved on business and official job. In overall evaluation, 50% HHs depends on only agriculture activities. 40% HHs have other income source, like jobs and foreign employment. In addition, 10% HHs is involvement of business activities. (VDC profile- 2067)

1.3 Statement of the Problems:

Road construction is a basic part of socio-economic development. Thus, interim plan of Nepal has taken road transportation as priority sector. However, many village areas are still far from the road facilities. Governmental plan is attractive but execution aspect is weak. As a result, rural areas have not taken enjoyment of road facilities. Next obstacle of road expansion is also poor economy. Thus, many rural areas are remote because of non-facilitation of road. Because of remoteness, rural areas are far from socio-economic development.

The Kurule Tenupa VDC is most remote rural VDC among many remote VDCs of Dhankuta district in Nepal. There are more opportunities but it is under developed area. It is rich of natural beauty and attractive scenario. It is a far boarder place of the eastern part of the Dhankuta district. In this view, development of this VDC would not become yet. However, it is under develop in comparison of neighboring VDCs. It is in front line on educational sector but it has become back on development sector, like road construction, electricity and it has main problem of drinking water all over the village. Some of district level plans are lunching to construct agriculture roads and rural roads. Some plans have made by the local people to open track of rural roads through VDC council meeting decision.

This study concerns on local bodies' investment on rural roads construction and the participation of the local people to construct roads at Kurule Tenupa VDC. It also studies on impact of transportation facility. As a whole, the study has presented the impact of rural transportation at Kurule Tenupa VDC. The main purpose of the study is to present the actual investment of local government to rural roads and the participation of local people of the roadside area of the Kurule Tenupa VDC. It is not identified any study on this topic by any agencies or any person.

That is a cause of non-achievement of expected development; I have expected that the study has been a supporting document for the fulfillment of this lack.

Mainly, the topic of this area has taken for searching given options:

- How much investment has allocated and expenses by local government bodies until now?

-How the local bodies use the local human resources to develop the village and to construct the rural roads? What is the level of participation on rural roads?

-What is the impact of road construction on environment of the VDC?

- Has road transportation supported to activities of development and poverty alleviation?

- Has road arrival helped the local people the growth of income level?

- Does the study help to fulfill of lack of data in micro level?

- Does the study help on VDC level, Ilaka level and district level regional planning?

1.4 Objectives of the Study

The main objective of the study is to access the local bodies' investment on rural roads at Kurule Tenupa VDC and role of local people on the road construction. The following are the objectives of this study:

-to access the investment on roads of local bodies of study area.

-to find out the level of people participation in road construction.

-to identify the relationship between road development and rural development.

1.5 Limitation of the Study

Road transportation is an important physical infrastructure. Transportation network has served socio economic aspect and road transportation impacts on natural and environmental aspect too but this small research is not able to study on overall aspects. In this thesis, investment of local bodies for the years to road transportation had been analyzed through the comparatively on other aspect and local people participation for road construction at VDC level. The data had collected from VDCs, DDC & users' committees related to the investment on rural roads throughout the district.

The participation of local stakeholders during road construction had analyzed in the study. The study had covered only one VDC. It had not covered overall population of the VDC. It has covered only immediate influenced area and population of the road construction. It had covered the users' group of rural roads at Kurule Tenupa VDC. Therefore, it is not able to include

all features of road impact and associate all sectors. It had just analyzed the investment of local bodies to rural road construction.

Limitations of the study were present below:

- This study has non-represented road effect in the rural development of all over the country.
- The study is limited on social and economic aspect of the road coverage area of the Kurule Tenupa VDC.
- The study area is selected only users' groups of rural roads of the Kurule Tenupa VDC, which area has influenced directly by road construction.
- All people committed in road users' committee were the target population of this research.
- The secondary data about the investment of govt. resources to rural roads through DDC has also analyzed in the research.

In this way, the following rural roads are constructing at the Kurule Tenupa VDC and these roads, their users' committees, investment of government to these roads, dozer used by the users' committees are the study area of this research. The users' committees are actively participated on the construction of these rural roads. Because of the geographical situation of the VDC, many of the roads are not usable and applicable for transportation and some roads are only starting to open track. In this situation, what is the actual investment to these roads has been found through this research. The list of research area is as follows:

Table 5: List of Rural Roads at Kurule Tenupa VDC

S.N.	Name of the Rural Roads at Kurule Tenupa VDC
1	Mudhebas-Kurule Tenupa Rural Road
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road
3	Gadhigaun-Banpala-Surungi Rural Road
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road
6	Kurule Tenupa-Basantatar Rural Road
7	Malateni-Banspani-Dihitar Rural Road
8	Bajthala-Khani-Falametar Rural Road
9	Sogum-Pokhari-Banduke Danda Rural Road
10	Khani-Bhadaure Bhainse Rural Road
11	Bhanjyang-Simsar-Yobara Dovan Rural Road

12	Gadhigaun-Higher Secondary School Rural Road
13	Simkuwa-Dhungana Gaun Rural Road

1.6 Organization of the study (Chapter Plan)

The research work has prepared in five chapters. Chapter I represents introduction of the study and study area, statement of the problems, objectives of the study, limitation of the study and organization of the study. Chapter II has covered by literature review and chapter III has described the methodology of the research. Under this chapter, sources of data, research design, research tools and techniques for data analysis has been discussion. Chapter IV has included analysis and interpretation of the data that is the main body of this study and chapter V has covered findings and recommendation of the research. Then, the references and appendixes have mentioned on the research work.

CHAPTER II
LITERATURE REVIEW

2. Literature Review

Research is complex work. Before research writing, study of related literature is needed. A researcher must have the knowledge of previous studies, which are closely related to the topic. The study of previous literature provides the foundation of the present study. Theoretical and behavioral knowledge are acquired from the review of the reference literatures. A researcher gains creative imagination and design of study by review of literature. The review does not fit hundred percent for further study but they are more or less helpful to reach the conclusion and also they help in enhancing the knowledge about the study in general.

2.1 Conclusion of some review of the literature:

An unpublished thesis 'An assessment of the impact of the road construction on Gorusing and Sandhikharka' is a thesis prepared by H.P. koirala , for his master's degree in anthropology . In his view, the road has both positive and negative impact in the area. In the positive impacts, the road provides access of developmental activities. And in the negative impacts, there can come bad nature's people and destroy the social peace in the area. But positive impact is more than negative impact.

Karunakar Paudel published a textbook 'Sustainable rural Development'. According to him, actual meaning of the development is sustainable development. Sustainable development is that which is related with poorest people, good governance and environment friendly development. Development is a process which is socially acceptable, technologically affordable and increasing the economic opportunities. Sustainable development is the actual definition of the development. The developmental activities do not destroy the sources and nature that is development.

Local Bodies Resources Mobilization and Management working procedure-2069 mentions that the local government bodies can invest on roads with participatory approach to reduce poverty with the human resources used from the poor community at local level. Rural roads have expected to extend in the need of local people with their participation. Large vehicles for road construction at grassroots level has strictly prohibited by the working procedure. Though the trend of using bulldozers for rural road construction by users' committees is increasing day by

day. The steps of planning have to be follow by the local bodies to develop the countryside. Different steps of people participation have used on the planning procedure.

Local Governance Community Development Program (LGCDP) is a system in Ministry of Federalism and Local Development (MoFLD) for development. This system has encouraged local and marginalized people to participate on development of their own village by using transaction and transformational social mobilization method. Social mobilization is a new concept for development in our country.

In each Village Development Committees (VDCs) has formed nine Ward Citizen Forums (WCF) one in each Ward and one VDC level Citizen Awareness Center (CWC). Each forum comprises of 20 to 25 members and they are selected through organizing onsite mass meetings. Due to diverse geographical settings, entire settlements of the VDC are not represented in WCF and CAC in some VDCs. The WCF comprises of women, dalit, poor, disables, civil society, elites, and community forests user group members too.

Some community based organization have leading role for social mobilization. One social mobilizer is working at one VDC and the role of Social Mobilizer for mobilizing WCF and CAC is important for empowering target communities. Social mobilizers have played vital role for local development. They encourage people to participate on development task. Many rural roads are digging by using human resources. Therefore, it is important to upkeep their motivation of work in the days to come. One way towards it would be considering them as an integral part of local bodies instead of recognizing them as NGO staff.

WCF, which is predominantly represented by women, dalit and disadvantageous communities, are instrumental for bringing voice of the target communities in the local bodies decision making process particularly in the situation where the local bodies are running without elected representatives.

From the environment management point of view, existence of WCF that represents all sectors of a society and their involvement in planning process will definitely help mainstreaming environmental criteria including climate change and disaster risk responsive activities in local planning and budgeting process.

There must have other successful initiatives across the country that needs documentation and dissemination.

'Three years Interim plan -2064' emphasizes on the role of road transportation for development process. Perspective theme of this plan, concerning the transportation is that, road transportation length will be increased up to 31000 km. Rail- way, water way, rope-way will be developed as options of the road. Only new-road will have constructed 780 km in length. Road access will have expanded in all of the 75 district headquarters. For the national economic development, this plan has given the first priority in agriculture sector and the next priority has given to transportation development.

UNDP (2011) report on "economic analysis of local government investment in Rural Roads in Nepal" has presented its' executive summary related to rural roads as: "No roads should be started without sufficient funds at hand or without assured funding sources. Fund support from local bodies and the centre should be disbursed at the beginning of the lean season (November). For this, the following changes should be made. Change the fiscal calendar in a way that allows development funds to be available for use at the local level by about the middle of November.

Expedite the budget release process. Abolish the budget-freezing process at the financial year-end for development work. For road projects, an ensured multi-year budget should be allocated, so that the financial grant system does not negatively impact the capacity of local government bodies to construct roads. Social mobilization of communities in the influence area of roads should be mandatory for road building. This is important for developing local ownership and mitigating intentional tampering. Social mobilization messages and modes of delivery should be tailored to each community, depending on its level of social capital. The use of bulldozers and rock-blasting materials should be discouraged, as the tremor effect they produce impacts on surrounding geological formations and significantly increases the probability of landslides. Controlled blasting techniques, which have a higher efficiency and lower cost because of substantial savings on blasting materials, can be considered. The force of the blast should be directed outward so that remaining rock faces are stable. These techniques can also be used in combination with LB methods, if compressors and jack hammers are made available. LB technology should be encouraged and particularly emphasized in poverty-ridden areas. However, to harness some of the positive features of EB technology, the use of excavators and breaker attachments should be allowed in certain situations. Use of equipment should be com-

plemented by water management structures (side and cross drains), other protection structures and bioengineering works in critical areas. The Department of Local Infrastructure Development and Agricultural Roads and local bodies should jointly institute a system of annual policy auditing for rural road construction by local bodies to assess policy compliance. Any failure to comply with policy should entail appropriate sanctions such as budget cuts. Operational guidelines need to be developed to ensure that transport does not damage roads and the maximum weight limit is enforced. This is especially relevant in relation to criteria for road closure, e.g., during the monsoon, when road surfaces are easily damaged. A concerted effort is needed to secure the participation of beneficiaries in all steps of the road project cycle in order to ensure ownership of the road and contributions for road maintenance. Different road maintenance models will need to be developed for different road standards and conditions to allow for communities to contribute within their capacity."

