

# **CHAPTER-ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

Rural transformation is about human development and is not limited only to the development of infrastructure (Bremen, 2014) In Nepalese context; the rural economy should continue to be a principal tool for the development and sustainability of the country. The word 'Rural transformation' has a broader meaning in itself. Transformation is the process or the event that occurs when something changes from one to another. Likewise the transformation which is not associated with the urban will be referred to as rural transformation. This may contain the uphill movement of the events or sometimes downhill movement, but when we are talking of rural transformation we are more concerned with its positive effects which contains the uphill movement. It involves many contexts like economic, physical, mobilization, cultural, political, administrative, and sociological and many other aspects. With the changes of society, the livelihood strategies of rural people have been changing over time in Nepal. The term 'change' used in this study refers to the process of adaptation through the alternation in their livelihood strategies due to the modernization. In this study, some effort has been made to find out how rural people modify their way of life and adapt to the circumstance with modernization in a changing context. The modernization or development activities are meant for the progress of rural livelihood and economic growth of the local people. It shifts from traditional occupation to specialization in agriculture activities and so on. Due to interventions of new technology, one of the introductions of new technology brings in the livelihood of rural people. One such intervention is the introduction of cable car in the Manakamana area of Gorkha district, Nepal. Manakamana is the most popular pilgrimage of nepal. This wish fulfilling temple of Manakamana is located in the district of Gorkha in the Gandaki zone. Every year thousands of pilgrims pay homage to goddess Manakamana Mai. Two times in a year big fair takes place here and pilgrims from all over the country come with all kinds of faith. These fair of Kartik panchami (October- November) and Baisakh panchami (April-May) are participated by thousands of pilgrims from different parts of the country.

The most important factor for changing livelihood of rural people is modern development process and development intervention. The development infrastructure especially transport network has been opened as a new door of development for rural livelihood in rural and urban area. There is no doubt land transportation is one of the most important factor which connects different places in the country. Due to the insufficient transportation network, it cannot open job opportunities and resource (forest, mine etc.) utilization, which the poor and ultra poor people cannot join mainstream of development in different isolated places. Similarly, there is no doubt that the road network provides a lot of assistance in the development and in improving rural livelihood in different places, but often landslide creates as artificial shortage of community and development materials. To ensure continuous supply of these necessities needed for rural and urban societies, development program along with carrying people by ropeway is the best means of transport. Cable Car/Ropeway also promotes tourism business in the mountainous country like Nepal and it improves the rural livelihood.

## **1.2 Statement of the Problem**

Nepal is a mountainous country, so most of the development activities and industries are located in urban and Terai region and very few developmental activities and industries are located in rural area, where transportation networks are linked. Some developmental activities can improve people's livelihood, develop the particular area and create many opportunities of the people, but some developmental works have an adverse effect in the rural society. Every developmental work and modern technology has found positive and negative outcomes in the particular area and community, but the planner always thinks of establishing the industry and imported modern technology and to do different developmental work in a way such that it will have minimum negative impacts for the rural community and their livelihood condition.

Generally we believe that the development (plans and projects) and modernization are for the progress and economic growth of the local people, but it does not apply equally everywhere. In the case of local community of Manakamana-Aambukhaireni trekking route and its surroundings they change their livelihood strategy with the ongoing development process, which has had an adverse effect on the local community. Before the Cable Car

construction local people were self-sufficient. They were engaged in different types of activities like agriculture, horticulture, animal husbandry, because at that time it was the only route to Manakamana. In these activities, the local people, managed good economic status and maintained their livelihood through business activities.

After the construction of Cable Car (CC), almost all the pilgrims go to Manakamana by Cable Car. Very few people go from this route via local residents. Porters and businessperson migrated from there and the local people returned to own traditional activities like agricultural activities with just earn and spend system. People who run small lodges and restaurants are not happy by the opening of the Cable Car; because they had been heavy losses in their business and marketing system were also reduced. Therefore, they diverted their activities from business to Agriculture.

So, this study will be finding out the different positive and negative impact on the Socio-cultural, Economic and Environmental aspects within the study area, the livelihoods strategies adopted by the rural people after construction of the modern technology and impacts faced after the MCC opened.

### **1.3 Objective of the Study**

The general objectives of this study are to analyze the impacts of MCC on the tourist flow and livelihood strategy of the rural people of Anbukhareni-Manakamana trekking route and their changing way of life in the Modern technology. The main objectives of the study are:

To analyze the Socio-economic condition of local people.

To analyze the livelihood strategies adopted by local people before and after the establishment of Manakamana Cable Car.

To analyze the effects of Manakamana Cable Car in the local development.

## **1.4 Significance of the Study**

Native and foreign researchers have done a lot of research on different development or modernization effects of local communities in different rural areas in Nepal, however nobody has studied about the impact of Manakamana Cable Car (MCC) on the livelihood strategy of local communities in Aambukhaireni to Manakamana trekking route so far. In this study mainly when the modern technology has established in rural area of Manakamana, it slowly influences the local communities as they changed their occupation and livelihood strategy. As flowing route has changed, it has negative impact on the route of origin. Then they have to restart their livelihood in traditional way or migrate from their old habitat. Everybody knows that development activity and modern technology improve the people's way of life and changes their livelihood strategy, but it is not so everywhere. Thus, the planners and businessmen always think and make new plans and establish new business in such a way that, it will have minimum negative impact in the rural people in coming days. The planner and government also must not only see the personal profit, but they must also see the public trouble and pain.

## **1.5 Limitation of the Study**

Every social research is bounded with the limitation. The cultural, historical and natural phenomenon is wider. It is not easy task to cover each and every aspect. The time and resources play vital role in the research, so the study does not cover whole population for the interview. The information is obtained from villagers, thus, the accuracy is dependent upon them. The economic aspects is very sensitive, therefore, the study cannot claim more reliability to the information by the villagers especially in the case of income and expenditure. Similarly, the study is conducted by the single season. Therefore, it is not represent the whole year.

## **1.6 Organization of the Study**

The 1<sup>st</sup> chapter includes the introductory information about study and study objectives i.e. background, statement of the problem, objective of the study, rationale and limitation of the study. The 2<sup>nd</sup> chapter includes reviews of literature. The 3<sup>rd</sup> chapter describes the methodology adopted for the study i.e. research design, sampling procedure, data collection techniques and tools. The 4<sup>th</sup> chapter includes general background of the study area, health condition and education. The 5<sup>th</sup> chapter includes analysis and presentation of data, population and economy, livelihood approach, socio economic impact and tourism. The 6<sup>th</sup> chapter includes summary, conclusion and recommendations.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

Literature review is most important aspect of research as it gives the researcher a new concept, idea and method for preparing the research works systematically. In this study, some relevant theories and studies have been reviewed which are as followings:

#### **2.1 Theoretical Review**

Different scholars have developed different theories. It gives some idea for research studies to relate and imply on the world, where ever suitable. Some theoretical reviews are reviewed in this study.

##### **2.1.1. Livelihood Approach**

Nepal is a poor country, where 81 % of the total people are involved in agriculture, but their condition is very miserable and people's life has not been improving. According to economic survey 2004, almost 32 percent of total population is below poverty level, mainly due to lack of irrigation facilities, low productivity, small size of land holding and slopping terraces as a result of which Nepalese farmers are not able to more income and maintain their livelihood. In this fact, the planner was feeling about the livelihood condition in Nepalese communities. They think that if the livelihood concept will be applying, in Nepal it will help the reducing poverty and income generation for sustainable development. This feeling is not only prevalent in Nepal, but the planner of South Asian countries, which are poorer also think. In these thinking was burn SAARC (South Asian Association for Regional Co-operation). The first SAARC summit was held in Nepal in 1985 and the summit passed some important issues for rural livelihood. In these issues, poverty reduction and sustainable development were major ones of them. These issues were implemented in Nepal with joint collaborations of Government of Nepal (GoN), United Nations Development Program (UNDP) in program basis for some district. It was not originated in theoretically but conceptually and it was area based not individual or household based. Similarly, the study of livelihood framework was also found area based not in household based. However, the study was described at household based for livelihood framework. The sustainable livelihoods approach comprises

of two elements among which one is sustainable livelihoods guiding principles and other is sustainable livelihood frameworks. The guidance principles direct one to the main concerns of sustainable livelihoods. These principles are important for sustainable rural livelihoods approach.

1. Puts people at the center of development,
2. Adopt a holistic view including multiple factors and factors and working across sectors, geographical areas and social groups,
3. Seeks to understand the dynamic nature of livelihood and influences up on them,
4. Tries to build on the people's strengths and opportunities, rather than focusing on their problems and their needs,
5. Emphasizes on the importance of Macro-Micro links and seeks to understand them, and
6. Points out the importance of sustainability to poverty reduction.

### Livelihood Frameworks

Livelihood frameworks provide many affecting factors influencing people's livelihood and it shows the important issues for the analysis of livelihood. It also helps in bringing out complexity on all factors are influencing on the livelihood. The following framework shows the main factor of influencing livelihood and how they interlink among each other.

It is difficult to understand above livelihood framework in simple way and linear process. It gives us many important issues and interactions among different aspects. It analyzes the vulnerable context, livelihood assets, transforming structure and process and how to people survive and adopt local environment in different circumstances.

### i Vulnerability Context

The vulnerability context represents the external environmental factors, in which people are not able to control or limit control. Trend means mobility of people or increasing population, (National, International) politics, economy, and new intercessions or developmental

interventions shocks represents people mentally effects, like human health economic problem and many other conflicts. Culture makes people traditionally bounded among environment society and their interactions. It also includes production, prices, employment opportunities and serial status.

## ii Capital Livelihood Assets

Capital is the central theme of human livelihood. Human beings always spend their time in generating income sources, and strengthening their economic status. The main principle of the sustainable livelihood approach is to build human strength. The capital assets are natural, social, physical, financial and human capital.

Natural capital represents natural resources like water forest land/soil/marine/wild animal, air resources. Social capital represents social behavior, skill knowledge, good relation, etc; physical capital represents ability to work, physical fitness, good health and goods of houses. Human capital represents member of household their education skill etc, financial capital represents income stock investment etc. All these all kinds of capital help of increase human livelihood by the help to some tools and equipments.

The basic infrastructures like houses, water supply, sanitation, food, clothes, communication facilities, regular inflow of money and other assets help to increase of financial capital.

The pentagon depicts the different categories of capital and interrelationships among them, which always influence livelihood strategy of human life and no singular category. Livelihood out comes that people inquire about.



## The Concept of livelihood and its origin

The important feature of this livelihood definition is to direct attention to the links between assets and options people possess to pursue alternative livelihood strategies.

Table.2.1. A conceptual framework for livelihood and diversity of rural households

A	B	C	D	E	F
<b>Livelihood Platform</b>	<b>Access modified by</b>	<b>In context Of</b>	<b>Resulting In</b>	<b>Composed of</b>	<b>With effects on</b>
Assets ) natural capital ) physical capital ) human capital ) financial capital ) social capital	Social relation ) Gender ) Class ) Age ) Ethnicity ) Caste institutions ) Rules and customs ) Land tenure ) Market in practice Organization ) Association ) NGOs ) Local admin ) State agencies	Trends ) Population ) Migration ) Tech. change ) National economic trends ) World economic trends Shocks ) War ) Drought ) Floods	Livelihood strategies	NR-based ) collection ) cultivation(food ) ) cultivation(non-food) ) livestock Non NR-based ) rural trade ) other service ) rural manufacture ) Remittance ) other transfers	

Source: Adapted from Scoones (1998:4) and Carney (1998:5) cited in Ellis 2000:30.

Assets may be described as stock of capital that can be utilized directly or indirectly to generate the means of survival of the household or to sustain its material well being at differing levels above survival (Ellis 2000:31). The five assets represented in livelihood framework are human, social, natural, physical and financial. Human capital refers to the

labor available to the household, its education, skill and health (Carney 1998, in Ellis 2000:33). Buildings, irrigation canals, roads, tools, machines and so on are physical capital that is created by economic production process. Similarly, natural capital comprises the land, water, and biological resources that are utilized by people to generate means of survival. Financial capital refers to the stock of money to which the household has access. Social capital is defined by Moser (1998 cited in Ellis 2000:36) as reciprocity within communities and between households based on trust deriving from social ties.

### An Introduction to ‘principles’ of livelihoods research

(Bernstein , 1992) has mentioned in his study report entitled *Rural Livelihoods: Crises and Responses*. Most people who live in the rural areas of poor countries, and many who live in urban areas, are engaged in an unremitting struggle to secure a livelihood in the face of adverse social, economic and often political circumstances. Two points are central to an understanding of such struggles. The first point is that the circumstances of poverty and the reasons for poverty have to be understood through detailed *analysis of social relations* in a particular historical context: between those with land and those without land, for example; between rich and poor households; between men and women; between rural and urban households and the institutions of the market and the state. The second point is that the modes of livelihood that typically prevail both within households and between households are highly *diverse*. Rural households, for example, on which this paper concentrates, may derive a part livelihood from farming; a part-livelihood from migrant labour undertaken by absent household members in urban areas or other rural areas; and a part-livelihood from a variety of other activities, more or less informal, such as petty trade or beer-brewing. Variable combinations of activities of this kind, likewise gendered in respect of unequal dispositions of labor and appropriations of income between men and women, are often themselves subject to rapid change over time. For these two reasons, rural

Livelihoods are not at all easy to study. Both these points were strongly illustrated in an exemplary text. Through exploration of ‘agrarian’ structures and change’ in three different regions of the world - Latin America, India and sub-Saharan Africa - and through detailed analysis of ‘making a living’ and ‘survival and change’ at the household level, the authors explored the vitally important processes of marginalization, dispossession, accumulation and

differentiation that have affected rural communities and go far towards explaining poverty in the late twentieth century.

### Principles of livelihoods research

1. Livelihoods research, of its nature, is essentially carried out at the micro-level: that of 'households' and 'communities'. It involves empirical investigation of combinations of modes of livelihood and, above all, of the relationships between them. It also involves pushing to the limit of their potential various methods of understanding changes that have taken place over time.
2. For research into changing livelihoods to be illuminating and useful, however, it is essential to define the structural, historical and institutional elements of what may for convenience be called its macro context. A time-frame must be specified, key variables identified, important trends of change discerned.
3. In so far as livelihoods research is directed to the diagnosis of the causes of Chronic poverty, the circumstances of poverty and the reasons for poverty should be understood through detailed *analysis of social relationship* a particular historical context. This implies a structural or relational view of poverty, and, in turn, that understanding of its 'persistence' or its intractability or its 'deepening' should be driven by questions about inequalities of power.
4. It also implies that livelihoods research and discussion of its implications for 'policy-making' should contain explicit reflection on the particular, relevant, contexts in which 'policy' is made, with reference to key questions such as the following. Who makes policy? How is it made? For what purposes? For whose benefit? With what outcomes?

### Variety of Methods and Approaches

Some examples of disparate and partly overlapping methods of studying livelihoods are briefly outlined here. In sequence, they move from the general framework advocated by DFID to specific regional studies undertaken in southern Africa. They express a clear bias toward the study of rural livelihoods. It is important to recognize that this is not disconnected, however, either conceptually or methodologically, from the study of urban livelihoods along lines elaborated, for example, by Beall and Kanji (1999). There is a

rapidly proliferating literature in this field and - apart from the highly selective references singled out below - the reader's attention is also drawn to the following work that is specifically relevant:

*De Haan 1999*, A series of country case-studies and comparative reviews produced under the auspices of the Institute of Development Studies (IDS) at the University of Sussex.

The Sustainable Livelihoods Working Paper series and the Natural Resource Perspectives briefings published by the Overseas Development Institute (ODI)

[[www.odi.org.uk/publications/working.html](http://www.odi.org.uk/publications/working.html); [www.oneworld.org/odi/nrp/](http://www.oneworld.org/odi/nrp/)].

