# Assessment of Karnali Employment Program



Government of Nepal National Planning Commission Singh Durbar, Kathmandu, Nepal

May 2012

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Published by: Government of Nepal National Planning Commission Singha Durbar Kathmandu, Nepal Tel: +977-1-4211629 Website: www.npc.gov.np

## Foreword

We have completed over five and a half decades of planned socio-economic development in Nepal. However, we are not able to provide full employment to all the economically active people of Nepal, especially the people belonging to remote areas and marginalized communities. People living in any corner of the country should have equal rights to get benefits of the development process. The development results should be realized by the concerned stakeholders. The Karnali region of the country is believed to have lagged behind in comparison to other regions in most of the development results. Realizing the facts, the Government as well as other development partners has emphasized their efforts on the overall development of the Karnali region. Among other efforts, the Government of Nepal announced the implementation of the Karnali Employment Program (KEP) through the Budget Speech in the Parliament in 2006, aiming at improving the situation of the region. The KEP was initiated as a scheme with the '*Ek ghar ek rojgar*' (one family one employment) program.

The present study aims to assess the outcome of investments made through the Karnali Employment Program to the employment situation in the Karnali region. We hope the findings of this study would be beneficial for policy makers, program designers and program implementers regarding any targeted program or project in the Karnali region and in replicating such program in other regions of the country. Similarly, this program could serve as a guideline if replication is deemed necessary.

We would like to acknowledge the guidance of Mr. Janak Raj Shah, Hon'ble Member and Mr. Yuba Raj Bhusal, Member-Secretary of National Planning Commission, and Mr. Sushil Ghimire, then Secretary of Ministry of Local Development in completing this study. We would like to thank TEAM Consult Private Limited especially the team leader, Dr. Govind Prasad Regmi and Team Members for successfully completing this study. Mr. Pushpa Lal Shakya, Mr. Dhurba Prasad Dahal, Mr. Bhaba Krishna Bhattarai and Mr. Teertha Raj Dhakal, Joint-Secretaries, and Mr. Rabi Shanker Sainju, Mr. Krishna Prasad Acharya, and Mr. Krishna Prasad Dhakal, Program Directors and other concerned officials and Planning Officers of National Planning Commission Secretariat including Mr. Mitra Mani Pokharel, Under-Secretary (Focal person - KEP) of Ministry of Local Development, deserve sincere appreciation for their valuable inputs to the Report. We express our sincere thanks to all Local Development Officers, Village Development Committee secretaries and the Chief Executive Officers of Municipalities for their support and cooperation during the field survey in the district. The beneficiaries, key informants, and the members participating in the group discussions also deserve special thanks for their contribution to this study.

We highly appreciate the financial and technical support provided by UNDP to complete this study. Our thanks are also due to Ms. Lazima Onta-Bhatta, Assistant Country Director and Dharma Swarnakar, Program Analyst of UNDP. Last but not least, Mr. Gyanendra Kumar Shrestha, National Project Manager, and Dr. Hari Pradhan, then National Project Manager for his initial support; Ms. Sujeeta Bajracharya, Monitoring and Evaluation Specialist, Mr. Dol Bahadur Kunwar, Administrative and Financial Assistant, and Mr. Saras Rana, Intern of SPMC NPC Project deserve our sincere appreciation for their coordination and technical support to the study.

(Deependra Bahadur Kshetry) Vice-Chairperson

National Planning Commission

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# Acronyms

NPC	National Planning Commission
KEP	Karnali Employment Program
MOLD	Ministry of Local Development
KRDU	Karnali Regional Development Unit
NRs	Nepali Rupees
KII	Key Informant Interview
FGD	Focus Group Discussion
VDC	Village Development Committee
DDC	District Development Committee
HDI	Human Development Index
EEC	Execution and Evaluation Committee
WUPAP	Western Upland Poverty Alleviation Program
GON	Government of Nepal

## **Executive Summary**

#### The context

Poverty reduction has been a central focus of the national development plan since the Ninth Plan. It has been further emphasized along with employment generation from the Tenth Plan. The Poverty Reduction Strategy Paper (PRSP) and the Tenth Plan (2002-2007) embodied employment generation, in general, and targeted programs, in particular, as one of the four pillars of the PRSP, while also including it as one of the main objectives of the Tenth Plan (NPC: 2002). Conforming to the preceding plans, the Approach Paper of the current Three-Year Plan (2010/11-2012/13) has also set objectives to reduce the existing inequality and poverty by increasing decent employment through the expansion of inclusive, productive and targeted programs (NPC:2010). Employment centric thrust has been one of the key strategies of the current Three Year Plan.

The Government of Nepal announced the Karnali Employment Program (KEP) through the budget speech of 2006 with an initial sum of NRs. 180 million. KEP was initiated as a scheme with '*Ek ghar ek rojgar*' (one family, one employment) as its objective. The aim was to initially provide 100 days of guaranteed wage employment to at least one unemployed family member in every household. The aim of KEP is to reach out to very poor households that do not have any employment opportunities or sources of income. Those households in which at least one family member has a source of income (temporary or permanent employment in the government, NGOs, INGOs, is a pensioner, and families that are food secure throughout the year and owners of business enterprises) are refused employment in the KEP (MoLD, KRDU: 2007).

Employment generation under KEP is primarily based on the public works program. Therefore, some authors have called it a 'public works based social protection scheme' (Vaidya: 2010). But with KEP's nature being non-contributory, it would be relevant to refer to it as a safety net or social assistance program based on workfare. The program is financed by the government and managed by the Karnali Region Development Unit (KRDU) of the Ministry of Local Development (MoLD).

The total amount allocated to KEP from 2006-2007 to 2010-11 was NRs. 1,056 million. Together with the budget of 2011-12, it amounts to NRs. 1,316 million. District-wise distribution figures show that the highest budgetary amount has been allocated to Kalikot (36.97 percent) followed by Jumla (27.71 percent), Mugu (14.43 percent), Humla (10.52 percent) and Dolpa (10.37 percent), during the period.

The present study aims to assess the outcome of the investments made through the Karnali Employment Program on the employment situation, in general, and the specific objectives of the study, in particular. The objectives of the study are: (1) to examine the amount spent and infrastructure built through the program; (2) to assess the employment created through the program and its results (i.e. impact) on the recipient households; (3) to identify problems associated with the program in relation to its reliability, effectiveness and sustainability; (4) to make recommendations for improving its impact on the recipient households; and (5) to recommend improvements in the implementation modality of the program.

#### Findings

The program area (KEP) covers five districts of the Karnali zone constituting 14.5 percent of the total geographical area representing 1.3 percent of the total population of the country. KEP was initiated five years ago without a detailed program design and an appropriate implementation modality. The cumulative total budget set for KEP reached a mark of NRs. 1,316 million. As per KRDU Operation Procedure, 2 percent of the total budget is taken as administrative costs, which is distributed from the center to the local government bodies. Of the total budget, on average, around 85 percent has been spent, while of the released budget, it is 100 percent.

The total number of projects, large and small, completed till 2009-10 is 3,252. The highest number of projects were implemented in Kalikot (27.68 percent) followed by Dolpa (21.45 percent), Mugu (19.03 percent), Humla (16.14 percent) and Jumla (15.68 percent). As far as expenditure is concerned, the highest amount of the budget was spent in Kalikot (36.99 percent) followed by Jumla (27.72 percent), Mugu (14.44 percent), Humla (10.47 percent) and Dolpa (10.47 percent). It is obvious that the districts which have more finances have completed a larger number of projects.

The average days of employment in KEP are 13 per year with an average wage of NRs. 201 per day, which is lower than the market as well as statutory minimum wage rate. Both males and females were paid equally while there is a variation in the market wage rates between the sexes. Payment of wages is not timely and is also not made all at once. The average income of a household amounts to NRs. 56,629. The pattern of income distribution is rather skewed. The bottom 10 percent of the households own only 0.55 percent of the income while 48.45 percent of the income is concentrated in the top 10 percent of the population. The Gini-coefficient is 0.61.

The consumption pattern of the households has not changed much since 2005-06. Around 31 percent of the income is spent on food, 21 percent on clothing and 1.5 percent on fuel. The expenditure on education has increased from 18.1 percent in 2006-07 to 22.5 percent in 2010-11. The expenditure on health has marginally increased to 7.6 percent during the same period. Of the total, 20.5 percent of the households are involved in asset creation. Among them, 21.1 percent of the households have invested in animals, 49.9 percent in household articles, 2 percent on land, 10 percent on radios, 7.6 percent on mobile sets and 0.6 percent on television sets. Investment on land and in agricultural tools is expected to enhance the future income streams of the households. Of the total children under 18 years (school going age), 81.2 percent are attending school, of which girls constitute 47 percent and boys 53 percent. After completion of schooling, only 3 percent leave the Karnali zone for employment elsewhere. On average, they remit NRs. 1,400 a month.

Figures reveal that 61 persons per 100 households had migrated in search of employment before the launch of KEP. But now the figure has declined to 54.1 percent.

About 81 percent of respondents expressed their satisfaction with the performance of KEP. Being an anti-poverty program, 78 percent of the total expenditure goes to the poor in the form of wages. In fact, increase in the outlay on labor has greatly enhanced the effectiveness of the workfare programs in raising the income of the poor. The cost-benefit ratio is 0.25 which is reasonable in the context of the level of development of the Karnali zone. In the present case, figures suggest that KEP transferred one rupee of the income to the participant workers at a cost of NRs. 1.30 in 2010-2011. It is to be noted that KEP included the poor as well as non-poor households largely because the program was highly politicized.

## **Key Recommendations**

- It is recommended that a detailed study of each district with a focus on the identification of the poor and non-poor and basic infrastructure projects essential for a decent livelihood is necessary.
- Amendment of the Operation Procedure of KEP, MoLD (Targeting, eligibility and intake, focal office/officer, work scheduling, work days and wage rates) is recommended.
- KEP should include include skill development training programs as a core component of program that helps to find more permanent employment or self- employment. Therefore, KEP's role is to be developed as a bridge to further employment.
- Strengthen the monitoring and supervision system of the KRDU as well as the DDCs. It is recommended to make provision of regular M&E visits for the KRDU officials to the program area at least once a year.
- It is recommend to develop MIS system for KEP program to strengthen the evidence based management decision and implementation.

## Chapter I

## **INTRODUCTION**

## **1.1 THE CONTEXT**

It has been recognized that inadequate attention has been paid to the unemployment dimension of Nepal's poverty reduction, which is now sufficiently manifested in current Nepalese economic literature. Underscoring its importance, the Poverty Reduction Strategy Paper (PRSP) and the Tenth Plan (2002-2007) embodied employment generation, in general, and targeted programs, in particular, as one of the four pillars of the PRSP, while also including it as one of the main objectives of the Tenth Plan (NPC: 2002).

With the end of the Maoist conflict and the realization of the urgent need for social protection to the poor and vulnerable, the Government of Nepal initiated several income generating and social welfare programs in various parts of the country. Conforming to the preceding plans, the Approach Paper of the current Three-Year Plan (2010/11-2012/13) has also set objectives to reduce the existing inequality and poverty by increasing decent employment through the expansion of inclusive, productive and targeted programs (NPC:2010).

As a result, the Government of Nepal announced the Karnali Employment Program (KEP) through the budget speech of 2006 with an initial sum of NRs. 180 million. KEP was initiated as a scheme with '*Ek ghar ek rojgar*' (one family, one employment) as its objective. The aim was to initially provide 100 days of guaranteed wage employment to at least one unemployed family member of every household. The aim of KEP is to reach out to very poor households that do not have any employment opportunities or sources of income. Those households in which at least one family member has a source of income (temporary or permanent employment in the government, NGOs, INGOs, is a pensioner, and families that are food secure throughout the year and owners of business enterprises) are refused employment in KEP (MoLD, KRDU: 2007).

