

CHAPTER I

INTRODUCTION

1.1 General Background

Transport is more important aspect to live easily for human being. In the context of development, human beings developed different types of means of transport contextually such as: animal to airways: 'searching of more comfort' is the human nature. Due to such nature human beings are inventing and exploring newness in every aspect. One of the inventing aspect is transport among different types of transports Road transport is and being more useful, accessible and essential. Many developing and developed countries are engaged in constructing the roads.

Of all the modern means of transport, motor transport has proved to be the form of most adaptable to today's multiplicity of needs. It is the dominant method of transport and its impact is felt in almost every phase of our daily life. In addition motor transport has virtually revolutionized production and distribution. Its scope is so broad that there is almost phase of daily living that is not affected by some aspect of this mode of transport (Taff, 1969: 1).

Livelihood of people is directly connected with road transport. Livelihood strategy is the way in which individual, household; community and society continue and modify their socio-economic and cultural activities in order to meet their essential and requirements. Some ways of earning among people have continued and other have changed or newly adopted. Livelihood in rural area is very difficult because of

scattered settlement and core periphery relation. Agriculture is a primary occupation of rural people and is also a means of livelihood. Livelihood of rural people is changing to adopt in newly explorative, innovative and descriptive ways of development such as roads. The development intervention creates diversification on occupation. Road is one of the major aspects of development interventions bringing change in rural livelihood.

Road transport is recognized as the area of greatest importance in bringing about significant development in a country. It is considered as a big production system whose products are the movement of persons and commodities. Fast economic and easy movement of persons and commodities among regions of a country helps in accelerating economic growth by interchanging the productive resources from one region to another. In addition, the road network is a necessary mean to achieve the objective of national integration along with it's economic development. (Tiwari, 1983:1).

Road transport is integral to most public intervention targeted as meeting the basic needs of poor people. Without adequate transport, a lot of difficulties are created, e.g. in medical emergencies the rural people cannot reach clinic in time. People can't take their agricultural products to market, they aren't able to mobilize and manage the resources to produce sustainable improvements in their quality of life. Due to the lack of transport, people of isolated group become marginalized.

Road accessibility in the rural area enhances the chances of mobility, easy accessibility to socio-educational services.

Road development in rural society is necessary for improving their way of life. There is vast gap between urban and rural areas. Road development can tie up them by linking rural and urban areas and broadening opportunities to rural lower class people. Road development mostly creates employment opportunities and increase interaction between core and periphery area. But in transition period the poor rural people are struggling for adopt the newly created situation.

In Parbat district there are so many roads but there is only one concreted road from Nayapul to Maldhunga, of Pokhara-Baglung highway. Many of other roads are constructing in rural area. These roads are neither concreted nor graveled until study period except Maldhunga-Beni road. Among them Sivalaya-Durlung-Kyang road is also constructing through district headquarter Kusma from Pokhara-Baglung highway. This road is reached to the northern boarder of Kyang VDC named Lespar until study period.

Sivalaya- Drlung- Kyang road is important for changing livelihood in related rural area. Transport network has connected several places where there have been different resources and opportunities operating in isolation in the past, due to the lack of access, the exchange networks were very poor and very limited people used to involve in movement. Besides very limited items of goods were involved in the exchange networks. Different resources of the rural area have marked due to the lack of transportation and information exchange networks (Adhikari 2000:3). In the case of Durlung and Kyang VDC several agriculture production such as potato, rice, millet, maize and other natural resources such as: wood, medicinal raw materials are available. Slate mines of

Tare (Salija VDC) and Mate (Durali VDC) have been quarrying for years. These VDCs, are also related area of this road. This route may be tourist route to go to Ghorepani, Annapurna area etc. but due to lack of information and proper road these all things are isolated. The development of Sivalaya- Durlung-Kyang road is viable for transportation of rural resources to the different urban areas such as: Kusma, Baglung, Pokhara and Kathmandu.

1.2 Problem Statement

Nepal is one of the least urbanized country in the world. Basically it is an agrarian rural country. In Nepal about 86% people live in rural area and only about 14% people live in urban area (Census 2001). Development intervention like road has immense impact on rural livelihood. The previous studies in this field could not concentrate on highlighting the effect of road on community and household level. And previous studies have considered the geographical, economical and other aspects. However, they have overlooked social aspects. So this study concentrates on livelihood concept in household level through sociological view. It must be an important task in rural areas in developing countries like Nepal.

The pattern of import and export of goods is one of the main factor to build the relation between urban and rural areas as Core and Periphery relation. So, rural people are compelled to change their livelihood. When a locally self- sufficient community no longer remains so, then ups and downs evolve and their members are compelled to change their livelihood strategies (Dahal, 2001: 4).

Livelihood is so complicated without adequate transport facilities. Road transport is dominant aspect among different types of transport. Before accessibility of road porters and mules were means of transport in study area. There were not sufficient shops. Only traditions production was product in their agriculture. In health emergencies people were fall in very difficult situation. But after accessibility of road livelihood of people is changing slowly.

The rural sector is marginalized area of the country, due to the geographical remoteness and widely dispersed settlement system. Inaccessibility has reduced the development of trade, commerce and contact with outside world. The rugged topography of the country has also creates the difficulties to link the rural area to urban areas. So the interaction of urban and rural sector is very difficult due to poorly developed transportation facilities and the nature of topography of the country. Within such difficult of geographical terrain of country road transport is developing slowly which creates the opportunity of interaction between core and peripheral area. But the relation is unequal, exploitative and dominant. However, the existing society seeks the changing pattern to adopt newly created situation by every development intervention such as road. The rural people of Durlung and Kyang VDCs are also changing their livelihood strategies with the ongoing development process. The SDKR is changing everyday life of the people in the study area and the rural function of livelihood structure. More manufactured goods are being imported in study area but a little non-manufactured goods and some agricultural production are being exported. Due to the road people are compelled to encourage to sharing

time for the production and other activities for existing the newly-built structure of livelihood. The people, who are continuing their traditional production and activities, are in crisis and also being exploited from the core or urban area. This has led to the researcher to conduct this study. Such phenomena has encouraged the research to investigate the changes in livelihood which is a recent event in Durlung and Kyang VDCs. Based on the above discussions, the following research questions have emerged.

1. What are the social and economic characteristics of the people of the study area?
2. Whether the accessibility of road has brought any changes in people livelihood?
3. What are some of the changes in social aspects to the people in the study area.
4. Whether people perceive that road is an important factor for development?
5. What are the positive and negative effects of the road?

1.3 Objectives of the Study

The general objectives of the study is to examine and analysis the effects of road on livelihood strategy of rural people and the changing way of life and the situation of related field with the development process, specially road transport.

The specific objectives of the study are as following:

1. To draw-up social and economic profile of the people of the study area.
2. To investigate the change in people livelihood after the road accessibility.
3. To examine the changes in the social aspects of the households of the study area.
4. To draw people perception about development in which road accessibility is an important factor.
5. To prescribe the positive and negative effects of the road.

1.4 Significance of the Study

The study 'Road accessibility and the changes in Rural people livelihood is basically related to examine the changing livelihood in rural area. People are involving in the newly established social structure after constructing motorable road. Local markets have developed; individuals have started different occupations in household level, which support to increase their income. In addition to it, people have started to use fast-food such as noodles, coca-cola, biscuits, chips etc rather than their indigenous production.

When road was constructed in rural area the rural activities have been slowly changing and rural household have started to import their needs like fertilizers, insecticides, tools and equipment for farming and other manufactured good from urban areas. Market town links to keep better relationship between rural and urban, mainly provides daily recognized goods and other various services (Pradhan and Routray, 1993:66). This study will provide the importance of development

intervention specially road transport and direction to improve rural livelihood. The study will also provides the planners, researcher, leader, policy makers and also the poor rural people in the developing countries for planning purpose and to sustain intervened development aspect appropriately.

Recent approaches to development in the so called third world countries have some remarkable class conflict, between labour and capital it is between foreign and national interest. It is between rural classes and urban classes. The rural sector contains most of the poverty and most of the low cost services of potential advanced but the urban sector contains most of the countries facilities organization and power (Michael, 1981:29) like this the gap between core and peripheral area is becoming vast. The peripheral or rural people are struggling to grab the positive opportunities appropriately. The means of the linkage to rural and urban sector is road and it helps to improve rural livelihood.

Roads are one of the most important lifelines for the people in any region for every day live (Okamura, 2005:170). The objective of constructing road in developing countries is to provide bask access rather than additional capacity and increase operational efficiency. (Panta, 2005:166)

1.5 Definition of the Terms

Different terms and concepts used in this study are defined as follows:

Age:

Age refers to the period from one's birth to the time of interview. Age is categorized here as: very young (below 20 years), young (20 to 34 years) middle (35 to 59 years) and old (60 years and above).

Sex:

Sex refers to biological differences between human beings. In this study sex is categorized as male and female as usual.

Education

Education refers to the capacity of the respondent to read and write in this study. Mainly education is categorized in two types: 'Illiterate' and 'Literate'. Illiterate refers to those who could not read and write, literate refers to those who could read and write.

Marital Status:

In this study marital status refers whether the respondent is married or unmarried. Married refers to those who are married at interview period unmarried refers to those who are not married at interview period.

Family Size

Family size means the number of individuals living with the respondents or total number of family members. Family size is categorized here into three types: Small family (up to 4 members), medium family (5 to 8 members) and large family (9 members and above).

Income

Income refers to the total annual income of the respondent's household from all household resources. It is categorized into three: Low level of household income (up to Rs.50,000.00 per year), middle level of household income (Rs.50,000.01 to Rs.100, 000.00 per year) and high level of household income (above Rs.100,000.01 per year)

Size of Land

Land refers to the total land owned by the respondents and any other family members. It is categorized into three types: small size of land (up to 9 ropanies) medium size of land (10 to 39 ropanies), high size of land (above 40 ropanies) (20 ropani is equivalent to 1 ha.)

Occupation

It this study occupation shows a job or profession of the respondent or other members. Here it is categoriezed as follows: Farmer (who are farming), service (who are engaging in government employment, private employment and aboard employment), business (who are engaging in commercial activity), student (who are studying). Although here the occupation is determined by their main job or profession but in the study area, all the other professional are related with agriculture.

Production

In this study production means the total product of respondent or other members of family. It is categorized into two types: subsistence production (The productions which are not for sell) and commercial production (The productions which are for sell).

Livelihood

Livelihood refers to the people way of life. In this study it is categorized into economic, social and cultural activities in which people are engaged to exist their life in society.

1.6 Limitations of the Study

This study covers Durlung and Kyang VDCs of Parbat district where the effects of road on rural people livelihood strategy will be analyzed. To study the changes in livelihood strategy is not an easy task because every person has different perspective. Beside, people adopt and apply the strategy as the particular social demand and the social, cultural, environmental and economic direction too. This study is also for fulfilling academic objectives of the researcher. Being a student, the researcher is handicapped by time and economic resources. So more VDCs having road accessibility and a large number of sample could not be considered in this study. Hence, the findings of this study may not be generally conclusive.

However it is hoped that this study would certainly provide certain insights into the rural area as well as the effect of road.

CHAPTER II

REVIEW OF LITERATURE

In this study review of literature is divided into two sectors as following:

-) Theoretical review
-) Empirical review

Theoretical review gives the idea for the research to relate the studies with different related theories. Empirical review relates the relevant previous studies which gives ideal for further studies.

2.1 Theoretical Review

2.1.1 Structural Functionalism

"Structural functionalism is a theoretical approach in which societies are conceptualized as social system and particular features of social structure are explained in terms of their contribution to the maintenance of these system e.g. religious, ritual explained in terms of the contribution on it makes to social integration" (Collins dictionary of sociology).

Talcott Parsons did a great deal of theoretical work. A function is "a complex of activities directed towards meeting a need or needs of the system." (Rocher 1975:40, quoted in Ritzer, 2000). Using this definition Parsons believes that there are four functional imperatives that are necessary for all system- Adaptation (A), goal (G), integration (I), and latency (L) or pattern maintenance. Together these four functional

imperatives as known as the (AGIL) scheme. In order to survive a system must perform these four functions:

- a) Adaptation: A system must cope with external situational exigencies. It must adapt to its environment and adopt the environment to its needs.
- b) Goal attainment: A system must define and achieve its primary goals.
- c) Integration: A system must regulate the interrelationship of its component parts. It also must manage the relationship among the other three function imperatives.
- d) Latency (Pattern maintenance): A system must furnish, maintain and renew both the motivation of individual and the cultural patterns that great and sustain the motivation (Ritzer, 2000: 233).

Road transport must also adapt to its environment and also the environment to its needs in social system, to achieve primary goals of road transport, system must be defined and its components and parts must be regulated by the interrelationship for regulating the social system.

Emile Dhrkheim (1983), has described in his book 'The Division of Labor' the two forms of solidarity as: ' mechanical solidarity' and 'organic solidarity'. Archaic societies (Primitive Societies) as they were once called are characterized by the pre-dominance of mechanical solidarity where as, modern industrial societies characterized by complex division of labour are dominated by organic solidarity. To Durkheim Social differentiation begins with the disintegration of

mechanical solidarity and of segmental structure occupational specialization and multiplication of industrial activities are only an expression of a more general form of social differentiation which corresponds to the structure of society as a whole.

Durkheim insists that division of labour, a social Phenomenon, can only be explained in terms of three social factors- the value, the material density and the moral density of the society. The value of the society refers to the size of the population and material density refers to the number of individuals as a given ground surface. Moral density means the intensity of communication between individuals. With the formation of cities and the development of communication and transportation the condensation of society multiplies intra-social relation (Francis and Morgan, 1994:108-109).

To develop the society and to make occupational specification and multiplication of industrial activities, Road Transport is also a major factor. Individuals can contact to each other easily after road accessibility. The intensity of communication between individual can be fulfilled easily.

According to Demrah and Peterson (1967), change comes form basically three sources: adjustment of the system to exogenous (or extra-systematic) change, growth through structural and functional differentiation; and inventions and innovations by members or group within society.

Road must adjustment on system and it helps to growth any differentiation and it is also a innovative part of transport. The road is a important aspect to integrate and interact the members or group in a society.