*Deborah Bryceson, 1999*, The mass of country studies carried out in sub-Saharan Africa in the mid- 1990s under the auspices of the De-Agrarianization and Rural Employment project (DARE)

*Elizabeth Francis*'s valuable recent book *Making a Living* (2000), in which she explores the dynamics of struggle over livelihoods through comparative study of change in eastern and southern Africa

### The Sustainable (Rural) Livelihoods framework

The phrase Sustainable Livelihoods may be traced from the work of Robert Chambers and others, through a research programme undertaken by the Institute of Development Studies at Sussex, involving work in Bangladesh, Ethiopia and Mali in particular. (*DfID, 1999, Section 1.1; see also Scoones, 1998, and Carney, 1998*). A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base

This approach has been broadly adopted by the Department for International Development (DfID) and a range of other development agencies and is therefore described here as the 'official' or dominant framework [see also [www.livelihoods.org](http://www.livelihoods.org)]. *DfID (1999, 2000)* has issued detailed 'guidance sheets' which are useful to explicate what rapidly became a familiar framework in the late 1990s, shown in the accompanying diagram. Within a

particular ‘vulnerability context’, defined for example by shifting seasonal constraints, short-term economic shocks and longer-term trends of change, people deploy five types of ‘livelihood assets’ or capital in variable combinations, within circumstances influenced by institutional structures and processes, in order to pursue diverse ‘livelihood strategies’, with more or less measurable ‘livelihood outcomes’. A series of ‘core concepts’ is defined. Firstly, the approach is ‘people-centered’, in that the making of policy is based on understanding the realities of struggle of poor people themselves, on the principle of their participation in determining priorities for practical intervention, and on their need to influence the institutional structures and processes that govern their lives. Secondly, it is ‘holistic’ in that it is ‘non-sectoral’ and it recognizes multiple influences, multiple actors, multiple strategies and multiple outcomes. Thirdly, it is ‘dynamic’ in that it attempts to understand change, complex cause-and-effect relationships and ‘iterative chains of events’. Fourthly, it starts with analysis of strengths rather than of needs, and seeks to build on everyone’s inherent potential. Fifthly, it attempts to ‘bridge the gap’ between macro- and micro-levels. Sixthly, it is committed explicitly to several different dimensions of sustainability: environmental, economic, social and institutional. Conflicts between these dimensions are, however, recognized. Some strengths of the SL approach are as follows.

It seeks to understand changing combinations of modes of livelihood in a dynamic and historical context.

It explicitly advocates a creative tension between different levels of analysis.

It acknowledges the need to transcend the boundaries between conventionally discrete sectors (urban/rural, industrial/agricultural, formal/informal, etc.).

It implicitly recognizes the necessity to investigate the relationships between different activities that constitute household livelihoods, which in turn require attention both to intra-household and to extra household social relations. Some weaknesses, however, may also be identified.

Elements of the ‘vulnerability context’, such as rampant inflation and extreme uncivil conflict and ripples of mass redundancy, are surely much more important than would appear to be allowed for.

The language of 'multiplier effects' predominates, as does the presumption that it is possible to expand people's 'asset pentagons' in a generalized and incremental fashion. Inequalities of power and conflicts of interest are not, perhaps, sufficiently acknowledged, either within local 'communities' themselves or between 'communities' and, for example, regional elites and government agencies.

The notion of 'participation' that dominates the discourse of intervention - with typically unresolved tension between these towards - presupposes heavy investment in 'community' on the part of donor agencies and thence a rhetorical tendency to disguise or weaken the probability that, in one way or another, enhancement of the livelihoods of one group or stratum or class will undermine the livelihoods of another group or stratum or class.

The qualifier 'sustainable' begs many questions which are not resolved even by positive 'livelihood outcomes' of the kind indicated in the framework 'Sustainable' for whom? By what criteria? In the short term or the long term?

### **Works related to livelihood strategies**

*Chambers (1995)* reports that the realities of poor people are local, complex diverse and dynamic, Income poverty, though important, is only one aspect of deprivation. Apart from poverty, many dimensions and criteria of disadvantage, ill-being and well-being as people's experiences like social inferiority, isolation, physical weakness, vulnerability, seasonal deprivation, powerlessness and humiliation are also important in the cases of poor people. Chambers argues for sustainable livelihood as an objective to address the poverty and poor and stresses on redistribution of livelihood resources, proper prices and payments, health abolishing restrictions and hassles and safety nets for poor people at bad times which can contribute in diminishing the poverty through diversified livelihoods as well as enhancement of sustainability.

*Chambers* strongly criticizes the measurement scales adopted by present conservative west bound thinking developed in the context of more industrial conditions by the professionals about the poor. Economist dominated poverty thinking concerned with income poverty, consumption poverty and employment thinking concerned with jobs. He firmly states that these are not always capable of measuring the quality of life and standard of living.

Therefore, Chambers suggests for a rethinking of existing measurement scales and knowledge on poverty and advises the new professionals to put people first before thing, and poor people and their priorities first of all.

*Ellis (2010)* also argues that for many such households farming on its own does not provide a sufficient means of survival on rural areas. For this reason, most of the rural households are found to depend on a diverse portfolio of activities and income sources amongst which crop and livestock production feature alongside many other contributions to family well being. Engagement in a diverse portfolio of activities also means nurturing the social networks of kin and community that enable such diversity to be secured and sustained. Thus livelihood diversity has both economic and social dimensions and must be approached in an interdisciplinary way.

*Department for International Development (DFID: 2012)* made a valuable contribution by developing principles, framework as well as method for livelihood studies. DFID emphasized on the following six principles to pursue sustainable livelihood studies:

- a. People at the centre of development rather than the resources they use or the governments that serve them.
- b. Adoption of holistic view which attempts to gain a realistic understanding of what shapes people's livelihoods and how the various influencing factors can be adjusted so that taken together, they produce more beneficial livelihood outcomes.
- c. It emphasizes on the dynamic nature of livelihoods as it seeks to understand and learn from change so that it can support positive pattern of change and help mitigate negative patterns.
- d. Focus on the approach towards strength and opportunities rather than problems and needs.
- e. Emphasis on macro-micro link policies and institutions to the livelihood options of communities as well as individuals.
- f. Key approach concerns livelihood with sustainability.

*DFID* developed a sustainable livelihood framework in order to understand and analyse the livelihoods. The framework provides a checklist of important issues and sketches the link among each other, and draws attention to the processes and emphasizes the multiple

interactions between the factors that affect livelihoods. The people centred analysis begins with simultaneous investigation of people's assets (human, natural, financial, social, physical assets as well as influence and access) through the livelihood strategies to achieve the objective (the livelihood outcomes). DFID emphasized on feedbacks that are likely between transforming structures and

Processes and the vulnerability context and livelihood outcomes and livelihood assets. *DFID* emphasized on quantitative and qualitative data collection techniques for the analysis of sustainable livelihoods at local level. To fulfil the purposes it insisted for key informant interview, focus group discussion, household surveys, resource assessment as well as participation in the fields.

### Research on livelihood strategies in Nepal

*Chhetri (2012)* discuss the changing livelihood strategies of the Jalari people of Begnas area of Pokhara. The main focus of the paper is how the space (both physical and social) of the Jalari people's interaction have changed over time as a consequences of changes in the total environment around them. The total environment in relation to changes in livelihood strategies was provided a reference for 'progressive contextualization' of Andrew Vayda. "The total environment context in Pokhara Valley which includes populations of (Jalari and other communities around them) and population process (growth and migration) and natural resources (e.g. land and fish) provides the broader field within which the Jalari have been situated in the present study".

Fishing today, is no more the occupation of Jalaris people only. The Bahuns and Chhetris in particular did not consider fishing as a way of earning cash or income. Today these so-called high castes too have adopted such 'lowly' occupation. They employ Jalari at time of harvesting. Thus it resembles like the idea of *Barth (1981, in Chhetri 2012:81)* that the environment for any particular ethnic group is not only defined by natural condition but also by the presence and activities of other ethnic group on which it depends. Each group exploits only a section of total environment and leaves large part of it open for other group to exploit. *Barry Bishop* could be credited as the first scholar to initiate the study of livelihood issues in the Karnali region, high mountain ecological belt of Nepal. *Bishop (1990)* described the difficulties of the inhabitants of Karnali areas. Located in the northern



part of Himalayas with difficult terrain, the region is further characterized by inaccessibility in terms of road networks. As such livelihood strategies are very difficult to pursue. Livelihood ranching is the most important activity characterized by seasonal movement to higher elevation areas in summer and to lower areas in winter. Due to lower temperature in long winter season agricultural activities require long growing season. The author sees this lack of diversification of livelihood activities as a pressing problem and therefore he urges the concerned authorities for more activities to strengthen the livelihoods of the people to get rid them of the stress.

*Fisher (1986)* has discussed extensively the economy of Tarangpur, his pseudonym for a village of Dolpa in Karnali. His contends in this book is that 'Tarangpur is not economically and culturally self sufficient are far more interesting than the ways in which it is' (1986:2). The book is a detailed description of local economy, traditional and more modern trading practices and the cultural features which accrue to those. In the traditional system, we see the barter of home-grown grain for salt from the Bhotias, and the subsequent exchange of this salt for rice from the south. This pattern has been increasingly supplanted by the commodities circuit (occasioned largely by the Chinese invasion of Tibet in 1959) which is characterized by the use of cash and movement away from hereditary trading associates to the more impersonal milieu of the open market. *Stevens (1993)* offers an extensive historical account of the cultural ecology of Sherpas of the Everest region of Nepal. In general, we find here a skilful application of anthropological methods for studying relationship among culture, environment and land use over time. The first half of the book is detailed summary of the history of Sherpa settlements and contemporary agriculture, pastorals and forest use in the Khumbu region. The second half covers four centuries of changes in resources and resources use patterns. Two principal successive economic activities of Sherpas-trade and tourism are restricted in final chapters. The author conducted an extensive fieldwork (three and a half years), and in the book uses comparative oral histories and oral traditions, enabling him to gain a native view of the environment. *Fricke (1993)* describes with the constraints of two interdependent cycles: the short-term annual subsistence cycle which makes non-negotiable demands on labour, and the longer-term developmental cycle of households, which allows peak labour potential for only brief periods. He further places these two interesting cycles within larger historical processes in the Himalayas that

variously affect the range of economic options open to villagers. He revisits the issues of change and addresses the contemporary forces that are drawing individuals off toward wage labor in greater Nepal. *Molnar (1981)* examines the economic strategies of the Kham-speaking Magars of the hill region south of Dhaulagiri and Dolpa ranges. These Magars are adapted to the mixed high-altitude farming and pastoralism in varying degrees as a means of investigating the variations in economic strategies from one Magar community to another. She applies data on ecological model of environmental constraints and potentials. Several factors emerge from this analysis which may account for the differences in economic strategy:

- a. Access to pasture and grazing land
- b. Trade opportunities and market options
- c. Effects of seasonal labor requirement
- d. Cultural attitudes/religious taboos on types of animal husbandry, and
- e. Access to education and changing job opportunities in the organized sector.

*Adhikari (1998)* also describes that rural households with no resources have been following multiple survival strategies throughout the history of the Nepali nation-state. He also talks of economic strategies which are the results of the ongoing unsustainable economic, ecological and social development process. He presents example that the needs of the urban and wealthier household by supplying them quality of village product such as milk, rice, ghee, herbs, wild foods, timber, and stone slate, and short-term migration has also increased. Yet another strategy for the rural households to extend livelihood security is to consume cheap and low quality food products while selling their home products at higher prices. He argues that these livelihood strategies have become possible because of the greater interaction of rural areas with the national and international marketing channels.

*Bhurtel (2000)* has also carried out livelihood studies with respect to community and occupational caste group in Kaski district. The findings of Bhurtel shows that the development of the market centers and the tendency of taking up of clay pot making as an alternative by the local people encouraged the young generation of Kumals to shift to sssother occupations from traditional pot making in Pokhara valley. The vulnerable group

after the mounting threat to traditional occupation opted for the alternative of visiting some of the Gulf countries as foreign laborers. Similarly, the development of irrigation facilities and introduction of high-yielding seeds encouraged the community to shift from pot-making to farming.

Similarly, *Pokharel (2000)* has also carried livelihood studies with respect to indigenous craftsmen. He shows that the changes in economy and environment challenge to the traditional occupations of the Damai (tailor), Kami (blacksmith) and Sarki (cobbler/tanner) with specific analysis of the means they have been adopting in order to exist besides their economically and politically better-off fellow villagers from other caste/ethnic groups including the Brahmins and Chhetris.

## **2.2 Study on Ropeway/Cable Car Development**

R.K. Pandey (1968)<sup>1</sup> conducted a study on “Ropeway Transport in Nepal with special reference to Kathmandu-Hetauda Ropeway A case study: He dealt in his study that, ropeway transport is a must for the place having rugged and steep topography where other means of transport like road, air, may be compared to the cost incurred for ropeway freight. Similarly, besides ropeway, other means of transport are mostly fair weather transport. During rainy season, they are either stopped or partially working, because of landslides or natural disasters. They cannot serve regular services, but the development materials and other daily goods require continuous flow. This is the cause of installation of Hetauda-Kathmandu Ropeway after the construction of Tribhuvan *Rajpath*. The goods hauling mono-cable Ropeway between Dhursing-Matatirtha, (22.5 km) was installed in 1926. Its operating capacity was 8 ton per hour and 8 hours per day, which gave satisfactory services almost satisfaction at that time. In 1964, under US aid the bio-cable ropeway system was extended from Hetauda to Kathmandu (42km) and its capacity was 25 ton per hours. The total transit

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<sup>1</sup> R. K. Pandey, **Ropeway Transport in Nepal With Special Reference to Kathmandu-Hetauda Ropeway: A Case Study**, Unpublished M.com Thesis Submitted to M.Com Examination of T.U. Kathmandu, 1968.

time was about 4 hours and it consisted of 360 carriers with an average speed of 9 km per hour. This system was operated by Nepal Transport Corporation few years ago. He concluded that at that time, the Kathmandu-Hetauda ropeway provided daily necessities and development materials to the Kathmandu valley and surrounding areas, but the mal-practices in management and non replacement of spare parts, it could not provided the need of Kathmandu valley and it was completely stopped now.

K. K. Pandey (1995)<sup>2</sup> conducted a study on “Impacts of the rope lines on the people and the resources in Sikha valley, Mygdi District Nepal”. His study found that the rope lines farming system is a temporary respite. The rope lines play a crucial role in overall economic development of the area. The improvement quality of life to the individuals and the economic development of their communities cannot be achieved without the enhancement of nature's regeneration capacity. So, there are several changes that may induce none changes in the immediate future.

He added that, the systems of fire wood collection continue without the integration of rope lines in the forest management system. The rope lines system is likely to cause widespread deforestation. The writer found that almost 30 percent of the households were against new rope lines, because it damaged the forests. It would not be possible to protect the forests located near settlements with the rope lines alone. Rope lines became the facilitator of a rotational use of the scarce resources and not help create localized serious deforestation.

There are certain resources for which the society cannot easily change the system of its interdependence. The forest water and labour resources are elements that still bind the communities. The endowment of the communities with resources by the state as well as nature is unequal. There is a growing trend of some households getting much richer while others face hardship. Those in the trailside areas have benefit to their lands and entered in to tourism related trade business. There are improvements of *Chulo* in farmhouse and ledges should get priority in order to save costly fuel-wood. Saving fuel-wood is also a matter of meal habit and food preparation.

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<sup>2</sup> K.K. Pandey, **Impacts of the Ropelines on the people and the resources in SikhaValley, Mygdi DistrictNepal**, IHC Occasional Paper No. 1 Kathmandu, Nepal, 1995.

At the end, above studies concluded that changing livelihood has comes with development interventions or new technologies. Above studies of varies literatures has found on livelihood and economic based on community and area based but this study has focused on household as well as community level. Nobody has followed the livelihood framework as given by Carney, but Simone Wayss (2003) has followed this framework and focus on labour migration of Sanik Basti. Livelihood is a new concept in Nepal, because in the early age, people believed that only physical factor changed livelihood strategy of local community and they emphasis the whole community. Now everybody knows that not only physical factor but development interventions or modern technology like cable car also play important role for changing livelihood of rural people or community.

## **CHAPTER-THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Design**

It is the blue print for the collection of data. It is a work plan owing to the objective of the research. For this study, a descriptive and exploratory research design will be followed. The descriptive method will be used for the qualitative data obtained during the study. The data's that are not quantifiable will be explained literally.

