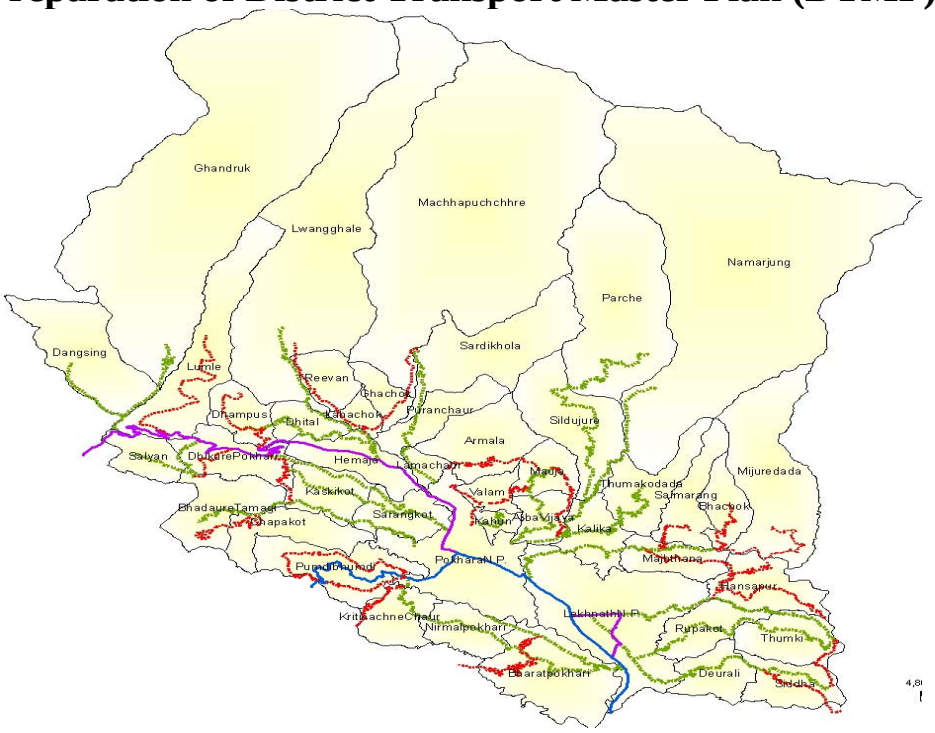
Government of Nepal
Ministry of Local Development
Department of Local Infrastructure Development and Agricultural Roads
District Development Office

District Technical Office

Pokhara, Kaski

Volume I
Main Report
For

Preparation of District Transport Master Plan (DTMP)



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CHAPTER I : - INTRODUCTION

1.1 Background

The development of road network is the backbone of the development of economic activities such as exploitation of the agricultural potentiality, enhancement of local production, sustainability of tourism, employment opportunities etc.

The road projects are varying from programme to programme despite the fact that they are implemented through the DDC, DOR, DCs and local people. It is obvious that there is an extensive diversity in the planning process, implementation modality, technology used, incurred cost, involvement of beneficiaries, planned benefits and the focus of the project implemented by different agencies. Absence of long-term perspective and sustainable visions, ad-hoc practices in fulfilling the needs, under-utilization of resources as well as the returns, over investment against the desired benefits, improper utilization of resources, under mobilization of limited technical human resources, deforestation, superstition and lack of co-ordination among implementing agencies are identified as major constraints for development of the district.

Consequently, for the development of road networks in the district, Ministry of Local Development through DoLIDAR has provided support to the DDC for process planning. The process planning adopts a single approach for the development of Agricultural and Rural Roads in line with the poverty alleviation objectives and the decentralized participatory development concepts. Under this approach District Transport Master Plan (DTMP) which is a long term perspective plan to set up the clear vision of road network of the district and its priority of investments, is prepared as part of planning process with inclusive of District Development Potential Map which indicates the existing growth centre and areas having development potentials. The District Inventory Map prepared in DTMP will assist the DDC Kaski in identifying accessibility needs and priorities road development plans to address the needs of the communities in the district. It will also provide support to DDC, VDCs for the implementation of the road network with local community participation at all stages of the project activities.

The District Transport Perspective Plan (DTPP) comprises the development of overall road network which will provide accessibility to the all VDCs and various growth centres,

service centres and connects with DDC centre as well as strategic road network. DTPP is plan of rural and agricultural roads of the district for long term planning to be implemented by the DDC and other donor agencies

The long term vision of the Government Plan for the road sector has formulated National Strategy, which emphasizes on "The development of basic rural infrastructure (with strong emphasis on district agricultural roads) country-wide in a planned and sustainable manner. In line with the poverty alleviation objectives, labour-based technology and environmental-friendly, local resource-oriented construction methods have to be incorporated in rural infrastructure development process. The National Strategy emphasizes the consideration of these aspects and the decentralized concept while formulating the guidelines (approach) for rural infrastructure development.

It is obvious that there is an extensive diversity in the planning process, implementation modality, used technology, incurred cost, involvement of beneficiaries, planned benefits and the focus of the programmes run by different agencies in the rural infrastructure sector at local levels. As a result, the Government faces continual problems in objective planning and integral implementation of rural infrastructure projects. Absence of long-term perspective plans, ad-hoc practices in fulfilling the needs, under-utilization of resources as well as the returns, over investment against the desired benefits, improper utilization of resources, under-mobilization of limited technical human resources, lack of co-ordination among implementing agencies are some of such problems faced by the Government. Consequently, it leads to create an inefficient environment with respect to rural infrastructure development that ultimately delays the fulfillment of peoples' expectations

The participatory development process emphasizes the effective utilization of local resources, objective-oriented analytical planning process, institutional strengthening of local government agencies, establishment of appropriate organizational structures, use of local skills and technologies and proper co-ordination between the local and central level institutions. The road sector projects are to be selected, formulated and developed to assist in alternative poverty and achieve high and sustainable economic growth through effective mobilization of resources and its justifiable distribution, both in terms of geographic and social basis.

The government agencies are to act as facilitator and regulator to promote private sector investments through the identification of projects with comparative advantages to achieve sustainable economic development in road transport sector, and enhancement of capacities of the government line agencies from centre to local level to ensure transparency, and achieve sustainable development with process management approach.

With the growing demands for rural roads and investment on it by local bodies , central government and donors , there are many rural roads constructed so for . An preliminary inventory of rural roads was made by DoLIDAR in 2003 based on the DTMPs and secondary of information from districts on the quantity and status of rural roads. It is essential to prepare a detail inventory of rural roads in each of the 75 districts of Nepal to know the present status that will guide for a systematic planning process utilizing the scarce resource for new road construction, upgrading and maintenance of the roads at the district levels. Due to the lack of updated information on the status of rural roads so far constructed, Government of Nepal has decided to make an updated inventory of rural roads in this fiscal year 2065/66 and MLD has also provided budgetary support to each DDC for it through ALRP. DDC being the main responsible local governments for the development and management of rural roads, DoLIDAR through ALRP intends to facilitate the DDC/DTO to prepare the detail inventory of rural roads at district levels.

In context to accessibility, the district has access to road transport network in almost part of district. However, they are under poor condition requiring upgrading, rehabilitation. DDC intends to develop linkage Road, Outer ring road, and inner outer ring road network to provide access to existing road network, market centres and other public utilities for sustainable development of road networks in the district.

The consulting service has to prepare the District Transport Master Plan (DTMP) including the new, existing and under construction roads of the district.

1.2 Introduction

Kaski District is located in Gandaki Zone of the Western Development Region of Nepal. It is adjacent to the neighbouring districts with Lamjung and Tanahun districts in the East; Syangja and Parbat districts in the West; Manang and Myagdi districts in the North; and

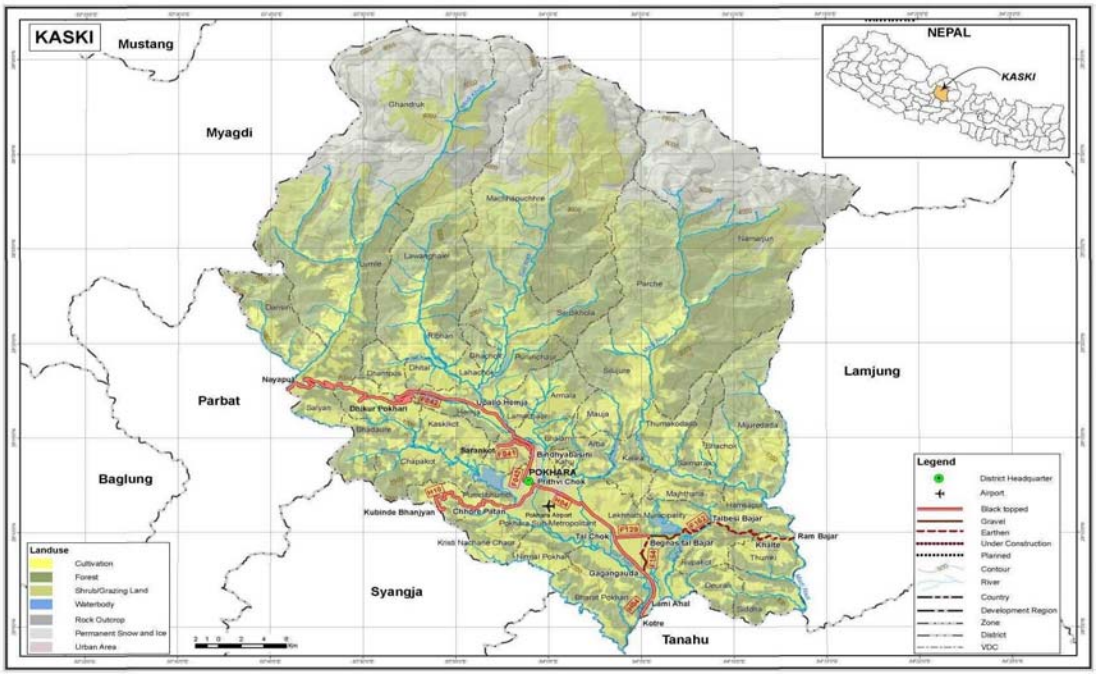
Syangja and Tanahu districts in the South. It is a Historical and twenty third largest densly populated density district of the country. The district has one metropolitan city Lekhnath, one sub metropolitan city Pokhara and forty three VDCs. There are many myth explaining how this district is named as Kaski. One myth is that there live people who were yellow cloths and people who wear yellow cloths are called ‘Kasayaki’ hence named as Kaski.

The total area of the district is 2017 Square kilo meters. Geographically the district lies on 83°40' east to 84°12' East longitude and 28°06' north to 28°36' North latitude. Five types of climate are found in this district, sub-tropical, temperate, temperate cold, alpine and tundra climate. The rainfall of district is measured maximum to 1701.7 mm in 2009 August and similarly, the maximum temperature is recorded 32°C in summer and 2.2°C in winter season. The temperature is always influenced with variation in altitude. The lowest elevation point is 450 meter and highest elevation point is 8091 meter from mean sea level of the district. Kaski district is famous for tourisum, trade and industrial sector and it is also the main place of Agriculture production. There are some hilly VDCs which are going to develop as potential for different cash crops, tea, Horticulture and Livestock. Kaski district is also famous for tourism.

According to the National Census 2058B.S. projection, the total population of the district is 380527 with composition of 184995 male and 195532 female clustered in 85075 households and average family size is 4.47. Kaski district has 62162 hectares of cultivated land where almost alluvial soil has been found. The paddy farming is done in almost all areas in district. The upland constituted with sandy loam and some places with red clay where ginger, millet, maize is suitable for farming. The 48962 hectares area in the district is irrigated land.

The long term vision of the Government' of Nepal for the road sector formulated National Strategy emphasizes on "the development basic rural infrastructure (with strong emphasis on district agricultural roads) country-wide in a planned and sustainable manner". In line with the poverty alleviation objectives, labour-based technology and environmental-friendly, local resource-oriented construction methods have to be incorporated in rural infrastructure development process. The National Strategy emphasizes the consideration of these aspects and the decentralised concept while formulating the approach and guidelines for rural infrastructure development.

In the context of accessibility, Kaski district has air transport service as well as the surface transport facilities. The existing transport situation in the district is better in comparison to the past. Surface transport facilities through national highway feeder road, district road and village roads are increasing significantly in the district. However, district and rural roads are in poor condition require upgrading, rehabilitation and proper maintenance. The total length of the strategic road networks in Kaski district is 112.96 kilometres including Highway and Feeder road with bituminous, gravel and earthen surface. Planning, construction and maintenance of strategic road networks is the responsibility of Department of Road (DoR).



Location Map of Kaski District

Transportation facilities help to develop the access of rural-urban linkages. Road accessibility can reduce isolation, stimulate crop production and marketing activities, encourage public services and help for transfer of technology. Road building arouses considerable enthusiasm in the people because road access brings about visible changes in rural life and is dramatic sign of development. In the absence of rational guidelines and criteria, adhoc decisions on road construction are made, which lead to wastage of resources.