Similarly, the report says: All rural roads should have adequate operation and maintenance funds for timely maintenance. Such funds must be complemented by beneficiary contributions raised from the increased income resulting from the road. A system of reasonable taxing of vehicles and goods movement can also be developed for this purpose. The tariff fixed for such purposes should not be specified as an absolute amount in the Local Self-Governance Rules but should be left for local bodies to decide for themselves.

Local road maintenance skills should be developed through training and work during road construction. Public service packages in agriculture and the social sectors (health, education, etc.) should be part of road design, so that benefits from the road are enhanced to their full potential. This is built into some projects funded by donors such the Asian Development Bank and World Bank, but not for roads built by local bodies themselves. Public forest and land needs to be protected from exploitation by (often) outsiders, who have easy access to natural resources through the expanding road network. Rent-seeking practices are anti-poor and should be strictly controlled. For this, public auditing should be mandatory. One of the reasons for unsustainable infrastructure at the local level is the shortage of technical manpower. Although resource availability within VDCs has increased by up to 10 times, the availability of technical manpower has remained the same. Therefore, a separate budget head for the outsourcing of technical manpower, e.g., for survey, design, construction and/or supervision, should be pro-

vided in grant funds. In addition, the possibility of using public–private partnerships for road development should be explored and tested.

On a thesis "Road Infrastructure and Its Linkage with Market Centres in Nepal (A case study of Khimti- Manthali Road in the Eastern Hills) ", Karki has been studied that transportation affects mainly on development process. His study has been divided into six chapters. In the first chapter, he has introduced transportation system, rural market evolution in Nepal and role of transportation in rural development. The objectives of study have had to examine the read development, evolution of market centre and social mobility on Khimti-Mnthaly road area after the road alignment. Karki has presented that the development process is easy and faster by road transportation facilities. Rural people can achieve social consciousness, education, health and other facilities by transportation.

The second chapter has centralized on literature review and the third is methodology. The fourth and fifth chapters are analysis part. In these chapters, it has presented introduction and location of the study area, inflow, out flow and turnover of people on the study area of the market centre- development and employment status. Khinti- Manthali Motar Road is 18 km in length. The road was opened for light vehicles from Kirnetar to Manthali from 2054 BS. The total population was 13,499 on the road influence area. After nearly arrival of Motar road, people begin to settle on the road side and initiated the evolution of market. On the study period, main local market centre were three, and sub-market centre were also three. On the average, 223 people were inflow and outflow per day in the Kimti chock. Main purpose of these people was to take commodity.

On the study, his main conclusions are as follows:

- Evolution of market- centres and number of functional establishment have gone to increase with the rod accessibility.
- Khimtichock market is located at the central position with 71 no. of functions of 8 types.
- No. of population directly influenced by the road is 31499.
- 44% of the average freight cost of goods and services has reduced after the completion of road.
- Agriculture is the major occupation of the movers.
- Main purpose of movements of movers is shopping

- Local people obtained better access to newspaper and media cause by road arrival.
- Despite various problems, rural roads have become one of the easiest means of transportation of local people.

His main recommendations are:

- Facilities must spray and reduce the problem.
- Road standardization must be growth and these activities, people participation also increase.
- Peoples participation, NGOs and governmental access should increase for facility increment and environment protection.

On the book 'Rural-urban Linkage and Rural Development' Pradhan and Sigdel refers that rural-urban linkage is positive for achieving the balanced development of the developing countries. This linkage expands the transportation as well as road transportation. Many theoretical views are developed for development of rural-urban linkage. But these theories point out the base of linkage is transportation. Transportation develops relation between town and village and small town and big town. Goods and commodities are exchanged each other sector by transportation then balanced development is possible.

Bhattarai observed that development is a change of present condition. Development is also eliminate the weakness, under literature factors of social, economical, political, cultural and other several aspect and a process of arise the life style of the people. So the development is a positive change of human being in the progression process, people's participation and local institutional participation. The transportation plays vital role on development.

Sharma and Rijal, on a publication, say that development is a positive changing of present situation. The development is a process, which makes easy, wealthy and pleasant life of human being. Not 0nly economic growth is a development; development is the achievement of political freedom, healthy life, access of sources, literacy, human rights and self-steams.

On the book "Rural Development- Policies and strategies", G.B. Hada pointed out- economic development is a component of development. Economic development represents the development of developing countries. Development indicates to reach and wealthy condition than the previous condition. As a whole, objective of development is to improve the life-style of the people.

On the book "Economic Development an Planning in Rural Perspective", Hada an Aryal have expressed that not only economic raise and physical achievement is development, but also development indicates changing the production and thought of people. The First term of the development process is to handle attitudes of people on positive direction. After this term, development begins. The first fulfillment of development is to achieve basic needs, the second is self-steam and last is freedom. In fact, achievement of these components is development.

Dahal presents his view that on the book 'Rural Tourism', base of access of some place are distance and transportation. Expansion of transportation makes accessible to the remote area. The interaction of the people is growth due to the accessibility. Cause of this condition, there are development of tourism and increase of social and economic activities.

In an unpublished book 'Indo-Nepal Trade-Problems and prospects, Kishor Dahal had presented that Nepal's trade with India has a significant impact on her economic development. Trade and industry are interrelated to each other. In 1982-83 A.D., Nepal's export to India was 74% of total export and import from India was 41% of Nepal's export. Nepal has no facilities to seaport and water transport because of land lucked nature. Thus, Nepal's trade depends on earthen and air transport only. Main transport facility/infrastructure of Indo-Nepal trade is road transport. Because of 500 miles open border between Nepal and India, Nepal's trade depends on India. The domestic demand for various types of species is increasing in India and India has been importing various types of species from various countries including Nepal in order to meet the domestic demand. In this regard, Nepal has been mainly exporting fresh and dry ginger, large cardamom, Tejpat, hand-made-paper, raw jute and also electricity power/hydro power. A sea port of Nepal is available to only a considerable distance of about 8000 km, i.e. Calcutta port.

Mehar Man Paudel, on his unpublished book- 'Planning for Agricultural Development in Nepal' has written that the development of agriculture secter is sufficiently and convincingly been a central place in the overall development of economics of Nepal. Realizing the great importance of agriculture in Nepal, a succession of different development plans have been given due priority in this sector. In his view, planning is generally thinking of a systematic approach to the activities of national development. Planning also includes the mobilization and allocation of resources from and between sectors and detailed physical programming. Agricultural

development planning presents certain special features in as much as it deals with a sector that already has been contains a large quantity of resources because there is a good deals of variability in the manner of use and in the productivity of resources and farmers involve on different forms and level from one region to another. Agriculture in Nepal is heavily depend upon the natural resources and secondly base of agriculture is transportation of road, which helps to expansion. Modernisation of agriculture includes improving technology demand entered production and more production from cheap cost. There must be increased the transportation facilities for modernization of agriculture in Nepal. The transportation is also important for enhancement of cash corps production and agricultural production.

'Nepal: Socio-economic Change and Rural Migration' is an unpublished book, prepaired by Kishor Dahal, as a thesis. According to his view, the third world countries are beset by imbalances in the spatial distribution of factors of production (land, opportunity of labour or capital). The economic model of migration, which treats internal migration as a function of demographic and economic characteristics of the individual as well as his expected future income has expanded. This research conceives/focuses to rural outmigration in Nepal as consequences of pressures and counter-pressures, forces, internal and external to the rural economy generate changes in the social relations of production. The Study area has located in Western Central Nepal, mainly, Chitawan, Nawalparasi, Syangja and Lamjung. Main objective of this study is analysis of rural to rural migration in Nepal. There is hilly side as a origin place and Terai is destination place. Main finding of this research is major cause of migration of the study area is remoteness. So, transportation facility must be enhancing on the remote area gradually.

'Perspectives in Regional Problems and Regional Development in Nepal' is a research book, prepared by D.B. Amatya. In this book, he has focused that the national plan suffer four overt sectoral bias, that is, the four sectors- agriculture and forest; industry and power; transport and communication and social services. In his view, regional problem of Nepal is on diversity of hills, mountains and terai. During the Rana regime (1846-1950), eastern and central area of the country progressed much more rapidly in infrastructure and industrial development than other areas. This rule brought regional diversity on development too. Cause of all facilities, eastern and central regions' people achieved awareness and interest in academic and intellectual circles than western Nepalese. The study has assessed and pointed the three appropriate regional de-

velopment models- Spatial Equilibrium Model, The Export Base Model and The Hirchman and Myrdal Model, for application of regional development of Nepal. In 1882-83 A.D., 71% (3472 no.) industries was established in Eastern Development Region (EDR) and Central Development Region (CDR). Only 28% industries had established in the western Nepal. At that time, 60% (3124 km) of road length has laid on EDR and CDR of Nepal. In this way, the study has indicated that the main component of development is industrial growth/establishment and achievement of transportation (mainly road transportation for Nepal) facilities.

From the review of above literatures, conclusion has obtained that, development is an overall aspects, change may be positive and sustainable, i. e. development. Transportation is a main component of the development. Transportation and development are supplementary part of each other. Role of transportation as well as road transportation is more important for development of rural and remote area. Theme of overall literature is that development is essential for all and basic infrastructure of development is road transportation.

According to District Transportation Master Plan (DTMP), almost all the new linkages of Dhankuta District start from mainly three roads i.e. Bhedetar-Rajarani-6 No. budhebare, Hile-Pakhribas-Leguwaghat feeder road and Hile-Uttarpani-Chhintang district road. The main objective of the DTMP was to develop the district road network in a planned way and sustainable means by adopting local resources in accordance with HMG/N policy, It is also a guide line to the DDC, VDC and the road planners to identify the need assessment and project selection, during the five year term of the body after the approval of district council. The DTMP also proposed to develop the existing growth centers and future growth centers by providing the

rural road network.

In our country, from so many years, number of agencies is involved in rural road development activities with wide ranged inconsistency in their planning and implementation processes and used technology. As a result the progress and achievement on rural road development activity is found to be minimal. Hence we hope that this DTMP provides a long term "District Perspective Plan" of rural road network to all those agencies who are involved in road construction activities through DDC as a sole implementing agency.