#### **3.2 Rationale of the Study Area**

After the construction of Prithivi Highway, it made the journey to Manakamana not only easier, but a new trekking route was opened, known as Manakamana-Aambukhaireni trekking route. As a result, there were high population movements. In this movement, economic activities of local people were increased and people were involved in agriculture as well as business activities. Similarly, Aambukhaireni was made a market centre and it also provided daily necessities to Manakamana and its surroundings. It is also growing as a gateway centre for Gorkha District.

In 1998, when cable car was started, almost all the pilgrims went by the cable car, and then almost nobody trekked in this trekking route. Now a days, this route is "shadowed by the big trees." Thus, the people having low income were most affected who have low income, marginal land, wage labor, porter and small businessperson etc. In this situation I wanted to find out livelihood strategy of local people in and around the trekking route in the changing situation.

#### **3.3 Nature and Source of Data**

This study is based on both primary and secondary source of information. The primary information has been collected from the field survey. Secondary data and information were collected from different published and unpublished documents. Both qualitative and quantitative information has been used in the study.

### 3.4 Universe and Sampling

#### 3.4.1 Collection of Primary Data

Different tools and techniques were used for collection of primary data. During field survey period, there were closed and open questionnaire used to collect the household information. The method was used to collect the information household questionnaire, key informant interview field observation.

100 sample households were taken from only five (1, 3, 4, 5 and 6) wards from Manakamana and a small portion of ward 6 from Aambukhaireni VDC area , especially from Prithivi Highway to Marsyangdi Bridge and 1 Sq. km buffer area. Ward no 2, 7, 8, 9 and some portion of selected wards (1 and 3) of Manakamana VDC, and some part of selected wards are also far from study area and these are not directly affected by the cable car. Given table 3.1 shown the distribution of sample households.

Political leaders, schoolteachers service members, businesspersons, farmers, priests, VDC secretaries, household heads, and porters etc were interviewed as key informant.

Table 3.1 Distribution of Selected and Sample Household

Ward No.	Manakamana VDC			Aambukhaireni VDC		
	Total household	Affected household	Sample household 14%	Total household	Affected household	Sample household 14%
1	168	54	8	-	-	-
3	203	127	18	-	-	-
4	134	113	16	-	-	-
5	104	104	14	-	-	-
6	170	130	18	948	186	26
Total	*779	**528	74	*948	**186	26

Source: \*Population Census, 2012

\*\*field survey, 2016

### **3.4.2 Collection of Secondary Data**

The secondary data was collected from different published and unpublished documents from different sources. They were collected from T.U library, GoN CBS, CEDA library, ICIMOD library, British Council library, Department of Survey, Department of Hydrology and Metrology, Manakamana Cable Car Office, VDC Office Manakamana, different news, journals, newspapers, dissertations etc.

### **3.5 Data Collection Methods and Tools**

#### **3.5.1 Household Questionnaire Survey and Semi-structured Interview**

The structured questionnaire was prepared to carry out the household survey. It gave the basic information like population structure (age, sex, marital status etc) education, occupation, caste/ethics, land holding, agriculture production, husbandry number, general income and expenditure amount, their way of life, livelihood strategy, migration situation etc.

Sometimes the structured questionnaire did not carry out some important information like changing livelihood strategies of rural people (what, why, how, when, where etc. questions) with the development interventions. So, unstructured interview was also done to the household head.

#### **3.5.2 Key Informant Interview**

During the field survey, different key informants (ward representatives, political leader, priest, business man, school teacher serviceman, VDC secretaries (past and present) porters, farmers, cable car staff of Manakamana station) were interviewed regarding information to the impact of cable car and changing livelihood strategy of local people and communities post and present condition.



### **3.5.3 Field Observation**

Field observation is another technique for research work, which minimizes the collection of wrong information. This technique was used to get the viewing information like settlement pattern, houses structure, cropping pattern, mobility pattern of people, sanitation of environments, situation of developmental works and economic status.

In the period of field survey, they provided very important issue and dialogue for researchers. Similarly, incidentally some important information was unsecured, lost, damaged etc. in that case the field note was help and they also reminded the subject matter about what had happened in the past.

### **3.5.4 Group Discussion**

Group discussion method is a very useful tool for research work in modern age. In this method, several solutions, among the rural people who face many problems by the development interventions for their rural livelihood and economic condition are find out. In the period of field survey, 2 focal group discussions conducted in ward no 4 Dhadbari and ward no 5 Dandagaun.

### **3.5.5 Case Study**

A case study is also included in this study. Case study makes more instructed and it shows clear pictured in their social, economical, livelihood situation and how do they survive in those environments in changing context. It also provides some qualitative information.

### **3.5.6 Livelihood Strategy Survey**

The data collected by this method was primarily qualitative in nature. It included not only the economic aspect or in simpler words, the earnings but also their social and cultural way of life: since their overall livelihood is surrounded in social norms and cultural values. These terms are directly or indirectly dependent upon the overall environment of the area. So, the researcher felt that these aspects needed a concurrent exploration. Hence, a study of changing socio-economic environment and the change in the livelihood strategy has been attempted together. Questions relating to their movement history the way they meet their economic needs from a major activities each of the household practices and the activities

they have adopted to supplement it, together with their level or satisfaction, have been put in the instrument of doing livelihood survey.

### **3.6 Data Processing and Analysis**

When information was collected from different sources, then they transferred into master sheet. The quantitative data were tabulated based on master sheet by the help of computer from Excel program. However, the qualitative information was carefully edited, which was missing and uncompleted answer. Similarly, the table, diagram and charts were prepared by Excel program.

To analyze the quantitative data first it was carefully checked, necessary tables were prepared and simple statistical tools (ratio, percentage, average etc.) were used where necessary. Besides these maps, tables, charts, diagram was also used. Maps were prepared by using GIS (Geographic Information System) and photographs were used where necessary. The study was mainly descriptive in nature and the analysis of the result was described by logically.

## **CHAPTER-FOUR**

### **BACKGROUND OF THE STUDY AREA**

The selected study area is of four hours bus distance from Kathmandu, one hour from Narayanghad and three hours from Pokhara city. There is a regular bus service from these cities. The study area especially Manakamana is a historic, religious and tourist place. Manakamana is also famous for Mandarin (orange) farming. Besides this crop farming is also notable. As a whole, it is recognized as a religious centre so; thousands of people come in here every year.

#### **4.1 Location**

The geographical location of the study area is situated in approximately between 27° 54' 00" to 27° 54' 30" North latitude and 84° 32' 15" to 84° 35' 30" East longitude in Manakamana and Aambukhaireni VDC of Gorkha and Tanahun District, western part of Nepal. In these two VDCs located in southern part of Gorkha district and northern part of Tanahun district. It lies in Mahabharat range or mid hills in Nepal. The study area lies in Bakrang and Deurali VDC of Gorkha District and Khatrigaun of Aambukhaireni VDC in the North ward no.2 and ward no. 7, 8 and 9 in Manakamana VDC in the East, and South and Prithivi highway in the West of Aambukhaireni VDC respectively. The study area is located at the attitude of 260m in Marsyangdi River to 1340m from the sea level. Location map is shown in page no 73.

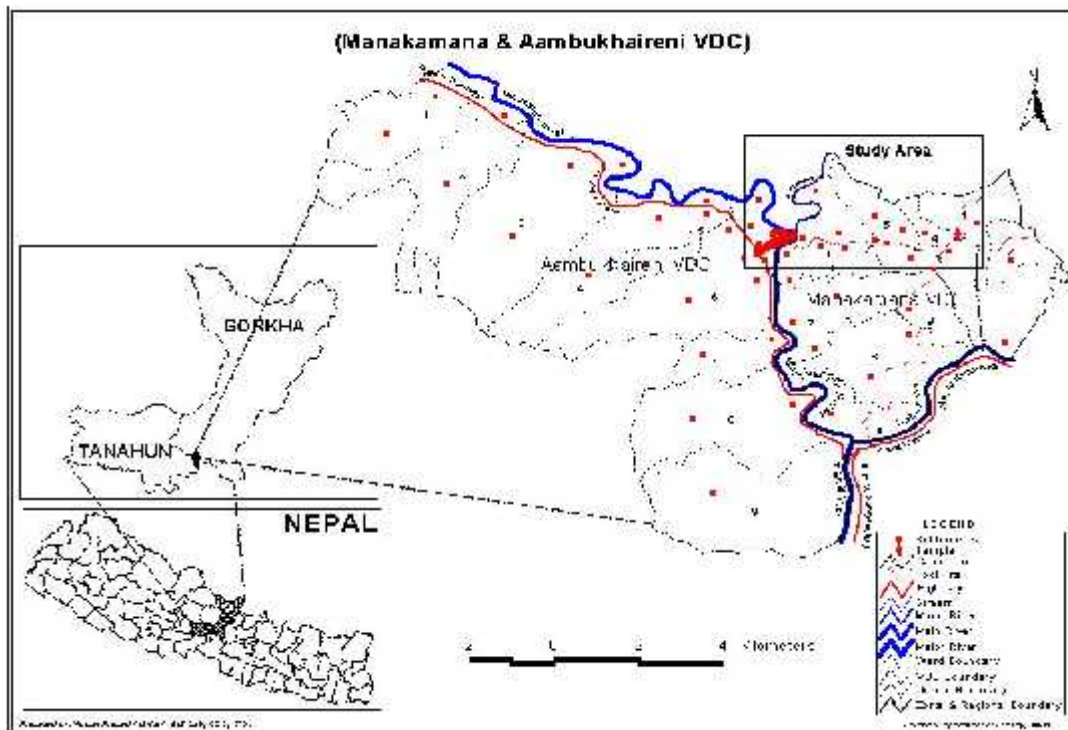
#### **4.2 Climatic Situation**

The general climatic condition of study area is dominantly controlled by altitudational variation. The Aambukhaireni and Banauti Gaun of Manakamana ward no. six have subtropical climate and rest of the other areas have temperate climate. The maximum temperature is recorded in July, which is 32.4<sup>0</sup> Celsius and minimum temperature is recorded in January, which is 9.6<sup>0</sup> Celsius. The average rainfall ranges about more than 1800mm annually, which mostly occurs during the monsoon season.

### 4.3 Natural Resources

The natural resources affects economic as well as socio cultural characteristics of the people. The main resources of the study area are rivers, vegetations and soil. Marsyangdi and Daraudi are the main rivers. These rivers are flowing from west and north to south. These rivers are not useful to farmers for irrigation because they are following from deep terraces. Besides these, other small streams are also there such as

Figure 1: figure of Manakamana and Abukhaireni VDC



The Aambukhaireni is a small market centre and has no forestland; however the VDC is rich in forest resources. Manakamana VDC is covered with, (nearly 50 percent of total land area) forest (Rajbanshi, 1997:3). In Manakamana VDC, the major natural vegetations are *Sal*, *Champ*, *Katus*, *Bamboo* and other grasses like *Khar*. Similarly, MCC has cleared forest, which does exist in transportation route ward no 3. As a result, they were facing the problem of shortage of fuel-wood, construction of houses and landslides and soil erosion. But, now a days, the MCC has appointed some serviceman for forest conservation to the request of local

people. In the present days, the local people know the importance of forest and have made a users committee for forest conservation and utilize systematically.

The geology of the study area is very un-similar. The low land (*Khet*) is dominated by clay and loamy soil, which is found in the river basin (Marsyangdi and Daraudi River). However, upland (*Pakho* or *Bari*) is dominated by mixed soil and it varies from one place to another. Soil erosion is the main problem in the study area by river in low land (*Khet*) and summer rainfall in upland (*Pakho* or *Bari*) area.

#### **4.4 Settlement Pattern and Household**

The study area consists of small village and hamlets where houses structure ranges from small hut to large concrete buildings. Some village hamlets consist of twenty to twenty five households (Kantar, Namjung, Dahdbari, Banauti, Phulbari Manakamana) and small market centre have more than hundred households.

#### **4.5 Transportation Network**

The transportation network is most important aspect of any place. Highway and graveled two types of road exist in Aambukhaireni. But Manakamana has only foot trails, beside one Cable Car route. The road network in the study area can be categorized into three groups: Highway, Graveled and trails.

#### **4.6 Health Condition**

There is one health post for health treatment in both VDCs and one private medical hall, (clinic) in Manakamana and five private clinics in Aambukhaireni. When the people are ill in Aambukhaireni they go to health post or clinic, but in Manakamana first of all they go to Manakamana to worship the goddess with *Bhokal*. Not only the people of Manakamana, but Newar communities of Kathmandu valley also believe in it and they go to Manakamana to worship the goddess if their family member is ill.

#### **4.7 Education**

Almost 50.1 percent total sample population are literate as according to principle of Manakamana high school, there was no tradition for providing education for their children

in schedule caste community and they do not care for education of their children. There is one high school, one lower secondary and three primary schools in Manakamana (around trekking route). Three boarding schools, one higher secondary (10+2) and one lower secondary school in Aambukhaireni.

## CHAPTER - FIVE

### LIVELIHOOD APPROACH OF THE PEOPLE

Livelihood strategy is the process where people adopt with a cope of environment in the particular area. Livelihood strategy is always related with socio-economic aspects, which is always affected or determined by environment, physical factor and development activities. But development activities are the most important factor, which drastically change the people's way of life in every area. It is not only changing the economic condition, but socio culture as well.

Generally, Nepalese people especially in hilly area can handle six different livelihood categories like agriculture, husbandry, horticulture, service, business and labour. Therefore, they cannot improve their status, because they put hand in different areas at the same time. So, when small change comes, then their whole livelihood strategy is changed.

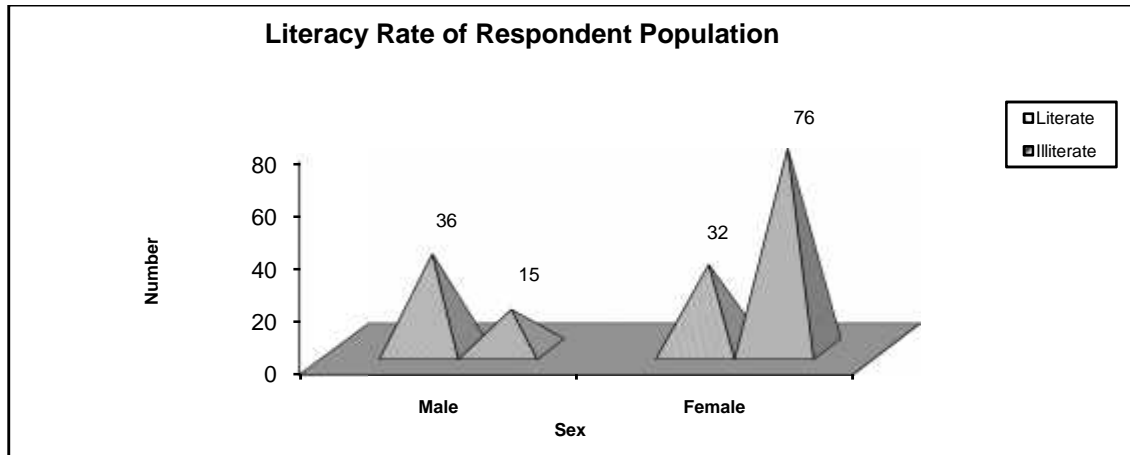
The livelihood related data was taken from structured/unstructured questionnaire, key informant interview with household member, field observation, different other suitable persons. Similarly secondary information (livelihood related) was taken from different published or unpublished materials. The different activities related to livelihood of the people of Manakamana-Aambukhereni trekking route on the following economic activities are described below.

**Table 5.1 Literacy Rate of Respondent Population**

<b>Literacy Status</b>	<b>Male</b>	<b>Percentage</b>	<b>Female</b>	<b>Percentage</b>	<b>Over all Literacy Rate</b>
Literate	36	70.59	32	29.63	50.11
Illiterate	15	29.41	76	70.37	
Total	51	100.00	108	100.00	

Source: *field survey, 2016*

**Figure 2**



Only 68 %people (both male and female) are literate and 91 people (both male and female) are illiterate. Among them 36 male are literate and only 15 male are illiterate, which % is 70.6 and 29.4 respectively. Similarly, among 108 Females only 32 females 29.6 percentages are literate and 76 females 70.4 percentage are illiterate. But the population (census 2011) indicates that out of total population in Manakamana has 56.25 percentage and 63.6 %people in Aambukhaireni VDC were can read and write. In the both VDC Male literacy rate is high this means there is a big difference in educational status in Nepal between the male and female population.