District transport Master Plan (DTMP) provides the guideline and criteria for transparent decision making process in rural transport infrastructure sector.

Transport is one of the major components to improve the access through the increase on the mobility to the settlement/community of services and facilities and also to provide linkage with market centers, agricultural production pocket areas and other potentialities of the district. Considering the transport sector interventions and planning based on the accessibility planning, District Transport Master Plan (DTMP) is long-term perspective plan prepared for the planned development of the rural roads in the district.

District Transport Master Plan is a reflection of transport infrastructure situation and future need in relation with the resources of the District. DTMP basically cover the rural transport infrastructures (RTls), which are funded, supported and implemented by DDCs. It strongly advocates for meaningful participation in the planning process to make DTMP more acceptable and creating ownership. The preparation process of DTMP pursues series of techno-political interface in the form of consultation workshops and interacting meetings to increase participation of all stakeholders such as District level workshop, DTICC meetings and cluster of llaka level workshops, formal/informal meeting and interaction, focus group discussions and transit walk, etc. In every stage, emphasis have to be given on their access and high level of participation of different actors of society (i.e. representatives from line agencies, major political parties, social leaders, women organizations, Dalit and Janjati coordination committee, differently able people, chamber of commerce, transportation association) and work toward consensus building.

Since 1992, construction of district and local roads has been entrusted to the District Development Committee (DDC) giving the full responsibility of rural road construction and maintenance. The Ministry of Local Development (MLD) provides rural grant and development funds to the district.

The DTMP serves as a negotiating document with potential donor agencies, line agencies and development partners working in the district. Many bileral and multilateral donor agencies are supporting to construct rural roads. DTMP is formal documents to obtain the grant and loan assistance from donor agencies. It facilitates project identification. Donors or funding agency within the country has set the DTMP as prerequisite for assistance.

1.3 Objective of the Study

The overall objective of the district Transport Master Plan (DTMP) is to develop roads in planned and sustainable manner by adopting the labour based, local resources oriented, environmental friendly technique in accordance with the decentralized participatory approach, and to facilitate accessibility to important centres and areas with resource potentiality; to guide the spatial arrangement of rural settlements, markets and services centers of the district.

Establishment of a single approach for the development of rural road network by local government and develop a sustainable road network that reduce the aggregate transportation cost and minimizes environmental impacts. Fundamental base for planning and implementing new construction, rehabilitation and improvement of existing roads and to maintain, repair and rehabilitate the existing infrastructure and to develop and connect the existing growth centres and potential growth centres through rural road development network is basic objectives of DTMP.

The specific objectives preparing DTMP are:

- Analyse the accessibility situation.
- Identify and prioritize the interventions based on the accessibility situation.
- Prepare Indicative Developmental Potential Map (IDPM)
- Prepare the District Inventory Map (DIM) of Rural Road networks.
- Prepare the Perspective Plan of transport services and facilities;
- Prepare/update the five year District Transport Master Plan (DTMP); and
- Prepare a realistic physical and financial implementation plan of prioritized roads for the DTMP period.

1.4 Scope of work

The scope of this plan consist the studies of the district roads including the socio-economic analysis and potentiality of various sectors as well as accessibility of the roads in the district. DTMP focus on the present transport situation, accessibility and socio-economic benefit which will draw the future scenario of the road development. Considering this aspect, perspective plan of twenty year range and five year DTMP is designed. The short term projects will be completed within five year period. This study is

only concerned within district boundary but due consideration is given to the nearest road head and inter-district linkages as well. Participatory way of planning is an asset of the DDC, which makes consensus among the politicians of the different political parties. DTMP is the agreed document from DDC and District council for the road development, implementation, improvement and maintenance of transport sector of district.

1.5 Limitation of Study

DTMP is the valid and legal document approved by DDC council, in order to implement the plan; DDC plays the vital role and continue to follow the document in the future, even if DDC council is changed. Socio-economic data are collected from secondary information sources during the preparation of DTMP and analysis of data is done based on this information. Only more than 5km road is taken in the task, which is approved from DTICC. Prioritization criteria are presented in DTICC and get approved. Perspective plan and five years DTMP plans are prepared based on result of prioritization and financial source of DDC and other funding agency.

Appropriate estimate of the construction of the roads is prepared. The budget to be received for the implementation of road projects is prepared after analysing the past trend of budgets. But there may be some changes in allocation of budget for road sector in future as the estimated cost is indicative. Since not detailed survey is carried out during the planning phase, cost estimate is calculated based on the experience gained in district roads in similar terrain.

Recent trend shows that there are numerous roads constructed and are under-construction in hill districts, all the village roads are practically not possible to include in DTMP. Therefore only district level roads categorized in RRA and RRB are included in the DTMP.

CHAPTER II: APPROACH AND METHODOLOGY

2.1 Approach

The methodology adopted for this study is basically different from the other conventional studies for transport planning. District Transport Master Plan is prepared based on participatory approach. Techno-Political interface has been made in the planning process, where active participation from representatives of political parties, line agencies, DDC officials is crucial.

The DTICC has been constituted to provide the policy decision as authorized legislative body of DDC for DTMP planning process where all the political representatives from political parties and representatives of relevant district office are members.

2.2 Methodology

The preparation process of DTMP has to follow several stages in its planning excerice. The secondary sources of information were collected from various line agencies. District level workshop was conducted to make aware and involved political parties and local people in planning process of DTMP preparation. Cluster of Illaka level workshop was conducted to verify and validation of proposed network planning. The Major methodological steps are described below

2.2.1 Task/Activities

The consultant carried out the related tasks and activities according to the work schedule and work plan as described in the inception report, which mentioned the activities to be carried out during the fieldwork. The major activities are as follows:

Task-1: Data/ Information collection

a) Collections and Review of Secondary Information

Secondary data were collected from annual report published by District Level offices and consultation with stakeholders (such as DADO, DVO, DDC, DEO, DFO, Small Cottage and Industries, local business man etc). The main objective of the secondary data is to verify the data collected from VDC level. Besides this, the socio-economic date (i.e Data/information regarding area, location and significance of development potential area such as extensive agriculture, extensive horticulture, livestock farming, high value cash crops, tourism, cottage and agro-based industries, center for business/commerce/markets,

tourism area, hydropower, mining's, service centers e.g. hospital, health post, agri-sub-center etc) which can not be collected from VDC level have collected obtained from annual report, district profile, study report published by various offices such as DDC, DADO, District Education office etc.

The information about demographic data of district, maps, service flow pattern, various maps showing service centers or the location of SOR facilities, transport infrastructure inventory, past plans and sectoral study reports, sectoral standards and policy targets were collected from the secondary sources like DoLIDAR, DDC Kaski, line agencies of DDC, Bureau of Statistics, Kathmandu, Topographical Survey Branch, Local NGOs etc. The details are given below

List of documents/information were collected and reviewed.

- Previous reports of DTMP prepared by the DDC
- District periodic plan prepared by the DDC
- Annual report of Agriculture Development Office, District Veterinary Office, report of District Education office etc.
- Report on settlement pattern and market centres of the district
- Demographic Statistics and socio-economic feature of the district

Collection of Maps

- Topo maps the 1:25000 and 1:50000 scales, which has been used as base map.
- Digitised topographic maps of Department of Survey
- District administrative map of District
- District Trail Map, Helvetas
- Map of strategic road Networks of Nepal.

b) Primary Data collection

Primary information was taken from concerned community people, VDC officials, civil society representatives, women's development organizations and school teachers about real accessibility situation of settlements in special format developed for this purpose.

Task- 2: Indicative Development Potential Map (IDPM) Preparation

Indicative Development Potential Map (IDMP) was prepared in order to indicate the different areas with the existing and potentiality of agriculture, horticulture, livestock and existing/potential key market/growth centers and other developmental potential area. IDPM is developed according to the Approach manual for the development of Agriculture and Rural Roads. Based on Data collected from annual reports from line agencies and DDC level workshop, Development potential area of the district in agriculture, horticulture, livestock, cottage and small industries, other potentiality of the district have been identified.

Existing / potential areas defines as:

- Areas with extensive agriculture,
- Areas with extensive horticulture;'
- Areas with extensive Livestock farming,
- Areas with extensive fisheries,
- Areas with extensive small cottage industries
- Potential Areas with tourism development,
- Existing/ Potential Areas with development of large industries like hydropower, mining develop,
- Market Suvey

Market Survey was carried out to identify market and service centre. Data and information collected in the field is the main basis for determining the importance on relative importance of market/service centre and central places. All services existing in a particular centre were listed by the district line agencies and supplemented by more detailed field data such as economic.

Population structure collected for the centre itself and its influence area, by means of P-RRA approach. For evaluation purpose, data from offices, Industry, Business & Commerce, Education, Health, Communication, Electricity Supply, Drinking Water Supply services are combined for the centre and its influence area. Assessment of

economic facilities and services existing in the market/service centers and their catchments areas leads to the identification of the most important market/service centre. Centrality analysis of the market facilities and government services are carried out.

The Centrality Index is calculated using following formula

$C_j = \sum^{n}_{i=1}(W_i, X_{ij})$

Where,

Cj = Centrality Index of the jth market centre

Xij = value of the ith function (number of establishments or shops at the jth market centre)

Wi = Weightage of the jth function

The weight of each function was calculated by adopting the Median Threshold Population Technique. The Median Threshold Population Technique calculates the weight as:

$$W_i = \frac{\text{Median population of the ith function}}{\text{Lowest median population of the market centres where a function exists}}$$

- The collected informations were plotted on the base map indicating their geographical boundaries as accurately as possible.
- Base map on which all the development potential areas and sites have been plotted is the draft Indicative Development Potential Map (IDPM) of the district. Brief notes on each plotted area of development potential are prepared. The description should highlight the nature and size of the area.
- Presentation of IDPM in DT1CC meeting to finalise and approve IDPM

Task- 3: Preparation of District inventory Map (DIM)

DIM was prepared according to Interim Guidelines for DTMP Preparation. The following steps were taken for preparation of DIM Report

- The inventory survey of the existing rural roads was carried out and required interventions; new construction, rehabilitation, periodic maintenance, regular maintenance are identified based on the field data. Earlier, spatial information of existing roads was taken on photocopy of topographical maps.
- The information/ data on existing rural infrastructures were taken by Global

Positioning System (GPS) instruments including GPS tracking of existing roads and GPS way points of trail bridges conducted by TBSU. GPS tracking is the major work for DIM preparation, which takes considerable effort in field level.

Task- 5: Preparation of District Transport Perspective Plan (DTPP)

Prioritization of Proposed New Roads

The following criteria are used for prioritization of new transport linkages.

Table 2.1:- Scoring System for Prioritization of New Linkages

S.N	Parameter	Scoring Unit	Score
i	Population per unit Cost	Population/investment Cost in 100,000	55
ii	Cultivated Land	Cultivated Land/km	15
iii	Population * Walking hour	Population * Walking hour/km	20
iv	Total Population of poor, Dalits and marginalized	Population /km	10

Calculation of Scores for Prioritization of New, Rehabilitation and Upgrading of Roads

In order to make the indicators comparable their results have to be transformed to dimensionless indices using the zero-to-one method.

The following formula is applied to each indicator of the area of investigation

(For high value ranking)

$$d = \frac{x\text{-min multiply by score}}{Max\text{-}min}$$

Where,

d= transformed indicator

x= original indicator value

Max = maximum original value

Min = minimum original value

For each area of investigation, the road link with the highest indicator value's' results in '1' multiplied by the highest mark available under the relevant indicators.

(Note: to avoid possible confusion, the value of lowest score, zero is transformed by relating it to the value of second lowest score using pro-rata distribution method)

(For low value ranking)

$$d = \frac{\text{max-x multiply by score}}{\text{Max-min}}$$

Where,

d= transformed indicator

x= original indicator value

Max= maximum original value

Min= minimum original value

For each area of investigation, the road link with the lowest indicator value's' results in T multiplied by the maximum available score.