2.1.2 Modernization Theory

Alex Inkeles (2005), has described socio-psychological process with the traits like openness to experience, readiness to change, awareness to diversity orientation to long term planning, high value to schooling, high value to technical skill and understanding of the production and industry. The road construction is assumed to bring about Inkeles postulation because of its nature of connecting a society with other advanced society. In this regard, the study of modernization theory gives some important issues for connecting those traditional and advanced societies. The interaction between the traditional and advance society, brings about the transformation of traits that are functional to modern society to traditional society.

W.W. Rostow (1960), an American economist distinguished five stage of economic growth through which every society had to pass in the transition to 'modernity' In the first stage, they were still pre-modern, traditional; in the second, the pre-conditions of modernization were brought into being, from financial and educational institutions to infrastructures of communications, in the third, the 'take-off' to modernization begins, stage four witnesses the 'drive to maturity' and by stage five high consumption has become a mass phenomenon (Worsley, 1987: 64-65).

In these all stage of growth transportation plays vital role. Among different types of transportation road transport is more important aspect to the process of modernization.

2.1.3 Dependency Theory

According to Frank (1998), development and underdevelopment are usually interlinked. The relationship is created mainly because of the unequal relation between centre and periphery. Road transport creates the exchange environment in core (urban area) and periphery (rural areas). The relationship becomes more unequal. Only cheap raw material and some agricultural productions are exported from rural area, vice versa expensive, manufactured products are imported.

According to Paul Baran (1962), there are variants of the concept of economic surplus.

- i. Actual economic surplus, i.e. The difference between society's actual current output and its actual current consumption.
- ii. Potential economic surplus, i.e. the difference between the output that could be produced in a given natural and technological environment with the help of employable productive resources, and what might be regarded as essential consumption.
- iii. Planned economic surplus, is what could be produced in rational and human system. (p 22-43).

To create such types of additional surplus developing countries have to focus commercial agriculture and internal investment in production. To increase production and to make surplus road transport is

essential factor. Road effects directly to create such types of economic surplus. Road helps to developing countries to create surplus and become independent from developed countries.

Samir Amin have described the relationship between core and periphery in his world dependency theory as following:

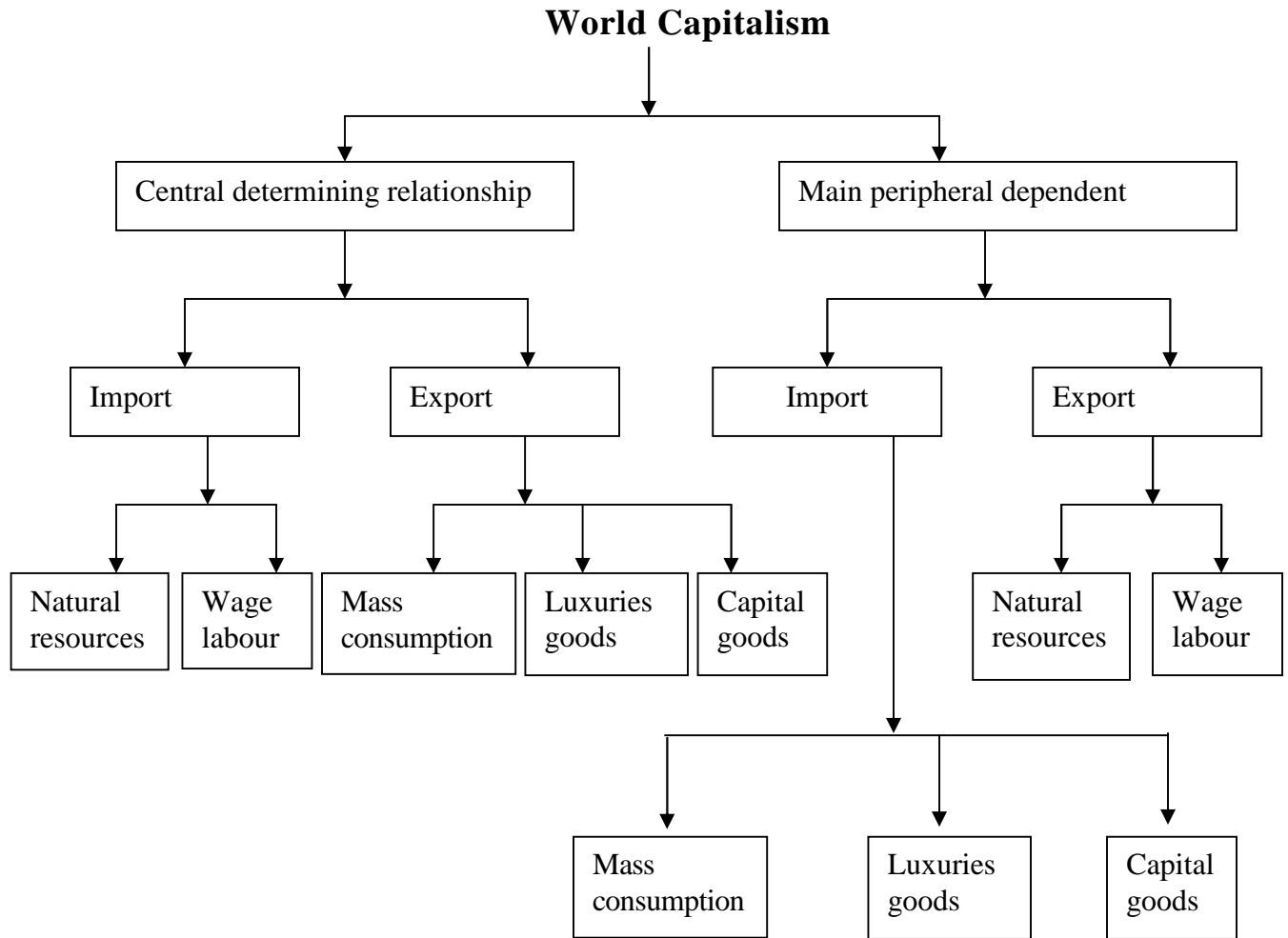


Fig.1: Gautam, 2060 B.S.

In this context such pattern of trade is created by road development in rural area as periphery. Road is being the helpful means of transport in this regard. With the help of road natural resources and wages labour are exported and mass consumption, luxuries goods and

capital goods are imported in rural area and vice versa are exported and imported in urban area.

2.1.4 Conflict Theory

In every type of social structure there are occasions for conflict since individual and subgroups are likely to make from time to time rivals claims to scarce resources, prestige or power positions. But social structures differ in the way in which they allow expression to antagonistic claims. Some show more tolerance of conflict than others (Coser, 1976:206). Conflict inevitably arises from the unequal distribution of desirable such as wealth, power, prestige and other goods. Individual strive to maximize their share of the scarce commodities, those who possess a greater share of the goods, try to consolidate their position, maximize their interests and dominate the structural arrangements by various means, especially coercion. But men dislike intensely being ordered around and result subjection. (Abrham 1982:134-135)

After accessibility the road every individuals try to grab opportunities wealth, power, prestige and other goods and services created by road, such as: in business sector, in transportation service sector and other daily livelihood activities.

As quoted in Chambiss (1973), Marx's theory may be stated briefly in the following proposition:

1. In every society beyond the most primitive, two categories of people may be distinguished as a (a.) ruling class and (b) one or more subject class.
2. Dominant position of the ruling class is to be explained by its possession of the major instruments of economic production but its political dominance is consolidated by hold which it establishes over by military force and over the production of ideas.
3. There is a perpetual conflict between the ruling class and the subject class or classes; and the nature and course of such conflict is influenced primarily by the development of the productive forces i.e., by change in technology (p: 252).

Marx is referring 'the forces of production' to the way of the production of goods. Forces of production shape the relationship of production. Forces of production and relationship of production is economic base or they are substructure of society. Road development plays crucial role as substructure of society which affects the substructure of society such as: religions familial and political institutions.

There are two classes in the field of road sector such as vehicles owner vs driver and helper, high level of business man vs wage labour, high scale land owner vs landless people etc. Vehicle owners, high class business man and high level of land owner are ruling class and versus group are subject classes. There is a perpetual conflict between these two groups and the nature of such conflict influenced primarily by the

development of the productive forces which shapes relation of production. Such effective substructure shapes the superstructure of society.

2.2 Empirical Review

2.2.1 Studies related to road development and its effects.

Blaike et al in (1976), have studied the effects of roads in west central Nepal specially of Mahendra Rajmarga, sidhartha Rajmarga and Prithivi Rajmarga. It has focused on the government policy, political condition and Bureaucracy system that effect to the basic needs of the society.

Barwell et all (1985) have studies in different developing countries about change, effect of road in their book 'Rural Transport in Developing Countries'.

Under the village road programmes existing talks are being upgraded to facilitate marketing and processing of agricultural produce in Malaysia.

In Nigeria, motorized vehicles have only recently begun to play a role in rural transportation. This role at present a minor one and is unlikely to become more significant in the near future.

It is therefore important to look for alternatives which can complement the limited road network available. In the case of roadworks a scheme similar to the one proposed for the Ukinga area was operating vary successfully in Afghanistan .

In Bangladesh, as in many parts of the world the assessment of the benefits of transport improvements has been based on the estimation of

the saving the existing users of the transport facility and an allowance for the benefits generated by the investment. All small farmer in Kenya need transport for production and marketing of crops and livestock and household activities (Barwell, 1985: 6-134).

In this book Barwell et al have studies different developing countries and analyzed the needs of roads and change in a larger context but not the effect on livelihood in household level.

Taff (1969), has studied motor transport in commercial sector. According to him of all modern means of transport motor transport has proved to be the form most adaptable to today's multiplicity of needs. It is the dominant method of transport, and its impact is felt in almost every phase of our life. In addition motor transport has virtually revolutionized production and distribution. Its scope is so broad that there is almost no phase of daily living that is not affected by some aspects of this mode of transport.

Schroeder and Sisler in (1997), have analyzed 'impact of the Sunauli -Pokhara highway on the regional income and agricultural production of Pokhara valley, Nepal'. They analyzed price differences before the opening of the Siddhartha Rajmarga and price changes after its opening and project regional income on the basis of a household survey. They report some government statistics on track traffic on the road immediately after it's opening, but these do not reflect the long term potential of route.

Rapp (1994), has described the impact of housing construction pattern in rural area and environmental impact of the road construction he has tried to find out the causes of deforestation and its direct impact

on environment. Rapp has studied on two fair weather roads in Dhading district Bhimdhunga-Lamidanda road and Dhadingbesi-Salyantar -Siktar road giving emphasis the road development in rural sector is necessary.

Rana (1974), did 'an economic study of the area around the alignment of the Dhangadhi-Dadheldhura road, Nepal'. The study is largely descriptive and focused on economic sector.

Shrestha (1971), has studied 'the impact of Tribhuvan Rajmarga on Nepalese economy'. This study shows that the road has been playing a significant role in the promotion of different sectors of Nepalese economy like foreign trade, tourism industry, employment, agriculture and revenue.

Agrawal and Das (1986), have studied on 'Transport linkage in Nepal: prospects for regional cooperation' focusing the total nation's income profile from different sectors and the types of transport linkage in national and regional context.

Basanta K.P. (1985), has studied the impact of Tansen-Tamga road on the trading activities of local people in Tansen district. According to him the porters have been replaced by the trucks and tractors.

IMU (1994), have studied the impact study on settlement structures along the Dhading Besi-salyantar Road. According to the unit, after accessibility the road there have been changes in house building construction, food supply, water supply and sanitation, health, education and other aspects.

"Road usually leads to the Proliferation of small shops in towns and the expansion of rural markets along the new routes" (Anderson et.al,1982:16)

Dangol (1996), has studied the socio-economic impact of the Dumre-Besisahar Road. According to him 90% of the respondents were engaged in farming 6% were engaged in the service sector and the remaining 4% were involved in the business sector. He found the developments of settlement area population and demography, ethnicity, migration, occupation and employment, natural resources conditions and impact on them of road. There were not large industries in the influenced area to increased tourism after accessibility the road.

2.2.2 Studies Related to Livelihood

Subedi and Pandey (2002), have studied on an article 'Livelihood Strategies of Rai Communities in Arun Valley: Continuity and Change' focusing on the livelihood strategies of higher caste group with economic and environmental changes.

Pandey (1987), has studies the 'Livelihood of Landless Peasants; a Study of Evicted Resettlers' focusing the cause and consequences for becoming landless peasants and their livelihood strategy both of migrants and their place of origin.

Bhurtel (2001), has studied 'the Changing Livelihood Strategies of the Kumals Living of Pokhara Valley of Western Nepal.' Focusing the changing livelihood strategies of Kumal community of Pokhara valley with social context used primary and secondary data.

Papola (1999), has studied 'the mountain enterprises for sustainable livelihood' describing the Himali people livelihood and their adjustments with that environment.

Dhakal (1994), has studied on 'Adaptive Strategies of the Magars an Ecological and Anthropological Case Study of Kali Gandaki river Basin Nawalparasi District'. He has found that magars have possessed the knowledge with the help of which they are exploiting their resources.

Blaike et all (2000), have studied on 'Struggle for Basic Needs in Nepal.' This study is based on two periods of field works in 1974-1975 and 1978. The purpose of this study was to evaluate the socio- economic impact of road constructions a wide range of survey's subject-specific investigation and detailed case studies were undertaken.

Above- mentioned literatures have found that most of the studies on livelihood have been conducted being based on area and community. Focus has been given to the changing livelihood with different development interventions. Above studies specially focused on economic aspect. Development interventions like road plays important role in the change of livelihood particularly in rural livelihood. It plays very important role in the changing nature of individual, household as well as community level. Many of these studies are also based on urban area. In Nepal nowadays in many parts of country, various roads are being constructed rapidly but the study is not being carried out about the roads which are being constructed. So it is important and essential to look effect and changes in livelihood of the rural road in household level in the rural areas. In the context of SDKR the study on the "changes in rural people livelihood by road" has not been carried out yet.