Employment generation under KEP is primarily based on the public works program. Therefore, some authors have called it a 'public works based social protection scheme' (Vaidya: 2010). But KEP's nature being non-contributory, it would be relevant to refer to it as a safety net or social assistance program based on workfare. The program is financed by the government and managed by the Karnali Region Development Unit (KRDU) of the Ministry of Local Development (MoLD).

The total amount allocated to KEP from 2006-2007 to 2010-11 was NRs. 1,056 million. Together with the budget of 2011-12, it amounts to NRs. 1,316 million. District-wise distribution figures show that the highest budgetary amount has been allocated to Kalikot (36.97 percent) followed by Jumla (27.71 percent), Mugu (14.43 percent), Humla (10.52 percent) and Dolpa (10.37 percent) during the period.

Available information indicates that in most of the districts, 99 percent of the budget has been spent every year. Therefore, in view of this, it is imperative to assess whether KEP has been able to provide 100 days of employment as set out in the KEP Operation Manual and if construction works are properly carried out to create jobs for those who are unemployed. These are some of the issues which the present study has attempted to address, to see if KEP can be continued in a similar manner or otherwise. Keeping these in mind, the objectives of the study are set as follows.

## **1.2 STUDY OBJECTIVES**

The present study aims to assess the outcome of the investments made through the Karnali Employment Program (KEP) on the employment situation, in general, and the specific objectives of the study, in particular. Its objectives are:

- to examine the amount spent and infrastructure built through the program;
- to assess the employment created through the program and its results (i.e. impact) on the recipient households;
- to identify problems associated with the program in relation to its reliability, effectiveness and sustainability;
- to recommend improvements in the implementation modality of the program; and
- to make recommendations for improving its impact on the recipient households.

## **1.3 RATIONALE OF THE STUDY**

The Government of Nepal launched KEP in 2006-07 and spent a total of NRs. 1,056 million from 2006-07 to 2010-11. KEP was announced through the budget speech and, therefore, it has neither any benchmark study nor any well-designed programs. Nonetheless, KEP has operated over five years with increased allocations pouring into it. Interestingly, the proportion of expenditure to the allocated budget is around 100 percent while in other programs, the absorptive capacity of the Karnali zone is less than 50 percent. Therefore, these issues need to be analyzed and reviewed to assess if the intended outputs are actually achieved. As to whether or not it is worth investing further in the program, this study provides a basis for the government to review and reformulate strategies for development of the Karnali area.

## **1.4 METHODOLOGY**

This study has been carried out using both primary as well as secondary sources of information. Purposive selection of KEP employed households indicates that the tracer approach has been adopted in this study. Random household selection in every identified location was made after the identification of KEP employed households. Primary information was collected through:

- Direct interviews of the beneficiary households utilizing a structured questionnaire,
- Focus group discussion with the stakeholders (local social workers, local community members, political representatives, contractors and local workers);
- Key Informants Interviewers (KII); and
- Observation of the KEP-created infrastructure.

The study area being the five districts of the Karnali zone, the household beneficiaries of KEP thus form the population of the study from which representative samples (around 3 percent) have been drawn.

## 1.4.1 Sampling procedure and sample size

The persons employed by KEP are the population of this study and representative samples have been drawn from this group. A minimum 25 percent of the VDCs are covered in the survey of the beneficiary households. The district headquarters of each district have been selected purposively. Sample VDCs were selected randomly by using the computer generated data analysis program. In

order to derive sample beneficiary households of each VDC, the probability, proportional to the size technique has been used.

The sample households have been selected through a systematic random sampling method. A minimum of 20 households are covered in each VDC. In order to make the sampling procedure more representative, a 45 percent level of confidence by each district has been maintained. Thus, the total sample size constitutes 2,019 households as presented in the following table. A detailed sample size and sampling interval are presented in Appendix 1-A.

S.N	District	VDC's	Sample VDC	Beneficiary	Sample size
				Households	
1	Jumla	30	8	18,462	525
2	Kalikot	30	8	27,702	786
3	Dolpa	23	6	6,606	188
4	Mugu	24	6	9391	269
5	Humla	27	7	8,845	251
	Total	134	35	71,005	2019

Table 1.1: Beneficiary Household and Estimated Sample Size by District

## 1.4.2 Focus Group Discussion (FGDs)

In order to assess the perceptions about KEP, its programming, implementation, evaluation and public auditing as well as its impact on the general people at large, FGDs were organized in each district. FGDs were conducted in each of the district headquarters as well as in each of the VDCs. The participants of the FGD in the district headquarters were different from the participants in the FGD at the VDC level. In doing so, it was expected that cross-cutting themes would emerge about KEP from the interactions with the divergent stakeholders.

#### 1.4.3 Key Informant Interview (KII)

With an intention to understanding the policy level reaction about KEP, KII was organized at the central level. At this level, officials from the NPC, MoLD and people with experience about Karnali and remote area development were interviewed, while at the district/VDC level, KII representatives from the concerned agencies, VDC secretaries and members of local agencies participated.

## **1.5 OUTLINE OF THE REPORT**

The first chapter briefly introduces the nature of the study and its objectives. Chapter II presents a critical survey of the studies related to employment theories for rural households. The role of public work programs in the process of reducing poverty and thereby consumption smoothing of poor households has been discussed. A brief introduction of the current status of development of the Karnali zone has been analyzed in chapter III. Chapter IV gives the structure of the population and status of the current situation of employment in the Karnali zone as against the national demographic scenario. The budget allocation and expenditure pattern of KEP have been analyzed in chapter V. At the outset, expenditure levels and patterns at the VDC level have been collected, verified and attempts have been made to relate them with the performance of the KEP programs. Institutional arrangement and assessment of the infrastructure development program under KEP are discussed in chapter VI and VII. The assessment of the impact of the Karnali Employment Program and the appraisal of the cost effectiveness of KEP is discussed in chapter VIII and IX. The summary of the findings and recommendations are presented in the last chapter.

## **Chapter II**

# AN OVERVIEW OF EMPLOYMENT THEORIES FOR RURAL HOUSEHOLDS

## 2.1 BRIEF REVIEW OF INTERNATIONAL EXPERIENCE

For the last several years, the problem of poverty, especially rural poverty, has posed a serious challenge to developing countries. Much has been written about it and divergent programs and projects have been undertaken with an intention to alleviate people from poverty. The Lewis (1958) or Dual Sector Model of labor transfer from the rural to the urban-industrial areas was accepted as an answer to the problem of unemployment and underdevelopment.

In fact, the theories of rural employment are primarily born out of diverse rural market conditions which are affected by fast changing agrarian structures. The rural labor market theories begin with subsistence theories where the determination of wages is regarded largely as 'exogenous' to labor market conditions. There are also factor market imperfections reflected in the monopolistic power of the employers in the villages giving rise to the 'imperfect theory of labor market', followed by the 'efficiency wage theory' and ' the inter linkage theory'. Due to the fast changing nature of the agrarian structure in developing countries, the relevance of these theories appears questionable, for example, when new production technologies are introduced, wage determination as per the subsistence theory of imperfect competition loses its ground due to the oligopolistic power of the employers. They hire labor for a few days during the peak period and are least concerned about the inflation of future labor costs.

A brief review of popular theories of rural labor markets, therefore, shows that they are incapable of addressing the nature and magnitude of the diversity that is existent in the rural economy of developing countries. Most of them fail to fully provide the underlying divergent socio-economic conditions of the rural economy. Although these theories have taken into consideration the rural demand and supply situation, they have not been able to incorporate the components of urban or semi-urban employment. Therefore, employment coverage of these theories is limited.

On the other end of the spectrum, is the issue of 'growth with equity' as a major policy prescription evolved during the 1970's and 1980's. It emphasized the role of agriculture on one hand and measures to improve the household economy of the weaker sections of society, on the other. As a result, safety net programs are prescribed as a part of the broader poverty reduction strategy along with other social development issues. Therefore, safety net programs, besides others, are assumed to achieve the following objectives (Grosh and others: 2008).

- Safety nets redistribute income to the poorest and more vulnerable with an immediate impact on poverty and inequality,
- Safety nets enable households to make better investments in their future,
- Safety nets help households manage risk, and
- Safety nets help governments make beneficial reform.

Recognizing the importance of safety net programs in reducing inequality and poverty, several developing countries have launched a variety of programs in the past three decades. They are in

the form of cash transfers; social pensions, in-kind transfers, price subsidies, fee waivers for essential services and employment in labor intensive public work programs.

The prime concern of this study being related to the public work programs particularly in the Karnali zone, a brief discussion is this regard would provide some insight into judging whether KEP has followed the basic tenets of international practices. The safety net programs are launched under different situations. Carlo del Ninno identifies such situations like mitigation of covariate shocks (both unexpected and seasonal), mitigation for idiosyncratic shocks, anti-poverty and workfare as a bridge to more permanent employment (Carlo and others: 2009). But the main objectives of such programs are to create jobs for the poor in order to provide a source of income to sustain a decent livelihood.

Under this framework, workfare programs provide income transfers via wages to smooth the consumption of poor households in the wake of major shocks such as economic crises, natural disasters or seasonal shortfalls in income and employment. Bangladesh has been running such programs as a counter cyclical workfare program in order to provide employment during the lean season. Such programs are also in operation in India and Yemen.

Bolivia and Mexico: During the period of idiosyncratic shocks, workfare provides an 'option price' to the workers when needed. Where there is no social security to the unemployed, this program virtually performs as an insurance function. The National Rural Employment Guarantee Act of India provides at least 100 days of guaranteed wage employment to those who register willingness to work at a statutory minimum wage. Public work programs designed as an antipoverty program provide income support to poor households where there is a large pool of unemployed workers. In order to reach out to the poor households, various targeting methods are used. If such programs are run by internal resources, then such public work programs can also perform a 'redistributive function'. Large antipoverty programs are in operation in Ethiopia, Bangladesh and South Africa. The workfare programs, which include skill training as one of the components, help the unemployed find a more permanent job or become self-employed.

The other important objective of the public works program is to create assets or goods for future consumption which enhance the scope for a greater second round employment effect (Subbaro: 2003). Public works in response to HIV/AIDs-related vulnerability, public works in urban areas, in fragile districts and in response to climate and risk prevention are some of the important areas which can reduce or mitigate the risk of covariate shocks.

A cross country analysis of public works programs carried out by Carlo del Ninno (Carlo:2009) indicates that about 40 percent of the projects were initiated to counteract the negative effects of covariate shocks, and about one fourth as an anti-poverty instrument. The antipoverty objective seems to motivate the launch of a workfare program mainly in low income countries. The benefits, which a well-designed public work program can deliver, depend on the following features.

## 2.2 THE DESIGN FEATURES

The effectiveness of public works as a safety net instrument depends on the amount of funds available to support the vulnerable section of the population. Since there is a pool of unemployed population in developing countries, some sort of eligibility, targeting and intake criteria are used in order to minimize targeting errors. Self-selection or self-selection in combination with other methods, including geographic or community targeting, is the most popular method adopted by several countries.

Seasonality of work operation is another uniform feature of public work programs where sufficient attention must be given. The public work program should be operational when the opportunity cost of labor is low. This means more people are in need of a temporary source of income. The best time would be the agricultural slack season (4-5 months in a year) in which the program would serve as a consumption smoothing function. Gender dimension is another important aspect in the public works programs. The participation of women in public works programs provides them with wage employment, which in turn helps households to improve child welfare, health and education. In order to make public works programs genuinely demand driven, the involvement of the community is important. It will result in the creation of infrastructure and assets that are demanded by the community for future use. It also creates a sense of ownership that may lead to better maintenance of assets.