(Note: to avoid possible confusion, the value of lowest score, zero is transformed by relating it to the value of second lowest score using pro-rata distribution method)

Prioritisation of Rural Roads Class A and Class B for Rehabilitation /Upgrading

The following criteria are proposed for prioritisation of District and Village Roads for rehabilitation

Table 2.2:- Scoring System for Prioritisation for Rehabilitation/Upgrading

S. No.	Criteria	Scoring Unit	Score
1	Traffic Unit	Cost/TU	70
2	Cost	Cost /km	20
3	Market /service centre	Centrality	10
Total			**100**

Prioritisation of Proposed Trail Bridge

TBSU is working for trail bridges issues of Nepal. Therefore prioritisaion trail bridges are adopted from the TBSU. The prioritization is based on following formula derived on the basis of a simulation model using ICIMOD indices, related poverty, education, health etc. used by TBSU as follows:

Table 2.3:- Prioritization Formula for New Construction

SSTB	{(2.041 P+2.856 MP)xDG} * {{(12-RT)x(1+RF/100)}/12}
LSTB	0.3 x {(2.041 P+2.856 MP)xDG} * {{(12-RT)x(1+RF/100)}/12}

Table 2.4:- Prioritization Formula for Major Maintenance

SSTB	2 x{(2.041 P+2.856 MP)xDG} x {{(12-RT)x(1+RF/100)}/12)
LSTB	1.2 x {(2.041 P+2.856 MP)xDG} x {{(12-RT)x(1+RF/100)}/12}

Table 2.5:- Prioritization Formula for Rehabilitation

SSTB	1x{{2.041P+2.856 MP)xDG}x{{(12-RT)x(1+RF/100)}/12}
LSTB	0.3 x {(2.041 P+2.856 MP)xDG} * {{(12-RT)x(1+RF/100)}/12}

Where,

P = Population i.e. the beneficiaries population of the prospective bridge

MP = Marginalized population (total dalit + marginalized janajatis + total minority + total poor from other caste)

DG = Distance Gained

R = River Type (no. of months crossable without a bridge)

RF = Risk Factor (Percent of population that has died within the last five year.

On the basis of prioritization criteria, the transport linkages under the categories of new construction /Rehabilitation/upgrading for each class of roads are prioritized.

- After overlay all proposed transport linakages in the DIM, DTPP is prepared.
- Presentation of Draft District Transport Perspective Plan (DTPP) in DTICC and finalisation of DTPP.

Task- 6: Preparation of Five Year District Transport Master Plan

- Considering the perspective plan of transport sector, the District Transport Master Plan was prepared.
- The financial resource of the district on transportation sector was assessed based on analysis of past trend of financing in this sector and allocation of budget by DDC and other line agencies for coming years. The tentative budget plan for coming five years was prepared in consultation with DDC.

- The required interventions and road linkage, purposed in perspective plan, were prioritized according to Approach for the Development of Agricultural and Rural Roads, DoLIDAR.
- Final workshop was organized in the DDC. The prioritization of road was approved by DDC.

Task- 7: Endorsement of the Five year District Transport Master Plan of District RTI Network

- DDC should submit the final District Transport Master Plan to District Council for approval. DTICC with the support of DTO brief the Council on the- entire process of preparation including scoring system for prioritization.
- The DTMP is finally approved by the District Council.

2.2.2 Activities done in the district:

For getting done the above mentioned tasks, different types of orientation, workshop and meeting were held at the district and cluster level. Chronological order of activities performed in the district for DTMP preparation is mentioned as follows.

i) Introductory workshop in DDC.
ii) Selection of Technical Assistant (TA) and Research Associate (RA)
For field level data collection.
iii) 1st DTICC meeting in DDC.
iv) llaka level workshop at different 13 location of the district at different time.
v) 2nd DTICC meeting in DDC hall with political parties.
vi) Final presentation and discussion at Dolidar hall with central level members.

In addition to above, bilateral talks, meetings and sharing were made with individuals, NGOs. Different line agencies, different district based projects related to transport infrastructures development for collecting secondary information for preparation/updating DTMP.

CHAPTER III: INDICATIVE DEVELOPMENT POTENTIAL MAP (IDPM)

3 Summary of District Profile

3.1. Physical Location & Geographical Characteristic

Kaski District is located in Gandaki Zone of the Western Development Region of Nepal and is located within 83°40' east to 84°12' east longitude and 28°06' north to 28°36' North latitude. It borders With Lamjung and Tanahu districts in the East; Salyan and Parbat districts in the West; Manang and Myagdi districts in the North; and Syangja and Tanahu districts in the South. It is a Historical and twenty third largest densly populated district of the country. The district has 4 constituency areas, 13 Illakas, 1 metropolitan city Lekhnath, 1 sub metropolitan city Pokhara and 43 VDCs. There are many myth explaining how this district is named as Kaski. One myth is that there live people who were yellow cloths and people who wear yellow cloths are called ‘Kasayaki’ hence named as Kaski.

The district experiences five types of climate; sub-tropical climate is mostly found below 1500 meter of elevation. The annual rainfall is about 1701.7 mm. Temperate climate is mostly found from 1500 to 2000 meter. Cold Temperate Climate is found mostly from 2000 to 3000 meter of elevation. The area under such climate is located in hilly areas. The highest point of district is Annapurna Himal which elevation is 8091 meter from mean sea level. The rainfall of district is measured maximum to 1701.7 mm and maximum temperature is recorded 32°C in summer and 2.2°C in winter season.

There are various rivers and streams which are Seti, Madi, Modi, Bijayapur, Kotre, Edi, Kali, Sardi, Harpan, Fusre, Kahun, Mardi and Suikhet. There are many natural lakes in the district like Fewa, Begnas, Rupa, Maidi, Dipang, Khaste, Niureni, Gude and Kamalpokhari are important lakes of historical and cultural point of view in the district. There is also a fall named Patale Chango popularly known as Devi’s Fall.

Kaski district has 62162 hectares of cultivated land where almost alluvial soil has been found. The paddy farming is done in almost all areas in district. The 48962 hectares area in the district is irrigated land.

Kaski district has approximately 75263 hectare (37.3 %) land is covered with forest and mainly Sal, Guransh, Chap, Chilaune, Utish, Katus, Salla, Gobre Salla/Teak, Kadam. Sal is a popular for wood verities and it is found in lower land.

Kaski District constitutes its own socio-economic, historical, human and natural resources as well as geographical characteristics. The information regarding the physical and natural resources including the religious, historical, archeoiogical, and tourism centre are obtained by the study of various maps, literatures, reports and consultation with many elder persons.

The district headquarter Pokhara is connected by Prithvi Highway with Kathmandu and by Siddhartha Highway with Palpa to Butuwal.

Major market areas of the Kaski district are Pokhara, Lekhnath, Kalika, Kanhu, Valam, Sarangkot, Armala, Arwabijaya, Bharatpokhari, Nirmalpokhari, Pumdi Vumdi, Chapakot, Hemja, Dhital, Lamachaur, Mauja, Kristinachnechaur, etc.

3.2 Socio-economic Characteristics

3.2.1 Religion, Festivals and Caste

In terms of ethnicity, the population of Brahaman (30.2%) , Gurung (18.1%), Chhetri (14.7%), Kami (6.9%), Magar (6.2%), Newar (5.3%), Damai (3.9%), Sarki (2.4%), Tamang (2.1%), Thakuri (1.3%), Dalit (1.3%), Bhujel (1.3%), Sonar (1.2%), Sanyasi (1%), and others (3.9 %). In terms of religion, the Hindu is (81.7%), Buddhist is (15.9 %), Muslim is (0.7 %), and other is (1.7 %). Major festivals are Dasain, Tihar, Loshar (Mainly Gurung)Phagupurnima, Shivaratri, Chhat, Udhauli Parba, Idd, Christmas etc.

3.2.2 Population

Kaski district has twenty third highest population in Nepal where the population of district is increasing rapidly due to immigration of people from hill districts (Syangja, Parpat, Baglung, Mustang, Myagdi etc). The population growth rate is projected as 2.62 % in according to census 2001.The population of the district according to census 2001 is 380,527 with composition of 184,995 male and 195,532 female clustered in 85,075 households. Average population is 4.47 people per households. The district has multi ethnic composition; majorities are Brahaman, Gurung, Chhetri, Kami, Magar, Newar, Damai, Sarki, Tamang, Thakuri, Bhujel, etc.

3.2.3 Education Status

There are altogether 626 educational institutions; 324 pre-primary and primary schools, 76 Lower secondary schools, 177 secondary, 49 higher secondary, 13 campuses, 6 Technical Schools and 1 university enhancing the education to the girls and boys. Comparatively boy

students are more in primary to higher secondary level. The literacy rate of the district is 72.13 % among them the literate male is 83.23 % and female is 61.76 %.

Table 3.1: Numbers of educational institutions in district

SN	School/ College	Community based	Private sector	Total
1	Pre-Primary and Primary	291	33	324
2	Lower Secondary School	49	27	76
3	Secondary	65	112	177
4	Higher Secondary	26	23	49
5	Campus	3	10	13
6	Technical School	3	3	6
7	University	1		1
Total		**438**	**208**	**546**

Source: Brief information of Kaski District 2003, published by DEO

3.2.4 Economically active and inactive population

Economically active population has great importance in economic enlistment of the district. The population of 15 to 60 years age group is considered as an economically active which participates directly or indirectly in the economic activities. Below 15 and above 60 yrs aged group are considered as dependent group. About 57.1% population are economically active and 42.9% are inactive for economic activities in Kaski district. The economically active as shown in table below

Table 3.2: Economic active and inactive population above 10 years

Status	Total %	Male %	Female%
Economic active	57.1	62.1	52.5
Economic inactive	42.9	37.9	47.5
Total	**100**	100	100

3.2.5 Occupation Pattern

Major occupation in the district is agriculture and now people are shifting their occupation as the product is limited and trend of young people migration is high due to social conflict. Due to conflict and economic crisis, occupation is shifting to business and oversees employment. About 52.6 % of peopie have been adopting agriculture as subsistence livelihood, whereas 27.07 % in commercial business, 8.1% in government services, 9.21% in oversees employment, 10.34% on domestic daily wage labour and 0.11% in multidimensional activities a as shown in table 3.2.

Table 3.3 Occupation Pattern

S.N.	Occupation	Percentage
1	Agriculture	52.6
2	Business	20.07
3	Gov. Service	8.1
4	Oversees Employment	8.71
5	Domestic works	10.32
6	Others	0.2
Total		**100.00**

Source:-Agriculture Development Office, Yearly Development plan and Progress Report, 2063/064

3.2.6 Land Use Pattern

The District has 185500 hac, area of which 105270 hactare is feasible for cultivation. The 52116 hectares area in the district is irrigated land. The land use pattern as shon in table 3.3

Table 3.4: Land Use pattern

S.N	Land use Type	Area (ha.)	Percentage (%)
1	Cultivated Land	62162	30.8
2	Forest	75263	37.3
3	Rock, Barren, Pasture and watershed	23942	11.9
4	Residential area	21385	10.6
5	River/ Stream/Road/Canal	7432	3.7
6	Snow covered area	11516	5.7
Total		**185500**	**100**

Source:-Agriculture Development Office, Yearly Development plan and Progress Report, 2063/064

3.2.7 Agriculture Production

3.2.7.1 Cultivated Land

Only 24.3 % of total land is cultivated in Kaski. Highest cultivated land is in Pokhara, Dhikurpokhari, Hemja, Chapakot, Rupakot, Lekhnath, Mauja, etc.

3.2.7.2 Production

Major cereal crops are paddy, Wheat and maize. As a substitute for the subsistence agriculture, they are shifting the production from cereal crop to high value crops as vegetable and jute farming as seasonal and non seasonal as well as horticulture. The annual production and areas are as mentioned bellow:

Table 3.5: Crop Production

S.N.	Crops	Area (Hectare)	Production MT	Productivity per hectare MT
1	Paddy	27000	81002	3
2	Wheat	7500	15000	2
3	Maize	21250	53125	2.5
4	Millet	16050	18297	1.14
5	Oilseeds	554.86	419.68	0.76
5.1	Mustard	412.25	317.45	0.77
5.2	Mustard (Sarsyu)	56.36	30.82	0.55
5.3	Til	41.25	22.46	0.54
5.4	Nuts	35	27.85	0.8
5.5	Others	10	21.1	2.11
6	Bean	728.37	536.45	0.74
6.1	Musuro Daal	64.33	55.64	0.86
6.2	Maas	256.2	155.47	0.61
6.3	Bhattmas	225.09	174.81	0.78
6.4	Bodi	147	108.3	0.74
6.5	Masyang	36.25	42.236	1.17
7	Sugarcane	21.85	406.9	18.6
8	Potato	1746.06	18778.7	10.8
9	Vegetables	1913.74	19992.6	10.45
9.1	Veg(Hiude)	715.04	8093.23	11.3
9.2	Veg (Monsoon)	981.68	9859.19	10.0
9.3	Veg Upseason	217.05	2040.2	9.4
10	Masala	1083.7	6756.1	6.23
10.1	Ginger	619	4294.2	6.9
10.2	Garlic	48.4	219.5	4.5
10.3	Onion	49.8	340.6	6.8
10.4	Turmeric	274.9	1565.4	5.7
10.5	Dhaniya	18.7	31.2	1.7
10.6	Chilli	52.6	288.8	5.5
10.7	Alaichi	20.3	16.5	0.8
11	Fruits	1550.24	12943.04	8.35
11.1	Fruits (Hiude)	131.38	985.992	7.5
11.2	Fruits (Monsoon)	436.66	3609.78	8.3
11.3	Orange	982.2	8347.26	8.5
12	Fish	1558.25	502.23	0.32