2.3 Conceptual Framework

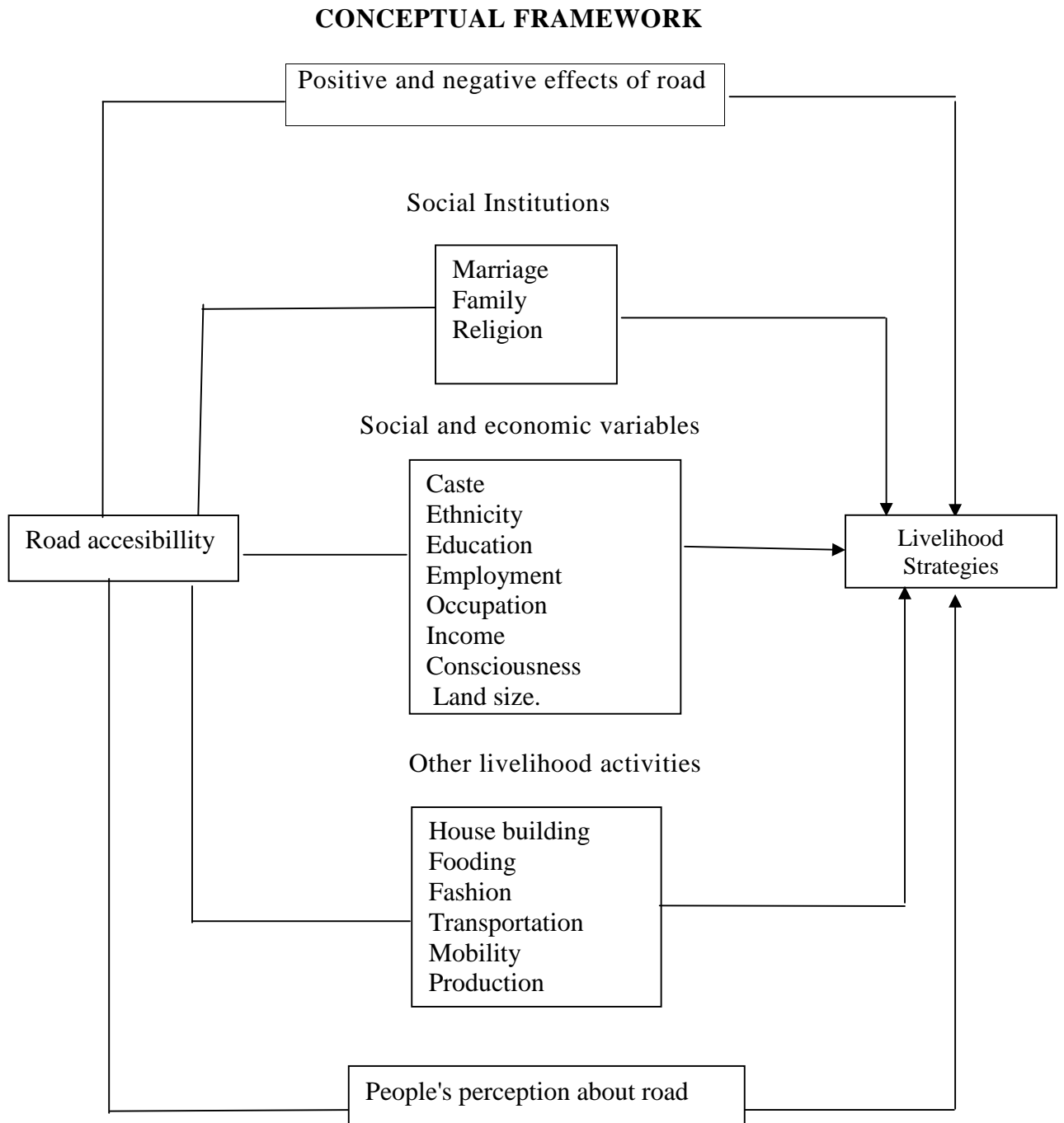


Fig.2: Conceptual Framework

The study 'Road accessibility and the changes in rural people livelihood' is a complex phenomenon which is reviewed above. The evolved conceptual framework is tested empirically in the analysis and presented in the subsequent chapters.

CHAPTER III

RESEARCH METHODS

This chapter deals with the methods adopted for data collection, analysis and interpretation.

3.1 Place of the Study

Durlung and Kyang VDCs are situated in hilly region named Parbat district in Dhaulagiri zone of western development region, according to geographical division of Nepal. Parbat district is situated 27⁰ 58'- 28⁰-39' Latitude and 83⁰ 34'- 83 59' east longitude (Gurung, 2000: 20). There are 55 VDCs in Parbat district. Durlung and Kyang are joined VDCs. The SDK Road being from Kusma (districts headquarters of Parbat, in Sivalya VDC) to Durlung to Kyang VDCs.

Durlung is a multi-caste, multi-lingual and multi- cultural village. Various caste/ ethnic group like Brahmin, Chhetri, Gurung, Magar, Dalit are inhabited. About 85% people of the total population of this VDC are involved in agricultural system. Others are engaging in government service, British army, Indian Army and overseas employment.

Similarly Kyang is also full with multi-caste, multi-cultural but it is not multi-lingual VDC. In Kyang VDC about 97% of people are Magar (Election commission, 2062). But they have not their mother language. They speak twisting Nepali language. Most of the people are engaging in agricultural system and some of them are in British army, Indian army and foreign employment as well such as: Saudi Arab, Malaysia, and Dubai etc.

In the field of education Durlung VDC is in front line than Kyang VDC. Kyang is situated in remote area than Durlung. In Durlung there are two secondary schools but in Kyang there is only one.

Demographically total population of Durlung VDC is 3,346 of which 1,550 are male and 1,796 are female (CBS, 2001). In Kyang the total population is 2, 377 of which 1, 084 are males and 1, 293 are female (CBS, 2001)

The boundary of study area limits to Bajung and Tilahar VDC to the east, Chuwa and Sivalaya VDC to the South, Deurali and Salija VDC to the north and north and Khurkot and Banahu VDC to the west. The SDKR starts from Pokhara - Baglung highway from Kusma (the headquarters of Parbat district). Untill this study period the road has reached to the north boarder line of Kyang VDC named Lespar. Lespar is boarder area of Salija and Kyang VDC. The road is being constructed farward with the help people's participation especially and with the help of VDC and DDC too.

There is no hard cliff and river at the road area. So the expenditure of road construction is not of high amount. Even road constructing the road in the forward direction the geographical condition is feasible. This route is very much essential, useful and important in future and also presents time. It can be a special tourist route to go to Gharepani, Annapurna region and so on. People can develop tourism and can improve their economic status in near future, if the road is made fine as well as long. This is the plus point of this route in comparison with other routes.

Agriculture is the main occupation of Kyang and Durlung VDC's. Road Development effects on the agricultural production. The livelihood strategy is changing by this road. So this area is selected for study

3.2 Research Design

This study is based on explorative and descriptive research design. Both quantitative and qualitative data were taken.

3.3 Sampling Procedure

From these two VDC 1, 2, 4 and 5 wards of Durlung VDC, 1 and 9 wards of Kyang VDC were selected. Other wards were not selected for the present study. Because selected wards are highly effected and nearest wards of the SDK road than others.

In Durlung VDC there were 50, 65, 90 and 93 households in ward no.1, 2, 4 and 5 respectively. Such as in Kyang VDC there were 39 and 130 household in ward no 1 and 9 respectively (Election Commission: 2062 B.S.).

From these selected wards a total of 94 respondents were drew with 20% sampling and the sample house hold were chosen by every five intervals of the total household. But 98 questionnaires were filled up and analyzed here because other four respondents were so interested in this study. These selected wards from Durlung and Kyang VDCs and actual number from each ward are present in table no. 1.

Table 1: Number of HHs and the Sample in the Study Area

VDC	Selected Ward	Total HHs of wards	Sample Size	Actual number of respondents
Durlung	1	50	20%	10
	2	65	"	13
	4	90	"	18
	5	93	"	19
Kyang	1	39	20%	8
	9	130	"	26
Total	6	467		94

Source: Election Commission, 2062 B.S.

In this study systematic random sampling technique is used for sampling procedure.

3.4 Nature and Sources of Data

The main objective of this study was to observe the changes on livelihood after the road accessibility in Durlung and Kyang VDCs of Parbat District. To achieve this objective the study need to various primary and some secondary data. To elicit primary data from the respondents, questionnaires were prepared. These questionnaires were contained simple and direct related to the independent variables (education, occupation, age sex, size of family, income etc) and the dependent variable 'livelihood'. Some key informant interview, field

observation and some case studies were also the other used methods to gain primary data.

Secondary data were collected from different published and unpublished documents, books, dissertations, Journals and newspapers from the different places such as: TU Library, CNAS library, CBS, CEDA, DFID, GTZ, DDC office of Parbat and office of Durlung and Kyang VDCs of Parbat district.

3.5 Data Collection tools and Techniques

Both quantitative and qualitative data were collected by using various methods such as: household survey questionnaires key informant interview, observation and few case studies. The techniques of data collection for this study were as following:

3.5.1 Survey Questionnaire

The questionnaire has provided more quantitative data. These questionnaires were filled up from 67 household heads, 19 sons and daughters and 2 daughters in laws. The targeted respondents were household head but some household heads were not found at any rate. Information was collected from respondents by introducing the study purposes and objectives. For the quality control less than five questionnaires were filled up per day.

3.5.2 Observation

Direct observation had applied for the relevant information. Basically, this technique was used to get the information about the changing pattern of agriculture, house building construction, import-

export condition, transportation facilities used by people and their life style as well.

3.5.3 Case Study

In this study, 7 case studies were conducted by different person who were related in different age, sex, occupation, income. From those case studies representative qualitative data were found such as: Changing their own livelihood by road, some positive and negative effects of road and also perception of rural people towards road.

3.5.4 Key Informant Interview

Among the different techniques of collecting information, key informant interview was one of the main technique. 6 key informants were interviewed by representing each ward and 3 key informants were interviewed, who were really knowledgeable about the road and its effects. Key informant interview was very helpful for getting the past information and changing livelihood of the village. More information was used for qualitative analysis.

3.6 Reliability and Validity of the Tools and Techniques

The questionnaire was pre-tested among 10 percent of total respondents. These respondents were interviewed from each ward. Necessary corrections, alternations and additions were made.

The research questionnaires were prepared in English but after examined the respondent's capacity questions were asked in other languages such as: Nepali, Gurung and Magar twisting tounge of Nepali language. Information received from the respondents was converted in to English language. For key informant interview and case study,

informants were interviewed in Nepali and the obtained information was translated into English language. For the quality control checklist were prepared of key informant interview and case study. Case study was conducted among different person such as: Porter, new business man, other businessman of old market, vehicle owner, student (who left school and started to job as a vehicle helper in jeep) etc. To observe the area it is quite task for the researcher, because he is a permanent resident in this area.

3.7 Method of Analysis

The task of analysis is to bring order out of the chaos of your notes to pick out the central theme of your study and to carry them across to your written works (Baker 1994:250). Data acquired from the survey questionnaire were checked and transformed into a data sheet; later other necessary tables, pie chart and bar-graph were prepared. The characteristics of respondents were analyzed by frequency and percentage according to the requirements. The information obtained from questionnaires, observation, survey and case studies and from secondary sources was analyzed systematically to ascertain the objectives of the study.

CHAPTER IV

SOCIAL AND ECONOMIC CHARACTERISTICS OF THE RESPONDENTS

This chapter deals with the distribution of respondents of this study according to their social and economic characteristics such as: age, sex, marital status, income, occupation, size of family, caste and ethnic group etc. Which are presented in different table, bar graph and pie-chart as well.

4.1 Age of respondents

The age of respondents ranged from 16 years to 78 years from total respondents. The majority (50%) were middle aged (35-59 yrs). Only one respondent was interviewed in very young age group (below 20 yrs). Young aged respondents (21-34yrs) were 29.59% and old aged respondents (60 and above years) were 19.39%. This data is shown in Table no.-2.

Table-2: Distribution of Respondents by Age

Age group	Respondents	
	No	Percentage
Below 20 yrs	1	1.02
20-34 yrs	29	29.59
35-59yrs	49	50.00
60yrs and above	19	19.39
Total	98	100.00

Source: Field Survey, 2007

4.2 Sex of Respondents

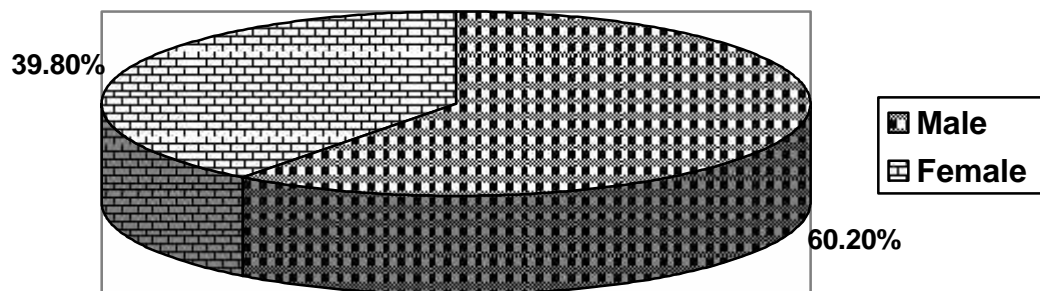
Of the total respondents 60.20% were male and 39.80% were female. This data shows the dominance of male respondents. The male and female status is presented in Table-3.

Table-3: Distribution of Respondents by Sex

Sex	Respondents	
	No.	Percentage
Male	59	60.20
Female	39	39.80
Total	98	100.00

Source: Field Survey, 2007

Figure 3: Distribution of Respondents by Sex



Source: Field Survey, 2007

4.3 Education

Literate respondents were found more than illiterate respondents in the study area. The respondent's education is ranged from illiterate to university degree. The following table shows 72.45% respondents literate and 27.55% respondents illiterate.

The educational attainment of respondents was who can just read and write 30.99%, primary level 22.55%, lower secondary level 19.72%, secondary level 15.49%, inter mediate level 4.22% and Bachelor level 7.04% of the total literate respondents.

Table-4: Distribution of Respondents by Educational Status

Educational Status	Respondents	
	No.	Percentage
Literate	71	72.45
Illiterate	27	27.55
Total	98	100.00
Educational Attainment		
Just can read and write	22	30.99
Primary Level	16	22.54
Lower Secondary Level	14	19.72
Secondary Level	11	15.49
Intermediate Level	3	4.22
Bachelor Level	5	7.02
Total	71	100

Source: Field Survey, 2007

4.4 Marital Status

Table-5 reveals that 95.92% respondents were married while the 4.08 were unmarried. It shows that most of the respondents were married in this study.