## **5.1 Population**

The total population of both VDCs was 19,386 (census 2011), among them 9,411 Males and 9,975 Females. The following table clearly shows that in word wise population among these wards, ward no 6 is first in Aambukhaireni VDC, because it is plain area and in urbanizing process.



**Table 5.2 Ward-wise Household and Population Distribution of  
Manakamana and Aambukhaireni VDC 2011**

Ward No	Manakamana				Aambukhaireni			
	Total Household	Male	Female	Total Population	Total Household	Male	Female	Total Population
1	168	422	412	834	368	883	993	1876
2	114	278	349	627	249	580	665	1245
3	203	544	545	1089	284	689	760	1449
4	134	344	380	724	106	266	289	555
5	104	262	343	605	263	604	619	1223
6	170	442	462	904	948	2204	2150	4354
7	104	309	311	620	128	318	369	687
8	108	297	312	609	123	360	382	742
9	100	245	264	509	120	364	370	734
Total	1205	3143	3378	6521	2589	6268	6597	12865

Source: *Population Census, 2011*

### **5.1.1 Population Composition by Age and Sex**

The following table shows the total age and sex composition in both VDCs, where proportion of female and active population is high.

**Table 5.3 Population Composition by Age and Sex**

Age group	Manakamana			Aambukhaireni		
	Male	Female	Total	Male	Female	Total
Below 14	1291	1311	2602	2401	2460	4861
15-59	1567	1801	3368	3424	3749	7173
60 above	285	266	551	443	388	831
Total	3143	3376	6521	6268	6597	12865

Source: *Population Census, 2011*

**Table 5.4 Age and Sex-wise Composition of Respondent Population**

Age group	Male	Percentage	Female	Percentage	Total	Percentage
Below-14	86	29.4	68	24.7	154	27.1
15-29	92	31.4	86	31.3	178	31.3
30-44	54	18.4	57	20.7	111	19.6
45-59	39	13.3	45	16.4	84	14.8
60 over	22	7.5	19	6.9	41	7.2
Total	293	100.0	275	100.0	568	100.0

Source: *field survey 2016*

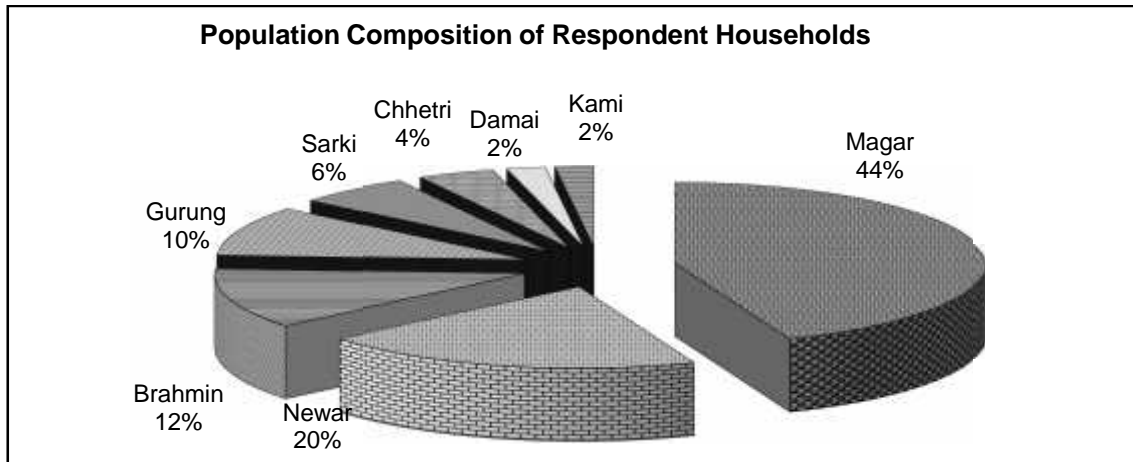
Above table shows the distribution of respondent population in the study area. The figure indicates that the active population (age 15 to 59 years) is more than 65 percent had engaged in business, and horticulture farming but now a days they involve mostly in agriculture activities like cereal crops.

### 5.1.2 Caste/Ethnic Composition

Nepal has multi ethnic diversity having more than 50 ethnic castes; and the study area is not an exception. The people of various castes/ethnic groups are living here. There are 16

caste/ethnic groups in both VDCs. Among them Magars proportion is high in Manakamana and Newar, Brahmin and Chhetris proportion is high in Aambukhareni, but over all cast ethnic composition, Magar is high among respondent households.

**Figure3**

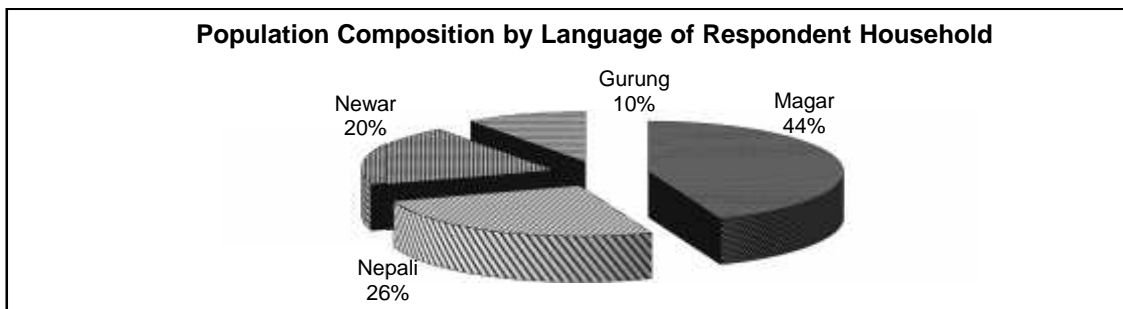


Source: *field Survey 2016*

### 5.1.3 Population Composition by Language

Magar language is of first rank in the study area. It covers 44 percent, because the area has been dominated by Magars. Similarly, Nepali language occupies second position in rank but all of them also speak Nepali. Followed by them, Newari and Gurung languages are third and fourth respectively.

**Figure 4**



Source: *field survey,2016*

## 5.2 Economy

Agriculture and livestock are the main occupations of the study area. Besides this business, horticulture is also occupying the people of Manakamana and Aambukhaireni VDC. There are two types of land, one is *Khet* (irrigated) and other is *Pakho* or *Bari* (unirrigated) land. Out of total 21506 *Ropanis* arable lands only 2366 *Ropanis* of land are irrigated in Manakamana VDC.<sup>3</sup> But, Aambukhaireni (only study area) has all land irrigated. The irrigated land is fertile than un-irrigated land and irrigated land's proportion of the study area is very low. The means of irrigation are only local *Kulo* (local canal), which is riverbank of Marsyangdi, Daraudi and other small streams that is called *Khahare*. But in the hilly areas (Manakamana), people depend upon monsoon rains for growing cereal crops.

The main crops of this area are paddy, maize *Ghaiya* (dry paddy), and millet. Among all crops, the paddy included (*Ghaiya*) and maize is dominant then others. The lack of knowledge, modern technology, new technology of cropping method and non-irrigation facility they cultivated these crops in traditional system. Therefore the production of cereal crops is not expected. The villagers are poor for economic condition especially cash flow, so they are in helping hands called *perma* (mutual exchange of labour) system.

Manakamana is a suitable area for citrus (mandarin) farming. It is main source of cash income of local people. The soil of this area is very favorable for modern farming. The people of this area have been farming mandarin since 20 years ago. They have slowly converted their *Bari* land from agriculture to horticulture, because they do not have sufficient income from cereal crop production to sustain themselves for one year. Similarly, they sell their production directly, before opening cable car to the tourist, but now it is not possible. Now, they carry their mandarin themselves up to Aambukhaireni and Mugling and sell directly to the wholesalers, retailers, and contractors. Husbandry is another sub occupation for local people, which help to maintain their status and agriculture activities. Almost all households have own cattle like buffalo, cow, ox, goat, pigs and chickens etc. Those households who are involved in business do not have more than one cattle only for milk purpose. Livestock are kept for production of milk, ghee, curd, meat, eggs and

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<sup>3</sup>Ashok Rajbanshi, *A Study of Mauderian Orange Farming in Manakamana VDC, Gorkha District; A mini research project*, Submitted to Research Division, T.U. Kirtipur, 1997, P-3.

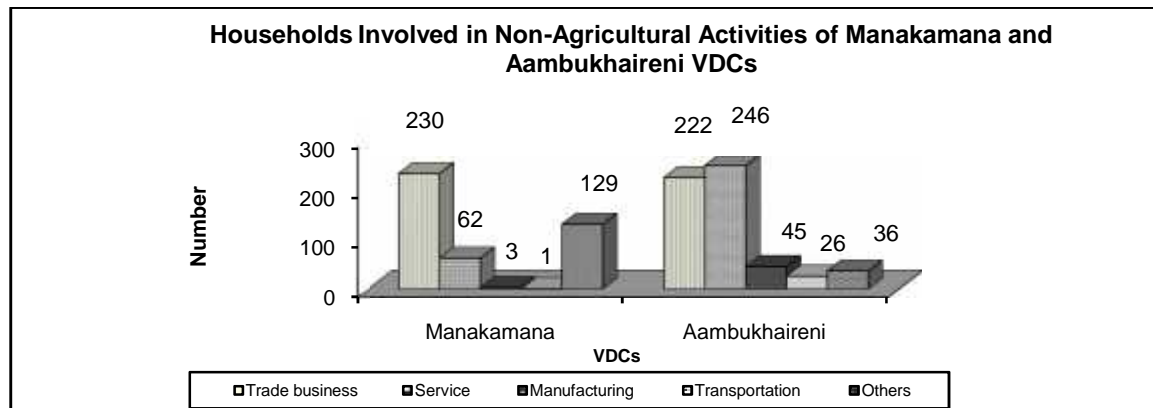
ploughing of field. They sold their animal products like milk, ghee, egg, curd, and male goat for tourists who went to Manakamana temple.

Business was their main occupation before the construction of cable car. According to the local people, income from business was profitable around Rs.1000 per day in small business like retail shops. They sell the local products like stick, fruit *Kafal*, *Aiselu* etc. also to the tourist, which helps them to earn money for buying necessary goods and they carry their way of life, but now their business has almost collapsed and they forcefully are involved in agricultural activities.

### 5.2.1 Economic Activity

There are 3794 households in Manakamana and Aambukhaireni VDC. Among them 1000 households are involved in non-agricultural activities. The table shows the proportion of people engage in non-agricultural activities in both VDC.

**Figure 5**



Source: *Population Census, 2011*

Manakamana is a touristic and religions place and Aambukhaireni is ongoing urbanizing area. Therefore, most of the household are involved in business activities besides others like agriculture, horticulture and livestock. According to population census (2011) those households which are involved in business activities, these households percentage are (54.1), similarly, servicemen households are found 14.5 percentage, followed by others 30.4 percentage, manufacturing and transportation activities involved households have almost

none (.7 and .2 percentage). Similarly, in Aambukhaireni most of the household (42.8) is involved in service and 38.6 percent households are involved in trade and business. Because it is a newly emerged urban area, it is bulk point of Gorkha and Prithwi Highway.

**Table 5.5 Household involves in Agricultural Activities in Working Areas**

Types of Agriculture Activities	Manakamana VDC		Aambukhaireni VDC	
	Household	Percentage	Household	Percentage
Having land and livestock	579	48.1	636	24.6
Having land, livestock and poultry	409	33.9	839	32.3
Having agriculture only	97	8	260	10
Having livestock only	26	2.2	74	2.9
Having land and poultry	7	0.6	20	0.8
Having livestock and poultry	4	0.4	23	0.9
Having poultry only	3	0.2	3	0.1
Non of All	80	6.6	734	28.4
Total	1205	100	2589	100

Source: *Population Census, 2011,*

Above table shows the highest percent of household is involved in agricultural activities having land and livestock in Manakamana, which shows that 48.0 percent are having land, livestock and poultry takes second rank 33.9 percentages because Manakamana is a hilly area and all the household having at least one cattle and few land. But in Aambukhaireni, 32.4 percent households are having land, livestock and poultry, because this area has plain, urbanizing process. So, some households are involved in poultry farming commercially. Similarly, 28.4 percent households are not involved in agricultural activities because they are involved in business and services.

### 5.3 Tourism in Manakamana Region

The Manakamana deity goes back to the time of Gorkha King Ram Shah (A.D. 1614-1636). His queen Lilabati/Mahimabati possessed divine powers known only to her devotee Lakhan Thapa a religious preceptor (Siddha), on one occasion the king found the queen as goddess and Lakhan as a Lion as Uppalokot in Gorkha. Following the revelation the king mentioned it to the queen and suddenly died. He was cremated and queen committed *Sati* on his funeral pray as was the custom then. She however consoled her Lamenting devotee Lakhan that she would appear sooner near his home. Six months later when a local farmer was ploughing his field he hit a stone and saw blood and milk flow the forth. He was very frightened and cased Lakhan Thapa. When Lakhan Thapa worshipped the stone with his *Tantrik* knowledge, it stopped the bleeding and milk flow the forth. And this site became the foundation of the present shrine.

Some of the stories say that the queen was not possessed away in simple way, but she was killing herself (*suicide*). In Nepalese society people believed that when someone possessed away in different (not natural) way the dead body could not go to the heaven and made unsatisfactory (*Aatma/Bayu*) soul. That unsatisfactory *Aatma* roamed round the living person in its own territory especially *Deurali* and *Bhanjyang* (Adjoining area of two hills), and it troubled alive person in different ways. If people felt illness by the effect of dead evil it wanted the animal's blood and people worshipped the dead evil (*Aatma/Bayu*) by the sacrificed animal. Then the dead evil will satisfy and does not trouble to alive people and their future generations. Therefore, this tradition is alive in Nepal and thousands of people fulfill their *Bhakal* and sacrifice to thousands of animals (beyond the national animal cow).

The shrine of Manakamana was renovated many times over the countries. The present temple is on a square between *Samudra* (Barrington Acutangula) and *Champ* (Michelia Excelsa) Trees. Entrance is from the southwest marked by stone pillars and *Maulo* (sacrifice pillar). The main sanctum has a rectangular depression with five stones smeared with blood.

Temple of six sisters of Goddess Kali is found to be scattered throughout Gorkha. They are called by Manakamana, Annapurna, Akala, Chhaudi Barahi, Chhimkeswori and Bakreswori. These temples were constructed along with the Gorkha Palace. Very soon the Goddess of Manakamana became popular among the Hindus as the "wish fulfilling goddess." The king

of Gorkha used to visit Manakamana temple immediately after their occasion to throne and pray for their successful events. People believe that the king of Gorkha were successful in expanding the boundary of their kingdom; thanks to the blessings of the goddess of Manakamana. In the period of first and second world war thousands of Nepalese young people were going to the army to the different countries especially British Army. Before joining the army they went for worshipping Goddess Manakamana. After they finished the war, they returned to their motherland and performed *Pooja* in Manakamana. They believed that if she was not thanked, then they could not achieve success to get victory in the war and return to their home safely. This way the temple was very famous in every way. As Manakamana temple there is another holy place called Bakreshwory. There are two legends about the place: one is Lakhan Thapas Cremation, which Gorkhnath made Lakhan holy in one of the cares of by giving *Viksha* and other is Bakreshwor Mahadev's Temple. People believed that if children's voice have not broken upto four five years old, it becomes fast to break the voice after worshipping in the temple to those children's name. Sabitri Maya K.C. was agreeing in this statement in our field visit.

#### Case One: Maya's Faith

*Sabitri Maya K.C (28) was married to her husband eight years ago (Gorkha 9). She had two sons, Raju- 7 and Suraj- 4 years old. When Suraj was 3 years old he was not able to speak. Sabitri felt sad and asked her husband to treat Suraj in hospital. They went to hospital in Bharatpur but doctor could not identify the problems. They returned to their home with a sad face. Then she told this matter to her one of her eldest neighbors. She suggested to her to go to Manakamana and worship the Manakamana and Bakreshwor temple so that her child could speak and break the voice. Then she came to Manakamana with her child and husband and worshipped the god of both temples with Bhakal that if the child is able to speak she would come again and worship with the pigeons. After few months, her child was able to speak, she was very happy and came again and worship with her Bhakal to both the temples.*

At present, the fame and popularity of goddess Manakamana, Bakreshwori and Bakreshwor Mahadev has exceeded the state boundary. In these importances the trend of Hindu pilgrims are increasing day by day after establishment of the Manakamana Temple.