The first two roads are going on constructing under DOR. Hence department of road is the authorized agencies for the construction of these roads. These roads are seasonal roads and provide passage of vehicle only for 9 months. Therefore, until these roads are upgraded to be operational in all reasons throughout the year, benefits from these new linkages cannot be extracted and, subsequently, the entire process of developing the district road net work will be disturbed and can not be achieved goal. The third road i.e. Hile-Uttarpani-Chhintang is the district road and it has got the first priority by scoring and hence the DDC has given the topmost priority for complete the alignment as soon as possible.

This proposed Four Year District Transport Master Plan will help in implementing the rural road construction programs properly and efficiently, It will bring changes to the concept of implementing the programs and will discourage the present ad-hoc investment practices. It will also minimize the confusion prevailed among the stakeholders due to varied approaches of implementing agencies for different rural road sub projects. This proposed DTMP makes easy for DDC bodies in decision making process and helps to fulfill the expectations of beneficiaries promptly with right approach to their desires. The DTMP is a new beginning to the development of

rural roads in Dhankuta district. If it could be implemented successfully that gives a lesson and a message to other agencies who work in the rural infrastructure sector, to follow the DTMP seriously and to make their investments without any duplication in a more coordinated manner. The district level four year master plan was developed.

CHAPTER III
METHODOLOGY

3. Methodology

Research depends on different methodology. Methodology prescribes the research structure at all level. Therefore, methodology is a combination of tools and techniques of research. Methodology presents that which types of tools and techniques have used in the study.

This study had accessed on micro level analysis of investment of local government bodies on road construction and specifically, it has analyzed of people participation on rural roads construction at Kurule Tenupa VDC. This study has been valuable according to the objectives, although budget and sources are limited. The study has been on primary and secondary information. The study has presented the direct influence of road in the local people and comparatively presented the investment of local bodies to road construction. It also has analyzed people participation on roads construction after using bulldozers and excavators. This study has analyzed the local bodies' investment on rural roads for rural development. So, this study has become vital for local level.

3.1 Sources of Data

Primary and secondary sources of information have used in the study. The main part of research data are primary data. The data have collected through the field survey and direct observation. Secondary data has collected from the records of Rural Road Users' Committees, VDC office, DDC office, division road office and other govt. offices and different websites as per need. Similarly, the data have collected from the user group committee's members through interview with structured questionnaire. Local stakeholders' groups have asked and interviewed.

3.2 Data collection Procedure

The primary data have collected by observation, informal interview and structured questionnaire. The road condition had observed in the study area. Many data were collect by questionnaire method. More and valuable primary data were collect from the questionnaire. The study related other secondary data was collected by informal interview, like road construction, road developmental process etc. Stakeholders/ users' groups had taken from the VDC records. That type data had collected in the researchers' own involvement.

The secondary data had taken from VDC, DDC and other govt. offices. Similarly, different kinds of publication were use. The data of population and literacy rate had take from VDC profile record of Kurule Tenupa VDC. The related data of road construction had been collected from Dhankuta District Development Committee (DDC) record and others too. The record of local rural road users' committee had also included in the study.

3.3 Research Design

The present research has found out the investment on road construction at Kurule Tenupa VDC for past five fiscal years. For this purpose; descriptive, survey and field study research design are used on the study. The location, socio-economic condition and other factors had collected and presented by descriptive design. Field survey has used to examine the road arrival and development at the VDC.

3.4 Sample Size

This study has covered all the rural road users committee formulated by the local bodies at Kurule Tenupa VDC. The purpose of building users' committees for road construction is to create the situation of participation of local people to development. Altogether 13 users' committees had formulated at the VDC until this research period. All committees have taken as a study area and sample size for this research and the responsible persons had requested to provide information on structured questionnaire during survey. Similarly, three in each users' committees and two from stakeholders in each road area were taken as sample population for survey. Five respondents from each users' committees, altogether 65 respondents are asked to fill up questionnaire as a sample population for this research to obtain primary data related to rural roads. All respondents were stakeholders of rural roads. The sample size has covered the representation of dalit, janajati, men women etc as the theme of inclusiveness. So it was representative voice of local people.

3.5 Tools for analysis

As far as possible complete questionnaire during day had checked in the evening and if anything became urgent to be included, a separate paper had used to collect the information. The local unit reported by the respondent had converted into uniform and standardized units. The information thus obtain had presented using simple mathematical tools such as ratio, percentage and average. Simply descriptive method had used for analyzing data.

CHAPTER IV
ANALYSIS AND INTERPRETATION OF THE STUDY

4. Analysis and Interpretation of the Data

This chapter has comprised the analysis and interpretation of the data. The researcher has collected data from the field survey and questionnaire filled up. The data of local government investment on rural roads for five fiscal years and participation of local people on rural road construct at Kurule Tenupa VDC had obtained on this research. On the base of analyzing and interpretation, the researcher had drawn the conclusion, present the findings and provide the recommendation to local bodies.Systematically collected data have analyzed, interpreted and presented by using appropriate statistical tools, diagrams, charts, graphs bars and tables in this chapter. These presentations have shown in the following sub-headings:

4.1 Analysis of Lenth of Rural Roads at Kurule Tenupa VDC

Table 6: Length of Rural Roads at Kurule Tenupa VDC

S. N.	Name of the Roads	Lenth (KM)
1	Mudhebas-Kurule Tenupa Rural Road	6.2
2	Mauna Budhuk-Sisne Kurule Tenupa Rural Road	19
3	Gadhigaun-Banpala-Surungi Rural Road	8
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	5
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	11
6	Kurule Tenupa-Basantatar Rural Road	9
7	Malateni-Banspani-Dihitar Rural Road	6
8	Bajthala-Khani-Falametar Rural Road	8
9	Sogum-Pokhari-Banduke Danda Rural Road	4
10	Khani-Bhadaure Bhainse Rural Road	3
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	5
12	Gadhigaun-Higher Secondary School Rural Road	1
13	Simkuwa-Dhungana Gaun Rural Road	5
	Total	90.2

Source: VDC Record, Kurule Tenupa

Table-6 shows the existing rural roads at Kurule Tenupa VDC. Mudhebas-Kurule Tenupa Rural Road is in 6.2 KM long. It has crossed through ward no. 5, 9 and 2. Similarly, Mauna Budhuk-Sishne-Kurule Tenupa Rural Road is 19 KM long along ward no. 9, 1, 2, 4 and 8. Gadhigaun-Banpala-Surungi Rural Road is 8 KM long crossed the wards 2 & 3. Thuli Bhanjyang-Sogum-Gadhi Gaun Rural Road is 5 KM long and crosses through ward no. 6 & 2.

Mauna Budhuk-Pauwa-Gadhigaun Rural Road is 11 KM long and it crosses ward no. 2 & 9. Kurule Tenupa-Basantatar Rural Road is 9 KM long and it crosses ward no. 5 and 9. Malateni-Banspani-Dihitar Rural Road is 6 KM long and it crosses ward no. 1, 4 and 8. Bajthala-Khani-Falametar Rural Road is 8 KM long and it crosses ward no. 1. Sogum-Banduke Danda-Pokhari Rural Road is 4 KM long and it crosses ward no. 6, 5 and 2. Khani-Bhadaure Bhainse Rural Road is 3 KM long and it crosses ward no. 1 & 8. Bhanjyang-Simsar-Yovara Rural Road is 5 Km long and it crosses ward no. 5, 6 & 7. Gadhigaun_Higher Secondary School Rural Road is one KM long and it lies at ward no. 2. Simkuwa-Dhungana Gaun Rural Road is 5 KM long and it lies at ward no. 2, 4 & 8. Hence, altogether 90.2 KM rural road has extended at Kurule Tenupa VDC and all wards are networking by rural roads.

4.2 Analysis of Budget Allocation of Rural Roads at Kurule Tenupa VDC

4.2.1 Fiscal Year wise Budget Allocation for Rural Roads

The study has focused for budget allocation in different fiscal years. The observation had done for five fiscal years to road construction at Kurule Tenupa VDC. The detail budget allocation in each fiscal year has given in the following sub-point:

a. Budget Allocation on Fiscal Year 2065-66

Table 7: Budget Allocation on Fiscal Year 2065-66

S.N.	Name of the Roads	Budget Allocation from Local Bodies to Rural Road Construction			
		VDC	DDC	Other	Participation
1	Mudhebas-Kurule Tenupa Rural Road	175000	200000	0	0
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	400000		2000000	205369.2
3	Gadhigaun-Banpala-Surungi Rural Road	50000	0	0	43163.5
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	200000	0	0	135844.37
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	0	0	0	0
6	Kurule Tenupa-Basantatar Rural Road	0	0	0	0
7	Malateni-Banspani-Dihitar Rural Road	0	0	0	0
8	Bajthala-Khani-Falametar Rural Road	0	0	0	0
9	Sogum-Pokhari-Banduke Danda Rural Road	0	0	0	0
10	Khani-Bhadaure Bhainse Rural Road	0	0	0	0
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	0	0	0	0
12	Gadhigaun-Higher Secondary School Rural Road	0	0	0	0
13	Simkuwa-Dhungana Gaun Rural Road	0	0	0	0
	Total	825000	200000	2000000	384377.07

Source: VDC Record, Kurule Tenupa

Table 7 shows the budget allocation for roads by DDC and VDC in FY 2065-66. Only one Mudhebas Kurule Tenupa rural road became in priority by DDC in this year and the budget allocation to this road is 2 Lakhs by DDC. Similarly, VDC has allocated budget for 4 roads. The total investment of local bodies' budget to the roads in this FY 2065-66 is 34 lakhs 9 thousand 377 rupees. The amount of 20 Lakhs has been allocated from the central plan to Mauna Budhuk-Sisne-Kurule Tenupa Rural Road.

b. Budget Allocation on Fiscal Year 2066-67

Table 8: Budget Allocation on Fiscal Year 2066-67

S.N.	Name of the Roads	Budget Allocation from Local Bodies to Rural Road Construction			
		VDC	DDC	Other	Participation
1	Mudhebas-Kurule Tenupa Rural Road	50000	200000	0	0
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	97000	0	0	33336.2
3	Gadhigaun-Banpala-Surungi Rural Road	50000	0	0	20045.15
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	213500	0	0	81741.75
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	313000	0	0	0
6	Kurule Tenupa-Basantatar Rural Road	0	0	0	0
7	Malateni-Banspani-Dihitar Rural Road	25000	0	0	0
8	Bajthala-Khani-Falametar Rural Road	0	0	0	0
9	Sogum-Pokhari-Banduke Danda Rural Road	0	0	0	0
10	Khani-Bhadaure Bhainse Rural Road	0	0	0	0
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	0	0	0	0
12	Gadhigaun-Higher Secondary School Rural Road	0	0	0	0
13	Simkuwa-Dhungana Gaun Rural Road	0	0	0	0