Table-5: Distribution of Respondents by Marital Status

Marital Status	Respondents	
	No.	Percentage
Married	94	95.92
Unmarried	4	4.08
Total	98	100.00

Source: Field Survey, 2007

4.5 Family Size

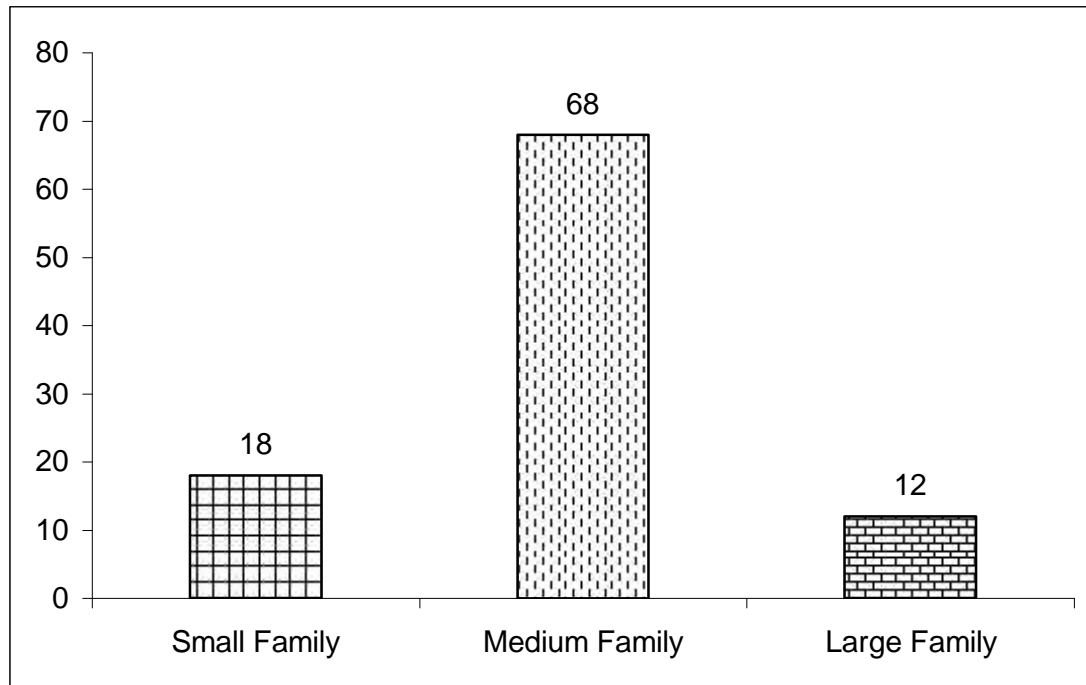
The number of the family member among the respondents ranged from 1 to 19 members. According to Table- 6, 18.37% were from small family, 69.39% were from medium family and 12.24% were from large family. This finding shows that, there is the prevalence of joint family system in the study area.

Table-6: Distribution of Respondents by Family Size

Size	Respondents	
	No.	Percentage
Small Family	18	18.37
Medium Family	68	69.39
Large Family	12	12.24
Total	98	100.00

Source: Field Survey, 2007

Figure 4: Family Size of Respondents



Source: Field Survey, 2007

4.6 Income

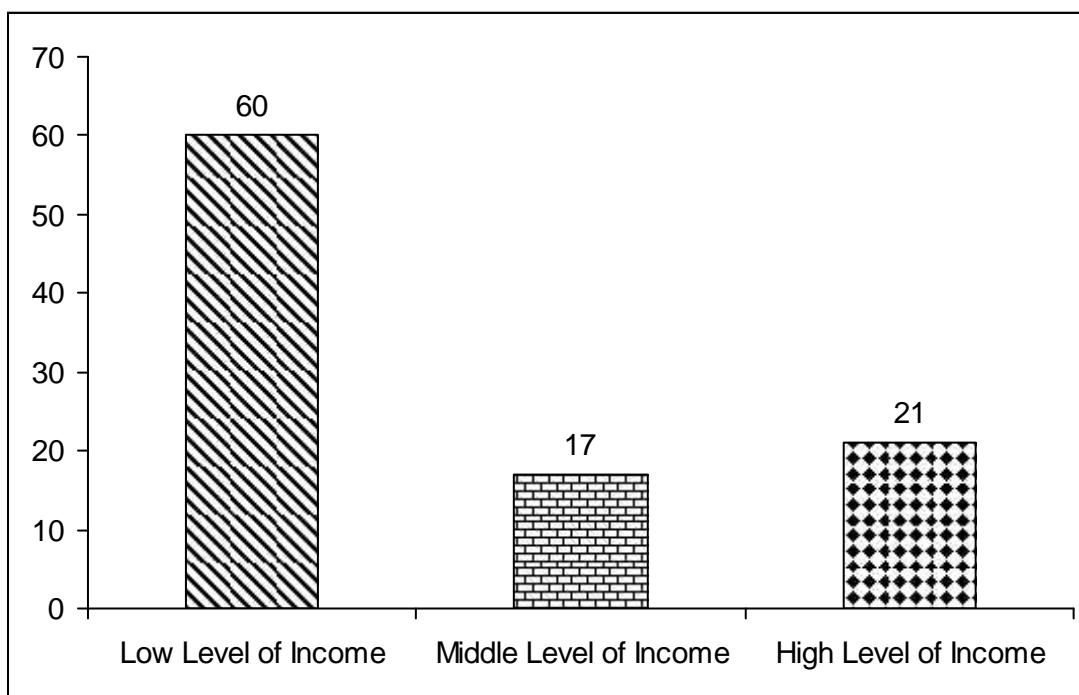
The annual household income of the respondents is presented in Table-7. According to the table, 61.24% respondents had low level of annual income (up to Rs. 50,000:00 per year), 17.34% respondents had middle level annual income, (Rs.50,000.01 to 1,00,000.00 per year) and 21.42% respondents had high level of annual income (above Rs. 100,000.01 per year). It shows that most of the respondents had low income.

Table-7: Distribution of Respondents by Their household Annual Income

Size	Respondents	
	No.	Percentage
Low Level of Income	60	61.24
Middle Level of Income	17	17.34
High Level of Income	21	21.42
Total	98	100.00

Source: Field Survey, 2007

Figure 5: Annual Income of Respondents



Source: Field Survey, 2007

4.7 Size of Farming Land

Some of the respondents were landless. The farming land among the land owner respondents ranged from 1 to 65 ropanies. According to the following table land owner respondents were 96.94% and landless respondents were 3.06%. Among the land owner 35.79%, 56.84% and 7.37% were as small scale land owner (up to 9 ropanies), medium scale land owner (10 to 39 ropanies) and High scale land owner (40 ropanies and above) respectively.

Table-8: Distribution of Respondents by Size of Farming Land

Nature of respondents by land	Respondents	
	No.	Percentage
Landless	3	3.06
Land Owner	95	96.94
Total	98	100.00
Land Size (in ropani)		
Small Size	34	35.79
Medium Size	54	56.84
Large Size	7	7.37
Total	98	100.00

Source: Field Survey, 2007

4.8 Occupation

Nepal is an agricultural country. Like this fact, the study area is also based on the agricultural area. Thus, most of the respondents were farmer and some were engaged in different occupations. The Table-9 reveals that 65.32% respondents were farmer, 9.18% respondents were

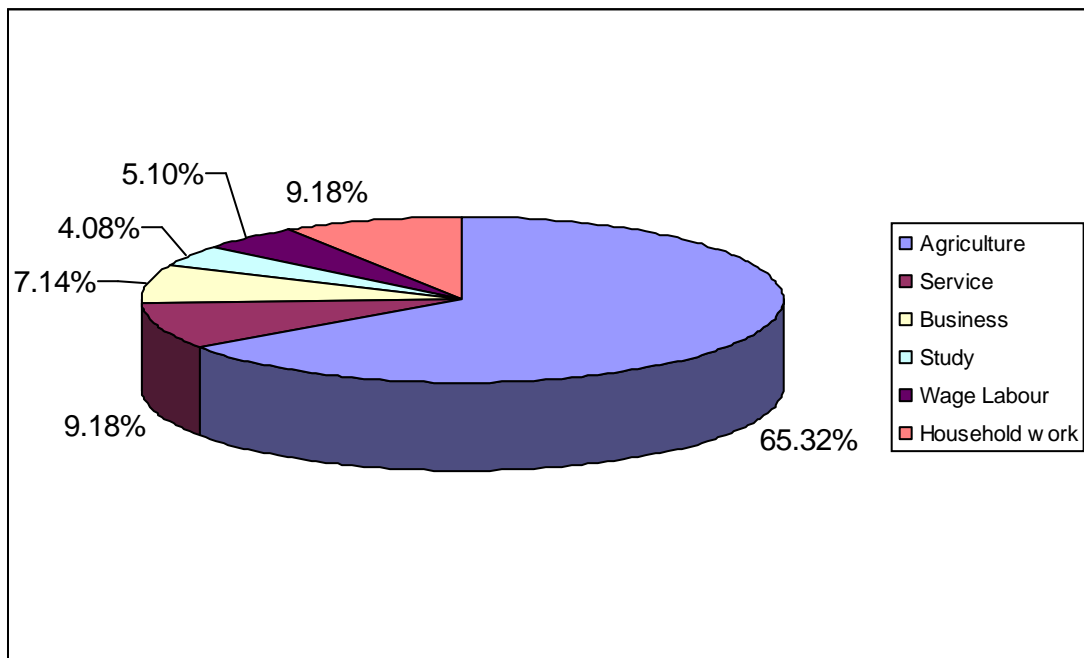
involve service 7.14% respondents were involve in business, 4.08% respondents were students, 5.10% were wage labour and 9.18% respondents were engaged in household activities.

Table-9: Distribution of Respondents by their Occupation

Occupation	Respondents	
	No.	Percentage
Agriculture	64	65.32
Service	9	9.18
Business	7	7.14
Study	4	4.08
Wage Labour	5	5.10
Household work	9	9.18
Total	98	100.00

Source: Field Survey, 2007

Figure 6: Occupation of the Respondents



Source: Field Survey, 2007

4.9 Production

The production was not sufficient for whole year fooding to most of the respondents. Even though some of the respondents sell their production. Because of they have produced only one cash crop potato. They exchange potato with other food crops like rice, millet etc as well. Among the whole only 32.65% respondents have sold and exchanged their production. Other 67.35% respondents didn't sell any production which is shown in the following table.

Table-10: Distribution of Respondents by based on their Production

Production	Respondents	
	No.	Percentage
Who sell	32	32.65
Who does not sell	66	67.35
Total	98	100.00

Source: Field Survey, 2007

4.10 Caste or Ethnic Group

In Durlung VDC, there were different caste or ethnic group but in Kyang VDC there were majority of Magar, a few Dalit and Chhetri were as respondents. According to the following table the respondents were Brahman, Chhetri, Gurung, Magar and Dalit as the present of 31.63%, 2.04%, 5.10%, 39.80% and 21.43 % respectively.

Table-11: Distribution of Respondents by Caste or Ethnic Group

Caste or Ethnic Group	Respondents	
	No.	Percentage
Brahman	31	31.63
Chhetri	2	2.04
Gurung	5	5.10
Magar	39	39.80
Dalit	21	21.43
Total	98	100.00

Source: Field Survey, 2007

CHAPTER V

CHANGES IN LIVELIHOOD AND SOCIAL ASPECTS

This chapter is devoted to investigate the changes in livelihood and social aspects after accessibility the road.

The road creates newness and openness after its accessibility. Changes occur gradually not drastically. As shown from observation people of this road area were engaged to change their social, cultural and economic activities to adopt with newly created situation by the road. The SDK road was started to construct in 1998 A.D. from Kusma Bazar, which is the district headquarter of Parbat District. The Pokhara Baglung highway is the main route of this road this highway is passed through Kusma Bazar. The road is started from Kusma Bazar. Kusma was the main trading centre of the study area but after accessibility the road the rural people were not fully depend on the core trade centre, Kusma. Nowadays, in the study area, Salyan, kotthar, Bhujeithan, Kafal Boat, Kafalchaur of Durlung VDC and Halhale lespar and Kyang of Kyang VDC were become trading centre.

After accessibility the road, people have changed their livelihood gradually. Livelihood is the people way of life, where people are engaged in economic, social, cultural and other related activities related to the human life. Doing such activities people seek to adopt with the particular environment. In any system when the change occurs in any

part, other part also seeks to adopt and cope with the changing aspects smoothly. Change is the ongoing process because of the nature of human beings: 'Searching of more comfort and newness in their daily life. People try to bring change in their livelihood to maintain or to adopt with the development of modern technologies, infrastructures and other invention and innovation of different fields.

This study is based on one of the development infrastructure 'road' and the change in livelihood by it. Data about related subject obtained from questionnaires, key informant interview, case study, observation and other secondary sources. The discussion of the finding from qualitative and quantitative data shows the pattern of changing livelihood as following:

5.1 Nature of SDK Road

The road was started from 1998 A.D. Geographical condition of the area is totally hilly, most of the road area is forest i.e. community forest. But in ward No. 1, 2, 4 and 5 of Durlung VDC and some part of Kyang-9, the road is passed with agricultural land. The road is fully earthen road so the fare is too expensive. According to the respondents, the fare is more than Rs 7.00 per km, carrying goods is quite cheaper than portering.

In this road, Jeep was the dominant vehicle, because the road was narrow for the big bus and trucks. Other mini buses, mini-trucks, tractors were also passed by the road for transportation and travel.

5.2 Transportation and Travel

In the study area, some people were starting to produce vegetables as for selling. Potato was the main export agriculture of this area. There is a huge mine of slate in the boarder of Kayang VDC but these quarrying slates weren't exported from there. These slates were used in local area only. After the road construction, these slate could export everywhere easily but due to adequate information and activities these slate weren't being exported properly. Some woods were exported from this area. Based on observation, it can said that, export pattern is very low than import.