There are four ways of trekking route to Manakamana through Bakrang, Taklung, Mugling and Aambukhaireni in few years ago. The Aambukhaireni route is dominated up to 1997,



because most of the people used this route after opening the Prithivi and Gorkha Narayanghad Highway. Before opening Prithivi Highway most of the people of Kathmandu valley used the Taklung Benighat route. But now after opening the Cable car from Cheras, Chitwan almost all of the people use this route. There was no record how many people go through the Aambukhaireni route annually before opening the cable car, but people say that almost three to four lakhes people went from this route annually. Now, almost only ten thousand people flow from this route because they are not capable to spend in large amount (two way ticketing Rs.400) for cable car.

The livelihood related data was taken from structured/unstructured questionnaire, key informant interview with household member, field observation, different other suitable persons. Similarly secondary information (livelihood related) was taken from different published or unpublished materials. The different activities related to livelihood of the people of Manakamana-Aambukhereni trekking route on the following economic activities are described below.

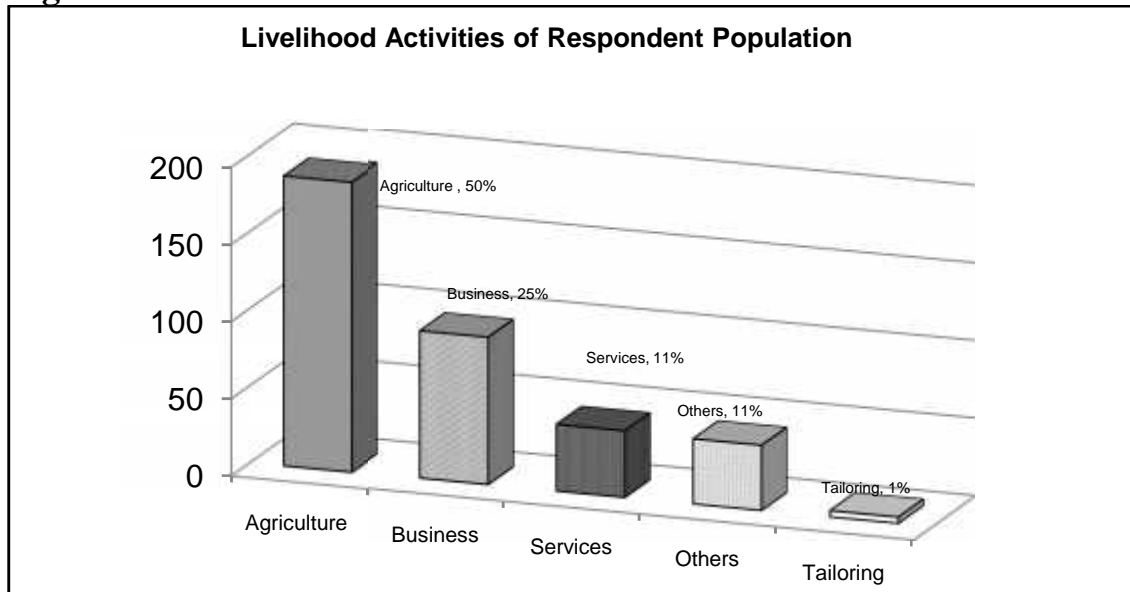
**Table 5.6 Livelihood Activities of Respondent Population**

Livelihood	Total person	Percentage
Agriculture	188	50.5
Business	95	25.5
Services	43	11.6
Tailoring	4	1.1
Others	42	11.3
<b>Total</b>	<b>372</b>	<b>100.0</b>

Note: 196 Student is not included

Source: *field survey 2016*

**Figure 6**



In the study area, there are different processes being adopted for earning livelihood. Above table shows more than 50.5 percent people are involved in agriculture, 25.5 percent people are involved in business, 11.6 percent people are serviceman and 1.1 percent is involved in tailoring and 11.3 percent are involving in others like leather work, labour and indirect income activities. There is close relationship between each other. In agriculture there is mostly inter dependence between land and labour. The people of study area are hard working in the daytime, who are farmer; sometimes they plant crops and in harvesting time they are also busy in morning and evening time but that are seasonal. Children who are going to school also help to take care of baby younger than themselves (*Bhai Bahini*) and they also help in some small works to in their houses like carrying water and taking care of the house. The people who are busy in agriculture do not have any holidays because in these days they involve in business activities, care of animals and care mandarin farming. Similarly, who involve in service, they also involve in agriculture activity. In the crop-planting season they take leave from their office and involve in the agricultural activity.

#### **5.4 Agriculture means of livelihood**

Agriculture is the backbone of the Nepalese society. So, it is the main way of life in the study area. Almost 43.7 percent active population are engaged in agriculture. There are very few irrigated lands like riverbanks of Marsyangdi and Daraundi and Aambukhaireni area. In

these area people plant paddies, but in upland area they plant millet, dry paddy(*Ghaiya*) and maize. But, income from the agriculture depends upon the type of land, size of land holding, their productivity, irrigation facility and hard working. Due to the lack of irrigation facility, they are not getting the income as expected.

People are involved in orange farming in Manakamana since 20 years as the place is very suitable for it. They are raising their income and living standard from orange farming. According to local people, after the construction of MCC their income is declining, because their income was dependent upon the tourists. Most of the people are involved in tourism related activities. So now a days they spend their life on just earn and spend system.

### **5.5 Business: Second Means of Livelihood**

Business in Manakamana and its surroundings has very close relation with tourism. It is neither a trade centre nor it lies on any major trade links. It is purely religious spot; Aambukhaireni is the newly emerging town and it links with Prithwi and Narayanghod-Gorkha highway. In the past, (before opening the Manakamana Cable Car) hundreds and thousands of visitors visited in Manakamana through the Aambukhaireni Manakama route. At that time, there were many retail, goods shop and hotel established. Retail and wholesale shop provided daily necessities of local needs and hotels and restaurant had established only the view of tourism. They were earning lots of income. Not only Manakamana and Ammbukhaireni the local people who lived in the route and surroundings were also engaged in business. They sold animal products like male goat, male buffalo, milk, curd, ghee etc. local fruits like papaya, pineapple, orange, mango, lemon, blackberries, guava, banana, peach etc.

After the Manakamana Cable Car opened, almost all of the tourists travelled flow by this route, then the Manakamana-Aambukhaireni trekking route became a lonely place but local people, some porters and *Khachhar* still travel by this route. The business activity of this route has collapsed as a trekking route. Now we can see damaged huts lonely and damaged trail in this route and empty hotels and lodges.

Before opening of the cable car, this route was fully covered by tourists between origins to destination. According to local people, in that time business and agricultural activities had

fully developed, peoples income had also improved and they maintained their livelihood condition well, but now nobody treks in this route and almost all types of business has collapsed. Now a days, all of the people of local communities are involved in agriculture activities, because of low income from business. Former chairpersons Ramkumar Joshi of Manakamana and Rishi K.C. of Aambukhaireni VDC have agreed that the MCC is a wonderful creation of science. It is luxurious and people can travel with comfort. But the villagers of Manakamana and Aambukhaireni area are not happy with this man made creation, because after cable car many people have lost their livelihood. In Manakamana and Aambukhaireni (study area) these days the local business are all running at a heavy loss and the business of trekking route is totally collapsed.

### **5.5.1 Business Activity**

According to the key informants and local people, the most significant changes that have been seen after opening of Manakamana Cable Car is that hotel lodge, retail shop, wholesale shop, tea shop and goat business shop etc. is in reducing stage in this area. Because of the pilgrimages, tourists return on same day by cable car and very few people are staying and travelling by the trekking route. Therefore, all kinds of business are almost in a reducing stage, besides local needed shops. Some of the hotel and lodges are very old style and their sitting room is also very small. One of the female lodge owners says we have a small house, who would live in it? Goats, chickens or mans? Therefore, now a day's this hotel and lodge are closed and some of them are keeping goat and chicken in their houses.

**Table 5.7 Business Activities in Study Area**

S.N	Types of Business	10 years ago	At present
1	<b>Hotel lodge</b>	200	165
2	Worship material shop	60	30
3	Tea shop	50	15
4	Retail shop	30	20
5	Whole sell shop	21	14
6	Hand ware shop	18	19
7	Vegetable shop	12	10
8	Goat purchasing shop	10	4
9	Tailoring shop	7	7
10	Medial hall	6	6
11	Stationary shop	5	7
12	Hair dresser shop	5	5
13	Mutton shop	4	5
14	Electric shop	4	8
15	Curio shop	0	8
<b>Total</b>		<b>432</b>	<b>323</b>

Source: *field survey 2016*

## 5.6 Landholding

Land is the major property of each household. Land is greatly respected on several occasions each year called *Dhartimata* (mother land) and worshipped, basically in summer season at planting crop time and harvesting time in winter season. Similarly all the people worship the land and compare land to mother, because land gives the people life and habitat. Those people who do not have enough land feel insecure and *Sukumbasi* (who have no land are called squatters). So, the land is the source of income and people feel permanent security own and future generation also. Every field has temporary income, but land is only one source of permanent income and long-term return. Those household have high economic and social status, who have more land especially *Khet*. They have large piece of *Bari*. So, they

have only cultivated dry paddy (*Ghaiya*), maize, millet and others crops like pulses. But the cereal crops could not produce sufficient food grains for whole year for their families due to lack of irrigation facilities. Therefore in recent years they have cultivated orange, because it is a very good income source and is more profitable than cereal crops. Now a days they have converted their land to horticulture farming basically in ward No. 1, 3, 4 and 5 where suitable climate for orange farming can be found. In Aambukhaireni, riverbanks of Marsyangdi and Darundi basin, most of people have planted paddy and other varieties of crops and vegetables farming also, because there is irrigation facility. The table shows that there are 33 and 26 household having no land of *Khet* and *Bari* respectively.

**Table 5.8 Landholding in the Respondent household**

Type of land	Having no land	Less than 5 Ropanies	5-10 Ropanies	10-15 Ropanies	More than 15 Ropanies	Total Household
Khet	33	25	20	15	7	100
Bari	23	18	20	9	27	100
Kharbari	98	-	1	-	1	100

Note: 1 *Ropani* = 0.0509 hectare.

Source: *field survey 2016*

Because some households have only *Khet* and some households have only *Bari*. It shows that most of the people who live in Manakamana and Aambukhaireni have only *Ghaderi* and are involved in own business or rented by others. Similarly in trekking route, there are 25 and 18 household having less than 5 *Ropanies* *Khet* and *Bari* and all of these households are poor. Those who have more than 15 *Ropanes* of land they are rich and almost all of them are high level of Magars and Brahmins.

## 5.7 Animal Husbandry

Animal husbandry is an important aspect of rural people of Nepal. So, it is also interdependent with agriculture and farming system. Animal husbandry plays a vital role for growing productivity and additional income for housing purpose. Animal husbandry helps

the rural families to keep their health and status. So, one slogan is popular in Nepalese society like *JaskaChhoraUskoDhan*, *JaskaBhaisUskoBan* (more sons and buffaloes means more wealth and forest) therefore, the people of study area are keeping animals like buffaloes, cows, ox, goats chickens, pigs. These animals are used for agricultural purpose, earning economy and for cultural practices. Similarly, livestock determines the character of society. The people of study area have kept the livestock mainly for the purpose of agriculture improves and their economic status.

**Table 5.9 Distribution of livestock in the respondent Household**

<b>Livestock</b>	<b>10 years ago</b>	<b>At present</b>
Goat	291	157
Buffalo	119	93
Cow	97	52
Ox	57	54
Pig	34	17
Chicken	27	39
Total	625	452

Source: *field survey, 2016*

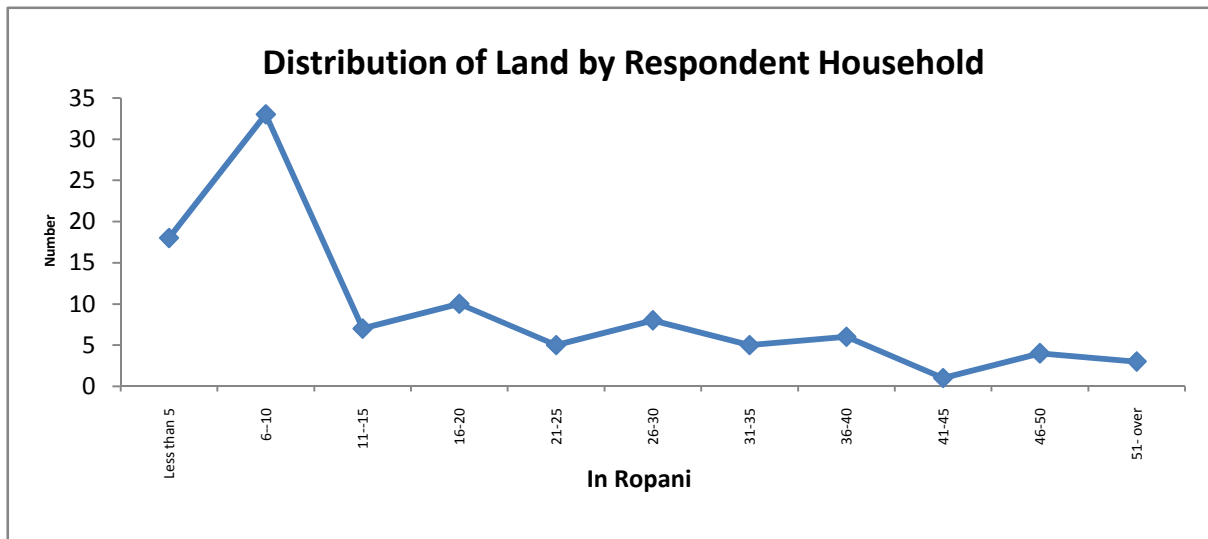
Above table shows almost all the families have kept the livestock besides some businessman from both Aambukhareni and Manakamana study area. They have been keeping livestock for the purpose of meat and milk basically goat, buffaloes, and pigs. Chicken is used for meat and housing purpose. Basically buying of cooking foods, copy and pen for children and daily needed materials for houses.

Before the construction Manakamana Cable Car, they sold their livestock like he goat, cock, and he buffalo also to the tourist for worship of goddess Manakamana. They also sold their animals' product thing like, milk, curd, Ghee, eggs came in this route, and they improved their economic condition.

## 5.8 Land and Major Crops

Land is major resource of local people. According to the state classification, Nepal has four categories of land *Abbal Dayam Sim* and *Chahar* (First, Second Third and Fourth category basis of productivity) respectively. Aambukhaireni areas have *Abbal* and *Dayam* and Manakamana area have *Sim* and *Chahar* types of land. In study area almost all of the people have third and fourth grade of land which productivity is very low.

**Figure 7**



But 3 % household then have above 50 *Ropanies* of land. Who have above 50 *Ropanies*, they are high status of Brahmin and Magars.

### 5.8.1 Major Crops and Production Situation

Paddy, maize, (*Ghaiya*) dry paddy, millet and pulses are the main crops of the study area. Because paddy is the dominating crop and main food of Nepalese people the production situation of study area has been dominated by paddy at present and before ten years,. Similarly, maize is in second position and dry paddy (*Ghaiya*) is in third position. Millet is also found in the study area, but very few people have produced this crop, because it is not more profitable than others.