S.N.	Name of the Roads	Budget Allocation from Local Bodies to Rural Road Construction			
		VDC	DDC	Other	Participation
	Total	748500	200000	0	135123.1

Source: VDC Record, Kurule Tenupa

Table 8 shows the budget allocation for roads by DDC and VDC in FY 2066-67. Only one Mudhebas Kurule Tenupa rural road became in regular priority by DDC in this year since last year and the budget allocation to this road is 2 Lakhs by DDC. Similarly, VDC has allocated budget for 6 roads and total budget allocation is 7 Lakhs 48 thousand 5 hundred. The total investment of local bodies' budget to the rural roads in this FY 2066-67 is 10 lakhs 83 thousand 623 rupees.

c. Budget Allocation on Fiscal Year 2067-68

Table 9: Budget Allocation on Fiscal Year 2067-68

S.N.	Name of the Roads	Budget Allocation from Local Bodies to Rural Road Construction			
		VDC	DDC	Other	Participation
1	Mudhebas-Kurule Tenupa Rural Road	63000	200000	500000	0
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	97000	100000	0	63294.43
3	Gadhigaun-Banpala-Surungi Rural Road	70000	0	47500	23442.6
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	150000	0	0	10956
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	100000	474000	42000	0
6	Kurule Tenupa-Basantatar Rural Road	75000	0	0	0
7	Malateni-Banspani-Dihitar Rural Road	70000	0	64920	0
8	Bajthala-Khani-Falametar Rural Road	40000	0	0	0
9	Sogum-Pokhari-Banduke Danda Rural Road	0	0	0	0
10	Khani-Bhadaure Bhainse Rural Road	70000	0	0	0
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	100000	0	0	0
12	Gadhigaun-Higher Secondary School Rural Road	50000	0	0	0
13	Simkuwa-Dhungana Gaun Rural Road	0	0	0	0
	Total	885000	774000	654420	97693.03

Source: VDC Record, Kurule Tenupa

Table 9 shows the budget allocation for roads by DDC and VDC in FY 2067-68. Three rural roads of Kurule Tenupa VDC have received budget from DDC in total amount of 7 Lakhs 74 thousand in this fiscal year. Similarly, VDC has allocated budget for 11 roads and total budget allocation is 8 Lakhs 85 thousand. The total investment of local bodies' budget to the rural roads in this FY 2067-68 is 24 lakhs 11 thousand 113 rupees including participation contribution of users'. There is an amount of 6 lakhs 54 thousand 420 rupees received from other agencies to road construction and people participation is equal to ninety seven thousand six hundred ninety three rupees for this FY.

d. Budget Allocation on Fiscal Year 2068-69

Table 10: Budget Allocation on Fiscal Year 2068-69

S.N.	Name of the Roads	Budget Allocation from Local Bodies to Rural Road Construction			
		VDC	DDC	Other	Participation
1	Mudhebas-Kurule Tenupa Rural Road	100000	0	500000	0
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	40000	241000	0	85000
3	Gadhigaun-Banpala-Surungi Rural Road	80000	0	0	15000
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	100000	0	0	50000
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	80000	0	0	0
6	Kurule Tenupa-Basantatar Rural Road	100000	500000	0	0
7	Malateni-Banspani-Dihitar Rural Road	70000	0	0	0
8	Bajthala-Khani-Falametar Rural Road	60000	500000	260000	0
9	Sogum-Pokhari-Banduke Danda Rural Road	25000	0	65000	0
10	Khani-Bhadaure Bhainse Rural Road	155000	0	0	0
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	80000	0	0	0
12	Gadhigaun-Higher Secondary School Rural Road	0	0	0	0
13	Simkuwa-Dhungana Gaun Rural Road	40000	0	0	0
	Total	930000	1241000	825000	150000

Source: VDC Record, Kurule Tenupa

Table 10 shows the budget allocation for roads by DDC and VDC in FY 2068-69. Three rural roads of Kurule Tenupa VDC have received budget from DDC in total amount of 12 Lakhs 41

thousand in this fiscal year. Similarly, VDC has allocated budget for 12 roads and total budget allocation is 9 Lakhs 30 thousand. The total investment of local bodies' budget to the rural roads in this FY 2068-69 is 31 lakhs 46 thousand including participation contribution of users'. There is an amount of 8 lakhs 25 thousand received from other agencies to road construction and people participation is equal to 1 Lakhs Fifty Thousand for this FY.

e. Budget Allocation on Fiscal Year 2069-70

Table 11: Budget Allocation on Fiscal Year 2069-70

S.N.	Name of the Roads	Budget Allocation from Local Bodies to Rural Road Construction			
		VDC	DDC	Other	Participation
1	Mudhebas-Kurule Tenupa Rural Road	0	0	0	0
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	100000	0	0	30000
3	Gadhigaun-Banpala-Surungi Rural Road	30000	0	0	0
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	0	0	0	0
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	20000	0	0	0
6	Kurule Tenupa-Basantatar Rural Road	0	0	0	0
7	Malateni-Banspani-Dihitar Rural Road	0	0	0	0
8	Bajthala-Khani-Falametar Rural Road	0	0	0	0
9	Sogum-Pokhari-Banduke Danda Rural Road	0	0	0	0
10	Khani-Bhadaure Bhainse Rural Road	0	0	0	0
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	0	0	0	0
12	Gadhigaun-Higher Secondary School Rural Road	0	0	0	0
13	Simkuwa-Dhungana Gaun Rural Road	0	0	0	0
	Total	150000	0	0	30000

Source: VDC Record, Kurule Tenupa

Table 11 shows the budget allocation for roads by DDC and VDC in FY 2068-69. No rural roads of Kurule Tenupa VDC have received budget from DDC in this fiscal year. Similarly, VDC has allocated budget for only 3 roads and total budget allocation is 1 Lakh 50 thousand. The total investment of local bodies' budget to the rural roads in this FY 2069-70 is 1 lakh 80

thousand including participation contribution of users'. people participation is equal to 30 thousand for this FY.

4.2.2 Road wise Budget Allocation for Rural Roads

a. Mudhebas-Kurule Tenupa Rural Road

Table 12: Budget Allocation for Mudebas Kurule Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	175000	50000	63000	100000	0	388000
DDC	200000	200000	200000	0	0	600000
LGCDP/Other	0	0	500000	500000	0	1000000
People Participation	144042.5	36062.4	0	0	0	180104.9
Total	519042.5	286062.4	763000	600000	0	2168105

Source: VDC Record, Kurule Tenupa

In the table 12, VDC and DDC have allocated some fund for this road in each fiscal year regularly. LGCDP under DDC has allocated 10 Lakhs budget for this road. Similarly, VDC has allocated 3 Lakhs 88 thousand budgets during five years and DDC had allocated 6 Lakhs for this road. Therefore, the total fund received in this road was 21 lakhs 68 thousand 105 rupees including people participation cost 1 lakhs 80 thousand 104 rupees. The users' committee at VDC level has used this budget. In fiscal year 069-70, the budget was null for this road.

b. Mauna Budhuk-Sishne-Kurule Tenupa Rural Road

Table 13: Budget Allocation for Mauna Budhuk Sisne Kurule Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	400000	97000	97000	40000	100000	734000
DDC	0	0	100000	241000	0	341000
LGCDP/Other	2000000	0	0	0	0	2000000
People Participation	205369.2	33336.2	63294.43	85000	30000	417000
Total	2605369.2	130336.2	260294.4	366000	130000	3492000

Source: VDC Record, Kurule Tenupa

The table 13 shows that this road had started to construct on fiscal year 2065-66. The total amount of 34 lakhs 92 thousand had invested until fiscal year 2069-70. More than 4 lakhs have contributed from the stakeholders as people participation. Total of 20 lakhs budget had come from the ministry directly through DDC in FY 2065-66. Every year, this road became under priority and does regularly maintenance the road as well as the level of road. VDC, DDC and LGCDP are major funding agencies and local people participation became major part of this

road. DDC had only allocated budget in two fiscal years. VDC had regularly allocated budget for this road. This road has known as district level registered road for budget allocation.

c. Gadhigaun-Banpala-Surungi Rural Road

Table 14: Budget Allocation for Gadhigaun Surungi Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	50000	50000	70000	80000	30000	280000
DDC	0	0	0	0	0	0
Other	0	0	47500	0	0	47500
People Participation	43163.5	20045.15	23442.6	15000	0	101651.3
Total	93163.5	70045.15	140942.6	95000	30000	429151.3

Source: VDC Record, Kurule Tenupa

The table 14 shows that this rural road Gadhigaun Banpala is local level road track. VDC office had regularly allocated budget for this road. Some amount had collected from local people and local organizations like Community Forestry. People participation also became major thing. To build this road, the users' committee used bulldozer to open the track and regularly did the same every year. Altogether four lakhs twenty nine thousand one hundred fifty one was invested for this road construction.

d. Thuli Bhanjyang-Sogum-Gadigaun Rural Road

Table 15: Budget Allocation for Bhanjyang Sogum Gadhigaun Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	200000	213500	150000	100000	0	663500
DDC	0	0	0	0	0	0
Other	0	0	0	0	0	0
People Participation	135844.37	81741.75	10956	50000	0	278542
Total	335844.37	295241.8	160956	150000	0	942042

Source: VDC Record, Kurule Tenupa

The table 15 shows that Thuli Bhanjyang-Sogum-Gadhigaun Rural Road has been VDC level local road. Local people are committed on user's committee and start to dig the road. Then, VDC had allocated some fund for this road to open track. Every year some fund from VDC and some collection from people participation had invested to extend the road. This is also not

completed road. In total, 9 lakhs 42 thousand 42 rupees fund had invested to dig this road until fiscal year 2068-69. Nevertheless, this fiscal year 069-70, no any fund has allocated for this road.

e. Mauna Budhuk-Pauwa-Gadhigaun Rural Road

Table 16: Budget Allocation for Mauna Pauwa Gadhigaun Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	0	313000	100000	80000	20000	513000
DDC	0	0	474000	0	0	474000
Other	0	0	42000	0	0	42000
People Participation	0	0	0	0	0	0
Total	0	313000	616000	80000	20000	1029000

Source: VDC Record, Kurule Tenupa

Table 16 shows that this road is also district level funding road in this VDC. This had started on fiscal year 2066-67 by allocating the budget from VDC office. Next year, DDC also supported to dig this road by the fund of LGCDP. VDC office had regularly allocated the budget for this road. All fund used to dig the road track by bulldozer. Some fund had collected from community forestry. There is no record of people participation though 30% of DDC funding budget have to add for people participation to construct this type of road.