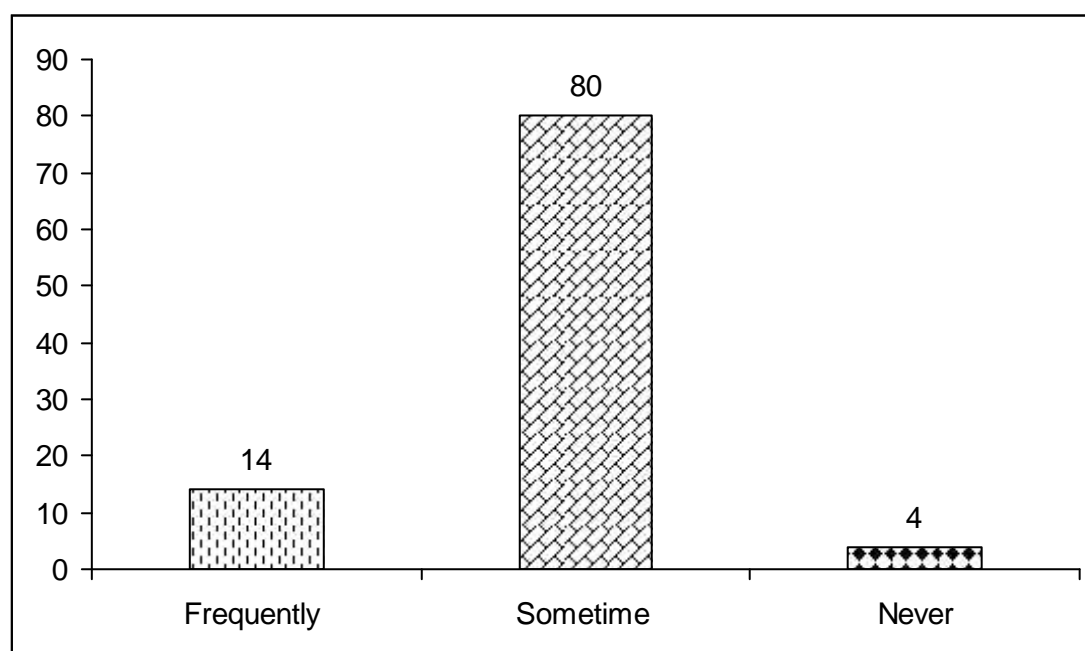
The manufacturing goods such as: fast food, rice and other food material were importing daily in a high degree. Import and export pattern is more unequal. It shows that there was an indirect exploitation of rural area by an urban area. Even though some people were started to produce new agricultural goods and started to grab the different opportunities created by road. If this process took places appropriately with all people, the situation won't be bad in near future. People were traveling on different vehicle although the fare is too expensive. Travel for old people, lady with their child and sick people was more useful and important. All people didn't use this road usually. The pattern of using this road as travel is shown in following table.

Table-13: Distribution of Respondents by Using SDK Road

Using Pattern	Respondents	
	No.	Percentage
Frequently	14	14.29
Sometime	80	81.63
Never	4	4.08
Total	98	100.00

Source: Field Survey, 2007

Figure 7: Pattern of Using Road for Travel by Respondents



Source: Field Survey, 2007

According to above table, 14.29% respondents have used this road frequently. Dominant percentage (81.63) respondents used some times and 4.08% respondents used never until Survey period. This result

occurs due to the high rate of fare. The fare is more than Rs 7 per km. But all people use this road for transportation. The cost of transportation is also expensive but it is cheaper than other means of transportation such as porters mules etc.

5.3 Occupation Change by Road

According to the respondents, who have changed their occupation after construction the road they were engage in agriculture before. They changed their occupation towards different sectors to exist newly built structure of society by road. The table 14 shows the pattern of changing occupation by road.

Table-14: Distribution of Respondents by Changing their Occupation

Variables	Respondents	
	No.	Percentage
Change	20	20.41
Does not change	78	79.59
Total	98	100.00
Changing Sector		
Special Skill Worker	2	10.00
Service (inside or outside of country)	7	35.00
Business	5	25.00
Wage Labour	4	20.00
Making Alcohol	2	10.00
Total	20	100.00

Source: Field Survey, 2007

Above mentioned table shows 20.41% respondents have changed their occupation and other 79.59% respondents were liberal. It shows the adopting process is going smoothly from different occupation.

According to those respondents, who have changed their occupation towards special skill worker, could make furniture and sell everywhere. People have started to built new houses along the road, changed the roof of the houses and plastered the wall. Thus, they got new opportunities by the road. Table-14 shows those types of respondents 10%. The respondents who have changed their occupation towards service, they were 35%. Most of them were porter before. After accessibility the road porters were compelled to go to India and other countries. Some of them went to overseas for better employment. Porter and other were emphasized by the road accessibility and interaction by urban culture to go to different countries. Such types of person have increased remittance in this area as well. Some porters have grabbed other good opportunities than before but some were in vulnerable condition. Because the road has effected their job. Otherwise they could not think and do like other porters. The following case study shows one of the vulnerable conditions of porters.

Box-1 Case study related to vulnerable condition of porters.

Mr. Khadananda Pipla, 43 was a porter of Dalit community of Durlung VDC. He couldn't get any chance to read, so he was illiterate until study period, He had got only one ropani of agriculture land. This land wasn't sufficient to care his joint family. He had 3 sons, 2 daughters and a spouse. Other family members were fully dependent with him. His portering job had affected by road. Nowadays he does different work as wage labour in agriculture field. Before accessibility the road, he earned around Rs 200/- per day but after the road construction, he couldn't earn Rs 200. Sometime he could find some work but he was jobless frequently.

According to his friend Shyam, when the Dodger was used to construct the road he said angrily "Teska Bauko sandhe ayo, aba bhari bokna paidaina." It means 'After the dodger used for construction the road, how we could get to carry loads'. This is the fact.

In this study, portering is decreasing after constructing the road but in the Rapp E. et al (1994) Studies, shows that the increasing position of portering after the construction of road. This data totally contradicts with Rapp's Study. Rapp's study was around the trade centre such as Dhading- Besi, Salyantar etc. So, to provide daily needs to neighbor village, portering was essential there. But in this study, there was not any opportunity for portering after construction the SDK road.

Other changing aspect from agriculture was business. Of the total respondents, who have changed their occupation, 25% were motivated to business. Some of them started business in local area and some of them were migrated along the road area. The people who were engaged in business, only after accessibility of the road, they were happy because of

good earning. The old businessmen were also increasing their business. Most of the shops were grocer. There was a single fancy and some tea shops as well. According to these businessmen their income is satisfactory in their life. The road has created easy accessibility of selling goods so; the road is so useful for business.

Other changed occupation was wage labour. Among total changing occupation 20% respondents have started their job as a wage labour. Most of the wage labour was belonged in ongoing road construction. Some wage labours were involved in making new houses and other infrastructures. 10% respondents have involved in making alcohol after accessibility the road. The road has made easier to sell their alcohol. Thinking analytically, it is the totally negative effective and change created by road.

Of the total respondents, 20.41% have changed their occupation towards different sectors. To exist and grab the newly created opportunities, people were smoothly started new job. Even though, in the rural area of Nepal, All people aren't separated with agriculture. Those people who were engaging in different sector, they all were related with more or less agricultural field as well. Agriculture is the shadow of agrarian society. This was the fact condition of rural area of Nepal.

5.4 Change in agricultural production

Nepal is an agrarian country. The study area also carries the same characteristics. In the study area, the way and types of agricultural production was gradually being changed by different causes. One of the

major causes was road construction. Of the total respondents, 16.33% have changed their traditional way and types of agriculture more or less. They have started to grow vegetable. Based on observation, it can say that there was starting phase to change in agricultural production. Some small projects have launched by local NGOs to develop vegetable production. Different agriculture group have formatted there. Only some vegetable started to going outside from this study area. Of the total respondents, 83.67% respondents had doing their agriculture traditionally. It shows that, the changing pattern of agricultural production is going smoothly to exist the new environment. The following table shows the pattern of changing agricultural production.

Table 15:- Distribution of respondents by changing their agricultural

Agricultural Production	Respondents	
	No	Percentage
Who change	16	16.33
Who does not change	82	83.67
Total	98	100.00

Source: Field survey, 2007

5.5 Selling Pattern of Agriculture Production

Some respondents have sold their agricultural production. Among them, some were compelled to sell their only one production potato to fulfill other foods and needs. Because, they grew only one crop potato. Other respondents who sold their production were big size of land owner. The production sold by the respondents is shown in following table.

Table 16: Distribution of respondents by selling their agriculture production

Agriculture production	Respondents	
	No	Percentage
Who sell	32	32.65
Who does not sell	66	67.35
	98	100.00
Before or after?		
Before of the road construction	22	68.75
Only after the road construction	10	31.25
Total	32	100.00

Source: Field survey, 2007

Of the total respondents, 32.65% were sold their agricultural production and the dominant respondents 67.35% weren't sold their any production. Among the respondents, who have sold their production, 68.75% were selling before of the road construction and only 31.25% respondents started to sell their production only after the road construction. According to them, the road has made easy environment to buy and sell everything.

5.6 House building construction after accessibility the road.

Of total respondents, 37.76% respondents have changed their household type. Most of the changing household types were with the roof of grass. But after accessibility the road, they have changed their house roof by the help of tin. Because the accessibility of tin was easier after the road construction. Some houses wall have plastered by cement,

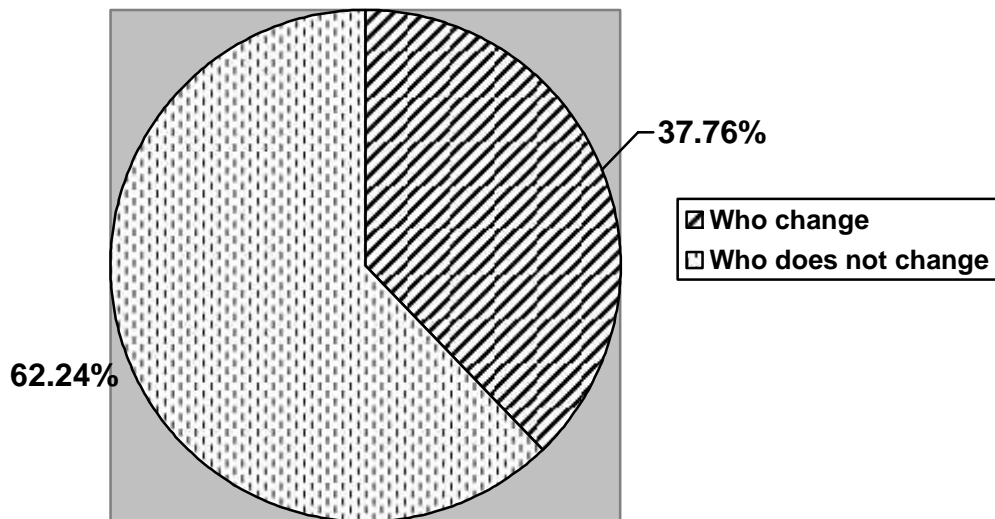
some were made new permanent buildings. The total respondents who have changed their house building are Shown in following table.

Table-17: Distribution of respondents by changing their house building

House Building	Respondents	
	No	Percentage
Who Change	37	37.76
Who does not Change	61	62.24
Total	98	100.00

Source: Field Survey, 2007

Figure 8: Changing Pattern of House Building by Respondents



Source: Field Survey, 2007

Among total respondents, 37.76% have changed their house building 62.24% respondents haven't changed their house building.

Specially the changing feature were in roof style, wall plastering and some new building, as well.

5.7 Fooding Behaviour and changing

After the road construction, some people have changed their fooding behavior. According to key informants using fast food or ready made food was increasing there after the road accessibility. The study area wasn't so productive area. So, most of the people had to buy basic daily needs for fooding except big size land owner. People used to buy daily needs for fooding from local shops. People were using fast food rather than indigenous food. Especially, in hospitality people used fast food such as: noodles, biscuits, coca-cola, Beer, Pepsi etc. but some respondents have used both native food and fast food. The fooding pattern of the study area is presented in following table.

Table-18: Distribution of respondents by using food

Food	Respondents	
	No	Percentage
Only native food	21	21.43
Only fast food	-	-
Both (native & fast food)	77	78.57
Total	98	100.00

Source: Field survey, 2007

This Table shows the dominance of both food users. Only fast food user weren't found in the study area. But those who didn't use fast

food, they were 21.43%. According to the respondents who were used both fast-food and native food, the pattern of using fast food was increasing after the road, construction rather than before. This finding is resembles with (Blaikie et al, 1980) study named 'Nepal in Crisis'.

5.8 Income

To live more easily income is the basic requirement for each and every people. After the road construction, expenditure of people was increased indirectly. Because people have changed their fooding, clothing, house building type. Otherwise, the fare of travel was also too much expensive. Before the road construction, people had used to travel on foot to go to Kusma Bazar and return in 1 to 2 hours. But after road construction, people have to pay Rs 100 to Rs 200/- for one way. The transportation charge of goods was quite cheap than other means of transport. To examine the whole condition of expenditure, that was increasing indirectly. It was the transitional period for the study area. People were using the different facilities in different ways by paying cost but the income was stable except some respondents. It shows the critical and dangerous situation.

Otherwise, according to the key informants, some people have grabbed the different opportunities created by road such as doing business, producing vegetables and other activities to increase their income. The people who continued their traditional agriculture and didn't do any thing to increase income, they were in crisis. The road has

affected them to decrease their income. It was the vulnerable condition in their livelihood.

According to the respondents, 30.61% respondents have increased their income by road. 18.37% respondents have decreased their income. Other dominant percentages 51.02% have not changed their income by road.

Table-19: Distribution of respondents by their income mobility

Income	Respondents	
	No	Percentage
Increasing	30	30.61
Decreasing	18	18.37
No change	50	51.02
Total	98	100.00

Source: Field survey, 2007

The people who could grab the opportunities, they could increase their income easily. The following case shows one of the increased statuses of income.

Box:2- Case study related to increasing status of income by road.

Bishow Prasad Poudel 31, was a residence of Durlung-3, (rural area) but now he is a residence of Kusma Bazar (District headquarter of Parbat). He passed S.L.C. and joined intermediate level. He couldn't be regular and passed this level. After accessibility the road, he bought a jeep. To buy the jeep his brother Krishna sent some money from Qatar and a finance company gave loan as well. He continued his job as a driver and vehicle owner also. After four year, he made huge building in Kusma Bazar with the income of jeep and his brother's income. According to him, the SDK road developed his economic condition. He earned more than Rs 40 thousand monthly by this jeep.

After the road construction, Mr. Bishow got a good economic condition in his life.