Source: District Agriculture Development Office, 2066

3.2.7.3 Cropping Pattern and Cropping Calendar

Major crops of this district are paddy, wheat, Maize, Vegetables and Oilseeds. Dalhan crops are Bodi, Bhattamas, Keraun, Chhana, and Maas, simi, beans and Gahat. Vegetables are raddish, rayo, kauli flower, cabbage, giraula, lauka, pumpkin and potato etc. Fruits are banana, mango and papayay. Vegetable seeds are soyabean, raddish, carrot, cucumber, tomato, cauliflower. Cash crops are ginger, garlic, onion. The year round cropping pattern of the district is as shown below:

Table 3.6: Cropping Pattern

Land (Khet)		
Paddy	Wheat	Paddy
Paddy	Maize	-
Paddy	Vegetable	Paddy
Paddy	Wheat	Paddy (Chaite)
Paddy	Potato	Maize
Paddy	Oilseeed	Paddy
Paddy	Vegetation (Monson/Seasonal)	-
Paddy	Wheat	Daal
Paddy	Oilseed	Maize
Paddy	Wheat	-
Paddy	Wheat	Dhaincha
Paddy	Wheat	Oilseed
Paddy	Cabbage	Maize

Source: Annual Report, DADO, and Group discution, 2066, Kaski

Table 3.7: Cropping Calendar

S.N	Crops	Nursery preparation	Time Showing/ Transplanting	Harvesting
1	Paddy (Chaite)	Magh-Falgun	Falgun-Chaitra	Jestha-Ashadh
2	Paddy (Monsoon) Local	Chaitra-Baishakh	Jestha-Ashadh	Kartik-Mangsir
3	Wheat		Kartik-Mangsir	Chaitra-Baishakh
4	Maize seasonal		Falgun-Baishakh	Asadh-Bhadra
5	Maize Monsoon		Falgun-Chaitra	Jestha-Ashadh
6	Millet	Asar-Shrawan	Shrawan-Bhadra	Mangsir-Poush
7	Tori		Bhadra-Mangsir	Kartik-Mangsir
8	Mas		Shrawan-Bhadra	Poush-Falgun
9	Potato (Monsoon)		Jestha-Asadh	Bhadra-Ashwin
10	Potato (Winter)		Kartik- Mangsir	Falgun-Chaitra

Source: Annual Report,

3.2.7.4 Livestock Production

The people of district are farming number of domestic animals and sell their product. The number of livestock population and their product are as follows.

Table 3.8: Livestock Population

S.N	Livestock	Local	Improve	Total
1	Cattle	33575	5930	39505
2	He/She Buffaloes	100127	29359	129486
3	Sheep	10644	3887	14531
4	Goat	75175	10110	85285
5	Pig/Boar	2761	5263	8024
6	Chicken	153816	617239	771055
Total		**376098**	**671788**	**1047886**
Percentage		**35.89%**	**64.11%**	**100.00%**

Source: District Veterinary Office, Kaski

Table:3.9 Livestock Production & Price list

SN	Livestock's Products	Unit	Annual Production
1	Milk	M.T	47524
2	Meat		
2.1	Goat	M.T	669.42
2.2	Sheep	M.T	97.68
2.3	Buffalo	M.T	4192.88
2.4	Pig/ Boar	M.T	545.1
2.5	Chicken	M.T	801.92
3	Egg(hen)	Thousand	14541.6
4	Wool	M.T	7.16
5	Skin	No.	27477

Source: District Veterinary Office, Kaski

3.3 Service centers and facilities

3.3.1 Post office

This district has one Regional Post Office Directoriate, 13 Illaka level post offices and 51 additional post offices in VDCs of Kaski district.

Table 3.10: Post office

S.N.	Type of Post office	Number	VDC/Municipality
1	Regional Post Office/Directoriate	**1**	Pokhara
2	Illaka Post Office	**13**	Birethati (Dangsing), PardiBandh (Pokhar), Naudanda (Dhikurpokhari), Gagangauda, Majhthana, Rupakot, Ghachowk, Sildujure, Makaikhola (Vachowk), NIrmalpokhari, Bhalam, Puranchaur, Chapakot
3	Additional Post Office	**37**	Yanjakot (Thumako Danda), Hemja, Lukunswara (Pumdi Vumdi), Deurali, Lamachaur, Vedawari (Dhital), Sikles (Parche), Vadaure, Nagidhar (Mijure danda), Ghandruk, Majhgau (Hanspur), Tangting (Namarjung), Burjung Khola (Khardi Khola), Lahachauk, Sisuwa, Sirkutan (Thumki), Kaskikot, Rambazzar (Pokhara), Varatpokhari, Salyan, Sarangkot, Lekhnath, Siddha, Begnas, Lumle, Saimrang, Kalika, Krissti, Mauja, Dhampus, Lwanghalel, Rivan, Machhapuchre, Kanhu, Arwabijaya and Armala

Source: District Post Office, 2066

3.3.2: Financial Institution

There are various types of commercial bank, Agricultural Development Bank, finance and money transfer service and many saving and credit cooperatives as financial institutions.

Table 3.11 Financial institutions

SN	Particular	Type	Units	Remarks
1	Govemmentaland Non governmental Banijya Bank	24	41	A Class
2	Cooperatives	16	26	C Class
3	Financial Company	19	42	B Class
4	Others	8	14	D Class
Total		**67**	**123**	

Source, Market Survey, 2010

3.3.3 Agriculture and agriculture Service Center

Governmentof Nepal is focusing in agriculture sector since long time. Government has lunched various Programmmes in this sector on Upliftment of people economic growth. The existing situation of the agriculture service and Sub service centers in district shown below,

Table 3.12: Agri – Service Centers / Sub - Centers

S.N.	Service /Sub-service Centre	Located Place	Influence VDCs
1	Service Center	Birauta	Pokhara, Armala, PumdiVumdi, Kristi, Nirmalpokhari,
2	Service Center	Kaseri	Arvabijaya, Kanhu, Kalika
3	Service Center	Dhikurpokhari, Nangdanda	Dhikurpokhari, Dhampus, Salyan, Lumle, Dangsing, Ghandruk, Kaskikot
4	Service Center	Gairi	Lamachaur, Hemja, Purunchaur
5	Service Center	Lwanghalel	Dhital, Lwanghalel, Rivan
6	Service Center	Paame	Bhadhauretamagi, Chapakot, Sarangkot
7	Service Center	Rupakot	Rupakot, Deurali, Hansapur, Thumki, Siddha,
8	Service Center	Dhungepatan	Bharatpokhari, Lekhnath (ward no. 1 and ward no. 8-15)
9	Service Center	Pulko Mukh	Bachowk, Namarjung, Saimarang, Thumako Danda,
10	Service Center	Ghachowk	Lahachowk, Ghachowk, Machhapuchre, Sardi Khola,
11	Service Center	Sundari Bazzar	Lekhnath (ward no. 2-7)
12	Service Center	Mauja	Parche, Sildujure, Mauja, Valam
13	Service Center	Majhthana	Mijuredanda, Majhthana

Source: Annual Report, DADO, 2065/66

3.3.4 Veterinary Service Centre

The district has 6 service centres and 8 sub-service centres. The existing situation of the veterinary service and Sub service centers in district shown below;

Table 3.13: Veterinary Service Centers/Sub-Centers

S.N	Service Centre/Sub-service Centre	Located Place/VDC	Influence VDCs
1	Service Centre	Birauta	Pokhara, Armala, Pumdi Vumdi, Kristi, Nirmalpokhari
2	Sub Service Centre	Kaseri	Arwabijaya, Kanhu, Kalika
3	Service Centre	Naudanda	Dhikurpokhari, Dhampus, Salyan, Lumle, Dangsing, Ghandruk, Kaskikot (1-8)

4	Sub Service Centre	Hemja	Lamachaur, Hemja, Lahachowk,
5	Sub Service Centre	Lwanghalel	Dhital, Lwanghalel, Rivan
6	Sub Service Centre	Pame	Bhadhauretamagi, Chapakot, Sarangkot, Kaskikot - 9
7	Sub Service Centre	Rupakot	Rupakot, Hansapur, Thumki
8	Service Centre	Sisuwa, Dhungepatan	Bharatpokhari, Lekhnath (ward no. 1 and 8-15)
9	Service Centre	Bhaise	Bachowk, Namarjung, Saimarang, Thumako Danda
10	Service Centre	Ghachowk	Purunchaur, Ghachowk, Machhapuchhre, Sardi Khola
11	Sub Service Centre	Lekhnath Chowk	Kalika, Lekhnath (2-8)
12	Service Centre	Mauja	Parche, Sildujure, Mauja, Valam
13	Sub Service Centre	Majhthana	Mijuredanda, Majhthana
14	Sub Service Centre	Deurali	Deurali, Siddha

Source: District Veterinary Office, 2066

3.3.5 Irrigation

Kaski district has 30.8% cultivated areas, most of agriculture fields have good accesses to irrigation facilities. The irrigation system managed by Bijayapur Irrigation Project and Pokhara Irrigation Project has its large command area in Kaski district. In some areas irrigation system is managed by farmers themselves. The source of irrigation and irrigated land in the district is shown below;

Table 3.14: Irrigation sources

SN	Sources of Irrigation	Current no.	Area (hac)	Percentage
1	Bouring and Tubel	95	11.2	.1
2	Permanent Canel	9697	2456.0	20.5
3	Temporary Canel	27252	8862.0	74.0
4	Pokhari	507	91.8	0.8
5	Mixed	285	24.1	0.2
6	Others	1996	524.1	4.4
Total		-	**11969.2**	**100.00**

Source: - District Profile DDC Kaski 2064

3.3.6 Health

in Kaski district, people have average access in health services. There are many hospitals, health centers, nursing home, etc in this district. In health sector Kaski district has

modern and well equipped health service facilities with experts.

Table 3.15: List of Health Service Centers

SN	Description	Nos.	Remark
1	Primary Health Center	3	
2	Health Post	11	
3	Sub Health Post	34	
4	Aayurbedic Pharmacy	5	
5	Regional Hospital	1	
6	Eye Hospital	1	
7	Regional T.B. Center	1	
8	Leprosy Hospital	1	
9	VSc Center	1	
10	MCH Clinic	22	Pokhara
11	MCH Clinic	15	Lekhnath
12	Vitamin A Distribution Center	441	
13	FCHV	915	
14	Private Hospital	1	Manipal Hospital
15	Private Nursing Hospital	8	
16	Private Pathology Clinic	40	
17	Pharmacy	427	
18	NGO, INGO	26	
19	PHC Outreach Clinic	158	
20	Immunization Clinic	148	
21	DOTS T. Center	11	
22	DOTS T. Center W/Micros facility	5	
23	Urban DOTS	5	
24	DOTS treatment sub-center	34	
25	DOTS Plus T.C.	1	
26	DOTS Plus sub T.C.	2	

Source: - District Health Office, District Profile DDC Kaski 2064

3.4 Existing / Potential Development Area

The team had studied and collected the relevant literature/reports available in the district, especially of the DFO. DAO, Livestock Office and consultation with various line agencies, NGOs, local people to identify potential pocket areas which are verified from area workshops are enlisted below.

Kaski is highly fertile area for paddy and wheat as well as other product because of the irrigation facilities. The area around the east west High way sector of the district is highly potential for rice, wheat and in northern side of MRM is covered with dense forest area so it is potential for livestock farming. The team has mentioned the significantly exported commodities and highly productive area on the table as follows.