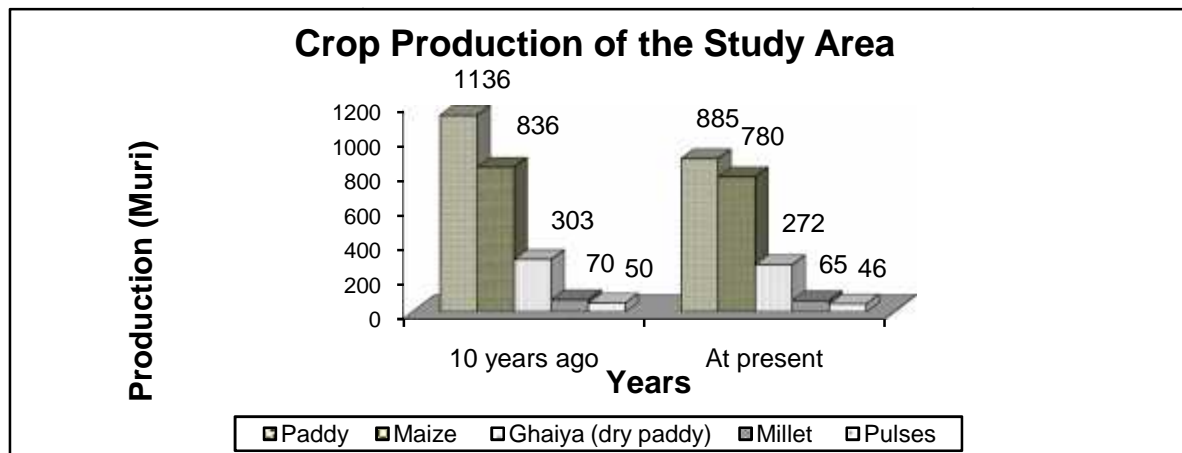
**Table 5.10 Crop Production Situation**

Types of Crops	10 years ago		At present	
	Quantity (in Muri)	Percentage	Quantity (in Muri)	Percent
Paddy	1136	47.4	885	43.2
Maize	836	34.9	780	38.1
Dry Paddy	303	12.7	272	13.3
Millet	70	2.9	65	3.2
Pulses	50	2.1	46	2.2
Total	2395	100.0	2048	100.0

Note: 1 Muri = 20 Pathi      1 Pathi = 4 Kg or 8 Mana

Source: *field survey 2016*

**Figure 8**



Source: *field survey 2016*

Above table and chart shows that none of them produce wheat. When cable car was started almost all the business collapsed and they involved in agriculture. However, they had a lot of time for involve agricultural activities, but all types of crops were reduced by production, because they had no purchasing power of improved seed, chemical fertilizer and drugs for crops. Similarly, there was no irrigation facility, therefore they couldn't increase their production, as they expected.

Paddy is the main crop of the study area. Paddy is grown in *Khet* twice a year where irrigation facility is available. Once in summer season, which called *Sali Dhan* in their language, is planted in June to August, and harvested in October/November. Similarly,

*Cheite Dhan* is planted in March to April, and harvested in June to July. *Chaite Dhan* is grown in only those areas, where irrigation facilities are available throughout the year. But the dry paddy (*Ghaiya*) and maize are grown in *Bari* land and growing time is March and harvesting time is August. Similarly, millet is grown in August and harvested is November. Pulses are grown in winter where as beans in winter season and other pulses like *Mas*, *Bhattamas* are grown in summer season and they grown in *Bari* and slopping area.

**Figure9**

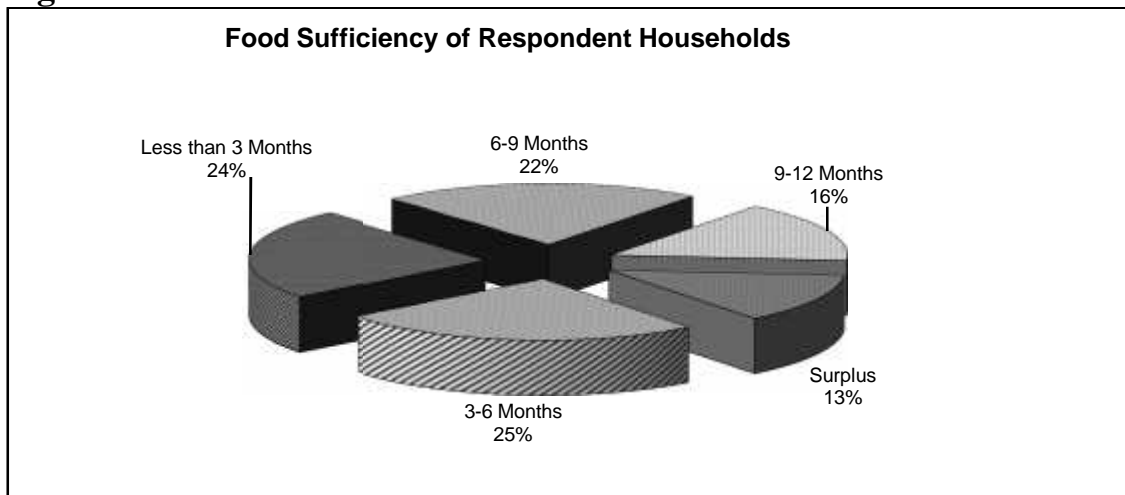


Table shows that only 13 percent household have food surplus but they sell their food less than 20 *Muries* in the respondent household.

## 5.9 Service

Some of people are involved in public and private services like teaching, health post, VDC offices and MCC office. These service men are basically upper caste like Brahman, Chhetri, Newar, Gurung and Magars. Basically Newar and Magars are also involved in hotel business after their service time. But other schedule caste people like Kami, Damai did not found in services.

## 5.10 Wage Labour

Some of the families who have food deficiency in whole year in their own production are involved in wage labour works in agricultural and non-agricultural activities. Basically some low caste people and small farmers are also engaged in wage labour to fulfil their needs as agricultural activities and others, especially crop planting and harvesting time. Similarly, they are also engaged in non-agricultural activities as bringing business material for lodge owner and whole seller, carpenter, house building and development work also. Before opening of MCC, most of the people were directly or indirectly engaged in tourism business like fruits selling, sticks, retail business and wood selling for hotel owners. They also did wage labour after finishing their agricultural work, but now they engage more time in agricultural wage labour and some time in others. Wage labours are mostly found in low caste people and poor family like Magars, schedule caste and others in the VDC.

Basically wage labours are found mostly in ward no 5 Dandagaun because most of the lower caste people like *Kemi*, *Sarki*, and marginal poor people of Magars are live in there. Most of them have no alternative way of life.

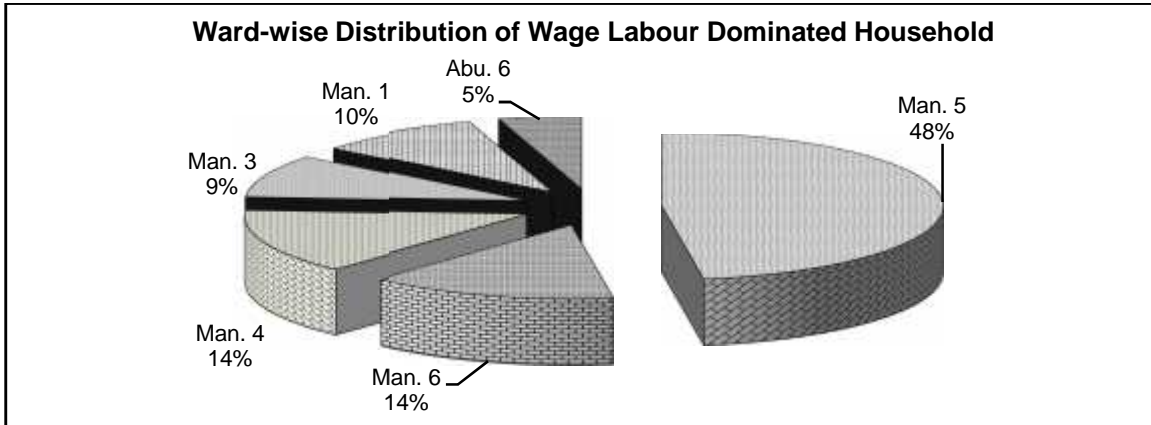
**Table 5.11 Distribution of Wage Labour Dominated Household**

Ward	Wage Labour Dominated Household	Percentage
Man. 1	2	9.5
Man. 3	2	9.5
Man. 4	3	14.3
Man. 5	10	47.6
Man. 6	3	14.3
Abu. 6	1	4.8
Total	21	100.0

*Note: Man = Manakamana, Abu = Aambukhaireni*

Source: field survey, 2016

**Figure 10**



Note: Man = Manakamana, Abu = Aambukhaireni

### 5.11 Horticulture

Mandarin farming is an important cash crop of Nepal, where it offers an opportunity for high income per hector / *Ropanies* of acute land scarcity with favorable income generation, poverty reduction and positive environmental effects. Mandarins are the major raw materials for the localization and development of industries producing orange juice, jams squashes, jellies, marmalades, pickles etc. and secondary employment potential in processing and marketing is also large.<sup>4</sup>

Manakamana is a suitable place for citrus fruits and mandarin farming. So, the people of Manakamana are involved in mandarin farming since 20 years, because, mandarin farming is a good source of income and it is much more profitable than other cereal crops. Almost 44 percent of households followed mandarin farming as a way to escape from poverty and traditional subsistence farming, which could not sufficiently provide food grants for the whole year for their families. But ward no 6 of Manakamana and Aambukhaireni do not have suitable climate for mandarin farming because of low land. Thus, they are not involved in this occupation. In low land, people were involved in other kind of fruits like Banana, Guava, *Naspati*, Mango, Pineapple, Papayas and Vegetable even before the opening of the MCC. Now they are slowly abandoning the fruit farming.

<sup>4</sup>Ashok Rajbanshi, *A study of Mandarin (Orange) Farming in Manakamana VDC, Gorkha District; A mini research project*, submitted to research division, T.U. Kirtipur, 1997, P-..

For Mandarin cultivation on altitude range of 100 to 1500 meters has been recommended as an optimum belt. Manakamana lies at an altitude of 1250m in average, where subtropical to warm climate has found. Similarly, it has with frost-free, winters prevail, and a northern slope is very suitable. It is grown better in the temperature range of 14<sup>0</sup>c to 34<sup>0</sup>c and black sandy and loam soil is needed for mandarin farming.

**Table 5.12 Involved in Mandarin farming Household**

Ward No.	Having Mandarin farming household	Not Having Mandarin farming Household	Total Households
Man. 1	7	1	8
Man. 3	12	6	18
Man. 4	16	-	16
Man. 5	7	7	14
Man. 6	2	16	18
Abu. 6	-	26	26
Total	44	56	100

*Note: Man. Manakamana, Abu. Aambukhaireni*

*Source: field survey, 2016*

Above table shows that most of the mandarin farming areas are found in ward no 4 and 3. Similarly, Manakamana in ward no 7 and 5 are equally farming and ward no 6 has lower proportion and Aambukhaireni is not cultivated.

Almost all the mandarin growing farmers are practicing intercropping, while the fruit (mandarin) trees are small and young. Most of the mandarin orchards are located in the *Bari* land, where the farmers use to grow various crops like millet, maize and *Ghaiya* between the young mandarins trees for the first few years. They also grow radish, mustard and other vegetables with in the orchards. Similarly, ginger and *Besar* (turmeric) are also planted in these fields.

## **5.12 Changing role in Agricultural and Non Agricultural Activities**

Agriculture is the backbone of the study area and people are dependent upon the agriculture for living. Before the opening of the cable car the people of the study area used different livelihood options. Most of them were involved in agriculture as well as business (but the people of Manakamana and Aambukhaireni area are involved in business) activities. Agriculture and horticulture were the main ways of livelihood, but it was different for using type. They produced cereal crops mainly and business was subsidiary. However, it was not equal everywhere like Manakamana and Aambukhaireni bazaar; because in this place most of them are involved in different types of business activities. The people of trekking route produced cereal crops for the purpose of food grains and sometimes, they made *Jaad* and alcohol for personal use and selling purpose. When they produced cereal crops in large quantity, they sold it to the hotel owners and wholesalers in local bazaar like Manakamana and Aambukhaireni. They produced cereal crops in a large quantity, because they had more cash to buy chemical fertilizers and improved seeds. Similarly, they were expending of multiple functions in agricultural sector.

## **5.13 Impacts of Manakamana Cable Car**

Modernization is the most important aspect of the present world. Ropeway/Cable Car is one of the most important means of modern transport, where topography and land surface is very rough, irregular and physical barriers are found. Similarly, it expends rural activities and livelihood easy and quite good but it does not apply equally everywhere. In the case of Manakamana Cable Car, it has some positive and negative impacts, which is described in following headings.

### **5.13.1 Positive impacts**

Manakamana Cable Car is one of the wonderful creations of modern science. it has helped and saved the peoples time, money and energy. Therefore, it has some positive impacts, which are given below.

### 5.13.1.1 Effective Time Management and increased the Access

The construction of cable car in Manakamana seems important as per the positive impact of time save and easy access to the village. Before opening the MCC the people of the Manakamana VDC had to travel by foot for four or five hours from the nearest motorable road, Aambukhaireni. However, they now travel only 10 minutes from Prithwi highway (Cheres, Chitwan District) to Manakamana but they return from different cities (Kathmandu, Pokhara and Narayanghad) in the same day of their visit especially people of ward no 1, 2, 3, 4 and northern part of ward no five. However, the people of southern part of ward no five and ward no six do not use the cable car, because it is too far from the local settlement areas.

**Table 5.13 Time access after and before Cable Car**

Name of Village	Time Before Cable Car from Aambukhaireni	After Cable Car	Time Saved
Kotgaun	3.30 hrs	0.20 hrs	3.10 hrs
Manakamana Bazar	3.15 hrs	0.15 hrs	3.00 hrs
Hatia	3.00 hrs	0.15 hrs	2.45 hrs
Dhadbari	2.30 hrs	0.30 hrs	2.00 hrs
Dandagaun	2.00 hrs	2.00 hrs	0.00 hrs
Banauti	1.00 hrs	3.00 hrs	-2.00 hrs

Source: *field survey, 2016*

This table clearly shows that Dandagaun and Banauti village are too far from Cable Car station. Therefore, the people of those villages do not use Cable Car but other villagers often use the Cable Car, basically for Kathmandu, Narayanghad, and even go to the Aambukhaireni and Gorkha bazaar also.

### **5.13.1.2 Growth new economic centre**

There were no new economic centres before the opening of the cable car in Manakamana. At present a new economic centre has emerged, which is located in ward no one in the eastern part of Manakamana near the cable car station. There are many new hotels and lodges, curio shop, animal; hardware and other different kind of shops are established. Now this centre is growing as a main marketing area of the village.

### **5.13.1.3 Source of Income of VDC**

The MCC is one of the main income generating sources of the Manakamana VDC. It has given the VDC Rs. 0.5 million every year (see VDC agreement). Before the opening of the MCC the VDCs main income generating source is only governments' aid and other different income taxes of the village. It is not sufficient for developmental activities in the VDCs. Therefore, MCC has been main income generating source in the VDC after its opening. Similarly, it has started to maintain the pavement of trekking route ward no. six Banauti gaun, some amount of money has been given to Manakamana high school, lower secondary and primary schools. It has helped in the conservation of local forest to given the three forest caring man and it also helps to clean the surroundings of temple area.

### **5.13.2 Negative Impacts**

Modern technology has not only positive impacts but, it has some negative impacts also. In the case of Manakamana Aambukhaireni trekking route the cable car has made some negative effects, which are described following sub headings.