5.9 Animal Husbandry

Animal husbandry is also the important way of rural livelihood. It is the vital part of agriculture. Without livestock, agriculture production is impossible in the rural area. Livestock was the alternative strategy in economic aspects in the study area. People were tame buffaloes, cattle, goats and sheep etc. These animals were tame for meat, milk and fertilizer for agriculture production. Some people have sold male goats and sheeps for meet. None of one has sold milk in dairy even though; the road had made easier and accessible to reach milk in dairy. According to key informants, some people have made Ghee and sold. Based on the

observation and information from key informants, it can say that livestock was not being professionally in the study area. The SDK road also didn't effect in their livestock pattern. There was not special change in livestock sector.

5.10 Mobility towards different organization

Spontaneously, the society seeks the different organization or institution formally or informally itself. There were previous existing indigenous or governmental and some non-governmental organization in the study area. According to key informants, after accessibility the road people were mobilized by above mentioned organization. Some agricultural group, clubs and mother groups were formatted there. People of this area were participating in different several organizations after accessibility the road than it was before. The district agriculture office Parbat has organized different group of vegetable production in the study area. People were engaging interestingly in those groups. Some of them were sold their production also. The SDK road has helped to mobilize the different group. According to the key informant, only after the road construction different government organization and non-government organization have started to launch different program frequently. Because the road has made easy for travel.

It shows the road has helped to increase the mobility of people to being organized. The participation and mobility condition of people towards different organizations shows the following table.

Table-20: Distribution of respondents by Involving in different organizations

Variables	Respondents	
	No	Percentage
Involved	41	41.84
Not Involved	57	58.16
Total	98	100.00
Time period of involved (after or before accessibility the road.)		
Only after the road accessibility	32	78.05
Only before the road accessibility	9	21.98
Total	41	100.00

Source: Field survey, 2007

This table shows the present situation of respondents by involving in different organizations. Where 41.84% respondents were involved and other 58.165 were not involved. Among those respondents who were involved in different organizations, 78.05% were involved only after accessibility of the road and only 21.955 respondents' were involved previously. It shows that, the involvement of the people towards different social organization. This pattern is increased rapidly after the road construction. Because the road has made so easier to work for different NGOs and Govts organizations in this area.

5.11 Effects of road in Some Social Institutions.

The road has brought newness in the rural social system. In a system there are different parts. Transport is one of the most important parts of social system. Among different means of transport road is most vital and effective means. So, when the road accessed in somewhere, it effects in every aspect of society. In this study one of the objects was to observe the changes in social system. Thus, here it is analyzed in general scenario in some social institutions such as: family, marriage and religion.

5.11.1 Family

Family is the primary social institution, where related members lived. There are different types of family, but here it was divided into three parts such as: Small family (up to 4 members), medium family (5to 8 members) and large family (above 9 members). According to the survey, there were 18.37% small family, 69.39% medium family and 12.24% were large family. The following table shows the family structure of the respondents.

Table-21: Percentage Distribution of respondents by their Family size

Family size	Respondents	
	No	Percentage
Small Family	18	18.37
Medium Family	68	69.39
Large Family	12	12.24
Total	98	100.00

Source: Field survey, 2007

This table shows that maximum of medium family. According to some key informants, after the road accessibility the mobility towards medium and small family is increased. Because, due to the road some people have changed their occupation and the road has entered newness, which helped people to this different ways of life. Such types of different perspective of individual pushed them in a medium and small scale family.

5.11.2 Marriage

Other primary social institution is marriage in every society. In the study area, most of the marriages were arrange before of the road construction, According to some key informants and respondents. But after accessibility the road, there were happened different types of marriage such as: Love marriage, Inter-caste marriage etc. These types of marriage were happened by different causes. Among these causes, one of the most effected cause was road in the study area. Because the road has created the mobility towards different places, caste or ethnic group, religions and languages people. The people of study area got chances to interact with these different people; such environment helped to create different types of marriage. The following case shows one of the different marriage created by road.

Box: 3- Case study related to different marriage type created by road.

Binda Pun was a student of lower- Sececondary School of magar community at Kang-9, Halhale. When the SDK road was constructed, some jeep started to run in the village. Binda was attracted with one of the Jeep driver named Indra Gurung. One night the jeep came there. At the same night, she got married with driver. It was inter-caste and love marriage. When Binda married with driver, she was only 14. So this marriage was the child marriage as well.

Although they have settled their life. The interesting event was that, they both were engaged in related job with SDK road. Her husband had been driving the jeep in this road and she has started a teashop in the starting point of SDK road. So the life of Binda is mostly related with this road. This road has created a different mode to Binda's life.

In this area, other different types of marriage were happened by the road accessibility. The road has effected in marriage system directly or indirectly in the study area.

5.11.3 Religion

Religion is one of the subsystems or primary social institution, which helps to maintain the society, Religion gives threat of sin and Love of sacred. In the study Brahmin, Chhetri, Dalit, Some Gurung and some Magar were following Hindu. Some Gurung and some Magar were following Buddhism. As based on observation and According to some key informants, the norms and values were being flexible. There were

different causes which were affected in religion. One of the vibrant cause was road. The road is one of the parts of modernity which creates openness. Thus, the road has been affected in different social aspects such as religion.

According to some respondents, some Christian's mobility has increased to familiarize their religion, after construction the road. But no one has changed their religion.

CHAPTER VI

POSITIVE AND NEGATIVE EFFECTS OF THE ROAD

Road is necessary condition in rural area. When the road connects in somewhere it effects in different sectors. The construction of SDK road has diversified the livelihood strategy in the rural area. After the road construction, some non-agriculture activities have expanded such as business, wage labour etc. On the other hand, the road has cut out agricultural land, increased population, increased evil works and conflicts etc. So there were both positive and negative effects in the study area.

6.1 Positive effects of SDK Road.

Road is the most important element for the development of rural area. It helps in daily life for easy transportation and travel. People can improve their livelihood after accessibility the road. In this study, some notable positive effects are given as following.

6.1.1 Increased Employment.

The SDK road has created some opportunities of employment. People have got chance to work in on-going road construction process as a wage labour. Some people were become driver and vehicle helper as well. On the other hand, people were engaged to grow some vegetable production, some were started to do business after the road accessibility.

6.1.2 Increased Income

Some people have increased their income by different employment opportunities by to do business, by growing vegetable production. The road has created mobility and interaction with different people. It has increased the rate of foreign employment. Thus the remittance was highly increased in this area. Such types of different sources, income were increased but not of all respondents. Of the total respondents 30.61% have agreed that the level of income was increased.

6.1.3 Made easy for Travel and Transportation

The SDK road has made the transportation system easier. Every day needs material are carried by vehicles from different urban area and some local production were out going. People were traveling on vehicles to do their work in short time than previous time. The road has become most useful device of transport in medical emergencies. All Respondents have agreed that the road is become so useful in medical emergencies.

6.1.4 Helped in Other Development Infrastructures.

After the SDK road, most of the school buildings were plastered, the electricity has been connected easily after the road accessibility. Some drinking water project have been lunched in Durlung-5 and Kyang 3,4 and 5. In these projects the road was become fruitful.

6.1.5 Helped in Agriculture Production

According to some key informants, the agricultural productions have been improved after the road accessibility due to easy access of the fertilizer and improved of market for outgoing agricultural production. Some NGO's and district agriculture office, Parbat have mobilized different vegetable production group in this area.

6.1.6 Improved Community Mobilization and Status of Women

Observation and information obtained from key informants shows that the establishment of the road has helped to mobilize the community in different aspects, such as: Communication, awareness, meetings politics and other social service sectors in this society. The dissemination of information by friendship, neighborhood and kinship is increased after the road construction which has helped to increased mobility.

The women role was increased in outside dichotomy. They were involving in meeting, different training conducted by different NGOs. Social mobilization was developed and this has helped to improve the status of women in the study area.

6.1.7 Other Positive Effects

There were other notable positive effects in the effected area as following.

- a) The road has increased trade and business.

- b) More or less, it has helped in education.
- c) The road has reduced the vast gap between rural and urban area
- d) Road has increased consciousness.
- e) It has been an essential factor to develop rural society.

6.2 Negative Effects of SDK road.

There were also some negative effects of this road in the study area. Most of the negative effects can be reformed, while people can do and think by right way about the opportunities and newness created by road.

6.2.1 Increased Social Evils and conflict

Some of the respondents, key informants and case studies have reported that the road has increased some social evils and conflicts. The flow of vehicles and the regular movement of people from the various parts, have increased different social evils and conflicts. Such types of movement have entered undesirable fashion, card playing, alcohol drinking and carrom playing pattern. The people who were involving in such evil works, they were losing their productive time. Some school children have left their school after the road construction.

The following case shows a negative event effected by road.

Box: 4- Case study related to negative event created by road.

A boy, named Man Bahadur Darji, was a student of Halhale lower secondary school of Kyang-9, Parabt. When the road was constructed in this area. Some vehicle were started to flow there. Man Bahadur wanted to play along the road and follow the running vehicle; he didn't want to go to school. After sometime, he started to help in a jeep as a jeep helper. Then he left the school. After some days the jeep had to maintain, so jeep was taken into the garage for servicing at Kusma, Bazar. The garage was near Pokhara Baglung highway. At 8:00 pm, while he was walking along the road to go for dinner, an unknown bus knocked him and injured. After treatment in Gandaki Regional Hospital, Pokhara he got well. Now, he had left the school and jeep helper as well. He didn't do any relevant works now. He was involved in different social evils in the study area.

On the other hand, the road has created exploitation to users due to the high rate of fare. So there was conflict between users and vehicle owners. These were indirect conflict between different businessmen. The flow of different people from different area had also created some conflict and social evils.

6.2.2 Increased expenses

The observation of researcher determined that, the road has entered expensive culture in lodging, fooding and other activities.. The road has created newness, entered urbanization and other more facilities. People of this area were following such type of expensive culture. Naturally, this culture were too expensive than existing culture. Only

some people have modified towards different earning ways. But those, who were following their traditional ways of livelihood, they were totally in crisis. Because the expenses is increased and income was stable. It was the dangerous matter of concern for stable people.

6.2.3 Road has affected agriculture land, jungle and created land degradation

When the road was constructed in this area, it has cot off more agricultural land. It has ruined and damaged the community forest of Durlung-5 and Kyang-9. After the road construction, some people had to compelled for migration due to the landslide from road. Other landslides have damaged the agriculture land as well. According to some key informants, some people have felt in very difficult situation in their life due to the road construction.

6.2.4 Road has decreased economy of study area

Some information from key informants, Respondents and from observation of the researcher determined that the whole economy was decreasing in the study area. After the road construction, people have started to change their life style directly or indirectly. They have increased fast food in their fooding rather than indigenous food. They were using Coca-cola, juice, beer, noodles rather than milk, curd and self production foods and drinks. Otherwise other ready made and expensive materials were entering regularly but very cheap, raw materials and some agriculture production were outgoing from the study area. Thus, it shows the dangerous situation. If this situation is continued for a few years the people of this area, will fall in crisis in near future.

CHAPTER VII

OPINION OF PEOPLE TOWARD ROAD

7.1 Perception of people about Road Accessibility

Will and desire are never fulfilled of human beings. They need more comfort in existing environment. It is universal truth that the road development is the most useful and essential subject to fulfill their comfortable will.

Road helps other development infrastructures. Road is an essential factor to live easily. About the road, people perception was measured by social survey and other data collection tools and techniques in this study. Which are shown as following:

Table-22: Distribution of respondents by their perception towards road with different variables (I)

Road has increase Income	Respondents	
	No	Percentage
Agree	30	30.61
Disagree	18	18.37
Undecided	50	51.02
Total	98	100.00
Road has helped in Education	Respondents	
	No	Percentage
Agree	69	70.40
Disagree	13	13.27
Undecided	16	16.33
Total	98	100.00

Road has made easy in medical emergencies	Respondents	
	No	Percentage
Agree	98	100.00
Disagree	-	-
Undecided	-	-
Total	98	100.00
Road has increased Consciousness	Respondents	
	No	Percentage
Agree	96	97.96
Disagree	1	1.02
Undecided	1	1.02
Total	98	100.00

Source: Field survey, 2007

To observe the perception, different variable were taken. Among them four variable and the findings about them are shown in Table-23 According to above mentioned table, maximum respondents were positive towards road. The respondents, who were grabbing the different opportunities, said that the road has increased income. They were 30.61%. Other Respondents who were following traditional way of livelihood, they said that the road has decreasing income. Because it has increased expenses by fare, other expensive culture and it has affected agriculture land as well. They were 18.37% and other 51.62% respondents hadn't decided about it. It means their income was neither increased nor decreased.

About education, 70.40% respondents agreed that the road has helped in education. According to them, road has made easier to bring material of school building, books and other stationeries. Some students and teachers were benefited by the road and they have used their time

more effectively in their task. 13.27% respondents disagreed with this phenomenon. According to them, the road has affected the school environment. Students were concentrating towards vehicles than their studies. Some students were leaved their study and went to become labour or vehicle helper. Other 16.33% respondents hadn't decided about it yet.

Road has helped in the medical sector. All Respondents has agreed this phenomenon. This data was totally resembled with observation and information by key informants as well.

Other phenomena of above table was 'road has increased consciousness' 97.96% respondents were agreed that. According to them road has brought newness, increased mobility of different individuals, institutions and organizations as well. Only one respondents or 1.02% disagreed with it and other only one respondent hadn't decided it.

Table-24: Distribution of respondents by their perception towards road with different variables (II)

Road has helped in agriculture production	Respondents	
	No	Percentage
Agree	74	75.51
Disagree	19	19.39
Undecided	5	5.10
Total	98	100.00
Road is helpful in communication	Respondents	
	No	Percentage
Agree	95	96.94
Disagree	3	3.66
Undecided	-	-

Total	98	100.00
Road has reduced the gap between urban and rural area	Respondents	
	No	Percentage
Agree	94	95.92
Disagree	-	-
Undecided	4	4.08
Total	98	100.00
Important aspect of transportation	Respondents	
	No	Percentage
Agree	98	100.00
Disagree	-	-
Undecided	-	-
Total	98	100.00

Source: Field survey, 2007

This above mentioned table shows the perception of respondents in other related variables. 75.51% have agreed that the road has helped in agriculture production. According to them, they could bring fertilizer, seeds and other equipment for agriculture. They could sell their production easily after accessibility of the road. Other 19.39% respondents were disagree with it. According to them, the road has cut-out the land and reduced the agriculture production. Only 5.10% respondents couldn't decide in this phenomenon.