3.4.1 Existing/Potential Area with Extensive Agriculture

Most of place of Kaski District have good accesses to irrigation facilities. The irrigation system managed by Pokhara Irrigation Project and Bijayapur Irrigation Project has its large command area in Kaski district. In some areas irrigation system is managed by farmers themselves. Out of 43 VDCs following area are mainly extensive agriculture production areas which is shown on table below:

Table 3.16: Potential Area with Extensive Agriculture

Crops	Areas
1-Cereals (Rice,Mai-ze,Wheat)	Parche, Sildujure, Mauja, Valam, Lahachowk, Ghachowk, Machhapuchre, Sardi Khola, Vachowk, Namarjung, Saimarang, Thumako Danda, Bharatpokhari, Lekhnath (ward no. 1 and ward no. 8-15), Rupakot, Deurali, Hansapur, Thumki, Siddha, Bhadaulretamagi, Chapakot, Sarangkot Dhital, Lwanghalel, Rivan Lamachaur, Hemja, Purunchaur Arwabijaya, Kanhu, Kalika, Armala, Pumdi Vumdi, Kristi, Nirmalpokhari
2-Fruits (Mango,Banana ,Lichi)	Parche, Sildujure, Mauja, Valam, Lahachowk, Ghachowk, Machhapuchre, Sardi Khola, Vachowk, Namarjung, Saimarang, Thumako Danda, Bharatpokhari, Lekhnath (ward no. 1 and ward no. 8-15), Rupakot, Deurali, Hansapur, Thumki, Siddha, Bhadaulretamagi, Chapakot, Sarangkot Dhital, Lwanghalel, Rivan Lamachaur, Hemja, Purunchaur Arwabijaya, Kanhu, Kalika, Armala, Pumdi Vumdi, Kristi, Nirmalpokhari.
3-Vegetables (caba-ge, Bhanta, Bodi, Simi)	Parche, Sildujure, Mauja, Valam, Lahachowk, Ghachowk, Machhapuchre, Sardi Khola, Vachowk, Namarjung, Saimarang, Thumako Danda, Bharatpokhari, Lekhnath (ward no. 1 and ward no. 8-15), Rupakot, Deurali, Hansapur, Thumki, Siddha, Bhadaulretamagi, Chapakot, Sarangkot Dhital, Lwanghalel, Rivan Lamachaur, Hemja, Purunchaur Arwabijaya, Kanhu, Kalika, Armala, Pumdi Vumdi, Kristi, Nirmalpokhari

Animals	Pokhara, Armala, Pumdi Vumdi, Kristi, Nirmalpokhari, Arwabijaya, Kanhu, Kalika , Dhikurpokhari, Dhampus, Salyan, Lumle, Dangsing, ghandruk, Lamachaur, Hemja, Lahachowk, Dhital, Lwanghalel, Rivan, Vadauretamagi, Chapakot, Sarangkot, Kaskikot, Rupakot, Hansapur, Thumki, Varatpokhari, Lekhnath, Vachowk, Namarjung, Saimarang, Thumako Danda, Purunchaur, Ghachowk, Machhapuchhre, Sardi Khola, Kalika, Parche, Sildujure, Mauja, Valam, Mijuredanda, Majhthana, Deurali, Siddh

Source:- District Agriculture Development Yearly plan 2064/65

3.4.2 Existing/Potential Area with Extensive Livestock

Kaski district is covered mostly by plain area and some area by Mahabharata in hillys. Pokhara and Lekhnath is tourism and industrial city and people have easy access to sell their products in market centre, therefore most people of village level engaged in livestock farming but lower Himallya & Mahabharata range are secured for a dense guransh forest and land for livestock farming. Live stock Farming pocket areas are as following Table.

Table 3.17 Livestock Farming Pocket areas

1	**Cow, Goat, Bufflo, Pig, Poultry**	Pokhara, Armala, Pumdi Vumdi, Kristi, Nirmalpokhari, Arwabijaya, Kanhu, Kalika , Dhikurpokhari, Dhampus, Salyan, Lumle, Dangsing, ghandruk, Lamachaur, Hemja, Lahachowk, Dhital, Lwanghalel, Rivan, Vadauretamagi, Chapakot, Sarangkot, Kaskikot, Rupakot, Hansapur, Thumki, Varatpokhari, Lekhnath, Vachowk, Namarjung, Saimarang, Thumako Danda, Purunchaur, Ghachowk, Machhapuchhre, Sardi Khola, Kalika, Parche, Sildujure, Mauja, Valam, Mijuredanda, Majhthana, Deurali, Siddh

3.4.3 Existing/Potential Area for Tourism, Religious and Historical Place

Kaski district is very famous for religious, tourism and historical place. There are many myth explaining how this district is named as Kaski. One myth is that there live people who were yellow cloths and people who wear yellow cloths are called ‘Kasayaki’ hence

named as Kaski. Mostly existing/potential area for tourism, religious and historical areas are as following Table.

Table 3.18: Area for Religious and Historical Place

S.N.	N.P./VDC Name	Historical and Religious Places	Natural Tourism Places
1	Pokhara Sub-Metropolitan City	BindhyaBasini Temple, Dharmashila Buddha Bihar, Tal Barahi Temple, Ram Mandir,	Gorge Section of Seti River, Chamero Gufa, Patle Chango, Mahendra Gufa, Gupteshowr Mahadev Gufa.
2	Arbabijaya	Arba Tapu, Sunpadalai Shivalaya mandir, Chandisthan	Jhuppiko Chautara, Madi
3	Bhachowk	Chewang Chhewang Gumba	Lamtari Lek
4	Chapakot	Pachbhaiya Mandir, deurali Mandir, Siddha Baraha	
5	Dhikurpokhari	Paudur kot	Naudada View Top, Chakal Dada
6	Ghachowk	Shivalaya Guthi Mandir	
7	Ghandruk	Meshram Baraha, Kot dada Gumba	Machhapuchre Besh Camp, Annapurna Besh Camp
8	Hanshpur	LIppani, Ramkot, Bhumesthan, Deyrali Mandir, Sarswoti Mandir	Indra Gufa
9	Hemja	Rishikul Arsham, Mahadev Guthi Mandir, Radha Krishna Mandir, Hanuman Mandir	
10	Kahu	Deurali Mandir, Chandi Mandir, Radha Krishna Mandir, Kalika Mandir, Santaneshowr Mandir, Kahu Dharahara	Deurali Chettra
11	Lahachowk	Armalakot Mandir	Patikhola Gufa, Armala View Point
12	Nirmalpokhari	Ganeshshtan, Kot Bhairav Mandir, Jal devi Mandir	Kot Dada, Kaule Dada,
13	Pumdibhumdi	Bishwa Shanti Stupa, Pumdikot, Bhumdikot	Pokhara View Point, Machhapuchre View Point
14	Ribhan	Shivalaya Mandir	
15	Saimarang	Bhagwati Mandir, Lamtari mai	Lamtari Lek
16	Sardikhola		Bhurjun Khola Upatakya, Kharpani Tatopani, Hiltop
17	Sildajure	Sildu Mandir, Maipul Pokhari, Naya Mandir	Ghaderidada, Thak Dada, Taprak Maidan
18	Bhalam	Harihar Gufa	Harihar Gufa
19	Dhampus	Dhampuskot, Bhume Mandir, Siddha Baraha Mandir	Paragliding Spot, Eko Park,Dhampus Deurali
20	Salyan	Bhume Mandir	Shital Gufa
21	Armala	Armalakot Mandir, Baudha Gumba, Kaal Bhairabhi Mandir	Armalakot, Dhikidada Paragliding, Kut Gufa, Siple kuna Gufa
22	Sarangkot	Bhume Kalika Mandir, Chisa Khola, Bageshowri Mandir	Sarangkot View Tower, Paragliding

23	Kristi	Mattikhan Kalika Mandir, Mankamana Mandir	Shiva Dhunga, Mattikhan View Tower, Bagh khor
24	Bhadhaure Tamagi	Devisthan mandir	Panchase Panchadham
25	Mauja	Bijayapur Kot	Dovhan Chahara
26	Parche		Siklesh Gau, Parche Gau, Dudhpokhari Lek
27	Rupakot	Baraha Mandir, Chisapani Mandir	Barahathok Kot, Bhiechowk Kot
28	Thumki	Jateshowr Mandir, Chandisthan Mandir	Phalangkot Darbar
29	Kaskikot	Gupta Kalika Mandir, Bhumesthan Mandir, Deurali Mandir	Thulipokhari
30	Deurali	Kalika Mandir, Shiva Mandir	Kalika Picnic Spot
31	Kalika	Kalika Mandir, Thulakot Bhairavsthan, Sunpadeli Shiva Mandir	Thulakot, Deumaidada, Tham dada
32	Dangshing	Dangshingkot Maula	Ulleri, Thikedhunga
33	Thumakodada	Yanjyakot Gurung Tol	
34	Bharatpokhari	Kalika Mandir, Siddha Mandir	Pandethum Dada, Siddheshowr Gufa
35	Lekhnath N.P.	Gorakhnath Mandir, Radha Krishna Mandir	Beghnash Tal, Rupa Tal, Sundari Dada

Source: Group Discussion/Workshop/Report of DTPP/DDC

3.4.4 Women Empowerment programme

Women Development Office is operating women empowerment programme, child and old aged support programme in support to other line agencies to promote gender sensitive and inclusive programme in the district. They are operating programmes in all VDcs out of 65 districts. *Aama Samuha* is acttivly involved for the social and infracturaal development sector.in this district.

3.5 Analysis of Market (Key Growth Centers) Centers

Market Survey was carried out to identify market and service centre. Data and information collected in the field is the main basis for determining the importance on relative importance of market/service centre and central places. All services existing in a particular centre were listed by the district line agencies and supplemented by more detailed fieid data such as economic population structure collected for the centre itself and its influence area, by means of P-RRA approach. For evaluation purpose, data from offices, Industry, Business & Commerce, Education, Health, Communication, Electricity Supply, Drinking Water Supply services are combined for the centre and its influence area. Assessment of economic facilities and services

existing in the market/service centres and their catchments areas leads to the identification of the most important market/service centre. Centrality index of the market facilities and government services are carried out using the formula:

Details of the use of formula is elaborated in approach and Methodology chapter As an outcome of the analysis, following is the centrality index and market grades:

Table 3.19: Existing and Potential Market Centres with Grading

S.N.	Market Centre	Grading
1	Baglung Bus Park	A
2	Baidam	A
3	Begnash	A
4	Bharatpokhari	A
5	Bhumdi	A
6	Chanaute	A
7	Chane	A
8	Chorepatan	A
9	Dhampus	A
10	Hemja	A
11	Kahukhola	A
12	Kande	A
13	Kaseri	A
14	Kaskikot	A
15	Lamachaur	A
16	Mahendragupha	A
17	Melbot	A
18	Naudada	A
19	Nirmalpokhari	A
20	Pame	A
21	Pandeythum	A
22	Phulbari	A
23	Rakhi (Bijayapur)	A
24	Rupakot	A
25	Saatmuhane	A
26	Sarangkot	A
27	Sisuwa	A
S.N.	**Market Centre**	**Grading**
1	Birethati	B
2	Dharapani	B
3	Ghatichina	B
4	Lumre	B
5	Siklesh	B
6	Suraya	B
7	Thumakodanda	B

S.N.	Market Centre	Grading
1	Arba	C
2	Armalakot	C
3	Atighar	C
4	Bagmara	C
5	Bhachock	C
6	Bhagbatitar	C
7	Bhainse	C
8	Bhalam	C
9	Deurali	C
10	Dhital	C
11	Dobilla	C
12	Dopahare	C
13	FurseKhola	C
14	Ghalel	C
15	Ghumle	C
16	Gorje	C
17	Hamsapur	C
18	Kalikasthan	C
19	karkitahara	C
20	Khalse	C
21	Kharpani	C
22	Kuvinde	C
23	Lahachowk	C
24	Lippani	C
25	Mattikhan	C
26	Mauja	C
27	Mchhapuchhere	C
28	Mijuredada	C
29	Polangtar	C
30	Saimarang	C
31	Salyan	C
32	Samikobagar	C
33	Shantistupa	C
34	Sidane	C
35	Tanting	C
36	Taprang	C
37	Thulabasi	C
38	Thumsikot	C

S.N.	Market Centre	Grading
1	Adhikaridada	Potantial
2	Bhadaure	Potantial
3	Bijayapur	Potantial
4	Gahate Dada	Potantial
5	Ghaderi	Potantial
6	Ghattekhola	Potantial
7	Jamdung/sabi	Potantial
8	Kaure	Potantial
9	Khanigau	Potantial

S.N.	Market Centre	Grading
10	Khorphaka	Potantial
11	Lamakhet	Potantial
12	Malladada	Potantial
13	Mauja Bisauna	Potantial
14	Mugrebasi	Potantial
15	Pulchowk, Thumki	Potantial
16	Ramkot	Potantial
17	Ryalechaur	Potantial
18	Tarabhir	Potantial
19	Thak,Sildajure	Potantial
20	Thikedhunga	Potantial
21	Thulasowara	Potantial
22	Ulleri	Potantial
23	View tower	Potantial

Source; Market Survey, 2010

3.5.1 Brief on Existing and Potential Market centre (Key Growth Centre)

According to the study of relevant literatures/reports, consultation with related program/project, consultation of the various person and field visit, total 79 possible market centre were considered for analysis After required data collection and analysis of collected information according to Interim guideline of DTMP, 27 market centres are grade A, 7 market centres as grade B, 38 market centres as grade C were identified as existing market centres and other 23 is as potential market centres. Brief description of market centres are as follows:

3.5.1.1 Description of Market Centre Grade A

Baglung Buspark

Baglung Buspark lies in Pokhara Municipality and major market centre of the Pokhara Municipality as well as Kaski district which is growing city of the District. It is connected with Pokhara-Baglung Road which is extended upto Jomsom As Kaski is a tourism district, the famous tourism place Bindhabasini Temple also lies in this market centre.There is so many service centre and many cottage industries available which is developing rapidly. This place is service centre of Sarangkot, Kaskikot and Hemja VDC. Baglung Buspark is A grade market centre in the district.