#### 2.3 THE IMPLEMENTATION FEATURES

The most important aspect in the implementation of the workfare program is wages. The program must distinguish between minimum wage, market wage and program wage rate. In India, the program wage rate is kept below the market wage rate in order to keep the self-selection procedure workable (Subbarao: 1997). The choice of payment (daily, weekly, monthly) also affects targeting. Task-based payment attracts more women to worksites (Dev: 1995). Labor intensity is another important aspect which reflects the share of workers in the total cost of the program, though it largely depends on the wage rate and its historical evolution.

## 2.4 ASSET CREATION AND MAINTENANCE

Maintenance and sustenance have always been a problem in public works programs particularly in developing countries. Assets created by workfare interventions are no exception. The magnitude of this problem can be reduced by involving the local communities since the inception of the program. Community involvement and creation of a sense of local ownership are ascribed as one of the attributes of the program. In many developing countries, these issues are addressed during the design phase of the program. In Egypt, sponsoring agencies of the program are required to deposit upfront 10 percent of the total project cost for maintenance in a separate bank account matched by another 10 percent from the Social Development Fund (Carlo:2009) Likewise, in Yemen and Tanzania, local communities are created depending on the type of assets created. The government also allocates funds which are channeled through local government authorities.

#### **2.5 FINANCING ARRANGEMENTS**

It is most common for public works programs of this nature to be funded and implemented by the government. Subbarao (1997) describes this as a traditional model of service provision (funding and management) and actual creation of infrastructure (the production). But in a number of countries, public-private partnership arrangements are also found financing and executing the workfare programs. Part of the fund is allocated by the central government and part of it is supplemented by the local government. Both these funds move to the villages; delays in movements result in low performance of the program.

In some countries in Africa, non-wage funds are also created. Wage costs are borne by the donors while the non-wage costs are borne by the recipient country. Due to the weak local line agencies of the government, often contractors are hired to implement the program. The involvement of contractors and use of labor displacing technology affect the poor who are the ultimate target of the program. This has happened in Andra Pradesh of India (Deshingkar: 2005). Accountability and social audit are necessary at all stages of program implementation. Monitoring and supervision in the process of execution is imperative for the successful implementation of the workfare programs.

In the context of Nepal, one finds that poverty reduction and income raising programs have been in operation over the last three decades. Nepal's effort at addressing poverty-related issues dates back to the Eighth Plan (1992-1997). Since then, a variety of community-based and geographic area-specific programs have been undertaken. Among them, the notable poverty reduction programs being executed by different line agencies, particularly in the Karnali zone, are:

- Programs of the Poverty Alleviation Fund
- Western High Mountain Poverty Reduction Program
- Rural Community Infrastructure Development Program
- Rural Development Program (Poverty with Bisheswore)
- Rural Access Improvement and Decentralization Project
- Decentralized Rural Infrastructure and Livelihood Program
- Karnali Employment Program (KEP)

Among these, KEP is the latest addition, which is the flagship program of all poverty alleviation programs in the country. Despite the geographical terrain and deprivation in the Karnali zone, KEP is not a well-designed program and, therefore, it is not a prototype like NREGA (Natural Rural Employment Guarantee Act) of India or RMP (Rural Maintenance Program) of Bangladesh or EPWP (Expend Public Works Program) of South Africa. It is a blend of several approaches and, therefore, has lost a sense of genuine theoretical underpinning.

## **Chapter III**

## INTRODUCTION TO THE KARNALI ZONE

The Karnali zone comprises of five districts with an area of 21,351 sq km constituting 14.5 percent of the total geographical area of the country. This is the largest zone of the country's 14 zones. The population of Karnali was 309,084, which is 1.3 percent of the total population of the country in 2001. The average population density is 14.5 persons per square kilometer as against 157.3 in the country. The average household size is 5.5, slightly above the national average. Altogether there are 134 VDCs in Karnali zone. Thus, it is indicative that the Karnali zone is thinly populated and the settlements are widely dispersed.

The Karnali zone is one of the least developed zones in the country. Basic human development indicators in 2004 presented a poor picture as compared to other parts of the country. Most of the indicators reflect a low status in almost all sectors such as adult literacy, life expectancy, malnutrition, access to safe drinking water and others. Both human development and poverty index show Karnali at the bottom of all the 75 districts of Nepal. The Human Development Report, 2009 does not provide district-wise human development indicators, but it is presented by development and ecological regions. Some selected development indicators are presented in Table 3.1 to give a broad direction of the changing pattern of HDI in the Karnali zone. A comparison of region-wise indicators clearly shows a positive change in the human development indicators, yet they are far below the national average.

District	Adult Literacy	Life Expectancy	Mean years of schooling	Chronic Malnutri- tion	Population without access to safe drinking water	GDP per capita (PPP US\$)	HDI
Jumla	26.6	50.8	1.55	74.2	26.01	1104	0.348
Kalikot	33.2	46.7	1.81	74.2	54.5	775	0.322
Dolpa	29.0	52.5	1.59	74.2	63.8	1279	0.371
Mugu	54.1	44.1	1.40	68.8	44.8	1105	0.344
Humla	19.6	58.4	1.25	90.4	35.8	1014	0.367
Mid western	42.2	54.50	2.18	53.9	35.66	988	0.402
Nepal	48.6	61.0	2.75	50.5	20.48	1310	0.471

Table 3.1: Selected Development Indicators, 2004

Source: Nepal Human Development Report, 2004

<b>Table 3.2:</b>	Selected	Human	Develo	pment	Indicators,	2009
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Area	Adult literacy (2006)	Life expectancy (2006)	Mean yrs of schooling (2006)	GDP per capita (PPP U\$ (2006)	HDI (2006)
Midwestern	50.78	57.21	3.07	1192	0.452
Nepal	52.42	63.69	3.21	1597	0.509

Source: Nepal Human Development Report, 2009.

The reason is that the Karnali zone remains very much out of the mainstream of national development. It is a fact that the Karnali zone does not have dependable connectivity with other

parts of the country except seasonal air links with Nepalgunj. It takes days to reach the nearest road link. Inaccessibility, therefore, has isolated the Karnali zone from the waves of change that is taking place in other parts of the country. This also has made development costly and governance weak, which has affected delivery of services, resulting in high child and maternal mortality, low literacy, low agriculture productivity; hence there is a high concentration of poverty.

The temperate climate and insufficient government effort in the supply of agricultural technology to the farmers have perpetually left Karnali as a food deficit district. As a result, dependency on food air lifted from outside has increased.

Introduction of community forestry in the hills has resulted in the migration of livestock to other districts, and as a result the farmers in Karnali districts are forced to live with less number of livestock. This has caused serious problems in the nutritional level and protein supplement of the people, leading to malnourishment as high as 90 percent in the children of Humla and 75 percent in Jumla, Kalikot and Dolpa respectively (Legal :2007).

Social indicators such as health, education, drinking water and sanitation also show poor status as compared to the national average. In 2004, except for Kalikot and Dolpa, literacy rate in the other districts was less than half the national average (48.6 percent). Most of the districts, except for Humla (19.6 percent), attained half the regional average (42.2 percent) while it improved to 50.78 percent at the regional level as against 52.42 percent at the national level in 2009.

Health indicators such as life expectancy, malnutrition, safe drinking water all seem to be disturbing when compared to the national as well as the regional level. In 2004, except for Kalikot, most of the districts had a per capita GDP higher than the regional average (US\$ 988) though it remains a little less than the national average (US\$ 1,310). At the regional level in 2009, it was 25.36 percent less than the national average (US\$ 1,597).

The overall human development index of Karnali districts is below the regional as well as national average, but changes at the regional level is narrowing from 14.65 percent in 2004 to 11.20 percent in 2009. Nonetheless, the heavy concentration of poverty, low social development, weak governance and high cost of development due to inaccessibility and dispersed settlement have compounded the problem of mainstreaming development in the districts of Karnali, which led to the introduction of the Karnali Employment Program in 2006.

## **Chapter IV**

## POPULATION, LABOR FORCE AND PATTERN OF EMPLOYMENT

## 4.1 POPULATION AND AGE STRUCTURE OF POPULATION

The population census, 2001 was affected by the Maoist insurgency in Karnali districts. Therefore, of the total VDCs (134), population figures were collected only from 92 VDCs. Therefore, in this study, demographic analysis is made on the basis of the figures available in the census report. Age-wise population in 2001 in the districts of Karnali is presented in Table 4.1. It shows that a large section of the population is a dependent population. In this case, the population below 14 years and 60 years and over constitutes 46.71 percent of the total population. As a whole, the Karnali zone enjoys demographic dividend, constituting 31.70 percent of the young population, while the total economically active population comprises 53.29 percent.

Districts		Total			
	0-14	15-34	35-59	60 and over	
Jumla	29,486	22,203	14,368	2,564	68,621
Kalikot	4,691	3,640	2,118	457	10,906
Dolpa	8,531	7,021	4,985	1,112	21,649
Mugu	13,194	9,642	6,582	1,693	31,111
Humla	16,638	12,422	9,362	2,558	40,980
Total	72,540	54,928	37,415	8,384	173267

#### **Table 4.1: Age Structure of Population**

Source: Population Census 2001, National Report, NPC, CBS, 2002, Kathmandu.

## 4.2 STATUS OF EMPLOYMENT AND UNEMPLOYMENT

Table 4.2 indicates the employment status of the economically active population in the five districts of the Karnali zone.

Districts	Sex	Employed	Unemployed
Jumla	Male	49.91	56.39
	Female	50.09	43.61
Kalikot	Male	62.13	53.29
	Female	37.67	46.71
Dolpa	Male	15.54	44.91
_	Female	48.46	5.54
Mugu	Male	49.64	69.13
	Female	50.36	30.87
Humla	Male	49.25	56.36
	Female	50.75	43.64
Nepal	Male	58.56	48.76
	Female	41.44	51.23

#### Table 4.2: Employment Status of Economically Active Population, 2001(%)

Source: Statistical Year Book of Nepal, 2007, CBS, Kathmandu.

The data shows that except for Kalikot, the rest of the districts have a lower percentage of employed males as compared to the national average (58.56 percent). Likewise, Dolpa, Jumla, Mugu and Humla have a higher percentage of employed females as against the national average (41.44 percentage).

## **4.3 EMPLOYMENT PATTERN**

Notwithstanding the insufficient data on employment, a few facts such as the structural shift in the employment as well as in the output have taken place during 2001-2011. Agriculture's share in total employment as well as in the GDP has declined over the years. Table 4.3 shows the sectoral shares of the labor force engaged in the five districts of the Karnali zone. The employment scenario in the Karnali zone is characterized by the predominance of agriculture.

District/ Industry	Agriculture	Manufacturing	Construction	Wholesale & Retail	Education	Others
Jumla	84.42	4.03	0.55	4.35	1.14	5.51
Kalikot	74.52	1.51	1.26	6.52	3.06	13.13
Dolpa	80.95	3.41	0.28	7.52	2.76	5.08
Mugu	85.23	3.96	0.16	3.79	1.89	4.97
Humla	89.27	1.99	0.11	4.43	1.36	2.84
Mid-western	68.28	8.13	3.35	8.10	1.81	10.33
Nepal	65.62	8.81	2.90	8.72	2.31	11.64

Table 4.3: Distribution of Labor Force by Major Industries, 2001 (%)

Source: Population Census, 2001, National Report, CBS, 2002.