Road was the useful factor of communication in the study area. 96.94% respondents have agreed that but only 3.06% have disagreed. All have decided about this phenomenon. People have sent their message by

the help of vehicle owner, driver, helper etc. The vehicle carried the newspapers, magazines etc as well.

The road has reduced the gap between urban and rural area. It was easy to go to everywhere form rural area. Everything for human needs could found after accessibility the road. The rural area is being changed after accessibility the road. Among total respondents 95.92% Respondents have agreed this phenomenon. Only 4.08% have undecided on it yet.

Within different transport road is the most important aspect in everywhere. As so, the road is most important in the study area. 100% Respondents have agreed that the road is most essential and important aspect of transport.

Table-24: Distribution of respondents by their perception towards road with different variables (III)

Road has helped in other development infrastructure	Respondents	
	No	Percentage
Agree	98	100.00
Disagree	-	-
Undecided	-	-
Total	98	100.00
Increased in Employment	Respondents	
	No	Percentage
Agree	91	92.86
Disagree	6	6.12

Undecided	1	1.02
Total	98	100.00
Essential factor to develop rural society	Respondents	
	No	Percentage
Agree	98	100.00
Disagree	-	-
Undecided	-	-
Total	98	100.00

Source: Field survey, 2007

Above mentioned table, shows that road has helped the other development infrastructures. The electricity has connected easily, after the road construction. New school buildings were constructed and different project of drinking water were lunched in this area. All respondents have agreed that the SDK road has helped in other development infrastructures.

The road has increased employment. 92.86% respondents have agreed this phenomenon. According to them after accessibility the road, people got new opportunity of business, started to vegetable production, started different job related to road etc. But other 6.12% respondents didn't agree with this phenomenon. Among them some were porter, whose job was affected by this road. Only one respondent hadn't decided about it.

To develop every society, road development is the basic requirement. Likewise this, according to the respondents the road was so

essential factor to develop the society. All respondents agreed that the road is the essential factor to develop the rural society.

In general scenario, the survey about people perception of the road shows that, the road is most essential and important factor. But there were not all positive effects after the road construction.

7.2 Suggestion of people to enhanced their livelihood after accessibility the SDK Road.

Road transport increases different new opportunities and expenses as well. In different sector the expenses are increased indirectly in the study area the road has created new environment in livelihood strategy. The expenses are increased and income is stabled, except some cases. This pattern of economic condition will be fall in different situation in near future. In this area, only some people were engaged in different sectors to increase their income. Other were following traditional ways of livelihood. Of the total Respondents, most of the people were conscious. According to them to enhance the livelihood after the road construction, people have to follow these ways of earning:

- 1) By increasing agricultural production with vegetable and fruit.
- 2) By starting cottage industries such as: furniture, poultry farm etc.
- 3) By establishing a milk dairy which helps to all farmers.
- 4) By exporting local resources such as: Slate, wood etc.
- 5) By doing business.
- 6) By increasing livestock for milk or meat.

- 7) By developing transport and travel business.
- 8) By involving in different employments created by road and others.
- 9) By increasing tourism.
- 10) By grabbing all positive opportunities rather than expensive and undesirable culture i.e. fashion, using fast food, house building construction etc.
- 11) By doing balance the fare of transportation.
- 12) By being conscious about unbalanced import and export pattern.

CHAPTER-VIII

SUMMARY AND CONCLUSION

8.1 Summary

After the road construction, people have changed the livelihood of rural area smoothly. The road has mostly effected in occupation, agriculture production, lodging and fooding style and some social institutions such as marriage, family and religion. In general, the road has knocked all the aspects of livelihood directly or indirectly.

Of the total Respondents, 20.41% Respondents have changed their occupation. Most of the people were engaged in agriculture before, but after the road accessibility occupation was diversified more or less. Those people who have changed their occupation towards different sector i.e. service, business, wage labour etc. Some people have started to grow vegetable in their field rather traditional production.

Some people of this area were changed their house building structure after the road construction. 37.76% Respondents have changed their house building structure. Among them some were changed roof style from straw to tin, some of them were plastered the walls and other were made permanent house building using cement and rod.

The pattern of using fast food and other cane food i.e. noodles, biscuits, chocolate, coca-cola and other wine and dinks is increased rather than their native foods and drinks.

Mobility of people was increased in different sectors, after the road construction. Friendship, neighborhood and kinship were the main exposer of mobility. Undesirable fashion has entered. Young generation were started to copy the culture of urban area as well as western world. The road has increased both the expenses and opportunities. The people who were grabbing the opportunities, they were increasing their income but who were stable they were in crisis.

The road has helped in other development infrastructures i.e. school building, electricity, driving water projects etc. After the road construction, it has helped in agriculture production, road has increased employment and it has made easy in medical emergencies.

The effects or changes of road on livelihood were both negative and positive as following:

i. Positive Effect of Road

- 1) The road has increased income of some people.
- 2) It has increased employment.
- 3) It has made easy for travel and transportation.
- 4) It has become so useful in medical emergencies.
- 5) The road has become helpful in other development infrastructures.
- 6) Road has helped in agriculture production.
- 7) It has improved status of women and increased mobility.
- 8) It has reduced the gap between rural and urban area.

9) Road has increased consciousness.

ii. Negative Effects of Road

1. Increased social evils and conflicts.
2. Increased expenses.
3. Cut out the agricultural land, jungle and created land degradation.
4. Increased pollution.
5. Road has decreased economy of the study area at present.
6. Entered undesirable fashion and culture.
7. Road has increased cottage alcohol industries.

8.2 Conclusion

Livelihood is the peoples way of life where people are engaged in economic social and cultural activities to exist in a society.

'Searching of more comforts and newness' is the main nature of human beings. So, people seek convenience way of life. People have developed different types of facilities to meet their will and in different sectors i.e. communication, transport education etc.

Among the different types of human needs transport is one of the vibrant aspects. Among different types of transport 'road transport' is the most essential and suitable device in everywhere. In Nepal, road transport is being developed. When the road enters into underdeveloped area, it effects in people livelihood directly or indirectly. People are

compelled to change their livelihood smoothly or drastically. After accessibility the road, it knocks the existing structure of society. Thus, people seek to adopt the newly environment created and effected by road. After road accessibility, it increases expenses, enters newness and urban culture and increases mobility as well. People starts to bring change in their daily behavior, earning ways, lodging and fooding style and other culture smoothly.

In the study area, people have changed their livelihood after the construction of SDK road. The people of the road area were compelled to change their existing way of life. There were both positive and negative effects of road in changing pattern. Mobility or awareness of people, changing agriculture production, easy condition for travel and transportation and different opportunities created by road were the positive effects of the road. But entering undesirable fashion, increasing conflict and social evils and created land degradation were negative effects of the road.

Vehicles were imported huge amount of ready made goods and food materials form urban area but very less agricultural products and some woods were being exported. It shows one of the dangerous situations in economic sector. Otherwise, the road has increased expenses of every individual but most of them were not conscious about to increase their income. They were following their traditional ways of earning but expenses were becoming high. If this situation being regular, it can be more difficult in their livelihood.

Young generations were started to new undesirable fashion in rural area after the road accessibility. Some people were changing their agriculture production with some vegetable production. Some of them were started to sell their production more or less.

After the road construction, It has affected in other social and cultural aspects i.e. marriage, kingship, family etc. Change occurred smoothly in every aspect of livelihood in study area. Although some effects were positive and some were negative.

8.3 Suggestions for the Further Research

Further researcher, who are interested to conduct their research work in this area by being related with this road, they can conduct different relevant research. Because there are too many interesting and vibrant problem in this field. The people of this area are very helpful. Thus, the field work of the researcher's will be very interesting. Further researcher can carried out their research by focusing in following point.

- a) Further study can be conducted in the field of environment that the road has effected in this area.
- b) This road can be a tourist route to go to Ghorepani and Annapurna region. Thus, 'feasibility of tourism' will be the next important and necessary topic for the research in this area.
- c) A purely economic research by being related with the road is necessity.
- d) This area is one of the fully natural resourceable area such as: mine of slate, medicinal raw materials, wood etc. After the road construction, mobilization and utilization of these natural resource

is being easier due to the appropriate device of transportation. Thus, to identify and manage those kinds of resource, the research, related with Natural resource management will be vibrant.

- e) This area is multi-cultural, multi-lingual, multi-religious and with multi-caste and ethnicity. To do any kind of sociological, and Anthropological studies, this area will be very relevant. Otherwise all the people are kind, helpful and amazing. Thus to do long durable anthropological research this area is very suitable.

REFERENCES

- Abraham, M.F. 1982, *Modern Sociology Theory an Introduction*, Oxford University Press, Delhi.
- Abrham, F. and Morgan, J.H. 1994, *Sociological thought UN Roa at Macmillan India press, Madras.*
- Adhikari, D.P., 2000, *Road Development, Evolution of Market Centers and Analysis of Mobility Pattern of Goods and People Along the Ranke-Ravi- Chisapani Road, A Case Study of Panchami Market Centre Mechizone*, Unpublished M.A. Thesis, Central Depart of Geography, T.U. Kirtipur, Kathmandu.
- Agrawal, G.K. and Das, A.K. Lal, 1986, *Transport Linkage in Nepal: Protects for Regional Cooperation*, CEDA, T.U. Kirtipur Kathmandu.
- Anderson, G.W. et all, 1982 *Rural roads evolution summary report*, A.I.D. Programme Eudution report no.-5 U.S.A
- Barwell, I.J., Idmonds G.A. et al, 1985 ,*Rural Transport in Developing Countries A Study Prepared for the International Labour Office Within the Framework of the world Employment Programme*. Intermediate Technology Publication.
- Basanta, K. P., 1985, *Impact of Tansen-Tamgash Road on" the trading activities of local people*, A mini research report, Dean's office institute of Humanities and Social Science, T.U., Kirtipur, Kathmandu.

- Bhurtel, B., 2000, *Changing Livelihood Strategies of Kumals Living in Pokhara Valley of Western Nepal*. Unpublished M.A. Thesis in Anthropology T.U. Kirtipur, Kathmandu.
- Blaikie, P.M., Cameron, J. and Seddon, J. D. 2000, *Nepal in crisis: Growth and Stagnation of the Periphery*, New Delhi.
- Blaikie, P.M., Cameron, J., and Seddon, J.D. 1980, *The Struggle for Basic Needs: A Case Study in Nepal*, OECD Development Centre, Paris.
- CBS, 2003, *Population Monograph of Nepal, Vol I and II*, Kathmandu, CBS Nepal.
- Coser, L.A., 1967, *Sociological Theory*, the Macmillan Company Newyork.
- Cuff. E.C. et al. 1981, *Perspective in Sociology* George Allen an unwin pvt Ltd. Australia.
- Dahal, K.B., 2001, *Struggling with Development: a Case Study of Changing Livelihood Strategies of the Bramus from Western Nepal*, Unpublished M.A. Thesis, Department of Sociology T.U. Kirtipur, Kathmandu.
- Dangol, D.M.1996, *The study on Socio-economic impact of the "Dumre-Besisahar Road Project"* An unpublished M.A. Thesis central department of Economics, T.U., Kirtipur, Kathmandu.

- Demrah N.J. and Peterson, R.A. 1967, '*System change and conflict*' the free press, A Division of Macmilian publishing co, The New Work.
- E., Rapp et al., 1994, '*Impact study on settlement structures along the Dhading Besi-Salyantar Road*, Impact monitoring unit, Kathmandu.
- Gautam, T., 2060, '*Perspective on Social and Cultural Change and Development*, Vidyarthi Pustak Bhandar, Kathmandu.
- Inkeles, A., 2005, '*What is Sociology? An Introduction to the discipline and profession*, prentice/Hall of Indra Private Limited, Delhi.
- Koirala, H.P., 1999, '*An Assessment of the Road Construction on Golusinghe-Sandhikharka*. Unpublished M.A. Thesis in Anthropology, Patan Multiple Campus, T.U., Kathmandu.
- Michael, L., 1981, '*Why Poor People Stay Poor?*' A Study of Urban Bias in World Development; Heritage Publisher, New Delhi, Reissue, New Delhi.
- Ojha, H. K., 2041, '*Women's Participation in Handloom Industry at Kirtipur Village*, Unpublished Thesis in Anthropology T.U. Kirtipur
- Okamura, M., 2005, '*Some Case Histories of Road Embankment Failure During Recent Earthquakes in Japan, Technical Session III, Disaster Management Achievement and Challenges*. Nepal Engineering College, Bhaktapur Nepal.

- Pandey, T.R., 1987, *Livelihood of Landless Peasants: A Study of Evicted Resettles*, Research Paper Series no. 33 HMG-USAID-GIZ-IDRC-FORD-WINKROCK Projects, Kathmandu.
- Papola, J.S., 1999, *Mountain Enterprises for Sustainable Livelihood*, ICIMOD, Kathmandu.
- Parsons, T., 1969, *Politics and Social Structure*. The free press, Collier-Macmillan limited alaondon, New York.
- Pradhan, P.K. and Routray, J.K. 1993, *Market Centre and Rural Development: A Case Study in Chitwan District*, AIT Bangkok.
- Rapp, E, 1994, *Impact Assessment of the Local Road Programme Implemented on Dhadingbesi- Salyantar- Siktar Road and Bhimdhunga- Lamidanda Road*. Impact Monitoring Unit (IMU) Kathmandu.
- Ritzer, G., 2000, *Sociological Theory* MC Grawl- Hill International Editions, England.
- Shrestha, C.B. and Manandhar, M.S., 1994, *Settlement System, Small Towns and Market Centre in Bagmati Zone Sub-Region*, ICIMOD ADDI Series no. 5, Kathmandu.
- Subedi, B.P. and Pandey R., 2002, *Livelihood Strategies of Rai Communities in Arun Valley: Contunity and Change, Vegetation and Society, Their Interaction in the Himalayas*, T.U. Nepal and University of Bergan, Norway.

- Taff, C. A., 1969, *Commercial Motor Transportation*, Illionors Irwin-Dorsey Limited, George Town Ontario.
- Timilisina, K.P., 2003, *Impact of Bhimdhurga- Lamidanda Road on the Livelihood Strategies of Rural People: A Case Study of Jivanpur VDC, Dhading District*, Unpublished M.A. Thesis in Geography, T.U. Kirtipur, Kathmandu.
- Tiwari, D. N., 1983, *Benefit-Cost Analysi of Gorkha Narayangarh Road Economics*, Unpublished Thesis in Economics, Central Depart T.U. Kirtipur, Kathmandu.
- Worsley, P., 1987. *The New Introducing Sociology*, Penguin Books Ltd. New-Zealand.