f. Kurule Tenupa-Basantatar Rural Road

Table 17: Budget Allocation for Kurule Basantatar Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	0	0	75000	100000	0	175000
DDC	0	0	0	500000	0	500000
Other	0	0	0	0	0	0
People Participation	0	0	0	0	0	0
Total	0	0	75000	600000	0	675000

Source: VDC Record, Kurule Tenupa

Table 17 shows that this road had registered on fiscal year 2067-68. VDC office had allocated the budget first. Then, the VDC also allocated the budget next year and DDC had sent some

fund for this road. So, the total fund of 6 lakhs 75 thousand had invested for this road. This road is also under construction. All budget had invested to dig the road by bulldozer. This road is also district level listed road in Kurule Tenupa VDC.

g. Malateni-Banspani-Dihitar Rural Road

Table 18: Budget Allocation for Malateni Banspani Dihitar Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	0	25000	70000	70000	0	165000
DDC	0	0			0	0
Other		0	64920		0	64920
People Participation	0	0	0	0	0	0
Total	0	25000	134920	70000	0	229920

Source: VDC Record, Kurule Tenupa

Table 18 shows that this road had started on fiscal year 2066-67. The VDC office funded for this road. Then, the VDC office regularly allocated budget to this road for 3 years. The users' committee had used bulldozer to dig this road and the committee invested two lakhs twenty nine thousand nine hundred twenty rupees for this road. This is VDC level local road and track-opening work is continuing on this road.

h. Bajthala-Khani-Falametar Rural Road

Table 19: Budget Allocation for Bajthaa Khani Falametar Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	0	0	40000	60000	0	100000
DDC	0	0	0	500000	0	500000
Other	0	0	0	260000	0	260000
People Participation	0	0	0	0	0	0
Total	0	0	40000	820000	0	860000

Source: VDC Record, Kurule Tenupa

Table 19 shows that this road was also district level rural road. In this road, DDC had allocated five lakhs budget from the heading of target group budget specially dalit community. Local people had collected some fund for bulldozer used. This road had started on fiscal year 2067-

68. VDC had allocated forty thousand budgets for opening the track. Then, DDC and other resources collected and invested to dig this road. 8 lakhs 60 thousand had invested for this road until 068-69.

i. Sogum-Pokhari-Banduke Danda Rural Road

Table 20: Budget Allocation for Sogum Pokhari Banduke Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	0	0	0	25000	0	25000
DDC	0	0	0	0	0	0
Other	0	0	0	65000	0	65000
People Participation	0	0	0	0	0	0
Total	0	0	0	90000	0	90000

Source: VDC Record, Kurule Tenupa

Table 20 shows that this road had started from fiscal year 2068-69. Only one year, the budget allocated there. VDC had allocated 25 thousand budget and local resources of 65 thousand had invested for this road. This is local level rural road and by using bulldozer, only track had opened. After that, this road was not in priority of any funding agency. Only ninety thousand budget invested in this road.

j. Khani-Bhadaure-Bhainse Rural Road

Table 21: Budget Allocation for Khani Bhadaure Bhaise Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	0	0	70000	155000	0	225000
DDC	0	0	0	0	0	0
Other	0	0	0	0	0	0
People Participation	0	0	0	0	0	0
Total	0	0	70000	155000	0	225000

Source: VDC Record, Kurule Tenupa

Table 21 shows that this road is also VDC level rural road started on fiscal year 2067-68. VDC was main funding agency for this road. 70 thousand budget had allocated first to open the track of this road in fiscal year 2067-68 and 1 lakhs 55 thousand allocated next year. Therefore, the

total budget was 2 lakhs 25 thousand for this road construction. The users' committee of this road had invested all fund for bulldozer use.

k. Bhanjyang-Simsar-Yobara Dovan Rural Road

Table 22: Budget Allocation for Bhanjyang Simsar Yobara Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	0	0	100000	80000	0	180000
DDC	0	0	0	0	0	0
Other	0	0	0	0	0	0
People Participation	0	0	0	0	0	0
Total	0	0	100000	80000	0	180000

Source: VDC Record, Kurule Tenupa

Table 22 shows that this is also local level rural road started from fiscal year 2067-68. VDC office had allocated 1 lakh budget for this road in this year to open the track. Then, next year also the VDC added some budget for continue the road construction in fiscal year 2068-69. Therefore, 1 lakh 80 thousand fund from VDC office had invested in this road. All fund had expenditure for bulldozer use during this road construction. No record of public participation had kept in the users' committee.

l. Gadhigaun-Higher Secondary School Rural Road

Table 23: Budget Allocation for Gadhigaun High School Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	0	0	50000	0	0	50000
DDC	0	0	0	0	0	0
Other	0	0	0	0	0	0
People Participation	0	0	0	0	0	0
Total	0	0	50000	0	0	50000

Source: VDC Record, Kurule Tenupa

Table 23 shows that this road was sub track of the main road Mudhebas-Kurule Tenupa rural road. It was for the school to reach at school ground. VDC had funded 50 thousand to open the track up to school from the Mudhebas-Kurule Tenupa rural road. This had done in fiscal year 2067-68. After opening the track, no fund had allocated for this road from VDC. The head teacher and school management committee rather than new users' committee formation built this road during this fiscal year.

m. Simkuwa-Dhungana Gaun Rural Road

Table 24: Budget Allocation for Simkuwa Dhungana Gaun Rural Road

Funding Agency	FY 2065-66	FY 2066-67	FY 2067-68	FY 2068-69	FY 2069-70	Total
VDC	0	0	0	40000	0	40000
DDC	0	0	0	0	0	0
Other	0	0	0	0	0	0
People Participation	0	0	0	0	0	0
Total	0	0	0	40000	0	40000

Source: VDC Record, Kurule Tenupa

Table 24 shows clearly that this road was new one for the VDC. This had started on the demand base. In fiscal year 2068-69, VDC council meeting had allocated forty thousand funds for this road to open the track. After that, no any fund had invested there. Users' committee had built and it used bulldozer to open the track of this road. This was new built track among all roads in the VDC.

4.2.3 Budget Allocation by VDC for Rural Road Construction

a. Analysis of Audit Report on Fiscal Year 2065-66

Table 25: Budget Allocation by VDC on FY 2065-66

S.N.	Name of the Roads	Audit Report FY 2065-66	
		VDC	Participation
1	Mudhebas-Kurule Tenupa Rural Road	175000	144042.5
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	400000	205369.2
3	Gadhigaun-Banpala-Surungi Rural Road	50000	43163.5
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	200000	135844.37
	Total	825000	528419.57

Source: Audit Report, Kurule Tenupa VDC

Table 25 shows clearly that the VDC had allocated 8 lakhs 25 thousand budget for 4 rural roads construction recorded in the audit report of FY 2065-66 of Kurule Tenupa VDC. Similarly 5 lakhs 28 thousand 4 hundred 19 rupees had been collected from people participation in the FY 2065-66.

b. Analysis of Audit Report on Fiscal Year 2066-67

Table 26: Budget Allocation by VDC on FY 2066-67

S.N.	Name of the Roads	Audit Report FY 2066-67	
		VDC	Participation
1	Mudhebas-Kurule Tenupa Rural Road	50000	37062.4
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	97000	33336.2
3	Gadhigaun-Banpala-Surungi Rural Road	50000	20045.15
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	213500	81741.75
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	313000	85429.25
6	Malateni-Banspani-Dihitar Rural Road	25000	8634.65
	Total	748500	266249.4

Source: Audit Report, Kurule Tenupa VDC

Table 26 shows clearly that the VDC had allocated 7 lakhs 48 thousand 5 hundred budget for 4 rural roads construction recorded in the audit report of FY 2066-67 of Kurule Tenupa VDC. Similarly 2 lakhs 66 thousand 2 hundred 49 rupees had been collected from people participation in the FY 2066-67.

c. Analysis of Audit Report on Fiscal Year 2067-68

Table 27: Budget Allocation by VDC on Fiscal Year 2067-68

S.N.	Name of the Roads	Audit Report FY 2067-68	
		VDC	Participation
1	Mudhebas-Kurule Tenupa Rural Road	63000	33255.93
2	Mauna Budhuk-Sishne-Kurule Tenupa R. Road	97000	63294.43
3	Gadhigaun-Banpala-Surungi Rural Road	70000	23442.6
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	15000	10956
5	Kurule Tenupa-Basantatar Rural Road	75000	77491.5
6	Malateni-Banspani-Dihitar Rural Road	70000	35620.1
7	Bajthala-Khani-Falametar Rural Road	40000	27226.4
8	Khani-Bhadaure Bhainse Rural Road	70000	35620.1
9	Bhanjyang-Simsar-Yobara Dovan Rural Road	263500	83255.93
10	Gadhigaun-Higher Secondary School Rural Road	50000	28408.75
	Total	813500	418571.7

Source: Audit Report, Kurule Tenupa VDC

Table 27 shows clearly that the VDC had allocated 8 lakhs 13 thousand 5 hundred budget for 10 rural roads construction recorded in the audit report of FY 2067-68 of Kurule Tenupa VDC. Similarly 4 lakhs 18 thousand 5 hundred 71 rupees had been collected from people participation in the FY 2067-68.

d. Analysis of Audit Report on Fiscal Year 2068-69

Table 28: Budget Allocation by VDC on FY 2068-69

S.N.	Name of the Roads	Audit Report FY 2068-69	
		VDC	Participation
1	Mudhebas-Kurule Tenupa Rural Road	100000	30000
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	40000	85000
3	Gadhigaun-Banpala-Surungi Rural Road	80000	15000
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	100000	50000
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	80000	0
6	Kurule Tenupa-Basantatar Rural Road	100000	0
7	Malateni-Banspani-Dihitar Rural Road	70000	0
8	Bajthala-Khani-Falametar Rural Road	60000	0
9	Sogum-Pokhari-Banduke Danda Rural Road	25000	0
10	Khani-Bhadaure Bhainse Rural Road	155000	0
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	80000	0
12	Simkuwa-Dhungana Gaun Rural Road	40000	0
	Total	930000	180000

Source: Audit Report, Kurule Tenupa VDC

Table 28 shows clearly that the VDC had allocated 9 lakhs 30 thousand budget for 12 rural roads construction recorded in the audit report of FY 2068-69 of Kurule Tenupa VDC. Similarly 1 lakhs 80 thousand 5 hundred 71 rupees had been collected from people participation in the FY 2067-68.