Manufacturing still accounts for less than 5 percent of the total employment, and the bulk of this is in small and cottage industries. As for industrial distribution of the workforce by sex, 90 percent of the females are engaged in agriculture and allied activities compared to 60 percent in males. A large chunk of the labor force is engaged in education, wholesale and retail business. In terms of employment, these are potential sectors where additional employment opportunities can be generated in the future. Distribution of the economically active population by occupation is presented in Table 4.4. It clearly shows that over 80 percent of the economically active population is engaged as skilled and semi-skilled workers in agriculture and allied activities.

Districts	Skilled semi skilled agricultural workers	Craft-related trade workers	Elementary occupation	Service workers	Others
Jumla	82.80	4.53	6.19	2.64	3.83
Kalikot	72.95	1.73	10.73	8.23	6.36
Dolpa	79.50	3.73	8.53	2.16	6.08
Mugu	83.34	3.80	6.73	1.22	4.91
Humla	88.38	1.92	5.21	1.16	3.33
Mid-western	64.54	9.05	13.94	6.40	6.07
Nepal	59.61	9.26	14.95	7.89	8.29

Table 4.4: Distribution of Labor Force by Occupation, 2001 (%)

Source: Population Census 2001, National Report, CBS, 2002, Kathmandu

This means that agriculture continues to dominate as a major occupation in the Karnali zone. But now craft-related trade works and elementary occupations are emerging as potential occupations in these districts.

## **Chapter V**

## **GOVERNMENT EXPENDITURE IN KEP**

Initially, a budget of NRs. 180 million was earmarked for KEP in 2006-07. Now, the cumulative total budget allocated to KEP has reached NRs. 1,316 million. The actual expenditure has been NRs. 895 million. The year-wise distribution of the allocated budget and expenditure incurred is presented in Table 5.1. Data show a marked acceleration in budget allocation recording a 44 percent increase during 2006-2011. Of the total budget, on average, around 85 percent of the budget has been spent, while of the released budget it is about 100 percent. The year to year budget release fluctuates between 71.5 percent in 2007-08 and 95.5 percent in 2009-10. From the expenditure view point, these figures clearly indicate a high level of performance in the implementation of the Karnali Employment Program.

2006-07 2007-08		7-08	2008	8-09	200	9-10	2010-11			
District	Release	Expenditure	Release	Expenditure	Release	Expenditure	Release	Expenditure	Release	Expenditure
Jumla	35457	35457	54320	54320	61262	61262	58863 0	58630	70580	70580
Kalikot	51424	51424	64364	64364	71730	71730	85459	85459	86314	86314
Dolpa	22905	22905	20573	20573	22580	22580	19436	19436	19436	19436
Mugu	28438	28438	29037	29037	29037	29037	27893	27893	31500	31500
Humla	8020	7436	24480	24480	24622	24622	24076	24076	25193	25193
Expenditure	146244	14660	143058	143058	160649	209231	215494	215494	233023	233023
Allocation		180,000		200,000		200,811	225	,607	250	,581

Table 5.1: District-wise total budget released and expenditure (NRs. 000)

Source: Red book 2011, KRDU and MoLD

A breakdown of the KEP expenditure by district is presented in Table 5.2. It is evident from the table that the highest amount was spent in Kalikot (36.99 percent) followed by Jumla (27.72 percent), Mugu (14.44 percent), Humla (10.47 percent) and Dolpa (10.38 percent). The VDC level expenditure figures are presented in Appendix 2.

Table 5.2: District-wise	Completed	<b>Projects</b>	(Number)
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Districts	2006-07	2007-08	2008-09	2009-2010	Total
Jumla	197	92	87	135	511
Kalikot	318	306	153	125	902
Dolpa	140	140	335	84	699
Mugu	153	194	133	140	620
Humla	187	167	106	66	526
Total	995	899	814	550	3258

Source: KRDU, MOLD, Kathmandu

A comparison of the budget spent and number of projects completed shows that Kalikot stands first, spending the largest amount of the budget (26.99 percent) and also completing the highest number of projects (902). Likewise, Mugu and Dolpa ranked third and fourth largest both in terms of expenditure and completion of the number of projects.

In cases where project/activity-wise expenditures are unavailable, the expenditure pattern cannot be worked out. Nonetheless, analysis of the information derived from the Focus Group Discussions reflects that the highest amount of the budget was spent on roads and construction of schools. In Jumla, Kalikot and Humla, *ek ghar ek bagaicha* (one house one garden), nursery development, irrigation, drinking water and micro-hydro projects figure highly, while in the rest of the districts, micro-hydro, toilet construction, roads, irrigation, bridge construction and drinking water projects were the focus.

At this point, it is worth noting that out of the total budget, 2 percent is divided among the VDCs, DDCs and central level KEP coordination committee as administrative expense. Of the 2 percent, 0.66 percent goes to the VDCs, another 0.66 percent to the DDCs while the remaining portion is kept by the KEP coordination committee at the centre.

Misappropriation of the budget is highly likely due to the introduction of an all-party mechanism while taking decisions on how to spend the KEP funds. Although there are legal issues related to the all-party mechanism system, the main concern in this context is related to the unaccountability of the mechanism in incurring expenses from the public coffer. Therefore, this needs to be rectified at the earliest; otherwise introduction of such a mechanism would nullify the attainment of the objectives of KEP. The income and expenditure figures are presented at the VDC-level meeting as a social audit, but no one seems to actively raise any dissenting voice.

## **Chapter VI**

## **INSTITUTIONAL ARRANGEMENTS**

KEP's effectiveness in meeting its objectives depends largely on institutional arrangements and management efficiency. In order to coordinate the programs of KEP at the central level, there is an 18-member coordination committee chaired by the minister of MoLD, supported by the member secretary who is the focal person of KRDU. This is the all powerful committee that manages the KEP programs in all the five districts, including allocation of funds to the various districts, devising standards to distribute the funds, release of funds, supply of requisite manpower, providing directives to local government bodies, undertaking supervision and monitoring of the programs. In case of any difficulties in the execution of the programs, it can resolve the problems by amending the existing working procedures.

The second tier coordination committee is constituted under the chair of the chairman of the district development committee. This is a 17-member coordination committee where the local development officer is the member secretary. There is coordination and monitoring committee at the VDC level which constitutes the third tier of the institutional arrangement. The coordinator of this committee is the VDC chairman who is responsible for coordinating and managing the programs undertaken in each of the VDCs. The VDC secretary is the member secretary of the VDC-level coordination committee.

In Jumla, there are user groups at the lowest ladder that, in fact, undertake project work. The VDC makes an agreement with the users group, and payment is made by the VDC to the user group. Currently, in the absence of elected representatives at the DDC as well as the VDC level, the LDO, as the chairman, and representatives of political parties and representatives of human rights organizations and prominent NGOs constitute a board, which takes decisions on how the funds should be disbursed. In Humla, it is called CMC (coordination and monitoring committee). It provides directions to each of the VDCs, which they must follow in the selection and preparation of project proposals. There is also a mechanism where the DDC-level monitoring and supervision team must visit the VDCs to evaluate, monitor and mediate if there are any inter-VDC disputes.

The planning unit of the DDC has designed various forms to list the names of persons selected for employment by the VDCs. Further, it has designed a form for the user committees to request KEP employment from the VDCs; form to list projects proposed by the user committee; form to list proposed projects submitted by the VDCs to the DDC; daily attendance sheet; form for the user committee to provide information on public audits; progress report form to be completed by the VDCs; form to include information on quantity and cost estimates of projects, progress report and project completion.

Although an elaborate system of project selection and implementation is in place, it is not being used systematically and rigorously at all levels. The information derived from the VDCs is primarily used to estimate quantity, material cost and labor input cost. Instead, it could have been used to estimate the project cost, labor cost and amount of work to be completed by the participating workers within a certain timeframe. Attendance sheets of particular workers are also there, but there is no information about whether they have worked a full day or half day or even for lesser hours. And the role of the District Technical Office (DTO) in preparing the design of the project appears ineffective. They are more involved in cross-checking to see if the

calculations are correct instead of providing guidance in the selection, preparation and supervision of projects.

As far as communication between the VDC and DDC (KEP) officials is concerned, regular monthly meetings are organized in which all the VDC secretaries participate. Most of the issues related to KEP from project identification to completion are discussed, and solutions are sought for the resolution of the problem.

In Humla, the district monitoring officer of WUPAP leads the DDC monitoring unit, who is also responsible for the administration of KEP. He is supported by an administrative and financial officer along with the social mobilizer. At the VDC level, the execution and evaluation committee (EEC) is chaired by the VDC secretary. The VDC secretary manages the KEP programs.

The institutional structures in all the five districts are almost similar with little variation. Nonetheless, in the absence of a uniform and single institution responsible for KEP, it undermines the whole effort in implementing the program. There is no focal institution or person as such. As a result, uniformity in all aspects (from identification of the poor to the completion of the project) have not been maintained. Different districts have different ways of identifying, selecting and appraising the program, which restricts the comparison of program achievements.

As is seen in Humla, a different program unit like the WUPAP is dealing with the KEP programs. On the other hand, the DDC and LDO are preoccupied and overburdened. It is very hard for them to regularly monitor the implementation of KEP. Thus, in some cases, funds are misused as in the case of Dadaphaya VDC of Humla, where a VDC secretary misappropriated NRs. 200,000. Therefore, it is imperative at this stage that all the five districts move hand in hand from program formulation to evaluation; otherwise it will be difficult to assess the achievements.

Keeping in mind the amount of resources the government is pouring into KEP as well as to synchronize the program activities, procedures and institutional arrangement in all the districts, a separate fully accountable institutional set-up seems essential.

## **Chapter VII**

# ASSESSMENT OF INFRASTRUCTURE DEVELOPMENT IN KARNALI EMPLOYMENT PROGRAM

Employment generation via development of infrastructure is one of the most important components of the KEP program. The development of infrastructure, which has a stabilization effect on the poor, can only remain sustainable if priority is given to the involvement of the people from the initial stage of project planning, i.e., project identification, selection, implementation, supervision and completion. This, in a way, promotes the ownership of the local community that helps to sustain the lifecycle of the project. Therefore, in this chapter attempts are focused on assessing the impact of infrastructure development projects in the KEP program with the following perspectives.

- Nature and type of work
- Volume of technical support taken while planning, designing, implementing and quality control of the projects
- Quality and materials used and skills of manpower involved
- Maintenance activities.

# 7.1 CURRENT STATUS OF INFRASTRUCTURE DEVELOPMENT UNDER KARNALI EMPLOYMENT PROGRAM

Several development infrastructure projects have been completed during the last five years. Construction of wooden bridges, drinking water supply systems, small canals for irrigation, rural earthen roads (*goreto-ghoretto*), monasteries, school buildings, community buildings, water mills, toilets, boundary walls, play grounds, electric solar panels, small hydropower plants, stone pavement, plantation, one household-one orchard (apple farm) schemes are major projects undertaken in the infrastructure sector in each of the districts. On the basis of the FGD discussions, the number of projects completed in their respective VDCs is presented in Table 7.1 Table 7.1 shows the types of projects undertaken under KEP in the five districts of Karnali zone.

Of the total, 30 projects (construction and maintenance of rural roads - 22, construction of wooden bridges - 7 and ropeway - 1) are related to transportation, which appears to be the most important activity. For the promotion of education, 16 projects have been undertaken (construction of school buildings - 8, playgrounds – 7, and construction of community building - 1). There are 12 projects related to construction and maintenance of irrigation canals, 11 projects related to small hydropower plants, 10 projects related to construction and maintenance of water supply systems and 7 projects (main activity of Jumla district) related to one household- one orchard program.

The percentage distribution of infrastructure projects is as follows.