ANNEX-I

HOUSEHOLD QUESTIONNAIRE DESIGN

Name of the Respondent:
Caste/ Ethnic :-
Address:-

Sex:-
Date of Interview:-

Age:-

S.N.	Full Name	Relation to the respondent	Age	Sex	Material status S/M	Main Occupation A/S/B/L	Education	Remarks
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								

Relation: R = Respondent, HU = Husband, wi = wife, Br =brother, si=sister, fa = father, mo = mother, so = son, da = daughter, oth = others

Marital status: Nm = not married, M = Married, wid = widowed, sep = separated, Div = divorced

Education: ill = illiterate, lit = literate (for those people who can read & write) and class/ level/ degree.

Level, S = Secondary Level, Int = Intermediate Bc = Bachelor, Mast = Masters and above

Occupation

A = Agriculture, S = Service, B = Business H.W. = Household Work, W.L. = Wage Labour, Oth = Other

Part-I: Socio-Economic Characteristic

- 1.1. How long have you been in this village?
a. less than one yr b. 1-10 yrs c. more than 10 yrs d. since birth
- 1.2. Are you a male or female?
a. male b. female
- 1.3. Which caste or ethnic group do you belong to?
a. Brahman b. Chhetri c. Gurung d. Magar
e. Dalit (Kami, Sarki, Damai etc) f. Other indicate
- 1.4. What is your status in this family?
a. Head b. spouse c. son/daughter d. other indicate.....
- 1.5. Please tell me your marital status
a. married b. widow c. divorced d. separated e. single
- 1.6. How old are you?
a. below 20 yrs b. 20-34 yrs c. 34-60 yrs d. 60yrs and above
- 1.7. What is your educational level ?
a. illiterate b. just can read/write c. primary level d. lower secondary level e. secondary level f. intermediate g. Bachelor h. Master's or Above
- 1.8. What is your main occupation?
a. agriculture b. service c. business d. household works e. wage labour f. other indicate
- 1.9. How much total annual income of your family?
a. up to Rs.50,000.00 b. Rs.50,001.00-1,00,000.00 c. more than 1,00,001.00
- 1.10. Please tell me your agricultural land size.
a. Small scale of land (upto 9 ropanies) b. medium size of land (upto 10 – 39 ropanies)
c. High size of land (above 40 ropanies)

Part II: Changing livelihood and social aspect of road

- 2.1. When was the road constructed?
.....
- 2.2. What kinds of vehicles are available?
a. taxi b. jeep c. Bus d. Truck e. Others indicate.....
- 2.3. How much fare do you pay for 1Km?
a. up to Rs 3 b. Rs (3-7) c. Rs 7 or above
- 2.4. Do you always use this road for travel and transportation?
a. always b. sometimes c. never

- 2.5 Did this road make any change on your occupation?
 a. yes b. no
- 2.5.1 If yes, in which area?
 a. agriculture b. service c. business d. household works e. wage labour f. other indicate.....
- 2.6. Have you changed to grow the crops after construction the road?
 a. yes b. no
- 2.6.1. If yes, please tell me what kinds of crops have you grown after construction the road?

- 2.7. Do you sell any agriculture production?
 a. yes b. no
- 2.7.1. If yes, when did you start to sell?
 a. before of the road construction b. only after the road construction
- 2.8. Do you change your house building after construction the road?
 a. yes b. no
- 2.9. What types of food do you and your family use?
 a. native food b. fast food c. native and fast food
- 2.10. Which types of fastfood usually use in your family?
 a. noodles b. biscuits c. chocolates d. cane food e. other indicate.....
- 2.11. Do you agree that the use of using fast food is increasing after road construction?
 a. yes b. no
- 2.12. Did this road make any change on your income? Please check.
 a. increasing b. decreasing c. no change
- 2.13. Did this road help to develop any infrastructure of development ?
 a. school b. health post c. means of communication d. electricity e. others
- 2.14. Have any new social organizations developed after road construction in your ward?
 a. club b. mother's group c. others
- 2.15. Are you involved in any NGO's/INGO's and other organization?
 a. yes b. No
- 2.15.1. If yes, when did you involve?
 a. after road construction b. before road construction
- 2.16. What types of marriage are existing after road construction than before?
 a. love marriage b. arrange marriage c. court marriage d. intercaste marriage e. others
 indicate.....
- 2.17. Have any member of your family changed religion after road construction?
 a. yes b. no
- 2.18 Please suggest how peoples' livelihood can be enhanced after the accessibility of the road?
 a.
 b.
 c.
 d.

Part III: Peoples Perception on the Accessibility of Road

The following questions are set to obtain opinions of respondents on different points. Three options are in every options as;

- a. agree b. disagree c. undecided
- 3.1. Road has increased income.
- 3.2. It helped in education.
- 3.3. Road has made easy in medical emergencies.
- 3.4. Road has increased consciousness.
- 3.5. It has helped agriculture production.
- 3.6. It has helped in education system.
- 3.7. It has become useful for communication.
- 3.8. It has reduced the gap between rural and urban area.
- 3.9. Road has become so important factor for transportation.
- 3.10. Road has helped other development infrastructure.
- 3.11. It has been an essential factor to develop rural society.

3.12. Road has increased employment.

ANNEX – II
PHOTOGRAPHS

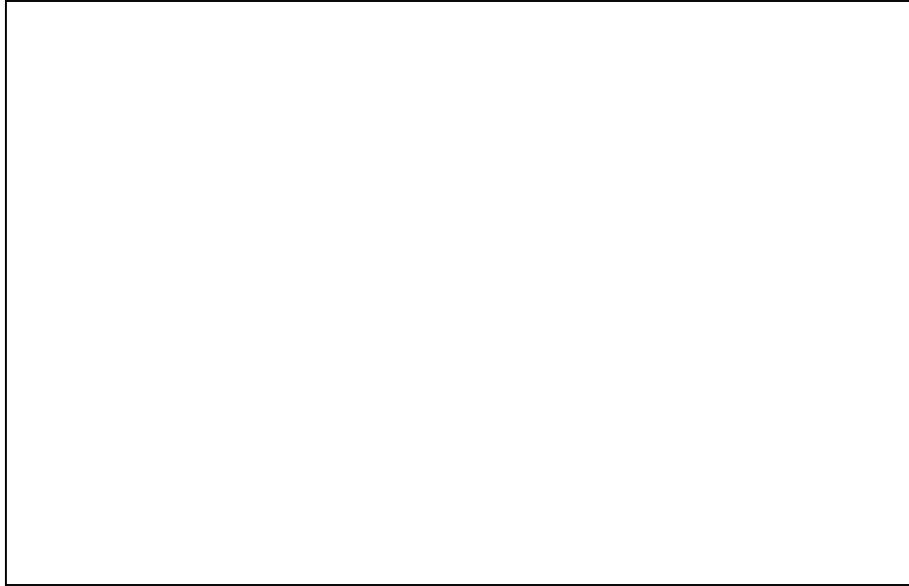


Plate I: The physical structure of study area with SDK road



Plate II: A newly constructing well equipped permanent house building at Lespar Village after construction the road

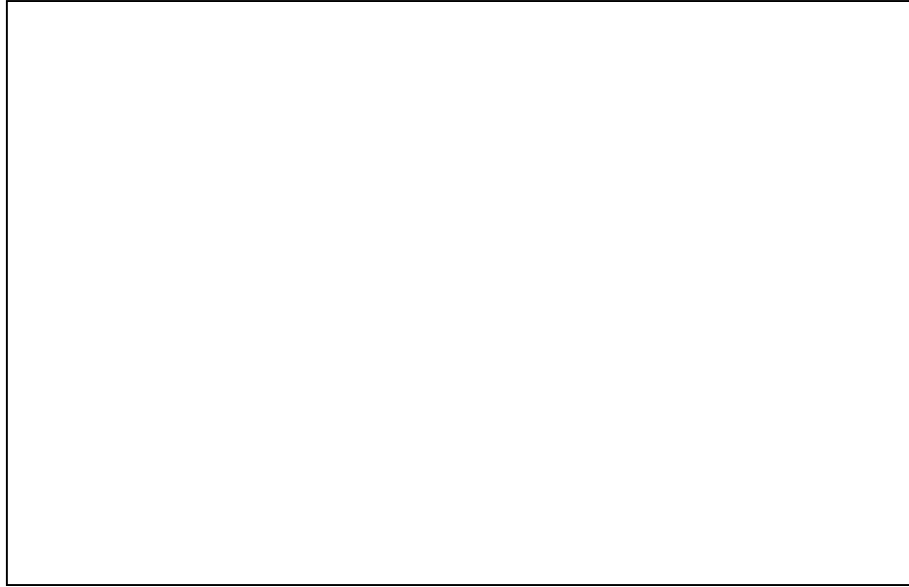


Plate III: The dominant means of vehicle, jeep with fully loaded goods for fooding and passengers

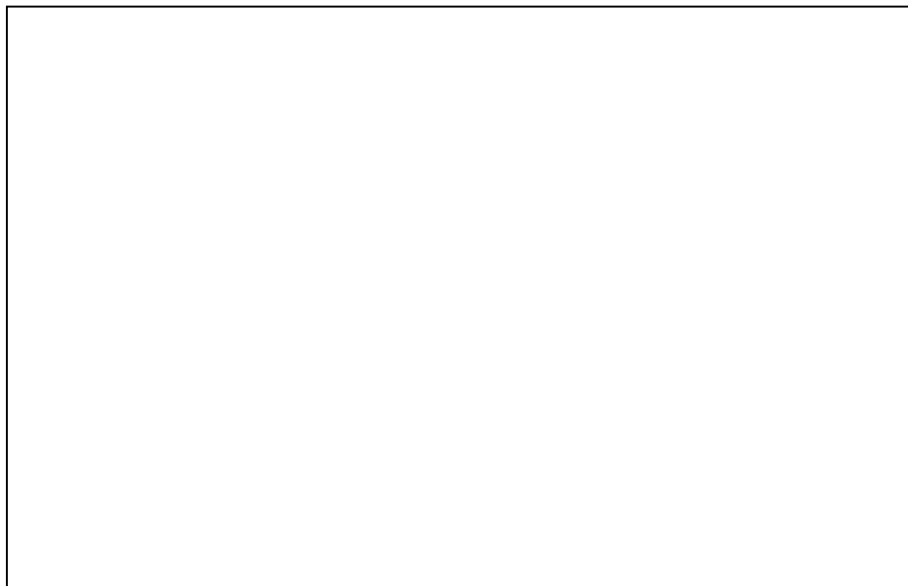


Plate IV: A new shop along the road after the road construction belonging with Dalit

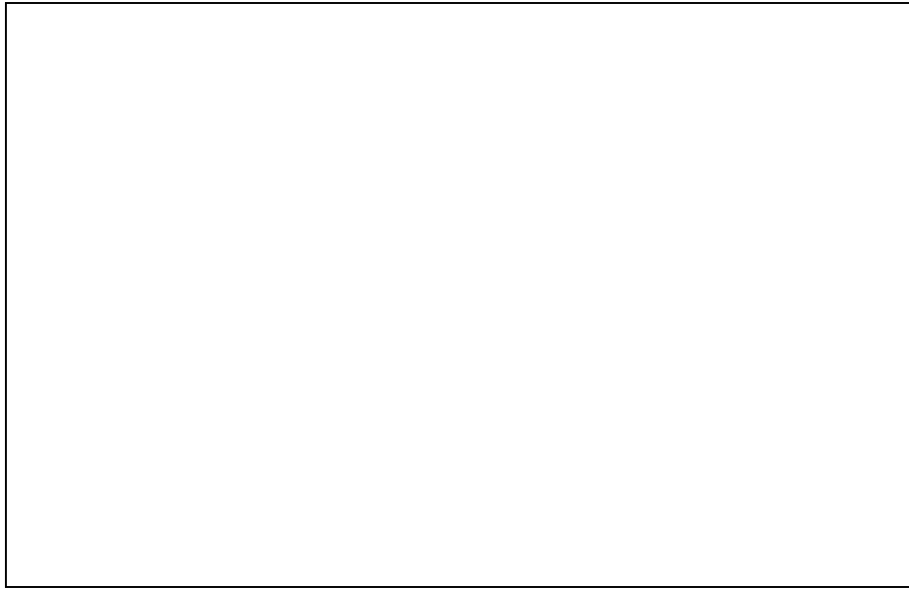


Plate V: A newly built house building only after the road construction

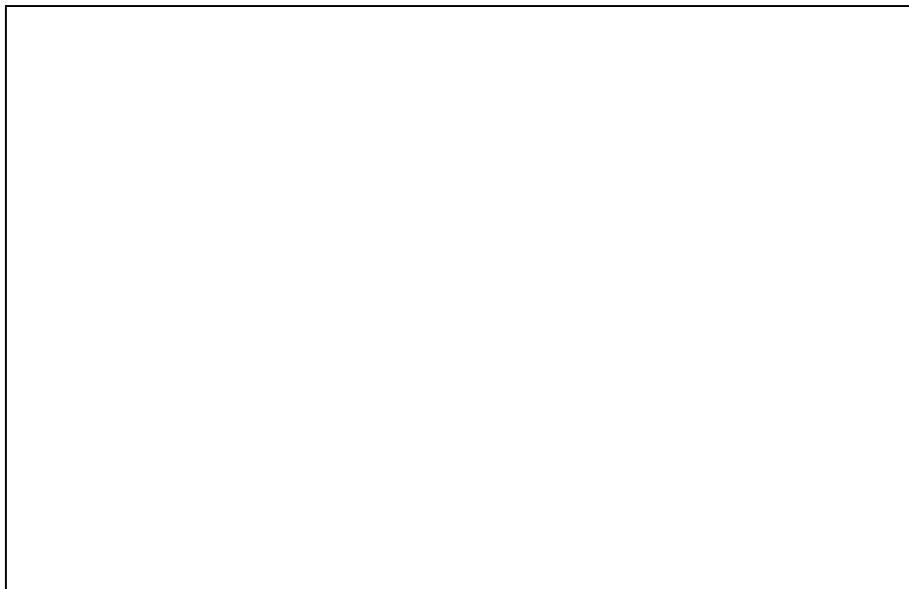


Plate VI: Researcher with respondent