4.2.6 Analysis of Total Budget Allocation to Rural Roads at Kurule Tenupa VDC

Table 29: Total Budget Allocation in FY 2065/66-2069/70 at Kurule Tenupa VDC

S.N.	Name of the Roads	Total				
		VDC	DDC	Other	Participation	Total
1	Mudhebas-Kurule Tenupa Rural Road	388000	600000	1000000	244360.8	2232360.83
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	734000	341000	2000000	416999.8	3491999.83
3	Gadhigaun-Banpala-Surungi Rural Road	280000	0	47500	101651.3	429151.25
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	663500	0	0	278542.1	942042.12
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	513000	474000	42000	0	1029000
6	Kurule Tenupa-Basantatar Rural Road	175000	500000	0	0	675000
7	Malateni-Banspani-Dihitar Rural Road	165000	0	65000	0	230000
8	Bajthala-Khani-Falametar Rural Road	100000	500000	260000	0	860000
9	Sogum-Pokhari-Banduke Danda Rural Road	25000	0	65000	0	90000
10	Khani-Bhadaure Bhainse Rural Road	225000	0	0	0	225000
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	180000	0	20000	0	200000
12	Gadhigaun-Higher Secondary School Rural Road	50000	0	0	0	50000
13	Simkuwa-Dhungana Gaun Rural Road	40000	0	0	0	40000
	Total	3538500	2415000	3479420	1041554	10474474

Source: Records of Kurule Tenupa VDC

Table 31 presents the total of budget allocation by VDC office for rural roads construction during five fiscal years. Total 35 lakhs 38 thousand 5 hundred had been allocated by VDC to road construction during five fiscal years. Similarly, there was people participation as 10 lakhs 41 thousand 5 hundred 54 rupees for road construction. DDC fund was 24 lakhs 15 thousand and other agencies funding was 34 lakhs 79 thousand 4 hundred 20 rupees. In the table, the total

investment of local bodies budget and local people participation became 104 lakhs 74 thousand 4 hundred 74 rupees during 5 fiscal years to construct 13 rural roads.

4.2.7 Analysis of Budget Allocation by Users' Committee for Bull Dozer to Construct Rural Road at Kurule Tenupa VDC

Table 30: Budget Allocation for Bull Dozer in FY 2065/66-2069/70

S.N.	Name of the Roads	Lenth (KM)	Total Budget Allocation	Budget for Bull Dozer	Other Expenses
1	Mudhebas-Kurule Tenupa Rural Road	6.2	2232360.83	360043	1872317.83
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	19	3491999.83	619000	2872999.83
3	Gadhigaun-Banpala-Surungi Rural Road	8	429151.25	189000	240151.25
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	5	942042.12	273500	668542.12
5	Mauna Budhuk-Pauwa-Gadhigaun R. Road	11	1029000	600000	429000
6	Kurule Tenupa-Basantatar Rural Road	9	675000	360043	314957
7	Malateni-Banspani-Dihitar Rural Road	6	230000	230000	0
8	Bajthala-Khani-Falametar Rural Road	8	860000	600000	260000
9	Sogum-Pokhari-Banduke Danda Rural Road	4	90000	83000	7000
10	Khani-Bhadaure Bhainse Rural Road	3	225000	200000	25000
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	5	200000	200000	0
12	Gadhigaun-Higher Secondary School R. Road	1	50000	50000	0
13	Simkuwa-Dhungana Gaun Rural Road	5	40000	0	40000
	Total	90.2	10494554.03	3764586	6729968.03

Source: Field Survey, 2070, Kurule Tenupa VDC

Table 32 shows that there are 12 roads' users' committee had used bull dozer to dig roads. Only one road didn't use bull dozer for digging the road. The total investment of 37 lakhs 64 thousand 5 hundred 86 rupees was spent for Bull Dozer to dig the roads and 67,29 thousand 9 hundred 68 was for another expenses.

4.2.8 Analysis of Time of Bull Dozer Used to Construct Rural Road

Table 31: Time of Bull Dozer used by Users' Committee to Construct Roads

S.N.	Name of the Roads	Time of Dozer used (Hrs)
1	Mudhebas-Kurule Tenupa Rural Road	103
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	178
3	Gadhigaun-Banpala-Surungi Rural Road	54
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	78
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	172
6	Kurule Tenupa-Basantatar Rural Road	200
7	Malateni-Banspani-Dihitar Rural Road	66
8	Bajthala-Khani-Falametar Rural Road	172
9	Sogum-Pokhari-Banduke Danda Rural Road	24
10	Khani-Bhadaure Bhainse Rural Road	58
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	81
12	Gadhigaun-Higher Secondary School Rural Road	15
13	Simkuwa-Dhungana Gaun Rural Road	0
	Total	1201

Source: Field Survey, 2070, Kurule Tenupa VDC

Table 33 shows that there was Bull Dozer used for about 1201 hours time to dig roads by users' committees. Only 12 roads used Dozer to dig. One road didn't use the Dozer. Among 12 Rural Roads, the highest time hour of Dozer used was 200 hours in Kurule Tenupa-Basantatar Rural Road and the lowest time hour of Dozer used was 15 hours in Kurule Tenupa Higher SS Rural Road.

4.3 Analysis of People Participation on Users' Committee for Road Construction

4.3.1 Analysis of People Participation by Sex

Table 32: People Participation on Users' Committees of Rural Roads

S.N.	Name of the Roads	People participation on Users' Committees		
		Female	Male	Total
1	Mudhebas-Kurule Tenupa Rural Road	3	6	9
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	5	8	13
3	Gadhigaun-Banpala-Surungi Rural Road	4	5	9
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	3	6	9
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	3	6	9
6	Kurule Tenupa-Basantatar Rural Road	3	4	7
7	Malateni-Banspani-Dihitar Rural Road	3	6	9
8	Bajthala-Khani-Falametar Rural Road	4	7	11
9	Sogum-Pokhari-Banduke Danda Rural Road	2	5	7
10	Khani-Bhadaure Bhainse Rural Road	3	6	9
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	3	6	9
12	Gadhigaun-Higher Secondary School Rural Road	2	7	9
13	Simkuwa-Dhungana Gaun Rural Road	3	6	9
	Total	**41**	**78**	**119**

Source: Field Survey, 2070, Kurule Tenupa VDC

Table 34 shows that there was 13 users' committees formulated for constructing the rural roads. All together 119 members are committed in the users' committees. Among them, 41 woman are represented and 78 men are participated in the committees.

4.3.2 Analysis of People Participation by Ethnic Groups

Table 33: People Participation on Users' Committees by Ethnic Groups

S.N.	Name of the Roads	People participation on Users' Committees for Road Construction			
		Dalit	Janajati	Others	Total
1	Mudhebas-Kurule Tenupa Rural Road	0	6	3	9
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	1	4	8	13
3	Gadhigaun-Banpala-Surungi Rural Road	1	7	1	9
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	0	9	0	9
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	1	7	1	9
6	Kurule Tenupa-Basantatar Rural Road	0	2	5	7
7	Malateni-Banspani-Dihitar Rural Road	0	3	6	9
8	Bajthala-Khani-Falametar Rural Road	3	4	4	11
9	Sogum-Pokhari-Banduke Danda Rural Road	0	7	0	7
10	Khani-Bhadaure Bhainse Rural Road	0	8	1	9
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	1	8	0	9
12	Gadhigaun-Higher Secondary School Rural Road	1	5	3	9
13	Simkuwa-Dhungana Gaun Rural Road	1	2	6	9
	Total	**9**	**72**	**38**	**119**

Source: Field Survey, 2070, Kurule Tenupa VDC

Table 35 presents the disaggregate data of users' committee participation. There are 9 Dalit, 72 Janajati and 38 Other communities participation on the committee .All together 119 members are committed in the 13 users' committees.

4.4 An Analysis of Road users' Response toward Road Construction

The researcher has conduct primary data collection through survey with structured questionnaire. 3 respondents are selected from each users' committee and 2 respondents from surrounding consumers of road. The result of the survey has been represented below:

4.4.1 Response about Condition of Rural Roads

Table 34: Condition of Rural Roads at VDC

What is the Condition of Rural Roads at Kurule Tenupa VDC?		
Categories	No. of Respondents	Percentage (%)
BT	0	0.00
GR	0	0.00
ER	65	100.00
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 36 shows that all 65 respondents said about the condition of the rural road is earthen category. All roads are earthen and no road has become gravel and black top at Kurule Tenupa VDC during this five fiscal year.

4.4.2 Regular Meeting of of Rural Roads' Committees

Table 35: Meeting of Rural Roads' Users' Committees

Is Rural Road users' committee met regularly its meeting or not?		
Categories	No. of Respondents	Percentage (%)
Yes	44	67.69
No	5	7.69
Don't Know	16	24.62
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 37 shows that the respondents response about the regular meeting of users' committee. 67 percent respondents said Yes, 8 percent said No and 24 percent said don’t know.

4.4.3 Record Keeping of Road Users' committees

Table 36: Users' Committee Recording System of Rural Roads

Is Rural Road Users' Committee kept its' Records in the office?		
Categories	No. of Respondents	Percentage (%)
Yes	44	67.69
No	5	7.69
Don't Know	16	24.62
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 38 shows that the respondents response about the record keeping culture of users' committee of rural roads. About 67 percent respondents said Yes, 8 percent said No and 24 percent said don't know.

4.4.4 Keeping hoarding board on the spot of Road Construction or not?

Table 37: Placement of Hoarding Boards at Rural Roads

Is there hoarding board in the spot of the road planning work?		
Categories	No. of Respondents	Percentage (%)
yes	12	18.46
No	51	78.46
Don't Know	2	3.08
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 39 shows that the respondents response about the hoarding boards kept by users' committee on the spot of rural road construction. About 18 percent respondents said Yes, 78 percent said No and 3 percent said don't know.

4.4.5 Using Bull Dozer for Road Construction by Road Users' committees

Table 38: Use of Dozer to Construct Rural Road

Is there used of Dozer in the road construction period?		
Categories	No. of Respondents	Percentage (%)
Yes	58	89.23
No	7	10.77
Don't Know	0	0.00
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 40 shows that the respondents response about the bull dozer used by users' committee of rural roads. About 89 percent respondents said Yes and 11 percent said No.

4.4.6 Social Audit of Road Users' committees have done or not ?

Table 39: Social Audit of Rural Roads

Is Road Users' committee done social audit at the planning spot?		
Categories	No. of Respondents	Percentage (%)
Yes	52	80.00
No	8	12.31
Don't Know	5	7.69
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 41 shows that the respondents response about the social audit at planning spot of rural roads. About 80 percent respondents said Yes, 12 percent said No and 8 percent said don't know.