- Construction of infrastructure for transportation (27.02 %)
- Construction of infrastructure for betterment of education (14.41 %)
- Construction of infrastructure for social protection and welfare (10.81 %)
- Construction of infrastructure for the promotion of food production (9.91 %)

- Construction of infrastructure for public health (9.01 %)
- Programs for income generation (6.31%)
- Others (28.84 %)

S.N	Programs	Jumla	Kalikot	Dolpa	Mugu	Humla	Total	% of Projects
1	Construction/maintenance of rural earthen roads	5	5	4	3	5	22	62.9
2	Construction of wooden bridge	2	2	2	-	1	7	20.0
3	Construction of school building	3	2	2	-	1	8	22.9
4	Construction/maintenance of water supply system	2	5	2	1	-	10	28.6
5	Construction/maintenance of irrigation canal	4	3	2	1	2	12	34.3
6	Construction of toilet	-	2	5	2	1	10	28.6
7	Construction of monastery/ temple	-	1	2	-	-	3	8.6
8	Construction of playground	5	5	2	1	2	15	42.9
9	Construction of small hydropower projects	4	-	5	1	1	11	31.4
10	Ropeway	-	1	-	-	-	1	2.9
11	River training works	1	-	-	-	-	1	2.9
12	One household- one orchard program	7	-	-	-	-	7	20.0
13	Solar panel	-	-	2	-	-	2	5.7
14	Construction of community building	-	-	-	-	1	1	2.9
15	Plantation work	-	-	-	-	1	1	2.9
	Total	33	26	28	9	15	111	

## Table7.1: Projects Completed in Sample VDCs under KEP

Source: Field survey2011

At this stage, it would be relevant to discuss the total number of projects that were completed during the four years. Table 7.2 shows Kalikot has completed the largest number of projects (802) followed by Dolpa (699), Mugu (620), Jumla (611) and Humla (426), respectively. It is interesting to note that the proportion of projects with respect to benefitting households is not increasing. This is because of the increase in the size of the project.

	<b>Table 7.2:</b>	Projects	Completed	under	KEP
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	Ju	ımla	Ka	alikot	Do	olpa	M	ugu	Hu	mla
Fiscal year	No. of Project	Beneficial household	No. of Project	Beneficial household	No. of Projects	Beneficial household	No. of Projects	Beneficial household	No. of Project	Beneficial household
2006/07	197	16,152	318	2,2001	140	6,032	153	8,928	187	7,426
2007/08	192	16,462	306	2,7697	140	6,034	194	9,391	167	8,415
2008/09	87	18,462	153	2,7701	335	6,606	133	9,391	106	8,845
2009/10	135	20,974	125	2,7708	84	7,611	140	9,751	66	9,260
Total	611		802		699		620		426	

Source: MOLD/KEP

## 7.2 PROJECT SELECTION, IMPLEMENTATION AND MONITORING

As discussed in the previous chapters, the VDCs at the lowest level in consultation with the wards identify and select projects and also set priorities. Then it is referred to the DDC. The DDC in its full session approves the project for each of the VDCs. The role of the DTO in this context is very important, but its involvement is limited to the assessment of the quantity of materials and cost.

In each of the VDCs, for the implementation of various KEP programs, different committees are formed by involving the community. At the VDC level, a committee exists which is chaired by the VDC secretary and represented by locally active parties, teachers and NGOs as members. The committee manages the KEP projects. In some VDCs, a VDC consumer forum and at the ward level, a ward consumer forum is formed by the respective council meeting. Within the financial ceiling provided by the district development committee, in the presence of the community, projects are finalized after discussion. In implementing the projects, the ward consumer forum has a major role to play. As a result, there is strong involvement (73.8%) of the community in the process of executing the projects.

The non availability of technical manpower is a serious concern. The District Technical Office of the respective districts is involved in some cases. Its involvement is, however, limited to checking the completion of the projects and finalizing the final stage payment.

## 7.3 QUALITY AND MAINTENANCE OF WORKS

The life cycle of the infrastructure built depends upon the quality of work. The quality of work is dependent on the cumulative effects of design, quality of materials used, skills of the manpower involved, the working environment, and level of monitoring and supervision, and technical support.

To assess the quality of the infrastructure built,

- Consultations were held with the beneficiaries of the project area, and information about the quality of used material, skill of involved workers and workmanship was obtained
- Field survey was carried out with a quality-related questionnaire
- Overall procedures of the project, especially monitoring and quality control system and views about the quality of infrastructure built obtained from officials of the DDC, DTO and VDC were analyzed
- A technical person visited selected projects and existing condition of the infrastructure built was analyzed
- People's perception in terms of satisfaction was obtained and analyzed

In the Karnali zone, programs of KEP are self-monitored by the consumer. There is insufficient presence of technical manpower in the process of project selection, implementation and monitoring. Most of the projects have not been adequately designed and estimated prior to construction. In most of the projects, the presence of technical manpower in the project area is limited to preparing the bill of quantities, cost estimates for the purpose of payment and writing the completion report.

Locally available construction materials are used in most of the projects. Most of the manpower involved is unskilled having insufficient knowledge about construction. Most of the infrastructure

construction practices are of traditional type. Due to the lack of enough technical guidance and supervision, project work is conducted and completed using their own ideas and knowledge. There is lack of involvement of higher officials in the monitoring process. Only for the final evaluation is there the presence of the DDC monitoring team. The team only focuses on whether the project has been completed or not. The team does not examine the quality and cost. However, no damages and loss can be seen. The overall quality of work is satisfactory.

The quality of projects is also reflected by the satisfaction level (average-96.9%) of the community indicated in Table 7.3.

Programs	Satisfied (percent)
Construction / maintenance of rural earthen roads	96.4
Construction of school building	97.6
Construction/ maintenance of water supply system	94
Construction / maintenance of irrigation canal	96
Construction of toilet	98.9
Construction of monastery/ temple	97.7
Construction of small hydropower projects	97.2
One household- one orchard program	98.3
Solar panel	92.3
Others	98.4

Table 7.3: Satisfactory Level of Quality of Work

Source: Field survey, 2011

Most of the infrastructures of the projects under KEP are regularly maintained. The maintenance is carried out by the user group. The major part (35.5%) of the maintenance is carried out through the KEP budget. In addition, other maintenance expenditures are borne through people's participation (30.3%), consumer forum (27%), VDC budget (5%) and other sources (2.2%).

## 7.4 UTILIZATION OF INFRASTRUCTURE

Most of the projects under KEP are fully utilized. As the community is directly involved in the project selection process, the construction of infrastructure-related projects are carried out where needed. Most of the projects have proved fruitful for the society.

Although cash is transferred to the people through employment generation, some infrastructure projects have been found to be unused, partly (seasonally) utilized or seems constructed for the well-off people only. A two-room school building constructed at Lamra-4, Jumla is one such example. Due to the faulty selection of the location, its grounds lie below the road, and so there is that probability of being flooded during the rainy season. The school is also situated far from the village.

The dirt walkways leading to Patan (*Charan chhetra*) are seasonally utilized (approximately for two weeks in a year). These walkways have been constructed in the interest of a few rich people of the community. This happens when such people influence project selection.

## 7.5 REACTION OF PEOPLE TO KEP

The peoples of the Karnali zone are highly appreciative of KEP. There is maximum participation in KEP's projects. Due to direct access and involvement in project selection, transparent expenditure, availability of employment (however small in scale), programs focused on the poor, development of infrastructure in the social sectors such as school buildings, people of the Karnali zone are experiencing progress in their lifestyle. To make KEP more effective, the following weaknesses have been pointed out for correction by the local people.

- Employment generation is very low (<30%) in comparison to intended (100 days)
- Insufficient budget allocation in comparison to the unemployment
- Lack of technical support
- Lack of large-scale programs
- Late release of fund and late payment to employers
- Lack of an accountable person in KEP
- Weak supervision and monitoring process from the higher level
- Insufficient knowledge about KEP

## **Chapter VIII**

## ASSESSMENT OF OUTCOME OF KEP

#### 8.1. EMPLOYMENT AND WAGES

One of the major objectives of KEP is to provide 100 days of wage employment at prescribed minimum wages applicable in the respective districts. Analysis of the data collected from the field survey indicates that KEP has mostly followed the principal of *Ek ghar ek rojgar* as was envisioned in the Operation Procedure of MoLD. Only 6.8 percent of the respondents reported that KEP has provided employment to more than one member of the household. The average days of work have been found to be just 13 days. Similar results are also found in the ILO studies (Vaidya: 2010). Thirteen days of employment is too little. The reasons for this are many; one reason being that the KEP program is not designed properly. It lacks proper designs, implementation procedures and delivery models.

The stabilization benefits of the program depend on its timing. If the program timing synchronizes with the agricultural slack season when the demand for labor is low, workers are most likely to gain from the resulting income stabilization and hence consumption smoothing (Subbarao: 1997). But most of the projects under KEP are operational during the agricultural season starting from April to October. In principle, programs like KEP are required to be implemented during the agricultural slack season, when the opportunity cost of labor is low. As said earlier, this helps workers to smoothen consumption. Workers walk to the work sites because most of the project works are located close to their settlements. There is no participation cost involved. Therefore, transfer benefits to a worker from a day's employment in KEP amounts to the wage he gets from the program. The net of any costs incurred is both the cost of participation and the earnings lost from alternative employment (Ravalli an: 1987, Data and Ravalli an: 1992).

Around 65 percent of the households reported that they walk less than half hour to reach the work sites. Therefore, in the case of KEP, the cost of participation and income from alternative sources are negligible because the projects are located close to worker settlements and there are no alternative employment opportunities available to the workers. Therefore, the transfer benefit to a worker equals the program wage multiplied by the duration of employment. The average wage rate in KEP is found to be NRs. 201 per day, which is lower than the market as well as the statutory minimum wage rates.

Of the total, the wages of 43 percent of the beneficiaries range from NRs. 2,000 to 3,000. Both males and females are paid equally whereas there is variation in the market wage rates between the sexes. Working outside KEP pays more (NRs. 292) than working in KEP. The average days worked outside KEP are 51.8 days. The mode of payment of the wages differs as 78 percent reported that the payments are done in time while 22 percent said they were not paid on time. The task-based payment system has not been introduced; as a result 52 percent of the workers never get all their wages at once.

Of the total beneficiaries, Brahmin and Chhetris constitute 72.1 percent and Dalits 21.4 percent. The remaining beneficiaries are Janajatis (4.9 percent) and others (1.5 percent). Sex-wise disaggregation of the beneficiaries shows that 47.4 percent of the females had benefitted from KEP as against 52.6 percent of male counterparts.

#### **8.2 INCOME DISTRIBUTION**

The total household income is derived by adding the wages earned from the work in KEP, work outside KEP and income earned from the sale of agricultural produce plus social pensions. The average income of a household amounts to NRs. 56,624. Disaggregation of this into KEP wages amounts to NRs. 2,573, non-KEP wages NRs. 15,126 while the rest (NRs. 38,930) comes from the sale of agricultural produce and social pensions.

In order to measure the pattern of income distribution, the Gini coefficient was calculated, which is 0.61. It shows a much skewed distribution pattern, indicating that the bottom 10 percent of the population owns 0.55 percent of the total income while 49.55 percent of the wealth is concentrated in the top 10 percent of the population. This means that a high variability in income distribution among the inhabitants of KEP is distinctly observable.



## **8.3 CONSUMPTION**

Expenditure on health has marginally increased to 7.6 percent. Expenditure on food, clothing and fuel has remained almost at 2006-07 level. Around 31 percent of the income is spent on food, 21 percent on clothing and 1.5 percent on fuel.