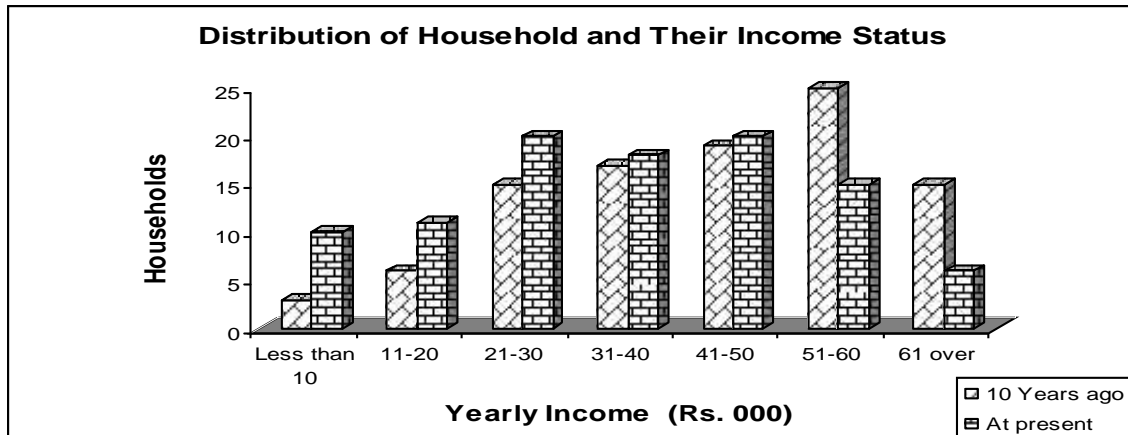
#### **5.13.2.1 Degrease in household income**

Due to the opening of MCC there are several incoming source s(fruits, vegetables, curd, milk, ghee, male goat and buffalos, chickens, pigeons, worship materials) which are going in a decreasing ratio because most of the people, who have income from local business are dependent upon the tourism activities. Now the travelling pilgrims are lured by MCC, and thereby nobody has trekked in this route. Nowadays, this route has been lonely and those people who are depending upon the tourism activities and income few amount are going to



be marginalized. But before opening the MCC the people were fully involved in agricultural via business activities with tourism related and they expend their income also.

**Figure 11**



Above chart clearly shows that the percentage of household income more than 60 thousand per year decrease 6 percentage, while it was 15 percentage before opening the MCC. Similarly, the households that earned 51-60 thousand per year had to suffer from decline of their income from 25-15%. Those households who had income less than 10 to 30 thousand per year are increasing in ratio and there whose percentage is 9 to 19.

### **Case Two: The lost Business**

*Sita Maya Thapa (35) with four children (3 daughters 11, 9, 7 years and 1 son 5 years) had opened a small retail shop, before 15 years at ward no 5 Dandagaun in Manakamana. They had a small plot of land, but there is no sufficient production in her field. They hardly reached the food problem in their own production within 6 months. Therefore they started small business and tea shop. Before 10 years, they had good income from retail business and tea shop, because in that time pilgrimage tourism was fully developed in this trekking route. They were earning almost 3 thousand per day. They kept 3 workers with full employment. Their children went to school and they were very happy with their small world. Incidentally, when her husband left this world 5 years, with their four children, than her life was filled with trouble, grief and sorrow. Her income was decreasing and as a result she was not able to put employed person. Similarly, when the tourist flow was captured by MCC from 1998, then her income is reduced too much. Now days she has earns hardly 100 rupees per day from only tea shop. Now she is also working in wage labouring. She said with tearful eyes, "When I lost my husband 5 years ago, my income was slowly reducing. Similarly, when MCC came, I have lost all of my business and incoming source. Now my children are small and I am not able to fulfil their basic need from tea shop and wage labouring activities, but when they will have growing up, how can I fulfil their lodging, fooding, schooling and management (marriage) cost in coming days. I think, I will make my child more educated and able to best citizens in this country, but my thinking has been going to be hopeless, because of Manakamana Cable Car.*

Due to the reduction in economic condition, they have almost collapsed their multi economic functions like agricultural or non-agricultural activities. We cannot say anything about their poverty by only looking at the condition of their house, but in depth actually they live in poverty, grief and deep sorrow.

#### **5.13.2.2 Increase the population**

When MCC opened, almost eight lakhs of people entered the Manakamana<sup>5</sup>. As a result of which, Manakamana area has been over populated now. Over population creates different kinds of artificial shortages, pollution and expends different social evils and conflicts in the society. But, the trekking route has been an abandoned place besides local people, mules and some porters.

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<sup>5</sup>Mamakamana Darshan P.Ltd Head office, Kathmandu, 2003

### **5.13.2.3 Not caring for trail maintenance**

There has not been care taking and maintenance of the trekking route, after opening the opening of the MCC, because most of the tourists do not travel by this route, and as a result, this route has fully been covered by small bushes and every where the damaged pavements and small and large stones scattered can be seen around the trail.

### **5.13.2.4 Increase conflicts and social evils**

In the past, all the pilgrims, who entered the Manakamana entered only for the purpose of worshipping goddess Manakamana and they had no other purposes, because travelling time was too much high and there was no easy access. But now, easy access and reduced travelling time has caused a large amount of population to enter the Manakamana every year for worship of goddess and also for relaxation purpose, as a result, there are social evils in a increasing ratio. According to health assistance of Manakamana VDC (owner of medical hall also), most of the youth come here only for the purpose of relaxation, because he sold the contraceptives 300 times before opening the cable car. He also accepted that, conflicts and social evils has increasing ratio in Manakamana, because some of youths come there with girl and boy friend's for short time stay and go back and sometimes they stay whole night also.

### **5.13.2.5 Reduction in porters' Job**

In the past, there were more than 500 porters directly involved in pottering activity in the Manakamana Aambukhaireni trekking route, because there were thousands of pilgrimage tourist entering the Manakamana to the purpose of worship of goddess Manakamana. At that time they used to carry not only tourist's bag, but also handicapped and old people. In the pottering time, they earned more than Rs. 700 per day. But at present when the tourist flow has been stopped due to MCC, there are only 25 porters in the trekking route. Now they carry only business materials of hotels, lodges and other shop owners in Manakamana. Now their jobs are also captured by mules because these are the cheapest means of transport (1 mule = Rs. 150/50 kg) and they can carry heavy loads than porters.

### **Case Three : Struggle for Life**

*Mr. Bhim Bahadur Thapa (27) had entered in this job before 7 years. He has 13 members in his family and he is the only one economically active person in his family. They live in Bhuglichok VDC Gorkha District. Before 10 years, he joined the Sapta Gandaki College in Bharatpur in I.A. When he passed I.A, he found some jobs because of economic problem, but he could not get success to find any kind of job because he had no forceful person. He wanted to join the Nepalese Army; therefore he went to Chauni Army Camp and tried to join. But, one of the Armed Police said to him, if you have some sourceful person you can get success otherwise there is no chance to join the Army. But he knew no one as such and he had no enough money. In the same time some of his friends also advertised that he was a Maoist and thereby he couldn't join the Army. After some time, he went to do the work of bus helper (Khalasi) in Bharatpur, where his brother (Uncles Son) was working. He thought that the job was not suitable for him and then he left the place and went to Aambukhaireni. But nobody gave him the suitable job. He started without lodging and fooding for four days in Aambukhaireni. He then becomes a porter. After four days he met one of his neighbours to doing the sames job. He said that he did not want do this kind of job but if he did not do this work, then his family and he could not survive in this world. Therefore, he forcefully did this work. In the past he earned more than Rs. 400 to 500 per day and sometimes some tourists gave him lodging and fooding also, but now he earns only Rs. 250 per day. Similarly, they can earn Rs. 3 per Kg in general but sometimes business owners gave Rs. 1.50 to 2.00 per Kg which is very low wage in the present situation. This wage is carried in last 4 years.*

This case study shows that, the MCC has directly affected and replaced the potters' job and their income opportunities.

#### **5.13.2.6 Land Value Change**

Reduced entire pilgrims, reduced hotel/lodge and shops and decrease in the demand of land for new construction and vegetable farming kitchen garden in Aambukhaireni, Banauti, Dhadbari, Dandagaun have caused speculative decrease in land price of mainly the trekking route. However the decrease of land value is more distinct in Dandagaun and Banauti of Manakamana VDC. Within ten years, the price of one *Ropani* (0.0509 ha) of land along the trekking route and suitable for shop and different business establishment has decreased by NRs. 1,00,000 to 30,000, but near the Cable Car station in Manakamana the land value price is very high (20,000 to 2,00,000) after opening the Cable Car.

### 5.13.2.7 Decrease in Vegetable Sale

Another effect of after opening Cable Car in the study area is decrease in vegetable production and sale in the local market. The total vegetable production and sale in per week in season was 40 *bharis* per household in Manakamana and Aambukhaireni. The main vegetable production was of cabbage, cauliflower, cucumber, beans, spinach, chilly, radishes, peas etc. but now it has decreased to hardly 10 *bharies* per week in season and now they produce their vegetables only for household purposes. As a result, it has decreased the main income level of rural people and their social status also. This table clearly shows the vegetable sale in the study area before and after opening the cable car.

**Table 5.15 Vegetable Sale**

10 years ago	At present
40 Bharies per week in the season	10 Bharies per week in the season

(1 bamboo basket load = 1 *bhari*)

Source: *Field Survey, 2016*

### 5.13.2.8 Decrease in animal product thing

Due to the lack of the tourists, there is direct negative impact on animal products like milk, curd, ghee and *Mohi* and its sale. In the past, some of the people in these areas sold milk products at maximum profit improving their social life style. They reared several animals like buffaloes and cows for milk purpose. Similarly, the farmers reared oxen and goats are for drudgery, meat and dung. In these activities the people found double profit, because on one hand they found cash in hand from animal products and on the other hand they increased cereal crops production. But now, they do not rear lots of cattle and who rear some animals produce few amount of milk for the use of only household purpose because of lack of tourist. It makes negative impact on milk business, livestock and agricultural activities. Very few people who produce some milk sell it in Aambukhaireni and Manakamana bazaar, which is very difficult to sell and income is negligible now. Following table shows the animal production in the past and present condition, but now it is in worse situation.

**Table 5.16 Average milk products and its sale and income per day in season**

Particular	10 years ago		At present	
	Unit	Amount	Unit	Amount
Milk	15 Lit.	300	3 Lit.	60
Curd	10 Lit.	150	1 Lit.	20
Ghee	4 Kg.	600	HH use	

Source: *field survey, 2016*

### **5.13.2.9 Damage condition of infrastructure development**

Another negative effect seen after the opening Cable Car in Manakamana is in damaged condition of infrastructure development like water tap, well, trekking trail and others. Now a days, water taps and trails are in a damaged condition and in some places taps and trails are covered by unnecessary grasses. Now taps are built without water and somewhere with broken pipelines. Nobody is taking care of these kinds of damaged infrastructure development.

### **5.14 Tourism as a Livelihood Strategy**

Tourism is one of the major sources of revenue in Nepal. The arrivals of tourists in Nepal every year is directly or indirectly beneficial to the Nepalese people. With its natural beauty and unique cultural features, Nepal has become an attractive destination for tourists from all over the world. There are several temples and monasteries natural beauties like caves, waterfall, mountain, rivers, and gorges are scattered throughout the country. Therefore, tourists are visiting Nepal for different purposes. They are visiting different pilgrimage centres, Manakamana is also one of them. Most of the people believe that the Goddess fulfils people's wishes. It is not only place of religious importance but most popular destination for all pilgrims, trekkers, holiday celebrators and so on for several years. In this

context after the construction of Prithwi Highway almost all of the pilgrims were entering Manakamana through the Aambukhaireni Manakamana trekking route and people who lived in and around the trekking route were involved in all kinds of business (retail, hotel/lodge, fruits, animals etc) and their livelihood strategy were also business oriented. But after the construction of Cable Car, the pilgrims flow was captured by Cable Car and the people of trekking route have diverted their occupation business to traditional or agricultural activities.

### 5.14.1 Tourist arrivals in Manakamana for livelihood context

There are abundant numbers of place of Hindu pilgrimage in Nepal, Manakamana has been greatest attraction for the pilgrims, because it is not only important for religious and historic aspect but touristic aspect as well. Therefore, there were thousands of pilgrims entering the Manakamana annually since three centuries through the different trekking route. Among them almost 90 percent people entering through by Aambukhaireni Manakamana trekking route before construction of the Manakamana Cable Car. Past record of pilgrims' to Manakamana temple are not available, but according the local people there were almost three to four hundred thousand people entering the Manakamana through this route annually before construction the Cable Car. Khimlal Devkota (2001: 48) was conducted a traffic survey in 2011 and said that there were average 2,06,992 visitors visit to Manakamana per year by this route. Following table clearly shows in his survey record.

**Table 5.17 Annual Visitors visit to Manakamana in 2011**

<b>Particular</b>	<b>Peak Months Push-Chaitra</b>	<b>Slack Months Baishak-Mangsir</b>	<b>Total Visitors</b>
Peak Days (Friday-Saturday)	2100	352	
Slack Days (Sunday-Thursday)	1100	89	
Average Visitors per Day	1386	164	
Average Visitors per Month	41580	5084	
Total Average			206992

Source: *K. Devkota, 2016*

During the study period researcher conducted a field survey with 100 sample tourists who were entering the Manakamana by different trekking routes and cable car. Among them,

more than 90 percent visitors were entering the Manakamana by the cable car and only 10 percent were entering there by different trekking route like Taklung Benighat, Bakrang, Mugling and Aambukhaireni Manakamana trekking route. Among them only 6 percent people were found using the Aambukhaireni Manakamana trekking route. Those people who were poor and did not have enough the money for ticketing (cable car) were trekking in this route. But the number of people using the construction of trekking route was found to be reasonable.

In the past (before construction of MCC) the local people of trekking route were involved in different tourism related business (agricultural and non-agricultural) activities and they had good income by tourism and their livelihood was passing by in a sustainable way. But now all entire tourist captured by MCC as a result of which their income has automatically reduced and they are forcefully diverted to agriculture from business and they live in just "earn and spend" system.

## **5.15 Tourism Related livelihood Activities**

In the context of Manakamana Aambukhaireni trekking route tourism related business activities was the main livelihood strategies of local people. When Manakamana Cable Car was established, then it made an effect in different sector according to the economic slandered of local communities. The tourism related activities of local people can be divided into main two categories, which Manakamana Cable Car has impacted in different aspects in the trekking route.

### **5.15.1 Direct Tourism Related Livelihood Activities**

#### **5.15.1.1 Hotel Business:**

Most of the economically rich people mainly Magar and Newars have opened the hotel and lodges in Manakamana and Aambukhaireni, because this business requires a substantial amount of investment. Magars and Newars who are rich in the community established different kinds of hotel/lodge in Manakamana and Aambukhaireni area since many years.



The hotel and lodge business is good income source when tourists are in abundance. Therefore, there were almost 200 hotels and lodges existing before construction the MCC and they had given good accommodation facility to the tourists. The transaction amounts of the hotels were average NRs 10000 per a day. Tourists stayed in Manakamana at least 2 days and they spent average 500 per person per day. But after the construction of the MCC, entire tourist route is not only changed all but, the people return home at same day even they do not even take their meal in the Manakamana, as a result of which many hotel and lodges collapsed and their income is huge decreasing ratio. Some of the hotel and lodges are converted in habitat for their domestic animals and some quit their business. In this situation, off side hotel owners have closed their lodge and are working in their farm land.

#### **5.15.1.2 Tea shops restaurant and petty trade business**

Direct tourism related business activities like tea shops, small restaurants and petty trade business which do not require a large capital were also in abundance along this route before the construction of MCC. Small business holders like Magars, Newars and other high caste people namely Brahmins, Chhetris not only men but women were also involved in these activities, which had a wide range of off farm job opportunities arrived from tourism. Women were also involved in petty trade (selling fruits like orange, mango, guava, banana etc.) in off farm seasons. Similarly, some women were involved in caring goods for shops and restaurants from the nearest Aambukhaireni market centre. Some schedule caste people including women were also engaged in selling handicraft products, goats and chickens to the tourists. On the other hand, then high caste old ladies were involved in selling items of worship and dairy products like yoghurt, milk and ghee. But now, all these activities have drastically declined. These women have diverted towards agricultural activities and other domestic activities.

**5.15.1.3 Livestock Farming** Livestock rearing was another direct tourism related activity for the local people in the study area. Most people who were engaged in agricultural activities were rearing buffalo, cow, ox, goat, pigeon, chicken and pig. All these animals were good income source. They reared almost five to six buffaloes, two oxen, many chickens and pigeons. Some schedule caste people also reared few pigs. They sold these

animals and their products to the tourists for worship and also as food items. This they earned as much as Rs. 5000 per month. Animal dung was used in farmland, which raised production of cereals. But nowadays, there is a decline in the livestock rearing due to the construction of MCC and thus, there is a decline in their income and cereal production.

## CHAPTER - SIX

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 6.1 Summary

This study focuses the impact of manakamana cable car on the livelihood strategy of the local people of Manakamana Aambukhaireni trekking route and its vicinity after the cable car construction.