Baidam

Baidam lies in Pokhara Municipality and major market centre of the Pokhara Municipality as

well as Kaski district which is growing city of the District. It is connected with Siddhartha Highway. As Kaski is a tourism district, the famous tourism place Phewa Tal, Lakeside lies in this market centre. This place has access to various services like as Government service centre, small/cottage industries, school are available. This place is service centre of Sarangkot, Kaskikot and Chapakot VDC. Baidam-Pame-Ghatichana-Damdame-Sidane Road Starts from this market centre.

Begnash

Beghnash lies in Lekhnath Municipality which is very famous in kaski district. Famous Tourism Lake Beghnash Tal lies in this market centre. This Market centre is famous for fishery farming also. This place has access to various services like as Government service centre, small/cottage industries, school are available. It is main market and other service centre of Hanspur, Majhthana, Mijuredada and Thumki VDC. It is also linked with Prithivi Highway and other gravelled and earthen road.

Bharatpokhari

Bharatpokhari VDC as well as market centre is very famous VDC in Kaski District. Chorepatan-Kristi-Nirmalpokhari-Bharatpokhari Road which starts from Siddartha highway lies here. Similarly Dobilla-Bagmara Road Ends at Prithivi Highway lies in This VDC. This VDC is the Border of Syanjya district and is connected with various earthen roads connecting to syanjya district. This place has access to various Services.

Bhumdi

This market centre lies on phumdibhumdi VDC. Chorepatan-Shantistupa-Bhumdi-Ulleri-Kubinde Road lies in this Market Centre which starts from prithivi highway and ends on prithivi highway. This market centre is linked with other gravelled and earthen roads.This palce has access to various service centres.

Chanaute

This market centre lies in chapakot VDC. This place has access to various service centres and is service centre of Chapakot, Bhadaure Tamagi and Kaskikot VDC. Chanaute-Khorphaka-Auishulechaur-Tarebhir Road starts from this market centre. It is also linked with other gravelled and earthen roads.

Chane

This market centre lies in Ghandruk VDC and is the most famous tourism treeking place in Kaski District. This place has acces to various service centres. Birethati-Chane Road lies here.

Chorepatan

This market centre lies in Pokhara N.P. It is the oldest market of Pokhara and Famous tourist place also. David falls lies in this market centre. Chorepatan-Kristi-NirmalPokhari-Bharatpokhri Road, Chorepatan-Shantistupa-Bhumdi-Ulleri-Kuvinde Road, Chorepatan-Khalse-Kuvinde Road Starts from This Market Centre.This market centre lies at Siddhartha Highway and connected with various black topped, Gravel and Earthen Roads. This market centre is service centre of PhumdiBhumdi, Kristi, Nirmal Pokhari and Bharatpokhari VDC.

Dhampus

Dhampus is VDC as well as market centre and famous tourist place of Kaski District. It is famous for Trekking and good secenery view of Machhapuchre range. It is the oldest and growing market centre and has access to various service centres. Ghattekhola-Dhampus-Khanigau Road and Melbot-Dhital-Dhampus Road lies in this market centre.

Hemja

Hemja is VDC as well as market centre which lies in Baglung highway from where buses travels to baglung, Jhomsom. This market centre is service centre of Hemja-Melbot-Dhital-Dhampus Road and connected with other Blacktopped, Gravel, and Earthen Roads.

Kahukhola

This market centre lies in Pokhara N.P. It is a growing city and service centre of Arbabijaya, Kalika, Mauja, Sildajure, Parche, Namarjung and Thumakodada VDC. Kahukhola-Dudhpokhari Road starts from this market centre and is connected to various Blacktop, Gravel and Earthen Roads.

Kande

This market centre lies in Dhikurpokhari VDC. This market centre is also major tourist place of pokhara. Baglung Highway lies in this market centre. Kande-Bhadaure-Salyan Road lies in this market centre. This market centre is service centre of Salyan, Bhadaure Tamagi and Dhikhurpokhari VDC.

Kaseri

This market centre lies in Arba Vijaya VDC. Kaseri-Bhainse-Thumakodada Road starts from here and Kahukhola-Dudhpokhari Road lies in this market centre. It is growing market centre and is service centre of Arba bijaya, Kalika and Thumakodada VDC.

Kaskikot

Kaskikot is VDC as well as market centre which is growing market centre and has access to various service centres. Naudada-Kaskikot-Sarangkot Road lies in this market centre.

Lamachaur

This market centre lies in Pokhara N.P. and is growing city and has access to various service centres. It is the place to go to tourist place Machhapuchre, Chamere Gufa and Mahendra Gufa. Similarly famous engineering campus western regional campus and Gandaki College also lies here. Lamachaur-Machhapuchhre Blacktopped road starts from here and s connected with many other Blacktopped, Gravel and Earthen Roads.

Mahendragufa

This market lies in Pokhara N.P. and is growing city also is main tourist place of Kaski district. Mahendra cave and bat cave lies in this market centre. This market centre is service centre of Armala and Puranchaur VDC. MahendraGufa-Armalakot-Aatighar Mauja Road starts from here and this market centre is connected with other various blacktop, gravel and earthen roads.

Melbot

This market lies in Hemja VDC and is growing market centre also has access to various services centres. Melbot-Dhital-Dhampus Road starts from here and Hemja-Mardipul-Khanepanimuhan-Lumre-Ghalel Road Lies here.

Naudada

This market centre lies in bharatpokhari VDC and is growing city and has access to various service centres. Baglung Highway Blacktopped road lies here. It is service centre of Dhikurpokhari, Salyan, Lumle and Dangshing VDC. Naudada-Kaskikot-Sarangkot Road starts from this market centre.

Nirmalpokhari

Nirmalpokhari VDC as well as market centre is growing market centre also. It has access to various services centre. Chorepatan-Kristi-Nirmalpokhari-Bharatpokhari Road lies here. It is connected with other several earthen roads which is connected with neighbouring district Syanjya.

Pame

This market centre lies at Kaskikot VDC and is growing market centre and tourist place also. It has access to various service centres. Baidam-Pame-Ghatichina-Damdame-Sidane Road lies here.It is servise centre of Chapakot, Kaskikot and Bhadaure Tamagi VDC. It is connected with various Gravelled, Earthen Roads.

Phulbari

This market centre lies at Pokhara N.P. and is growing city and has access to various service centres. Famous hospital Manipal Hospital Lies in this market centre. Phulbari-Kahu (View Tower) Road starts from this market centre. It is connected with other Blacktopped, Gravel and Earthen Roads.

Rakhi (Bijayapur)

This market centre lies at Lekhnath N.P. and connected with prithivi Highway. Rakhi-Mijure Blacktopped road starts from here. It is connected with other various Blacktop, Gravel and Earthen Roads.

Rupakot

Rupakot VDC as well market centre is growing market centre and is tourist centre also. Saatmuhane-Rupakot-Thumki Road lies in this market centre. It is connected with various earthen roads connecting to neighbouring VDCs.

Saatmuhane

Saathmuhane lies in Lekhnath N.P. and is growing city and has access to various services centres. Saathmuhane-Rupakot-Thumki Road starts from here and Sisuwa-Deurali-Polangtar Road is connected at this market centre.

Sarangkot

Sarangkot VDC as well as market centre is growing market centre and a famous tourist place also. From this market centre the clear view of sunrise can be seen. It has access to various centres. Naudada-Kaskikot-Sarangkot Road ends here. It is connected with other blacktopped, gravel and earthen roads.

Sisuwa

Sisuwa lies at Lekhnath N.P. and is growing market centre. Sisuwa-Deurali-Polangtar Road starts from here. Tourist place Beghnash Tal is about 3 km far from this market centre. It has access to various service centres. It is connected with other various blacktop, gravel and earthen roads.

Pokhara & Lekhanath City

Pokhara city and Lekhanath is not included for ranking among other market center of Kaski district. It is the one of largest city of Nepal with industry, hotel and other trade market. Including Pokhara among other markets of Kaski district makes the ranking extreme variation. Pokhara sub-Metropolitan is located in kaski district of Gandaki Zone, Western Development Region. It is well connected with Prithivi and Sidartha Highway. It is the major center of western development region in trade, tourism, commerce, education, health development etc. There is wide transport connection from Pokhara to all parts of the country by highway and also to the other major cities by airways.

3.5.1.2 Description of Market Centre Grade B

Birethati

This market centre lies in Dangshing VDC and is growing market centre and tourist place also. The base point of Main tourist place Ghandruk is this market centre. Birethati-Chane Road starts from here and Nayapul-Birethati-Thikedhunga Road lies at this market centre.

Dharapani

Dharapani lies at Dhikurpokhari VDC and is growing Market Centre. It has access to various service centres. Dharapani-Andherikhola-Deurali-Salyan Road starts from this market centre.

Ghatichina

Ghatichina lies at Chapakot VDC and it is growing market centre and way to famous tourist place Panchase. Baidam-Pame-Ghatichaina-Damdame-Sidane Road lies in this market centre. This market centre is connected with different earthen roads.

Lumre

Lumre lies at lwanghalel VDC and is growing Market centre. This market centre lies at the bank of Mardi Khola. Hemja-Mardipul-Khanepanimuhan-Lumre-Ghalel Road lies at this market centre.This market centre have access to various service centres.

Siklesh

Siklesh lies in Parche VDC and is famous tourist place also and way to tourist place Dudhpokhari. It has access to various services centres. Kahukhola-Dudhpokhari Road has its influence upto this market centre only.

Saurya

Saurya lies in Majhthana VDC. It is the start point of Saurya-Ramkot-Hanspur-Thulabesi Road and is connected to blacktop Road Rakhi-Mijure. It has access to various service centres.

Thumakodada

Thumakodada is VDC as well as market centre is growing market centre. This market centre is end point of Kaseri-Bhainse-Thumakodada Road. It has access to various services centres.

CHAPTER IV: - DISTRICT INVENTORY MAP OF RURAL ROAD NETWORK

4.1 Background and Existing Transport Situation

Kaski district is situated in Gandaki zone in Western development region of Nepal. There are many transport linkages such as: Air transport, Roads Transport and Trails Bridges. Those transport linkage shown in map are called District Inventory Map. This Map also indicates overall situation of each transport linkage. Primary and secondary data were collected for DIM. Primary data were collected by field visits by Technical assistance and research associate. Technical data were collected by using GPS instrument. Lines and points data were extracted directly form the instrument and other detail information of the technical data was collected in FORMAT 'A'. Similarly, socio-economic data were collected in QUESTIONNAIRE 'A' by market survey. Secondary data were collected by the study of relevant Literatures/Repots, Consultation with various persons like employees of different line agencies, NGOs

4.2 Lists of transport Linkages

In Kaski District, air transportation as well as road transportation facilities are in good condition. Different airlines are providing the services from Pokhara to Kathmandu and to neighboring hill district as Mustang, Manang, Beni airports.

The Prithivi Highway and Sidartha Highway is connect the district headquater with capital city and East West Highway. From this highway the district south, east and west part is playing a vital role in the development of the district as a spinal cord. Similarly, Postal Highway provides the inter district road access along the diffrent part of the district. Other feeder roads and district roads (District Roads class "A" and District Roads class "B") help to support the transportation system within the District. Kaski DDC itself is contributing in road sector development for blacktopped, graveled as well as new construction. Similarly, In Kaski District there is one sub-metropolitan city (Pokhara), one metropolitan city (Leknath) and Fourty three VDCs. They have own network of the urban as well as rural roads facilitating for the movements within district.