## **8.4 ASSET CREATION**

Most of the assets created by employment generation schemes enhance the scope for greater second round employment effects (Subbarao: 2003). Therefore, asset creation during the program period has twin benefits. It creates temporary jobs that transfer income to the poor on one hand and creates durable assets that have lasting values as well as employment opportunities in the future, on the other hand. In this context, evaluation of KEP indicates that the response of 20.5 percent of the households was positive. They have invested in animals (21.1 percent), household things (49.9 percent), land (2.0 percent), radio (10 percent), agricultural tools (6.7 percent), mobile (7.6 percent) and television sets (0.6 percent). Investment in land, agricultural tools and animals are generally expected to generate further income for the farmers. Out of the investment made, 18 percent of the respondents reported that they earned NRs. 1,000 per year while the earnings of 9.1 percent of the respondent ranged between NRs. 1,001 and NRs. 5,000. The earnings of 1.1 percent of the respondent are over NRs. 5,000.

Of the total respondents, 13.6 percent have opened accounts in banks, 10.1 percent of the households have taken a loan from the banks while 29.4 percent and 25.7 percent have taken loans from traders and user groups respectively. The purpose for taking the loans was diverse. Of the borrowers, 25.6 percent of the respondents took the loan to purchase food, 26.8 percent for clothing, 9.8 percent for health and medicine, 10.7 percent for education, 16.2 percent for trade, 14.4 for agriculture and 0.4 percent for foreign employment.

#### **8.5 FOOD SECURITY**

Only 8 percent of the households are food secure while 18 percent are food secure only for 3 months. Another 33 percent are food secure for 6 months and 41 percent are found to be food secure for 9 months. To supplement the food shortage, 61 percent of the households work as laborers and 19 percent sell their animals. Around 6 percent went to India while 3 percent sold their land holding. A question was asked as to whether KEP had helped to reduce the food insecure days. The response was positive with 75 percent of the households reporting, "yes."

#### **8.6 INDIRECT BENEFIT**

In this section, an attempt is made to measure the indirect benefits derived from the infrastructure built by KEP. In this regard, 80 percent of the respondents reported that they had benefited from the construction of roads. They have saved 0.7 days in a week. Of the total respondents, 42 percent have irrigation facilities. Figures show that income from irrigation facilities range from NRs. 5,000 to NRs. 15,000; 47.9 percent of the households earn less than NRs. 5,000, while 4.3 percent of the households earn more than NRs. 15,000. The income of 42 percent of the households ranges from NRs. 5,000 to 8,000.

In a bid to assess the quality of life, an enquiry was also made to see if there was electricity connection in the dwelling units of the beneficiaries. It was revealed that 57 percent of the beneficiaries got electricity connections after 2006-2007. Only 13.4 percent of the households use electricity, 17.4 percent use solar energy, 0.5 percent bio-gas while the rest use conventional sources of energy. Of the total respondents, 42 percent had irrigation facilities. Figures show that income from irrigation facilities range from NRs. 5,000 to 15,000 while 4.3 percent of households earn more than NRs. 15,000. The income of 42 percent of households range from NRs. 5,000 and NRs. 8,000.

Of the total children of school-going age under 18 years, 81.2 percent are going to school, of which girls constitute 47 percent and boys 53 percent. After completion of schooling, only 3 percent leave the Karnali zone for employment. On average, they are remitting NRs. 1,400 per month. It was reported that before the start of KEP, the average days of illness was 14.6 days per year while this declined to 5.5 days per year in 2010-1,1 due to the construction of health posts. More than that, 73 percent of the respondents reported that due to proper drinking water facilities, hygiene and sanitation, on average 2.5 days are saved from sickness related to pneumonia, cholera and diarrhea. As far as drinking water is concerned, more than 50 percent reported that they saved half an hour while fetching drinking water. Figures reveal that 61 persons per 100 households were migrating in search of employment before the launch of KEP. But it has now declined to 54.1 percent.

To assess the change in the quality of life brought about by the implementation of KEP, 81 percent of the respondents revealed that they were satisfied with the performance of KEP. Of the total, 94 percent of the beneficiaries stated that positive changes in the quality of life had been experienced after the implementation of KEP.

## 8.7. TARGETING, ELIGIBILITY AND INTAKE

Targeting is a tool used to make a program efficient and effective. It increases the benefits that the poor can realize with the given budgetary allocation. This can be accomplished by channeling resources to a target group. There are multiple ways for targeting. Eligibility criteria and intake procedures are equally important to reach the really needy poor. All attempts must be focused to minimize the targeting errors so that program leakages to the non-poor are kept to the minimum. In this context, analysis of KEP's selection procedures shows that it has not followed targeting, eligibility and intake criterias rigorously. Instead, KEP has selected all the households of each VDC, all at once. As a result, the criterion of selecting an unemployed household, as set out in the Operation Procedure of KRDU, has been defeated. When a household is selected on imperfect information, the targeting criterion fails to distinguish between the poor and non-poor, which widen the error of inclusion. The following table presents the cumulative numbers of the households that have benefited from KEP. Table 8.1 shows that all the households of all the VDCs are included in KEP.

Districts	2006-07	2007-08	2008-09	2009-10
Jumla	16,150	16,462	18,462	20,974
Kalikot	22,201	27,697	27,701	27,708
Dolpa	6,035	6,034	6,606	7,611
Mugu	8,928	9,391	9,391	9,751
Humla	7,426	8,415	8,845	9,260

**Table 8.1: Benefited Households** 

Source: MOLD, KRDU, 2067-068 Kathmandu

On the other hand, with little variation, the total budget is also divided equally among all the VDCs. Article 2.2 of the Operation Procedure of KEP has clearly identified the people who are eligible to get jobs under the KEP program. But inclusion of all inhabitants from all the VDCs has undermined the objectives of the program. Weak local governance and excessive political pressure might be the probable causes for such a thing to happen.

#### 8.8. EFFECTIVENESS AND SATISFACTION LEVEL

Response from the households is positive with respect to KEP's effectiveness. More than 80 percent of the respondents reported that KEP has been instrumental in bringing about economic changes in their livelihood. This can be justified with the types of projects undertaken during the last five years in the program area (discussed above). For example, Jumla alone exports apples worth NRs. 10 million, which has no doubt brought about changes in the quality of life of the Jumli people. In addition, it is also reported that the inhabitants of the program area are satisfied with the construction of various projects in their respective VDCs. During the focus group discussions, all the participants had a positive and constructive attitude towards KEP and asked the government to allocate more funds so that the Karnali zone could integrate itself more strongly with the national economy. The overall satisfaction level is found to be 96.90 percent. As far as maintenance of the projects is concerned, about 30 percent of the projects are maintained through people's participation, 36 percent through KEP's budget, 27 percent by user groups and 5 percent through the VDC budget.

## **Chapter IX**

## APPRAISAL OF COST EFFECTIVENESS OF KEP

#### 9.1 THE ANALYTICAL FRAMEWORK

For rapid appraisal of the cost effectiveness of KEP, we employ an arithmetic framework first put forward by Ravalallion (1999) with some modifications to estimate the Nepali rupee of public expenditure necessary to transfer one rupee of resources to the poor. In other words, how many rupees of the public fund it takes to transfer one rupee to a poor worker. Let us define the following, assuming that the cost of participation and opportunity cost of labor are zero.

G= Government spending in KEP W= Wage bill to workers IB= Indirect benefit to the poor

The total benefit to the poor B becomes W+IB. Using these components, we can define,

Labour intensity = (w/G)Benefit to cost ratio = (W+IB)/GCost per unit of benefit to the poor = G/B

Dutta and Ravallian (1992) have found that the foregone earnings are not substantial in the Employment Guarantee Scheme of India. Foregone income is lowered due to more flexible timing, providing work closest to homes and by expanding the program during agricultural slack reasons.

## 9.2 SOURCES OF DATA

This analysis is based on both the primary and secondary sources of information. Altogether 2,019 households were visited by enumerators and supervisors with structured questionnaires. The figure on the total government spending was derived from the Red Book of the Ministry of Finance, KRDU, DDC and MoLD. These represent actual expenditures at the VDC level. Figures on the wage bill were derived on the basis of the following assumptions.

- 1. The beneficiaries of the program being all the households of all the VDCs indicate that at least one person of a family are employed in the KEP program.
- 2. Wage figures are calculated on the basis of the average days of work and the total sum they received during that year.

In fact, calculation of the indirect benefit is quite complex. Based on an analysis of the Employment Guarantee Scheme in Maharashtra, India, Ravillion and Dutta (1995) consider a level of 'indirect benefits' (such as the increased demand for rural labor and the value of infrastructure) of 40 percent of the cost of a project to be reasonable. But in this case, we attempted to capture the number of hours saved from the construction of roads, health centers and drinking water, toilet and sanitation facilities. Then, they are converted into total days saved multiplied by the average program wage rate. A proxy of direct benefits derived from educational infrastructure are calculated on the basis of the monthly income their children repatriate home from their employment within and outside the Karnali zone after the completion of their

schooling in the local schools in the respective districts. The period covers the fiscal year 2010-2011 and all calculations are made in Nepali rupees.

## 9.3 RESULTS

Table 9.1 describes the values of the variables as outlined in the previous section. The wage bill to the poor (w) is critical in determining the distribution of the benefits from the program and shows how much the program is targeted towards the poor. KEP, by nature, being an antipoverty program, 78 percent of the total expenditure goes to the poor in the form of wages.

Variables	Proportion
Labor intensity (W/G)	0.78
Cost benefit ratio (G/B)	0.25
Share of wages in total (W/B)	0.19
Average per day wage (NRs.)	201
Cost of transferring a one-rupees income to a participant worker	1.30

## Table 9.1: Cost-effectiveness of KEP

In fact, the increase in the share of the outlay on labor greatly enhances the effectiveness of the workfare programs in raising the income of the poor. But there are some aberrations like hiring local contractors by the user committees to undertake construction work. The poor households agree upon the decisions taken by the user committees and submit their wages to the contractors. As a result, the poor workers are forfeited from the benefits they used to get from KEP. The costbenefit ratio (G/B) is reasonable, i.e., 0.25. The lower the G/B, the more efficient the transfer mechanism in KEP for the poor at least in terms of government outlay. In general, one might expect G/B to decline with (I) increased labor intensity, (II) improved targeting performance, (III) a large proportion of indirect benefits to the poor and (IV) large new wage gains (Haddad and Adato : 2001).

The share of wages in the total benefit (W/B) is 19 percent. Though the share of direct benefits is relatively small, this can be increased by the assets created notably through second-round effects on employment from higher farm productivity (Ravallion: 1999) in the future. The cost of per job created depends on several factors such as a mix of locals and expatriates in the implementation of the program, modality of hiring private contractors, the wage rate, capital intensity of operation and administrative capacity. Disaggregation of information into these is very difficult in the present case. Nonetheless calculation based on the available statistics show that KEP transferred one rupee of income to a poor participant worker at a cost of NRs. 1.30 in 2010-2011. Similar results are found in Jawahar Rojgar Yojana of India, which stands to Rs. 1.90 in 1991 while it was US\$ 1 in the case of Bangladesh and US\$ 8 in the case of Bolivia (Subbrao:1997).

## **Chapter X**

## FINDINGS AND RECOMMENDATION

This section draws the main conclusions from the study, and recommendations are presented for further improvement in the implementation of KEP in future.