Manakamana and Aambukhaireni are the villages having rural characteristics. Manakamana lies on the top of the local hill where famous Manakamana temple is situated and the place is famous from historical, cultural and tourist perspective. Whereas, Aambukhaireni lies in bank of Marsyangdi River and it is towards urbanization. Manakamana temple has been very famous pilgrimage since 400 years for pilgrims and tourists. As time goes it has been famous and well advertised. Different routes were discovered and constructed as well as several facilities were developed for the pilgrims and tourists. As a result the number of tourists has been increasing rapidly and substantially. The pace tourist flow increased up to 5-6 hundreds thousands per year after the construction of Prithivi and Narayangadh- Gorkha highway. Though the trekking route is very steep and hard to climb people have no other options to reach manakamana temple. Therefore people have to use old trekking route i.e. Manakamana Aambukhaireni trekking route.

Directly or indirectly, local people had adopted several tourism related activities to sustain their livelihood. But, when Manakamana cable car was established in 1998, this old so-called Manakamana Aambukhaireni trekking route received less number of tourist and pilgrims every year. All the tourists and pilgrims started to travel through cable car. It saved their time. Now, people from Kathmandu, Pokhara and Chitawan could complete their Manakamana temple visit same day which was possible within at least 2-3 days before the construction of MCC.

After the construction of MCC, all the tourism and pilgrimage activities of old trekking route collapsed and the place became deserted. As a result all the livelihood strategies of

local people was destroyed and damaged. They have been forced and compelled to return to one and only agricultural activities, which was their old livelihood strategy.

This study is based on the information collected from both primary and secondary sources. Primary data was collected from Manakamana Aambukhaireni trekking route and its vicinity. Here, simple random sampling method has been used to collect primary data. Likewise, key informants interview, observation and group discussion methods have been conducted to collect required qualitative information.

This study area has substantial number of school but the literacy rate is not satisfactory. But, in the recent years, schooling population or school enrolment is increasing. Male population is higher in education with compared to females. Health condition also not satisfactory. But, still religious dogma persists in the study area. Normally local people prefer to visit Mnakamana temple whenever they get ill. In serious case, they go to local health centre/post and hospital. After the construction of cable car, it has been easy and fast to reach the patient to hospital. Therefore, cable car has contributed to enhance the health condition in the study area.

In Mnakamana trekking route, agricultural activities and animal husbandry have the dominancy. However, in Aambukhaireni, non agricultural activities like business in the major livelihood option. Before the construction of MCC, in Manakamana, Aambukhaireni and trekking route, large numbers of local people have the activities like agriculture, animal husbandry, wage labour, horticulture etc. but they were almost tourism oriented. After the construction of MCC, these sorts of activities have been reduced significantly. Now, nearly 44% people are engaged in agricultural in the study area. Moreover, the proportion of student, business, service, and others have 23%, 21%, 12% and 1% respectively. The average land holding is 16.2 ropani per household. Likewise, average number of livestock per household is 4.5 and the population density per ropani-cultivated land is 2.8.

In the study area, land is a major asset, 33 percent households have 6-10 ropani land. Likewise, 18% households have less than 5 ropani land and 10% households have 16-20 ropani land. One thing to be considered here is Manakamana has both *khet* and *baari*. On the

other hand, Aambukhaireni has only *khet*. Therefore, the proportion of households having both *khet* and *baari* is 67% and 33% of household have only *khet*.

Business activities have also been declined in the study area. Before the construction of MCC the area has 432 types of business activities. Currently, it has been reduced and the number of activities is only 323. Some business activities such as hotel and lodge, teashop, tavern, grocery shop (retail and wholesale), worship item shop etc. have been reduced significantly and drastically. These sorts of business were the major source of income of the people.

Similar narrative is observed in the animal husbandry and their production. Major decline is found in the number of goat, buffalo, cow, pig, chicken etc. Before the construction of MCC the number of livestock was 625 and now, only 452 numbers of livestock are found during the field survey. A major cause behind the decline of livestock numbers is the limited flow of tourists and pilgrims in the old trekking route.

Orange farming was one of the major sources of income for the local people. Indeed, the study area is famous for its orange cultivation. However, when the number of tourists and pilgrims flow reduced in trekking route, orange production has been declined and whatever the local people would produce would not get the proper market and reasonable price. As a result, it has incurred 40 % loss and most of the orange farms have been converted to agricultural land. Employment arrangement is not proper and easy in the study area. According to the agreement made between local people and MCC, high priorities for the employment will be given to the local people. However, only 5 persons were employed in the MCC. Employment opportunities for the local people in the hotel, lodge, restaurant, teashop, tavern, souvenir shop etc. were also missing due to the MCC.

Before the construction of MCC, local people had very tough competition for tourism related livelihood strategy. But, after the construction of MCC, people have realised the importance of social cooperation, wasteful behaviours have been declined and the second system has been increased. MCC has limited benefits and unlimited impacts in the livelihood strategy of local people. Easy, cheap travel access to Prithvi highway for local people, establishment of new market in the Manakamana, yearly 5 lakhs donation to local

VDC by MCC are some of the notable benefits if the MCC. Alternatively, MCC seized all the livelihood options and employment opportunities of the local people. All the business and horticulture activities have been collapsed in the old trekking route. Agricultural production and number of livestock are reduced significantly. As a result, living standard of local people has been deteriorating gradually and it has been very difficult to fulfil the daily needs of family. Their annual income has been reduced to a large extent after the construction of manakamana cable car. Number of households having more than 10,000 per year has been raised from 3 to 9 households. But, income more than 60,000 per year has declined from 15 to 6 households. It means number of households having low income is increasing and high income is decreasing.

Change is observed in the land value in manakamana Aambukhaireni trekking route. More 100 increments are found in the land value in cable car station area (20,000 to 2, 00,000). But in the old trekking route and Aambukhaireni land value has been declined from 1, 00,000 to 30,000 and 6,00,000 to 4,00,000 per ropani respectively. Significant decline is found in the vegetable sale. Before the construction, per week sale was 40 bhari and now its supply is limited around 10 bhari per week in season. Another notable impact is on pottering. Before the construction, everyday approximately, 600 porters had got work and they had earned average Rs.700 per day. Now, only 25 porters are found in the study area and they could earn hardly Rs.250 per day.

Organization, policies and institution are transforming structures and processes. Organizations like community groups and mothers groups are transforming structure and process to achieve livelihood assets. Likewise, traditional farming systems, providing employment opportunities to local people, providing fund to local VDC annually by MCC, development tourism activities are the policies for transforming structure and process to achieve livelihood strategies.

Loan and interest rate have increased in the study area. Changes are observed in land value. The numbers of local moneylenders, business as well as other tourism-oriented activities have been reduced. These sorts of institutions are transforming structure and process, which shape the livelihood strategies.

People are adopting several livelihood strategies along with farming like farming plus service, farming plus livestock, farming plus business, farming plus horticulture, farming plus wage labour, orange farming plus business, farming plus other rural economic activities (like selling milk, yogurt, ghee) in the study area. After the construction of MCC, the flows of tourism and pilgrims have been decline in old trekking route. Most of the employment opportunities have been reduced substantially and drastically. As a result, all the business, agriculture and tourism related activities are deteriorating gradually and people are compelled to adopt traditional agriculture as a new livelihood strategy. In conclusion, living standard of people has declined.

## **6.2 Conclusion**

This study has analysed several impacts of Manakamana cable car on the livelihood strategy of the local people of Manakamana-Aambukhaireni trekking route and its vicinity after the cable car construction.

Directly or indirectly, local people had adopted several tourism activities to sustain their livelihood. But, when MCC established in 1998, this old so called Manakamana-Aambukhaireni trekking route became tourists and pilgrims less. Gradually all the tourism activities of old trekking route collapsed and the place became isolated and deserted. They have been forced and compelled to return to one and only agricultural activities, which was their old livelihood strategy.

Before the construction of MCC, in Manakamana, Aambukhaireni trekking route, large numbers of local people have the activities like agriculture, animal husbandry, wage labour, horticulture etc. but they were almost tourism oriented. After the construction of MCC, these sorts of activities have been reduced significantly. The production of major crops and business activities has been reduced after the construction of MCC. The major causes are low investment in agriculture and decline in tourism related activities.

Likewise, the numbers of major domestic animal like cow, buffalo, goat, chicken and pig as well as their production have been reduced after the construction of MCC. Similarly, fruit production like orange, mango, banana, guava, blackberry etc. have been declined and

whatever the local people would produce it would not get the proper market and reasonable price.

Employment opportunities for the local people in the hotel, lodge, restaurant, teashop, tavern, souvenir shop etc. were also missing due to the MCC. MCC had made an agreement with local people to give high priority in employment. But, only five local persons have got the job in MCC. Those who were involved in tourism-oriented activities like porter, businessman, tourist guide, handicraft maker and seller, fruit seller etc. have lost their employment opportunities and their livelihood options were totally collapsed. MCC has brought social conflicts and evils in the study area with the increasing number of tourist.

In conclusion, manakamana cable car is a beautiful example of modern technology. It is very popular, wide spread, well accepted as well as suitable means of transportation for a country like Nepal. Obviously, MCC has a great support and contribution for the economic development of nation as well as the local area. But, sometimes modern technology could have negative impacts and the people would have to suffer. MCC is a very good and suitable example of modern technology that has brought several negative impacts to local marginalized and poor of Manakamana-Aambukhaireni trekking route and its vicinity.

### **6.3 Recommendations**

During the survey, the researchers felt that if the following points would be considered, then the people's livelihood status could be improved.

- 1) Tourists and pilgrims have almost abandoned the old trekking route due to the cable car. So, the trekking routes should be checked upon seriously, rebuilt and timely maintained. As a result the trekking route is well developed and flow of tourists is maintained as in past.
- 2) To minimize the impact of cable car there should be motor able Roads to Manakamana so that the products of the people obtained from agriculture, horticulture, animal husbandry and so on would get good market. Thus, it will improve the livelihood condition of the local people.
- 3) To minimize the further impact, financial as well as other



Agricultural facilities like irrigation, market centre, improved varieties seeds and fertilizer should be provided for the people of old trekking route.

- 4) Manakamana is very famous for orange farming. If factories of orange juice, jellies, jam and marmalade could be established, then these resources would be utilized and negative effects of MCC could be reduced.
- 5) MCC is a private industry. Therefore, its ticketing charge of the cable car is not determined by the government. If the government could increase the ticketing charge of the cable car, the tourists would prefer the old trekking and it helps to minimize the impact to greater extent.
- 6) If MCC affected local people will get organize, increase social cooperation among each other and to practice integrated agriculture, animal husbandry, and fruit farming system, it will help to reduce negative impact of MCC in the local community of Manakamana Aambukhareni trekking route and its vicinity. Then they will sustain maintain their livelihood from above activities.
- 7) Technology Impact Assessment (TIA) is necessary before the construction or establishment of modern technology.

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**Appendix-1**  
**Tribhuvan University**  
**Central Department of Rural Development**  
**Kathmandu**

**SOCIO-ECONOMIC CHANGE THROUGH MANAKAMANA CABLE  
CAR: A CASE STUDY OF MANAKAMANA TREKKING ROUTE,  
NEPAL**

Household Survey Questionnaire (2016)

Respondent Name: - ..... Date:-.....

VDC/Municipality:-..... Ward no.:-..... Caste:-.....

Religion:-.....

1) Social and economic status of the family.

S.no.	Name of family members	age	gender		Relation	Marital Status	Education	Occupation
			M	F				
1.								
2.								
3.								
4.								
5.								

Code List

A. Age:-Present age

B. Gender

Male	1	Female	2
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C. Marital status

1	Married	2	Unmarried	3	Widows	4	Divorced
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E. Education

1	Illiterate	2	Literate	3	No schooling	4	Primary;1-5	5	Lower Sec.6-8
6	Secondary 9-10	7	S.L.C	8	Intermediate	9	Bachelor	10	Master Level
11	No comments								

F. Occupation

1	Agriculture	2	Business	3	Labour	4	Service	5	House wife
6	Student	7	Household works	8	Unemployed	9	Others		

1. Information of Land Ownership(in Ropani)

S.N.	Land type	Own land	Land taken for Sharecropping	Land given for Sharecropping
1	Khet			
2	Bari			
3	Kharbari			
4	Others			
Total				

A. Cereal Crop Production(In Muri)

S.N.	Types of crop	Production	
1	Paddy	Ten years ago	At present
2	Maize		
3	Wheat		
4	Millet		
5	Ghaiya		
6	Pulses		
7	Others		

2. Livestock owned by the household

S.N.	Types of animals	Number	
1	Cow	Ten years ago	At present
2	Buffalo		



3	Ox		
4	He buffalo		
5	Goat		
6	Pig		
7	Chicken		
8	Ducks		
9	Pigeon		
10	Others		

A. Milk products

S.N.	Litre/Kg	Income(Rs.)		
		At present	Ten years ago	At present
1	Ten years ago		Ten years ago	At present
2				
3				
4				

A. Agriculture, land and resource use

1. Have you always grown the same crops?

Yes

No

2. If no,

(a) Which crops do you plant now?

(b) When did you start planting these new crops?

(c) Which crops did you plant before this year?

(d) Why do you prefer these crops?(List the reasons)

3. Do you consume all that is produced?

Yes

No

4. If No, how much do you sell?

(a) In the village (b) In Manakamana (c) In Aambukhaireni (d) others

5. If your crop products are not sufficient, then

(a) What do you prefer to buy?

(b) Where do you buy?

(1) In the village (2) In Manakamana (3) In Aambukhaireni

(4) Others

6. Has there been any change regarding the cost of production?

Yes

No

7. If yes, has it increased or decreased?

8. Has there been any change regarding the fertilizer use over the year?

Yes

No

9. If Yes,

(a) What did you use before?

(b) What do you use now?

(c) When did you start to use the new type of fertilizer?

10. Which breed of crops do you use?

(a) Local (b) Improved (c) Both

11. If you used improved one when did you start using it? (Approx. year)

12. Do you farm vegetables/fruits also?

Yes

No

13. If yes, what type of fruits/vegetables do you grow?

14. Are those vegetables/fruits sold?

Yes

No

15. If yes, where do you sell them?

(a) Manakamana (b) Aambukhaireni (c) Local village (d) Others

16. When did you start to sell vegetables/fruits? (Approx. Year)

17. Has there been any change regarding the production the production in vegetables/fruits types?

Yes

No

18. If yes, what did you use to grow in the past?

19. What do you grow now?

20. If you have changed, why?

21. Do you use fertilizer for production of vegetables/fruits?

22. What type of fertilizer do you use?

(a) Chemical fertilizer (b) Animal dung (c) Others

23. If you use fertilizer, where do you buy it?

(a) Manakamana (b) Aambukhaireni (c) others

## **B. Saving/ Deficit, investment, Remittances**

1. What are the sources of income of your household? (Priority 1<sup>st</sup>, 2<sup>nd</sup>,3<sup>rd</sup>)

(a)Agriculture (b) Business (c) Services (d) Wage labour



### **C. Development**

- 1) When was the cable car started?
- 2) Does the cable car make any change on your occupation?
- 3) If it has changed,
  - (a) What did you do before?
  - (b) What do you do now?
- 4) Does the cable car make any impact in your economic condition?
  - (a) Positive (b) Negative (c) No comments
- 5) If positives, what are they?
- 6) If negatives, what are they?
- 7) How can we minimize the negative impacts?
- 8) Do you want any other development activities in your village?
- 9) If you want, what do you think should be done?
- 10) According to you, who could initiate such development?

#### **Key Informants Interview Questionnaire (2003)**

Name of the respondent:

1. What is the condition of school going children in the village?
2. Is their number increasing or decreasing?
3. If it is increasing, when did it start to increase?
4. If it is decreasing, why?
5. What is the number of businesses in the village?

Types of shops	No. of businesses	
	Before the road construction	After the construction

6. What types and in which season in those shops the goods is available?

7. What are the rural activities in the village?

Types of activities	Before the road construction	After the construction

8. What is the perception of the villagers on human health?

9. Is there any change on human health treatment of the villagers since the cable car has been constructed?

10. Do you think the cable car has changed the economic condition of local people?

11. Give some suggestions how can we improve rural livelihood?

12. If there are some negative impacts of Cable car, how can we reduce them?