4.4.7 Participation of People on Road Construction with Road Users' committees

Table 40: Participation of People to Construct Rural Roads

Have you volunteerly participated on road construction?		
Categories	No. of Respondents	Percentage (%)
Yes	52	80.00
No	13	20.00
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 42 shows that the respondents response about volunteerly participation on road construction. About 80 percent respondents said Yes, 20 percent said No.

4.4.8 Information of the Budget Allocation for Rural Roads at Local Level

Table 41: Information about Budget Allocation to Rural Roads

Do you know about the budget allocation by local bodies?		
Categories	No. of Respondents	Percentage (%)
Yes	34	52.31
No	31	47.69
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 43 shows that the respondents response about the budget allocation by local bodies to rural roads. About 52 percent respondents said Yes, 48 percent said No.

4.4.9 Information of the technical estimate of Road Construction

Table 42: Information about Technical Estimate of Rural Road Construction

Do you know about the Technical Estimate of Road Construction?		
Categories	No. of Respondents	Percentage (%)
Yes	55	84.62
No	3	4.62
Don't Know	7	10.77
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 44 shows that the respondents response about the technical estimate of road construction of rural roads. About 84 percent respondents said Yes, 5 percent said No and 11 percent said don't know.

4.4.10 Completion of time of Road Construction by Road Users' committees

Table 43: Completion of Construction Projects at Rural Roads

Are the road construction projects completed on time at Kurule Tenupa VDC?		
Categories	No. of Respondents	Percentage (%)
Yes	35	53.85
No	30	46.15
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 45 shows that the respondents response about the completion of road construction on time. About 54 percent respondents said Yes and 46 percent said No.

4.4.11 Role of Road Users' committees for Road Construction

Table 44: Activities of Users' Committees at Rural Roads

Are the Road Users' Committees active or not?		
Categories	No. of Respondents	Percentage (%)
Active	39	60.00
Not active	15	23.08
Don't Know	11	16.92
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 46 shows that the respondents response about the users' committees activeness. About 60 percent respondents said active, 23 percent said Not active and 16 percent said don't know.

4.4.12 Sustainability of Rural Roads at VDC level

Table 45: Sustainability of Rural Roads

Are the rural roads sustainable or not?		
Categories	No. of Respondents	Percentage (%)
Yes	41	63.08
No	24	36.92
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 47 shows that the respondents response about the sustainable condition of roads. About 63 percent respondents said Yes and 37 percent said No.

4.4.13 Caution adaptation by Road Users' committees for Preserving Rural Roads

Table 46: Caution to Preservation of Rural Roads

What cautions has the users' committee adopted for preserving rural road ?		
Categories	No. of Respondents	Percentage (%)
Repairing	14	21.54
Planting	26	40.00
Draining	8	12.31
Not any plan	17	26.15
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 48 shows that the respondents response about the cautions adopted for preserving rural roads by users' committees. About 22 percent respondents pointed out the regular repairing needed. 40 percent pointed out planting trees both side of the roads, 8 percent said Draining is necessary and 26 percent said they have no plan to adopt caution.

4.4.14 Major Problems to Construct Rural Roads Faced by Road Users' committees

Table 47: Major Problems of Rural Roads Construction

What are the major problems to construct rural roads?		
Categories	No. of Respondents	Percentage (%)
Not receiving budget on time	33	50.77
Lack of labours and use of dozer	5	7.69
Problem of Management of Financial Recording	8	12.31
Misuse of Budget by elite groups	5	7.69
Budget clearance problem	11	16.92
Lack of Monitoring Mechanism	3	4.62
Total	65	100.00

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 49 shows that the respondents response about the problems to construct rural roads. About 50 percent respondents said the major problem was not receiving budget on time from local bodies. 17 percent said the problem of budget clearance to local bodies. Similarly, management of financial reporting was another problem said by 12 percents respondents. Lack of monitoring mechanism, misuse of budget by elite groups, lack of labours and use of dozer are also major problem they indicated.

4.5 Analysis of Respondents by Sex

Table 48: Number of Respondents by Sex

S.N.	Name of the Roads	Number of Respondents		
		Female	Male	Total
1	Mudhebas-Kurule Tenupa Rural Road	2	3	5
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	1	4	5
3	Gadhigaun-Banpala-Surungi Rural Road	1	4	5
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	1	4	5
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	2	3	5
6	Kurule Tenupa-Basantatar Rural Road	2	3	5
7	Malateni-Banspani-Dihitar Rural Road	1	4	5
8	Bajthala-Khani-Falametar Rural Road	2	3	5
9	Sogum-Pokhari-Banduke Danda Rural Road	1	4	5
10	Khani-Bhadaure Bhainse Rural Road	1	4	5
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	1	4	5
12	Gadhigaun-Higher Secondary School Rural Road	1	4	5
13	Simkuwa-Dhungana Gaun Rural Road	1	4	5
	Total	**17**	**48**	**65**

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 50 shows that the respondents are altogether 65. Among them, 17 female and 48 males taken sample from each users' groups from 13 rural roads users' committees of Kurule Tenupa VDC.

4.6 Analysis of Respondents by Ethnic Groups

Table 49: Number of Respondents by Ethnic Groups

S. N.	Name of the Roads	Number of Respondents			
		Dalit	Janajati	Others	Total
1	Mudhebas-Kurule Tenupa Rural Road	0	2	3	5
2	Mauna Budhuk-Sishne-Kurule Tenupa Rural Road	1	2	2	5
3	Gadhigaun-Banpala-Surungi Rural Road	1	3	1	5
4	Thuli Bhanjyang-Sogum-Gadigaun Rural Road	0	5	0	5
5	Mauna Budhuk-Pauwa-Gadhigaun Rural Road	1	3	1	5
6	Kurule Tenupa-Basantatar Rural Road	0	2	3	5
7	Malateni-Banspani-Dihitar Rural Road	0	2	3	5
8	Bajthala-Khani-Falametar Rural Road	1	2	2	5
9	Sogum-Pokhari-Banduke Danda Rural Road	0	5	0	5
10	Khani-Bhadaure Bhainse Rural Road	0	4	1	5
11	Bhanjyang-Simsar-Yobara Dovan Rural Road	0	5	0	5
12	Gadhigaun-Higher Secondary School Rural Road	1	1	3	5
13	Simkuwa-Dhungana Gaun Rural Road	1	1	3	5
	Total	**6**	**37**	**22**	**65**

Source: Field Survey, 2070, Kurule Tenupa VDC

The table 51 shows that the respondents are altogether 65. Among them, 6 dalit, 37 janajati and 22 others taken sample population for survey. 13 rural roads users' committees of Kurule Tenupa VDC are the research area.

CHAPTER- V
FINDINGS AND RECOMMENDATIONS

5. Findings and Recommendations

The principal aims of the present study were to find out the budget allocation on rural road construction at VDC for rural development and to access the participation of local people on rural road construction at Kurule Tenupa VDC of Dhankuta district. The data has carefully presented in tables, then analyzed, and interpreted under different headings and sub-headings to accomplish the objectives.

5.1 Findings

On the basis of the analysis and interpretation of the data, the findings of the study can be summarized in the following points:

Finding 1: There are 13 rural roads and the total lenth of the roads is about 90.2 KM constructed by users' committees at Kurule Tenupa VDC with the support of local bodies and people participation.

Finding 2: There are 4 roads in priority to allocate budget from VDC council meeting in FY 2065-66 and DDC had allocated budget for only one road to this VDC in the year. There are 6 roads in priority to allocate budget from VDC council meeting in FY 2066-67 and DDC had allocated budget for only one road to this VDC in the year also.

Finding 3: There are 11 roads in priority to allocate budget from VDC council meeting in FY 2067-68 and DDC had allocated budget for 3 roads to this VDC in the year. Similarly, there are 12 roads in priority to allocate budget from VDC council meeting in FY 2068-69 and DDC had allocated 12 lakhs 41 thousand budget for 3 roads to this VDC in the year.

Finding 4: There are 3 roads in priority to allocate budget from VDC council meeting in FY 2069-70 and DDC had allocated no any fund for this VDC in the year.

Finding 5: In five fiscal years since 2065-66 up to 2069-70, the total budget invested in the Mudhebas Kurule Tenupa Rural Road was 21 Lakhs 68 thousand 105 rupees, though, in fiscal year 069-70, the budget was null for this road.

Finding 6: In five fiscal years since 2065-66 up to 2069-70, the total budget invested in the Mauna Budhuk-Sishne-Kurule Tenupa Rural Road was 34 Lakhs 92 thousand. DDC had only allocated budget in two fiscal years. the total budget invested in this road was 9 Lakhs 42 thou-

sand 42 rupees. VDC had regularly allocated budget for Bhanjyang-Sogum-Gadhigaun Rural Road for 4 years but last fiscal year 069-70, no fund allocated for this road.

Finding 7: In the Mauna Budhuk-Pauwa-Gadhigaun Rural Road, during four fiscal years since 2066-67 up to 2069-70, the total budget invested in road was 10 Lakhs 29 thousand. VDC had regularly allocated budget for this road for 4 years but first fiscal year 065-66, no fund allocated for this road. Similarly, In the Kurule Tenupa-Basantatar Rural Road, only two fiscal years since 2067-68 and 2068-69, the total budget invested in this road was 6 Lakhs 75 thousand. No regular budgeting for this road has been seen and in the Malateni-Banshpani-Dihitar Rural Road, only three fiscal years since 2066-67 to 2068-69, the total budget invested in this road was 2 Lakhs 29 thousand 9 hundred 20 rupees.

Finding 8: In the Kurule Tenupa Higher Secondary School Rural Road, the total budget allocated for this road was 50 thousand to construct the road. The local bodies had not invested budget for this road regularly and no people participation has been recorded. All budget was used for bull Dozer to dig the road. In the Simkuwa-Dhungana Gaun Rural Road, the total budget allocated for this road was 40 thousand to construct the road. All budget was used for digging the road via Bull Dozer in this road.

Finding 9: In the audit report record during the four FY years', the VDC had allocated 30 lakhs 47 thousand for road construction. In FY 2068-69, the highest allocation of budget was 9 lakhs 30 thousand and the number of roads was 12. Similarly, in FY 2066-67, the lowest allocation of budget was 4 lakhs 78 thousand 5 hundred invested for 6 roads. In 2065-66, only 4 rural roads had got budget from VDC. In the same way, the total participation fund was 13 lakhs 93 thousand 2 hundred 40 rupees. The highest participation was in FY 2065-66 and the lowest was in FY 2068-69.

Finding 10: The total budget of 35 lakhs 38 thousand 5 hundred had been invested by VDC to road construction. Similarly, in the record of users' committee, there was people participation as equal to 10 lakhs 41 thousand 5 hundred 54 rupees for road construction. In the same way, the total budget was 36 lakhs 15 thousand during five fiscal years. Similarly 6 lakhs 31 thousand 3 hundred 60 rupees was the contribution of people participation during five fiscal years.