## **10.1 FINDINGS**

- The program area (KEP) covers the five districts of the Karnali zone constituting 14.5 percent of the total geographical area and representing 1.3 percent of the total population of the country. The density of population is 14.5 per sq. km. The average household size is 5.5, slightly above the national average. As a whole, the program area enjoys a demographic dividend constituting 31.70 percent of the young population.
- KEP was initiated five years ago without a detailed program design and an appropriate implementation modality. The cumulative total budget set out for KEP reached a mark of NRs. 1,316 million. As per the KRDU Operation Procedure, 2 percent of the total budget is taken as the administrative cost, which is distributed from the centre to the local level government bodies. Of the total budget, on average, around 85 percent has been spent, while of the released budget, it is 100 percent. From the viewpoint of expenditure, the figures clearly indicate a high level of performance in the implementation of KEP.
- The projects, large and small, completed up to 2009-10 number 3,252. The highest number of projects were implemented in Kalikot (27.68 percent) followed by Dolpa (21.45 percent), Mugu (19.03 percent), Humla (16.14 percent) and Jumla (15.68 percent).
- As far as expenditure is concerned, the highest amount was spent in Kalikot (36.99 percent) followed by Jumla (27.72 percent), Mugu (14.44 percent), Humla (10.47 percent) and Dolpa (10.47 percent). It is obvious that the districts which have more budget have completed a larger number of projects.
- Of the total budget, 2 percent is kept aside for administrative expenses, 0.66 percent goes to each of the VDCs, another 0.66 to the DDCs and the rest is kept at the centre which goes to the central level KEP coordination committee.
- The average days of employment in KEP are 13. The average wage rate is NRs. 201 per day, which is lower than the market as well as the statutory minimum wage rates. Both males and females are paid equally while there is variation in the market wage rates between the sexes. Working outside KEP pays more than working in KEP. Payment of wages is not timely and also not paid all at once.
- The average income of a household amounts to NRs. 56,629. Wages from working in KEP amounts to NRs. 25,730, non-KEP wages NRs. 15,126 and the rest (NRs. 38,930) comes from the sale of agricultural produce and social pensions. The pattern of income distribution is rather skewed. The bottom 10 percent of the households own only 0.55 percent of the income while 48.45 percent of the income is concentrated in the top 10 percent of the population. The Gini-coefficient is 0.61.
- The consumption pattern of households has not changed much when compared to 2005-06. Around 31 percent of the income is spent on food, 21 percent on clothing and 1.5 percent on

fuel. Expenditure on education has increased from 18.1 percent in 2006-07 to 22.5 percent in 2010-11. Expenditure on health has marginally increased to 7.6 percent during the same period.

- Of the total, 20.5 percent of the households are involved in asset creation. Among them, 21.1 percent of households have invested in animals, 49.9 percent in household articles, 2 percent on land, 10 percent on radios, 7.6 percent on mobiles and 0.6 percent on television sets. Investment on land and in agricultural tools is expected to enhance future income streams of the households.
- Only 8 percent of the households are food secure. 61 percent of the households work as labor to supplement food shortages. 19 percent sell their animals while 6 percent go to India for employment. 75 percent of the households have reported that KEP has helped to reduce food insure days.
- Easy access to markets due to the construction of rural roads has helped the households save 0.7 days per week. 42 percent of the households have irrigation facility. The income from irrigation ranges from less than NRs. 5,000 to NRs. 15,000. But out of those households that have benefited, 47.9 percent earn less than NRs. 5,000.
- Of the total, 54.6 percent of households have electricity connection. Of the total households that have benefited, 57 percent got electricity connections after 2006-07.
- Only 13.4 percent of households use electricity, 12.4 percent use solar energy, 0.5 percent use bio-gas while the rest depend on conventional sources of energy.
- Of the total number of children of school-going age under 18 years, 81.2 percent are attending school, of which girls constitute 47 percent and boys 53 percent. After the completion of schooling, only 3 percent leave the Karnali zone for employment. On average, they remit NRs. 1,400 per month.
- On average, 2.5 days are saved from sickness related to hygiene and sanitation such as pneumonia, diarrhea and cholera. Likewise, half an hour's time is saved while fetching drinking water. Figures reveal that 61 persons in every 100 households were migrating in search of employment before the launch of KEP. But now it has declined to 54.1 percent.
- The general conviction is that KEP has brought about a change in the quality of life in the region. 81 percent revealed that they are satisfied with the performance of KEP.
- The targeting tool has not been followed rigorously; as a result there is no distinction between the poor and the non-poor.
- Being an anti-poverty program, 78 percent of the total expenditure goes to the poor in the form of wages. In fact, increase in the outlay on labor has greatly enhanced the effectiveness of the workfare programs in raising the income of the poor. The cost benefit ratio is 0.25 which is reasonable, given the level of development of the Karnali zone.
- A few studies have examined the cost per dollar of income transferred through the public work programs to the poor. In the present case, figures suggest that KEP transferred one rupee of income to the participant workers at a cost of NRs. 1.30 in 2010-2011. It is to be noted that KEP included the poor as well as the non-poor households largely because the program was highly politicized.

## **10.2 RECOMMENDATIONS**

- It is recommended that a detailed study of each district with a focus on the identification of the poor and non-poor and basic infrastructure projects essential for a decent livelihood is necessary.
- Amendment of the Operation Procedure of KEP, MoLD (Targeting, eligibility and intake, focal office/officer, work scheduling, work days and wage rates) is recommended.
- KEP should include include skill development training programs as a core component of program that helps to find more permanent employment or self- employment. Therefore, KEP's role is to be developed as a bridge to further employment.
- Strengthen the monitoring and supervision system of the KRDU as well as the DDCs. It is recommended to make provision of regular M&E visits for the KRDU officials to the program area at least once a year.
- It is recommend to develop MIS system for KEP program to strengthen the evidence based management decision and implementation.

## Some Flash of Completed Projects



Construction of Earthen Road from Haku to Karteeshwami, Jumla



Irrigation canal maintenance at Tirpurakot 5 & 6, Dolpa



Water supply system at Kalikot

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District	VDC	Household No	Sample	Sampling
			Size	Interval
Jumla	1) Chandan Nath	1452	174	8.34
	2) Dillichaur	619	74	8.36
	3) Haku	383	46	8.33
	4)Labhra	433	52	8.33
	5)Kanakasundari	189	23	8.22
	6)Dhapa	231	28	8.25
	7)Kudari	721	87	8.29
	8)Ghode Mahadev	341	41	8.32
		4369	525	8.32
Kalikot	1)Manma	994	134	7.42
	2)Mugraha	472	64	7.38
	3)Pukha	752	101	7.45
	4)Ranchuli	501	67	7.48
	5)Nanikot	910	123	7.40
	6)Sipkhana	749	101	7.42
	7)Kumalgaun	545	73	7.47
	8)Lalu	917	123	7.46
		5840	786	7.43
Dolpa	1)Dunai	376	35	10.74
	2)Sahartara	410	39	10.51
	3)Lawan	273	26	10.50
	4) Tripurkast	509	48	10.60
	5)Pahada	97	20	4.85
	6)Kalika	186	20	9.30
		1851	188	9.85
Mugu	1)Srinagar	689	70	9.84
U	2)Magri	378	38	9.95
	3)Rowa	523	53	9.87
	4)Rara	229	23	9.96
	5)Jima	393	40	9.83
	6)Shreekot	450	45	10.00
		2662	269	9.90
Humla	1)Simikot	408	46	8.87
	2)Thehe	396	44	9.00
	3)Khagalgaun	202	23	8.78
	4)Syada	261	29	9.00
	5)Raya	279	31	9.00
	6)Rodikot	385	43	8.95
	7)Sarkeedeu	313	35	8.94
		2244	251	8.94

## <u>Appendix 1</u>

# Selected Districts/ VDCs, Sample Size & Sampling Interval

District: Dolpa					0,		-				
C N	VDC	200	06/07	20	07/08	20	)08/09	20	09/10	20	)10/11
<b>3.</b> IN	v.D.C	Release	Expenditure								
1	Dunai	1003145	1003145	892000	892000	960000	960000	1105000	1105000	1105000	1105000
2	Jufal	1290760	1290760	1122000	1122000	1215000	1215000	1206000	1206000	1206000	1206000
3	Majfal	1253500	1253500	1291000	1291000	1390000	1390000	1255000	1255000	1255000	1255000
4	Raha	624335	624335	510000	510000	595000	595000	605000	605000	605000	605000
5	Lowan	1266200	1266200	1124000	1124000	1210000	1210000	954000	954000	954000	954000
6	Sahartara	1266200	1266200	1124000	1124000	1210000	1210000	1080000	1080000	1080000	1080000
7	Mukot	731660	731660	650000	650000	699000	699000	490000	490000	490000	490000
8	Charka	584350	584350	521000	521000	561000	561000	408000	408000	408000	408000
9	Dho	952640	952640	844000	844000	905000	905000	714000	714000	714000	714000
10	Saldang	2036880	2036880	2114000	2114000	2295000	2295000	1734000	1734000	1734000	1734000
11	Tinje	1144150	1144150	1017000	1017000	1100000	1100000	808000	808000	808000	808000
12	Vijera	851000	851000	518000	518000	850000	850000	610000	610000	610000	610000
13	Foksundo	471400	471400	418000	418000	490000	490000	425000	425000	425000	425000
14	Suu	989115	989115	878000	878000	925000	925000	695000	695000	695000	695000
15	Tripurakot	1501730	1501730	1342000	1342000	1460000	1460000	1180000	1180000	1180000	1180000
16	Liku	1027700	1027700	913000	913000	983000	983000	995000	995000	995000	995000
17	Laha	634860	634860	565000	565000	609000	609000	533000	533000	533000	533000
18	Kalika	859340	859340	807000	807000	835000	835000	665000	665000	665000	665000
19	Narku	820750	820750	729000	729000	785000	785000	645000	645000	645000	645000
20	Pahada	1234640	1234640	1095000	1095000	1190000	1190000	1060000	1060000	1060000	1060000
21	Sarmi	1252180	1252180	1110000	1110000	1192000	1192000	1162000	1162000	1162000	1162000
22	Rimi	701500	701500	623000	623000	675000	675000	695000	695000	695000	695000
23	Kaigaun	406870	406870	366000	366000	446000	446000	412000	412000	412000	412000
	Total	22904905	22904905	20573000	20573000	22580000	22580000	19436000	19436000	19436000	19436000

<u>Appendix 2</u> Five Years Budget, Release and Expenditure Of KEP

<b>District:</b>	Humla
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C N	VDC	2006/07		2007/08		2008/09		2009/10		2010/11	
9.11	V.D.C	Release	Expenditure								
1	Maila	2368324	2368324	2132297	2132297	2064637	2064637	1903200	1903200	245940	245940
2	Shreenagar	2045978	2045978	2309746	2309746	2280540	2280540	2134600	2134600	2294695	2294695
3	Kalika	1605888	1605888	1416683	1416683	1351448	1351448	1284400	1284400	1844700	1844700
4	Ridikot	1363985	1363985	1192690	1192690	1264697	1264697	1276600	1276600	1372345	1372345
5	Dehe	1309694	1309694	1373048	1373048	1256246	1256246	1219400	1219400	1310855	1310855
6	Simikot	1230255	1230255	1137419	1137419	1219629	1219629	1209000	1209000	1299675	1299675
7	Sarkideu	1156012	1156012	1099602	1099602	1092878	1092878	1027000	1027000	1104025	1104025
8	Jair	1089151	1089151	1099602	1099602	1163295	1163295	1131000	1131000	1565200	1565200
9	Darma	1062008	1062008	948334	948334	1064711	1064711	1120600	1120600	1204645	1204645
10	Sadda	1031471	1031471	884336	884336	898525	898525	829400	829400	891605	891605
11	Dadafaya	970397	970397	831974	831974	906976	906976	884000	884000	950300	950300
12	Raya	960322	960322	968697	968697	937959	937959	962000	962000	1034150	1034150
13	Lali	858428	858428	852337	852337	825292	825292	902200	902200	969865	969865
14	Madana	834678	834678	788339	788339	791492	791492	800800	800800	860860	860860
15	Kharpunath	763425	763425	802884	802884	822475	822475	886600	886600	1285700	1285700
16	Limi	681992	681992	622526	622526	608406	608406	587600	587600	631670	631670
17	Chipra	681992	681992	654525	654525	743608	743608	738400	738400	793780	793780
18	Khalal gaun	678600	678600	581800	581800	656290	656290	634400	634400	681980	681980
19	Hepka	658241	658241	570164	570164	546439	546439	504400	504400	542230	542230
20	Gothi	617526	617526	695251	695251	583057	583057	478400	478400	514280	514280
21	Muchu	586988	586988	523620	523620	509822	509822	569400	569400	612105	612105
22	Mimi	570023	570023	541074	541074	523905	523905	590200	590200	572975	572975
23	Saya	539487	539487	567555	567555	549255	549255	504400	504400	542230	542230
24	Melcham	459936	459936	413078	413078	397155	397155	392600	392600	422045	422045
25	Worai	221223	221223	482894	482894	591505	591505	603200	603200	648440	648440
26	Wara gaun	202200	202200	465440	465440	450670	450670	416000	416000	474200	474200
27	Shreemasta	0	0	523620	523620	521088	521088	486200	486200	522665	522665
	Total	24548224	24548224	24479535	24479535	24622000	24622000	24076000	24076000	25193160	25193160