4.1 List of National Highway and Feeder Road:

S.N	Name of Road	Class	Ref No	Link Code	BT	GR	ER	Total
1	Kotre-Bijayapur Khola	**NH**	H04	H0411	14.04	0.00	0.00	14.04
2	Bijayapur Khola-Prithvi Chok	**NH**	H04	H0412	4.85	0.00	0.00	4.85
3	Kubinde-Pokhara municipality boundary	**NH**	H10	H1012	12.09	0.00	0.00	12.09
4	Pokhara municipality boundary-Prithvichowk	**NH**	H10	H1013	4.42	0.00	0.00	4.42
5	Pokhara-Sarankot	FRN	F041	F04101	0.000	0.00	0.00	0.000
6	Pokhara-Bindebasini	FRN	F042	F04201	3.96	0.00	0.00	3.96
7	Bindebasini-Yamdi bridge	FRN	F042	F042F042	2.76	0.00	0.00	2.76
8	Yamdi bridge-Sandh bridge	FRN	F042	F04203	37.04	0.00	0.00	37.04
9	Talchok (PRM)-Khudimuhan (Beganas Lake)	FRN	F129	F12901	3.50	0.00	0.00	3.50
10	Gagangaunda (PRM)-Khudi (Access to PU)	FRN	F164	F16401	0.00	10.00	10.00	2.00
11	Beganastal-Ram Bajar	**FRO**	F162	F16201	0.00	4.00	19.50	23.50
Total					**87.46**	**5.00**	**20.50**	**112.9**

4.2 Summary of District Roads (Class "A")

S.N.	DTMP Code No.	Road Name	Total Length (K.M.)	Surface Type(K.M.)			Accessibility Condition		Required Intervention		Traffic Running (K.M.)	Remarks
				Blacktop	Gravel	Earthen	All Weather	Fair Weather	Length Km	Upgarding		
1	40A001R	Begnash-Bhorletar Raod	24.17	2.82	2.90	18.45	2.82	21.35	21.35	Black Top	24.17	
2	40A002R	Rakhi-Mijure Road	19.77	19.77			19.77		10.00	Black Top	19.77	Poor Section
3	40A003R	Lamachaur-Machhapuchre Road	16.00	16.00			16.00		1.00	Black Top	16.00	
4	40A004R	Kahu-Dudhpokhari Road	37.32		3.00	34.32		37.32	37.32	Blacktop / Gravel	37.32	7 km BT and 30.32 Gravel 4 km is done by RAIDP
5	40A005R	Baidam-Pame-Ghatichina-Damdame-Sidane Road	21.10	6.34	8.23	6.53	6.34	14.76	14.76	Blacktop / Gravel	21.10	5 km BT and 6.53 km Gravel
6	40A006R	Sisuwa-Polangtar Road	25.20	7.10	3.50	14.60	7.10	18.10	18.10	Black Top	25.20	2 km PSM and 9 km By DDC and 7.1 km Gravel
7	40A007R	Chorepatan-Kristi-Nirmalpokhari-Bharatpokharai	22.50	0.80	1.20	20.50	0.80	21.70	21.70	Blacktop / Gravel	22.50	7 km BT and 7.5 Km Gravel 8 km done By RAIDP
8	40A008R	Hemja-Khanepanimuhan-Lumre-Ghalel Road	15.37	0.85	1.10	13.42	0.85	14.52	14.52	Blacktop / Gravel	15.37	4.5 Km BT by DOR, 5 Km BT By DDC
9	40A009R	Saatmuhane-Rupakot-Thumki Road	23.09		1.52	21.57		23.09	23.09	Black Top	23.09	2 km BT by PSM and 10 km DDC

S.N.	DTMP Code No.	Road Name	Total Length (K.M.)	Surface Type(K.M.)			Accessibility Condition		Required Intervention		Traffic Running (K.M.)	Remarks
10	40A010R	Dobilla- Bagmara Road	12.19		7.50	4.69		12.19	12.19	Black Top	12.19	8 Km Under Construction
11	40A011R	Naudada-Kaskikot-Sarangkot	12.50			12.50		12.50	12.50	Black Top	12.50	
12	40A012R	Kaseri-Bhainse-Thumakodada Road	17.36		1.20	16.16		17.36	17.36	Blacktop / Gravel	17.36	5 Km BT and 12.36 Km Gravel
13	40A013R	Birethati-Chane Tourism Road	6.39		1.30	5.09		6.39	6.39	Gravel	4.52	
14	40A014R	Nayapul-Birethati-Tikhethundga Road	7.50		1.40	2.95		4.35	4.35	Blacktop / Gravel	1.40	2 km BT and Other Gravel(3 Km to be Constructed)
15	40A015R	Kaure-Jyamdung-Tanting Road	15.50			6.70		6.70	6.70	Gravel	6.70	9 Km to be Constructed
16	40A016R	Melbot-Dhital-Dhampus Road	14.00		5.00	9.00		14.00	14.00	Blacktop / Gravel	13.00	4 Km BT and 10 Km Gravel
17	40A017R	Kahu Khola - Arba - Mauja Road	15.34		2.00	13.34		15.34	15.34	Blacktop / Gravel	15.34	5 Km BT and 10.34 Km Gravel
18	40A018R	Kande-Bhadaure-Salyan Road	10.88		4.60	6.28		10.88	10.88	Blacktop / Gravel	10.88	5 Km BT and 5.88 Km Gravel
19	40A019R	Fulbari-Kahu Tower Tourism Raod	5.50		0.50	5.00		5.50	5.50	Black Top	5.50	
20	40A020R	Baglung Buspark- Sarangkot-Dhikurpokhari Raod	14.00	0.00	1.50	12.50		14.00	14.00	Blacktop / Gravel	14.00	5 Km BT and 9.00 Km Gravel

4.3 Brief Description of District Roads

Brief description of all transport linkages i.e. National highway, Feeder road, District roads, and Village roads in the district are described below:

4.3.1 Briefs of district Roads Class "A"

Study and analysis concluded that Kaski district has 19 numbers of district roads class "A" and 81 numbers of district roads class "B". Most of the district roads are gravel surface, which are mostly all weather roads. Moreover construction quality of the road is poor and has to be upgraded to all weather roads to provide accessibility through out the year to the people to improve overall transport situation of the district. Different roads need different types of interventions which can be viewed in the summary table. The briefs on individual district

roads are described below:

4.3.1.1 Begnash-Bhorletar Road (40A001R)

The road alignment starts at Beghnash chowk of Lekhnath Municipality. It passes through Lekhnath Municipality, Hansapur and Thumki VDC. The settlements passing through this corridor are Begnash Chowk, Sundaredada, Talbeshi, SauryaBash, Chyarpe, Syastri, Pulchowk and bhorletar of Lamjung District. The major market centre on the road corridor is Beghnash chowk and Pulchowk. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from near about prithivi highway and ends on Pulchowk connecting to Bhorletar of Lamjung District and has been providing the road access facility for the people of Lekhnath municipality and Hanspur, Rupakot, Thumki VDCs. The total length of the road is 24.17 km, out of that 2.82 Km road is in blacktop condition, 2.9 Km is in Gravel condition and remaining portion is in earthen Condition. The Major Rivers and khola crossing to this corridor is Dovan Khola, Chisa Khola and Madi River. According to the traffic density this alignment requires blacktop.

4.3.1.2 Rakhi-Mijure Road (40A002R)

The road alignment starts at Bijayapur of Lekhnath Municipality. It passes through Lekhnath Municipality, Kalika and Majhthana VDC. The settlements passing through this corridor are Bijayapur, Kalikasthan, Saurya, Okhale, Bhagwatitar and Ghumle. The major market centre on the road corridor is Bijayapur, Kalikasthan, Saurya and Ghumle. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from prithivi highway and ends on Ghumle and has been providing the road access facility for the people of Leknath municipality and Kalika, Majhthana, Saimarang, Bhachowk, Mijuredada, Hanshapur VDCs. The total length of the road is 19.77 km which is in blacktop condition.

4.3.1.3 Lamachaur-Machhapuchre Road (40A003R)

The road alignment starts at Lamachaur. It passes through Lamachaur, Purunchaur, Sardikhola and Machhapuchre VDC. The settlements passing through this corridor are Lamachaur, Bastola Chowk, Thati, Bhajokhet, Kharpani. The major market center on the road corridor is Lamachaur, Purunchaur, Kharpani etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Lamachaur

and ends on Kharpani and has been providing the road access facility for the people of Pokhara municipality and Purunchaur, Sardikhola, Machhapuchre, Hemja, Lahachowk, Chachowk, Armala VDCs. The total length of the road is 16.00 km which is in blacktop condition. The Major River and khola crossing to this corridor is Bhoti Khola, Bhurjun Khola, Sardi Khola.

4.3.1.4 Kahu-Dudhpokhari Road (40A004R)

The road alignment starts at Kahu of Pokhara Municipality. It passes through Pokhara Minicipality and Arbabijaya, Kalika, Sildajure, Parche VDC. The settlements passing through this corridor are Dudhpokhari chowk, Kaseri, Kaure, Dhanbash, Thak, Taprang, Chiple, Khilang, and Siklesh. The major market center on the road corridor is Kahu, Kaseri, Taprang, Siklesh etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Kahu and ends on Dudhpokhari but the road is now only constructed upto Siklesh and has been providing the road access facility for the people of Pokhara municipality and Arbabijaya, Kalika, Sildajure, Parche ,Namarjung, Thumakodada, Mauja VDCs. The total length of the road is 37.32 km, out of that 3.00 km road is in Gravel condition and remaining portion is in earthen condition. The Major River and khola crossing to this corridor is Kahukhola, Bijayapur Khola, Chipli Khola and Patku Khola. According to the traffic density this alignment requires blacktop.

4.3.1.5 Baidam-Pame-Ghatichina-Damdame-Sidane Road (40A005R)

The road alignment starts at Baidam (Hallan Chowk) of Pokhara Municipality. It passes through Pokhara Minicipality and Sarangkot, Kaskikot, Chapakot, Bhadaure Tamagi VDC. The settlements passing through this corridor are Baidam, Chankhapur, Pame, Baskot, Ghatichina, Damdame, Sidane. The major market center on the road corridor is Baidam, Pame Sidane etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Baidam (Hallan chowk) and ends on Sidane and has been providing the road access facility for the people of Pokhara municipality and Sarangkot, Kaskikot, Chapakot, Bhadaure Tamagi VDCs. The total length of the road is 21.1 km, out of that 6.34 Km road is in blacktop condition, 8.23km is in gravel condition and remaining portion is in earthen condition. The main River and khola crossing to this corridor are Betani Khola,Laure Khola,Khahare Khola,Harpan Khola.

4.3.1.6 Sisuwa-Polangtar Road (40A006R)

The road alignment starts at Sisuwa of Lekhnath Municipality. It passes through Lekhnath Minicipality and Deurali,Siddha VDC. The settlements passing through this corridor are Sisuwa, Saatmuhane, Raja Chautara, Badare, Dadagau, Deurali Bazar, Dhamigau, Mulpani, Thuliswara, Polangtar. The major market center on the road corridor is Sisuwa, Saatmuhane, Deurali, Siddha etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Sisuwa Chowk and ends on Polangtar and has been providing the road access facility for the people of Lekhnath municipality and Deurali, Siddha, Rupakot, Thumki VDCs. The total length of the road is 25.2 km, out of that 7.21 km road is in blacktop condition, 3.5 km road is in gravel condition and remaining portion is in earthen condition. The main River and Khola croosing to this corridor is Khudi Khola,Rupa Tal Khola,Badare Khola,Apu Khola,Khalte Khola.

4.3.1.7 Chorepatan-Kristi-Nirmalpokhari-Bharatpokharai Road (40A007R)

The road alignment starts at Chorepatan of Pokhara Municipality. It passes through Pokhara Municipality, Kristinachnechaur, Nirmalpokhari and Bharatpokhari VDC. The settlements passing through this corridor are Chorepatan, Kamere, Bayali, Dopahere, Shivalaya, Kriyapani, Jibredhunga, Pandethum, Banpale, Dharapani, Malagiri, Bhanjyan, Badarkote. The major market center on the road corridor is Chorepatan, Dopahare, Nirmalpokhari, Bharatpokari etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Chorepatan and ends on Badarkote and has been providing the road access facility for the people of Pokhara Municipality, Kristi, Nirmal Pokhari, and Bharat Pokhari VDC. The total length of the road is 22.50 km, out of that 800 m road is in blacktop condition, 1.2 km road is in gravel condition and remaining portion is in earthen condition. The main River and khola crossing to this corridor is Furse Khola, Bhunge Khola.

4.3.1.8 Hemja-Khanepanimuhan-Lumre-Ghalel Road (40A008R)

The road alignment starts at Hemja. It passes through Hemja, Dhital, and Lwanghalel VDC. The settlements passing through this corridor are Hemja, Melbot, Khanipanimuhan, Bhedabari, Khoramukh, Lumre, and Ghalel Gau. The major market center on the road corridor is Hemja, Lumre, Ghalel Gau etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Hemja and ends on

Ghalel Gau and has been providing the road access facility for the people of Hemja, Dhital, Lwanghalel, Lahachowk, Reevan VDC. The total length of the road is 15.37 km, out of that 850 m road is in blacktop condition, 1.1 Km road is in earthen condition and remaining portion is in earthen condition. The major river and khola crossing to this structure are Budune Khola, Indi Khola, and Pau khola.

4.3.1.9 Saatmuhane-Rupakot-Thumki Road (40A009R)

The road alignment starts at Saatmuhane. It passes through Pokhara N.P., Rupakot, Thumki VDC. The settlements passing through this corridor are Saatmuhane, Kholakochew, Ghimirethar, Maidan, Bhirchowk, Chisapani, Mohariya, Pelunga, Phalyankot, Pulchowk. The major market center on the road corridor is Saatmuhane, Rupakot, Pulchowk etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Saatmuhane and ends on Pulchowk and has been providing the road access facility for the people of through Pokhara N.P., Rupakot, and Thumki VDC. The total length of the road is 23.1 km, out of that 1.52 km road is in Gravel condition and remaining portion is in earthen condition. The main river and khola crossing to this corridor are Rupa Tal Khola and Madi River.