Finding 11: There was Bull Dozer used for about 1201 hours time to dig roads by users' committees during five fiscal years. Only 12 roads had used Dozer to dig the roads. One road didn't use the Dozer. Among 12 Rural Roads, the highest time hour of Dozer used was 200 hours in Kurule Tenupa-Basantatar Rural Road and the lowest time hour of Dozer used was 15 hours in Kurule Tenupa Higher SS Rural Road.

Finding 12: All rural roads are earthen categories. Only 68% respondents said the users' committees kept the records of the Rural Roads. Only 18 percent respondents know about hoarding boards of rural roads. 90% respondents said there were bull dozer used for road construction. 80% said there were public audit in the roads committees and their participation on road construction. 52 percent said they know about budget allocation for rural roads and 84 percent said they are known about estimate of rural road construction.

Finding 13: About 22 percent respondents pointed out the regular repairing needed to preserve rural roads and make them sustainable. 40 percent pointed out planting trees both side of the roads, 12 percent said Draining is necessary and 26 percent said they have no plan to adopt caution.

Finding 14: About 50 percent respondents said the major problem was not receiving budget on time from local bodies. 17 percent said the problem of budget clearance to local bodies. Similarly, management of financial reporting was another problem said by 12 percents respondents. Lack of monitoring mechanism, misuse of budget by elite groups, lack of labours and use of dozer are also major problem they indicated.

Finding 15: Road development is basic necessary and first priority for rural development. Local people are actively participated to construct rural roads as well as rural development. Rural Road is first priority to invest local resources to development of local bodies.

5.2 Conclusions

The following conclusions have emerged from the study:

Kurule Tenupa VDC is a remote area of Dhankuta district. It is far from the headquarter and low access of all development indicators in the village like electricity, drinking water, transportation, market centres, industries, etc. There are some practices to do extention of rural roads in the village. More than a dozen rural roads are started to dig and try to con-

tinue the roads to construct. VDC and DDC has been supporting to users' committees for constructing roads at the village. People participation is also encouraged for this social work.

Roads are the number one priority for local communities and, rightly so, considering the spatial nature of poverty in rural areas. However, if roads cannot be plied or the poor do not adequately benefit from them, the roads are not developed properly and the present high priority allocated to them can itself become a source of problems. LB roads are more pro-poor than EB roads and can provide employment to the poor. Hence, rural road construction can be made into a pro-poor initiative with the use of LB technology.

Existing government processes, particularly budgetary processes, result in long delays in fund release, which limits the working season for road projects. This is not favorable for construction, especially with LB technology, and instead encourages or compels the choice of EB technology for 'last-minute' work. Current price trends (threefold increase in wages over the last 10 years and more than 50 percent reduction in heavy equipment rental rates in the same period) have increased the economic feasibility of EB technology.

The use of EB technology has a strong correlation with the un-sustainability of roads. This is caused by, amongst other things, higher risk of too-steep gradients; lack of adequate water-draining structures; an absence generally of road stabilizing and protection structures; significantly higher environmental damage which causes high environmental costs; and a high risk/occurrence (about five times higher) of landslides compared to LB roads. There are certain situations when EB technology can be efficient and less damaging. These situations are in:

(i) road widening;

(ii) ridge alignments; and

(iii) long alignments through unpopulated areas that require the establishment of labour camps under LB methodology.

Similarly, EB technology allows for breaker attachments on excavators, which can be more efficient for breaking very hard rock than LB technology that often uses skilled labourers for tedious chisel-cutting. EB technology can be economical and is faster, but is still not necessarily associated with high rates of return. In contrast to this, the returns

from LB methods are about 30 percent higher than for EB methods. In Nepal, most non-functioning and seasonal roads have been constructed using EB technologies.

There are several known instances of corruption and other financial abuses, but none have been formally investigated or penalized. This indicates a clear state of impunity and lack of financial discipline. The risk of corruption is significantly higher with EB methods, since beneficiaries and communities in general have far less involvement in decision making and in monitoring of alignment selection, tendering for work, and actual construction. Whenever and wherever possible, a blend of LB and EB technologies should be used for rural road construction to harness the positive features of each technology—cheaper and faster from EB technology, and sustainable and poverty-reducing from LB technology.

5.3 Recommendations

5.3.1 Policies Recommendation

a. Road planning

- The road to be built must be planned in a participatory way and should be a part of the DTMP.
- No road should be financed by local bodies, unless it is included in the DTMP.
- Special care should be taken that decision-making processes on road prioritization, the DTMP and road alignments are participatory and transparent.
- Community auditing needs to be included and an appeals process should be established.
- Feasibility and environmental assessments should be mandatory, and problems highlighted in environmental reports must be resolved within the road design.

b. Fund management

- No roads should be started without sufficient funds at hand or without assured funding sources.
- Fund support from local bodies and the centre should be disbursed at the beginning of the lean season (November). For this, the following changes should be made.
- Change the fiscal calendar in a way that allows development funds to be available for use at the local level by about the middle of November.

- Expedite the budget release process. Abolish the budget-freezing process at the financial year-end for development work.
- For road projects, an ensured multi-year budget should be allocated, so that the financial grant system does not negatively impact the capacity of local government bodies to construct roads.

c. Preparing the community

- Social mobilization of communities in the influence area of roads should be mandatory for road building.
- This is important for developing local ownership and mitigating intentional tampering.
- Social mobilization messages and modes of delivery should be tailored to each community, depending on its level of social capital.

d. Road construction

The use of bulldozers and rock-blasting materials should be discouraged, as the tremor effect they produce impacts on surrounding geological formations and significantly increases the probability of landslides. Controlled blasting techniques, which have a higher efficiency and lower cost because of substantial savings on blasting materials, can be considered. The force of the blast should be directed outward so that remaining rock faces are stable. These techniques can also be used in combination with LB methods, if compressors and jack hammers are made available. LB technology should be encouraged and particularly emphasized in poverty-ridden areas. However, to harness some of the positive features of EB technology, the use of excavators should be allowed for

(i) road widening;

(ii) ridge alignments (see photo below); and

(iii) long alignments that require labour camps under LB methodology.

Similarly, breaker attachments can be time- and cost-efficient for breaking rocks over long spells of very hard rock that require tedious chisel-cutting under LB methodology. However, equipment use should be duly complemented by water management structures (side and cross drains), other protection structures and bioengineering works in critical areas.

The Department of Local Infrastructure Development and Agricultural Roads and local bodies should jointly institute a system of annual policy auditing for rural road construction by local bodies to assess policy compliance. Any failure to comply with policy should entail appropriate sanctions such as budget cuts.

e. Road operation and maintenance

Operational guidelines need to be developed to ensure that transport does not damage roads and the maximum weight limit is enforced. This is especially relevant in relation to criteria for road closure, e.g., during the monsoon, when road surfaces are easily damaged. A concerted effort is needed to secure the participation of beneficiaries in all steps of the road project cycle in order to ensure ownership of the road and contributions for road maintenance. Different road maintenance models will need to be developed for different road standards and conditions to allow for communities to contribute within their capacity.

f. Enhancing benefits from the road

Public service packages in agriculture and the social sectors (health, education, etc.) should be part of road design, so that benefits from the road are enhanced to their full potential. This is built into some projects funded by donors such the ADB and World Bank, but not for roads built by local bodies themselves. Public forest and land needs to be protected from exploitation by (often) outsiders, who have easy access to natural resources through the expanding road network.

Other Issues Related to Rural Roads:

- Rent-seeking practices are anti-poor and should be strictly controlled. For this, public auditing should be mandatory.
- One of the reasons for unsustainable infrastructure at the local level is the shortage of technical manpower.
- Although resource availability within VDCs has increased by up to 10 times, the availability of technical manpower has remained the same.
- Therefore, a separate budget head for the outsourcing of technical manpower, e.g., for survey, design, construction and/or supervision, should be provided in grant funds.

- In addition, the possibility of using public–private partnerships for road development should be explored and tested.

5.3.2 Some Other Recommendations

On the basis of the findings of the study, some recommendations for local government bodies have been suggested below:

- The local bodies should maintain the record of all users' committees of all plannings at VDC level.
- Roads must be planned in a participatory way and should be a part of the District Transport Master Plan (DTMP).
- No road should be financed by local bodies, unless it is included in the DTMP. Special care should be taken that decision-making processes on road prioritization, the DTMP and road alignments are participatory and transparent.
- Community auditing needs to be instigated and an appeals process should be established.
- Feasibility and environmental assessments should be mandatory, and problems highlighted in environmental reports must be resolved within the road design.
- All rural roads should have adequate operation and maintenance funds for timely maintenance. Such funds must be complemented by beneficiary contributions raised from the increased income resulting from the road. A system of reasonable taxing of vehicles and goods movement can also be developing for this purpose. The tariff fixed for such purposes should not be specifing as an absolute amount in the Local Self-Governance Rules but should be left for local bodies to decide for themselves.
- Local road maintenance skills should be developing through training and work during road construction.

It is recommended that, in the new state structure for Nepal, the current ilaka are defined as the local body equivalent to the current VDC. If the ilaka is taken as the smallest local administrative body, then it will have adequate resources and capacity to have its own technical unit.

There are currently about 700 ilaka compared to 3,915 VDCs. The foreseen transformation of democratic and public institutions in Nepal provides a good opportunity for developing clear roles and responsibilities and institutional arrangements conducive for rural road development. New guidelines for planning, design and construction as well as for operation and maintenance are needed, and beneficiary participation and monitoring and evaluation should be reinforced. Adequate compensation arrangements should be made for the losers of land to road alignments or of crops destroyed during construction, particularly since the losers are more often than not the poor.

5.3.3 Further Researchers:

Rural Road construction is being the emerging issue in the context of our country. The issues which are raised by the local people are important in terms of rural development. So, the study is significant to those people who are directly or indirectly engaged in the field of local development. It is most important to the social workers and local bodies employes who are involved in VDC development. It can be vital for further researchers of rural development. It will be useful for the sector of planning and designing of rural development as well as local bodies staffs and social mobilizers who are involving in developing rural areas by advocating socio economic status of the rural people. It will be useful for those students who are studying rural development and sociology. It shows the trends of investing resources to rural roads by using people participation to establish local development and rural development.

This study was carried out on local bodies investment on rural roads for five fiscal years at Kurule Tenupa VDC of Dhankuta district. So, it is not represented whole road construction system in Nepal but it will be the basic guideline for rural development in Nepal through rural road construction and extention of roads from urban areas to contry area and from village to village network.

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