Dist	trict:	Ju	ımla	
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GN	VDC	2006/07		2007/08		200	8/09	2009/10		2010/11	
<b>3.</b> N	v.D.C	Release	Expenditure								
1	Mahabpathrakho	1181894	1181894	1800000	1800000	1800000	1800000	1950000	1950000	1950000	1950000
2	Malikathata	1181894	1181894	1500000	1500000	1500000	1500000	1950000	1950000	1950000	1950000
3	Dillichaur	1181894	1181894	1200000	1200000	1500000	1500000	1980000	1980000	2450000	2450000
4	Gothichaur	1181894	1181894	1200000	1200000	1500000	1500000	1950000	1950000	2599000	2599000
5	Raralihi	1181894	1181894	2300000	2300000	1000000	1000000	1950000	1950000	1950000	1950000
6	Kalikakhetu	1181894	1181894	600000	600000	2000000	2000000	1950000	1950000	2180000	2180000
7	Birat	1181894	1181894	2400000	2400000	2000000	2000000	1950000	1950000	1950000	1950000
8	Narakot	1181894	1181894	1800000	1800000	1800000	1800000	1950000	1950000	2124000	2124000
9	Dhapa	1181894	1181894	2400000	2400000	1200000	1200000	1950000	1950000	2517000	2517000
10	Pandabgupha	1181894	1181894	2800000	2800000	1000000	1000000	1950000	1950000	1950000	1950000
11	Malikabota	1181894	1181894	1070000	1070000	2400000	2400000	1950000	1950000	1950000	1950000
12	Kartiksyami	1400000	1400000	2500000	2500000	4200000	4200000	1950000	1950000	1950000	1950000
13	Patarashi	1181894	1181894	1800000	1800000	2500000	2500000	1950000	1950000	1950000	1950000
14	Ghodemahadev	1181894	1181894	1800000	1800000	1000000	1000000	1950000	1950000	1950000	1950000
15	Talium	1400000	1400000	1800000	1800000	2400000	2400000	1950000	1950000	2748000	2748000
16	Tatopani	1181894	1181894	2000000	2000000	1700000	1700000	1950000	1950000	1950000	1950000
17	Patmara	1181894	1181894	600000	600000	1900000	1900000	1950000	1950000	2610000	2610000
18	Kanaksundari	745687	745687	900000	900000	2200000	2200000	1950000	1950000	1950000	1950000
19	Chumchaur	1181894	1181894	1800000	1800000	2500000	2500000	2050000	2050000	2305000	2305000
20	Gajangchowk	1181894	1181894	1450000	1450000	2200000	2200000	1950000	1950000	3214000	3214000
21	Kanigaun	1181894	1181894	1800000	1800000	1900000	1900000	1950000	1950000	2594000	2594000
22	Mahat	1181894	1181894	1500000	1500000	1200000	1200000	1950000	1950000	2235000	2235000
23	Lamra	1181894	1181894	2000000	2000000	2900000	2900000	1950000	1950000	1950000	1950000
24	Chandanath	1181894	1181894	3100000	3100000	2462000	2462000	1950000	1950000	5436000	5436000
25	Kudari	1181894	1181894	2500000	2500000	2000000	2000000	1950000	1950000	2318000	2318000
26	Hakku	1181894	1181894	2300000	2300000	3000000	3000000	1950000	1950000	2420000	2420000
27	Tamdi	1181894	1181894	3176000	3176000	2600000	2600000	1950000	1950000	1950000	1950000
28	Depalgaun	1181894	1181894	1600000	1600000	2500000	2500000	1950000	1950000	2520000	2520000
29	Badki	1181894	1181894	1800000	1800000	1800000	1800000	1950000	1950000	3010000	3010000
30	Brumadichaur	1181894	1181894	824000	824000	2600000	2600000	1950000	1950000	1950000	1950000
Total		35456825	35456825	54320000	54320000	61262000	61262000	58630000	58630000	70580000	70580000

#### District: Kalikot

S.	VDC	2006/07		2007/08		2008/09		2009/10		2010/11	
Ν	v.D.C	Release	Expenditure								
1	Coatbada	1268425	1268425	1722500	1722500	1970229	1970229	2345000	2345000	2390301	2390301
2	Bharta	2406640	2406640	3633993	3633993	4015339	4015339	4780000	4780000	4871691	4871691
3	Sukatiya	1984580	1984580	2797542	2797542	3012418	3012418	3680000	3680000	3752454	3752454
4	Nanikot	2588485	2588485	2825070	2825070	3148224	3148224	3747000	3747000	3819456	3819456
5	Syuna	2072135	2072135	2420300	2420300	2723628	2723628	3242000	3242000	3304332	3304332
6	Chilkhaya	1955395	1955395	2233924	2233924	2451783	2451783	2918000	2918000	2974527	2974527
7	Rupsa	1575160	1575160	1703160	1703160	1869258	1869258	2225000	2225000	2268802	2268802
8	Kumalgaun	1290875	1290875	1754556	1754556	1941750	1941750	2311000	2311000	2355750	2355750
9	Kalika	1221280	1221280	1628650	1628650	1799355	1799355	2142000	2142000	2182995	2182995
10	Dhaulagoha	2920745	2920745	3243000	3243000	3707448	3707448	4412000	4412000	4497912	4497912
11	Khin	1544560	1544560	1750300	1750300	1959873	1959873	2333000	2333000	2377735	2377735
12	Phoimahadev	1416595	1416595	1705981	1705981	1884792	1884792	2243000	2243000	2286648	2286648
13	Rachuli	1165155	1165155	1354400	1354400	1548222	1548222	1843000	1843000	1878318	1878318
14	Awankau	1611910	1611910	1849380	1849380	2081556	2081556	2477000	2477000	2525364	2525364
15	Thirpu	1690485	1690485	1716800	1716800	1949517	1949517	2320000	2320000	2365173	2365173
16	Malkot	1291335	1291335	1703260	1703260	1878713	1878713	2331000	2331000	2276223	2276223
17	Daha	1892535	1892535	2397278	2397278	2648547	2648547	3152000	3152000	3213243	3213243
18	Lalu	2112545	2112545	2723009	2723009	3095266	3095266	3580000	3580000	2649842	2649842
19	Badalkot	1277405	1277405	1708900	1708900	1928805	1928805	2296000	2296000	2340045	2340045
20	Mahalmudi	1690485	1690485	2086100	2086100	2332689	2332689	2776000	2776000	2830041	2830041
21	Shipkhana	1728650	1728650	2565629	2565629	2824599	2824599	3362000	3362000	3426831	3426831
22	Raku	1575990	1575990	2184640	2184640	2288676	2288676	2724000	2724000	2776644	2776644
23	Juniya	1490680	1490680	2041085	2041085	2255019	2255019	2684000	2684000	2735811	2735811
24	Chapre	1418840	1418840	2038741	2038741	2252430	2252430	2681000	2681000	2732670	2732670
25	Ghela	1598440	1598440	2040490	2040490	2239485	2239485	2665000	2665000	2716965	2716965
26	Fukot	2074380	2074380	2536453	2536453	2884146	2884146	3433000	3433000	3499074	3499074
27	Pakha	1593950	1593950	1731920	1731920	2047899	2047899	2437000	2437000	2784531	2784531
28	Mumra	1109030	1109030	1451300	1451300	1633659	1633659	1944000	1944000	1981971	1981971
29	Ramnakot	1432310	1432310	2030000	2030000	2278320	2278320	2712000	2712000	2764080	2764080
30	Manma	2424600	2424600	2786279	2786279	3078321	3078321	3664000	3664000	3734649	3734649
	Total	51423600	51423600	64364640	64364640	71729966	71729966	85459000	85459000	86314078	86314078

21011		200	2006/07		2007/08		2008/09		2009/10		2010/11	
S.N	V.D.C	Release	Expenditure	Release	Expenditure	Release	Expenditure	Release	Expenditur e	Release	Expenditure	
1	Karkibada	1941264	1941264	2052880	2052880	2052880	2052880	1840500	1840500	2005793	2005793	
2	Seri	1183156	1183156	1314456	1314456	1314456	1314456	119000	119000	1282935	1282935	
3	Fotu	631228	631228	600544	600544	600544	600544	628300	628300	731135	731135	
4	Hamale	750000	750000	799704	799704	799704	799704	777600	777600	1109118	1109118	
5	Pulu	750000	750000	670500	670500	670500	670500	650000	650000	731135	731135	
6	Mihi	716872	716872	1020312	1020312	1020312	1020312	929875	929875	918747	918747	
7	Dhainakot	1303692	1303692	1305264	1305264	1305264	1305264	1250895	1250895	1296730	1296730	
8	Katai	818376	818376	790512	790512	790512	790512	929875	929875	789074	789074	
9	Ruga	1893684	1893684	1826144	1826144	1826144	1826144	1895275	1895275	2038901	2038901	
10	Narthapu	1011868	1011868	1008056	1008056	1008056	1008056	975740	975740	993240	993240	
11	Shreenagar	1478152	1478152	1780184	1780184	1780184	1780184	1953080	1953080	1851289	1851289	
12	Jima	1516516	1516516	1513616	1513616	1513616	1513616	1521500	1521500	1495378	1495378	
13	Shreekot	1792224	1792224	1780184	1780184	1780184	1780184	1658900	1658900	2185128	2185128	
14	Rara	818376	818376	566840	566840	566840	566840	968500	968500	918747	918747	
15	Hanglu	932568	932568	903880	903880	903880	903880	941685	941685	1338115	1338115	
16	Kotdada	815204	815204	1173512	1173512	1173512	1173512	1124400	1124400	1422141	1422141	
17	Sukadhik	1103857	1103857	1066272	1066272	1066272	1066272	1024250	1024250	1260863	1260863	
18	Pina	2055456	2055456	2003856	2003856	2003856	2003856	1836000	1836000	2038901	2038901	
19	Magri	1382992	1382992	1335904	1335904	1335904	1335904	1323156	1323156	1368464	1368464	
20	Dolphu	900848	900848	885496	885496	885496	885496	714866	714866	714581	714581	
21	Gamtha	1310036	1310036	1433952	1433952	1433952	1433952	1337600	1337600	1387777	1387777	
22	Rowa	2147444	2147444	2071264	2071264	2071264	2071264	2035722	2035722	2303765	2303765	
23	Kimri	433953	433953	422832	422832	422832	422832	800000	800000	642847	642847	
24	Mugu	750000	750000	710848	710848	710848	710848	656000	656000	675196	675196	
	Total	28437766	28437766	29037012	29037012	29037012	29037012	27892719	27892719	31500000	31500000	

#### **District: Mugu**