4.3.1.10 Dobilla- Bagmara Road (40A010R)

The road alignment starts at Dobilla. It passes through Pokhara N.P., Nirmalpokhari, Bharatpokari VDC, lekhnath N.P. The settlements passing through this corridor are Dobilla, Chisapani, Kalikasthan, Hanuman Pokhari, Badarkote, Lamghadi, Gagangauda Bazar. The major market center on the road corridor is Dobilla, Lamghadi etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Dobilla and ends on Gagangauda and has been providing the road access facility for the people of Pokhara N.P., Lekhnath N.P., Nirmal Pokhari, BharatPokhari VDC. The total length of the road is 12.20 km, out of that 7.5km road is in Gravel condition and remaining portion is in earthen condition. The Main River and khola crossing to this corridor is Furse Khola, Bhunge Khola, Seti River. This road is funded by RAIDP project.

4.3.1.11 Naudada-Kaskikot-Sarangkot Road (40A011R)

The road alignment starts at Naudada. It passes through Dhikurpokhari, Kaskikot, Sarangkot VDC.The settlements passing through this corridor are Naudada, Simpali, Phallapani, Mandre

Dhunga, Pateshawara, Toripani, Sarangkot. The major market center on the road corridor is Naudada, Kaskikot, Sarangkot etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Naudada and ends on Sarangkot and has been providing the road access facility for the people of Dhikur Pokhari, Kaskikot, Sarangkot. The total length of the road is 12.50 km which is in earthen condition.

4.3.1.12 Kaseri-Bhainse-Thumakodada Road (40A012R)

The road alignment starts at Kaseri of ArbaBijaya VDC. It passes through Arba Bijaya, Kalika, Thumakodada VDC.The settlements passing through this corridor are Kaseri, Sunpadeli, Chitepani, Bhainse, Majhuwa, Yanjakot and Thumakodada. The major market center on the road corridor is Kaseri, BHainse, Thumakodada etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Kaseri and ends on Thumakodada and has been providing the road access facility for the people of Arba Bijaya, Kalika, Thumakodada. The total length of the road is 17.40 km, 1.2km road is in gravel condition and remaining portion is in earthen condition. The major river and khola crossing this corridor is Bijayapur River and Madi River.

4.3.1.13 Birethati-Chane Tourism Road (40A013R)

The road alignment starts at Birethati of Dangshing VDC. It passes through Dangshing and Ghandruk VDC. The settlements passing through this corridor are Birethati, Lamakhet, Syauli Bazar, Kilyu, Kimche,Chane. The major market center on the road corridor is Birethati, Chane etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Birethati and ends on Chane and has been providing the road access facility for tourist as well as dangshing and ghandruk VDC .This is a Main Tourism road of kaski district. The total length of the road is 6.4 km, out of that 1.3 km road is in gravel condition and remaining portion is in earthen condition. The main river and khola crossing to this corridor are Bhurundi Khola,Thado Khola.

4.3.1.14 Nayapul-Birethati-Tikhethundga Road (40A014R)

The road alignment starts at Nayapul on Siddhartha Highway. It passes through Salyan, Lumle, Dangshing .The settlements passing through this corridor are Nayapul, Birethati, Bajhgara, Hile, Thikedhunga. The major market center on the road corridor is Nayapul, Birethati, Thikedhunga etc. It passes through cultivated land, Forest, potential key growth

centre, VDC centre; school etc. This alignment starts from Nayapul and ends on Thikedhunga and has been providing the road access facility for the people of Salyan, Lumle, Dangshing, Ghandruk. It is tourism road of Kaski. The total length of the road is 7.35 km but 4.35 km road only is constructed which is in earthen condition and remaining 3.15km is to be constructed. The Major River and khola crossing to this corridor is Bhurundi Khola and Karai Khola.

4.3.1.15 Kaure-Jyamdung-Tanting Road (40A015R)

The road alignment starts at Kaure on Dudh Pokhari Highway. It passes through Kalika, Sildajure, Thumakodada, Namarjung.The settlements passing through this corridor Kaure, Dadagau, Lamakhet, Jyamdung, Sabi, Bagalethar,Tanting. Road is Planned to be constructed up to Tanting But Now the road is constructed upto Sabi Only and vehicles also run up to Sabi. The major market center on the road corridor is Kaure, Jyamdung, Tanting etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Kaure and ends on Tanting and has been providing the road access facility for the people of Kalika, Sildajure, Thumakodada, Namarjung VDC. The total length of the road is 15.5 km but 6.7 km road only is constructed which is in earthen condition and remaining 8.8km is to be constructed. The Major River and khola crossing to this corridor is Madi River.

4.3.1.16 Melbot-Dhital-Dhampus Road (40A016R)

The road alignment starts at Melbot on Hemja. It passes through Hemja, Dhital, Dhampus VDC.The settlements passing through this corridor are Melbot, Astham, Hyanjakot, Dhital, Dhampus and Deurali. The major market center on the road corridor is Melbot, Dhital, Dhampus etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Melbot and ends on Dhampus and has been providing the road access facility for the people of Hemja, Dhital and Dhampus VDC. The total length of the road is 14.00 km, out of that 5km road is in Gravel condition and remaining portion is in earthen condition.

4.3.1.17 Kahu Khola - Arba - Mauja Road (40A017R)

The road alignment starts at Kahukhola Bazar. It passes through Pokhara N.P., Arba Bijaya, Mauja VDC.The settlements passing through this corridor are Kahukhola, Sundada, Ahadi,

Panidada, Bijayapur, Dadagau, Aatighar, Mohorihya and Mauja. The major market center on the road corridor is Kahukhola, Arba. Mauja etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Kahukhola and ends on Mauja and has been providing the road access facility for the people of Pokhara N.P., Arba Bijaya and Mauja VDC. The total length of the road is 15.40 km, out of that 2km road is in Gravel condition and remaining portion is in earthen condition.

4.3.1.18 Kande-Bhadaure-Salyan Road (40A018R)

The road alignment starts at Kande on Siddhartha Highhway. It passes through Dhikurpokhari, Bhadaure Tamagi, Salyan VDC.The settlements passing through this corridor are Kande, Kaphal Swara, Talibare, Dadakharka, Kameregauda, Bashkharka and Salyan. The major market center on the road corridor is Kande, Bhadaure, Salyan etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Kande and ends on Salyan (Hulak) and has been providing the road access facility for the people of Dhikurpokhari, Bhadaure Tamagi, and Salyan VDC. The total length of the road is 11.90 km, out of that 4.6km road is in gravel condition and remaining portion is in earthen condition.

4.3.1.19 Fulbari-Kahu Tower Tourism Raod (40A019R)

The road alignment starts from Fulbari. It passes through Pokhara N.P., Kahu VDC.The settlements passing through this corridor are Phulbari, Lamichhanethar, Sisneri, View Tower. The major market center on the road corridor is Phulbari etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Phulbari and ends on View Tower and has been providing the road access facility for the people of Pokhara N.P., Kahu VDC. The total length of the road is 5.50 km, out of that 500m road is in gravel condition and remaining portion is in earthen condition.

4.3.1.20 Baglung Buspark- Sarangkot-Dhikurpokhari Road (40A020R)

The road alignment starts at Baglung Buspark. It passes through Pokhara N.P., Sarangkot, Kaskikot, Dhikurpokhari.The settlements passing through this corridor are Baglun Buspark, pokharaphat, Chisakhola, Jamunebot, Gyarjati, Gothadi, Haredada, Padeli, Bhangera, Chipchipe pani, Bhirmuni, Khoriyapani, Simalchaur, Banpale, Adhakaridada, Simpali, Naudada. The major market center on the road corridor is Baglung Buspark, Sarangkot,

Dhikurpokhar etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Baglung buspark and ends on naudada and has been providing the road access facility for the people of Pokhara N.P., Sarangkot, Kaskikot, Dhikurpokhari VDC. The total length of the road is 14 km out of that 1.5km road is gravel and remaining portion is earthen condition.

4.3 Summary of District Roads ("B")

S.N.	DTMP Code No.	Road Name	Total Length (K.M.)	Surface Type(K.M.)			Accessibility Condition		Required Intervention		Traffic Running (K.M.)	Remarks
				Blacktop	Gravel	Earthen	All Weather	Fair Weather	Length Km	Upgarding		
1	40B001R	Chorepatan-Shantistupa-Bhumdi-Ulleri-Kuvinde Road	18.30	0.00	10.20	8.10		18.30	18.30	Blacktop / Gravel	15.00	5 km BT and 13.3 km Gravel
2	40B002R	Mahendra Gufa-Armalakot-Aatighar Mauja Road	13.06	0.80	1.00	11.26	0.80	12.26	12.26	Blacktop / Gravel	8.86	4 km BT and 9.06 km Gravel
3	40B003R	Samibagar-Lahachowk-Machhapuchre Road	11.00	0.00	3.00	8.00		11.00	11.00	Blacktop / Gravel	10.00	3 km BT and 8 km Gravel
4	40B004R	Fursekhola-Ramdi-Matthikhan Road	9.70	0.10	0.20	9.40	0.10	9.60	9.60	Blacktop / Gravel	9.70	3 km BT and 6.7 km Gravel
5	40B005R	Chisapani - Sigarebash – Danlin Road	12.00			12.00		12.00	12.00	Gravel		
6	40B006R	Saurya-Lippani-Ramkot-Hanshpur-Thulabesi Road	22.87	0.00	2.20	20.67		22.87	22.87	Gravel	20.00	
7	40B007R	Bhalam-Ryalechaur-Mauja Bisauna Road	6.19	0.00	0.90	5.29		6.19	6.19	Gravel	5.29	
8	40B008R	Sagrabash -Kyolene -Madhbesi Road	6.00			6.00		6.00	6.00	Gravel	6.00	
9	40B009R	Mardipul-Samibagar-Rivan-Saideghatta Road	12.57	0.00	2.20	10.37		12.57	12.57	Blacktop / Gravel	12.57	4 km BT and 8.57 km Gravel
10	40B010R	Ghatichina - Makawanpur - Bhanjyang Road	12.00			12.00		12.00	12.00	Gravel	7.00	

S.N.	DTMP Code No.	Road Name	Total Length (K.M.)	Surface Type(K.M.)			Accessibility Condition		Required Intervention		Traffic Running (K.M.)	Remarks
				Blacktop	Gravel	Earthen	All Weather	Fair Weather	Length Km	Upgarding		
11	40B011R	Talbesi - Lippani - Chamare Odar Road	11.00			11.00		11.00	11.00	Gravel	8.00	
12	40B012R	RaniPauwa-Bhalam-Batulechaur	6.00	1.80	0.20	4.00	1.80	4.20	4.20	Black Top	6.00	All BT
13	40B013R	Gahatedada-Lamakhet-Mauja Road	12.05	0.00	0.40	11.65		12.05	12.05	Gravel	9.00	
14	40B014R	Gairepokhari-Khalte-Shisaghat	7.71	0.00	1.36	6.35		7.71	7.71	Gravel	7.00	
15	40B021R	Lumle-Chandrakot-Tanchowk-Landruk Road	16.00			16.00		16.00	16.00	Blacktop / Gravel	6.00	4.0 km BT and 12.0 km Gravel
16	40B015R	Pulchowk-Sishaghat	7.50	0.00	0.00	6.13		6.13	6.13	Gravel	6.00	
17	40B016R	Thumsikot-Mugrebesi-Gorge-Mijuredada Road	14.34	0.00	0.00	14.34		14.34	14.34	Gravel	14.00	
18	40B017R	Ghatte Khola- Khani Gau-Dhampus Road	13.00	0.00	6.50	5.50		12.00	12.00	Blacktop / Gravel	12.00	6.5 km BT and 5.5 km Gravel
19	40B018R	Thumsikot-Bhachowk Road	9.26	0.00	0.00	9.26		9.26	9.26	Gravel	9.00	
20	40B019R	Thumsikot-GhahateDada-Mijuredada	7.31	0.00	0.00	7.31		7.31	7.31	Gravel	5.00	
21	40B020R	Milanchowk-Bhagwatitar-Saimarang Road	6.97	0.00	0.00	6.97		6.97	6.97	Gravel	2.00	
22	40B022R	Chorepatan-Khalse-Kubinde Road	8.84	0.80	1.50	6.54	0.80	8.04	8.04	Blacktop / Gravel	4.00	1.5 km BT and 7.84 km Gravel
23	40B023R	Naudada- AdhakariDada-KarkiTahara Road	11.50	0.00	0.00	11.50		11.50	11.50	Gravel	11.50	

4.4.2 Brief of district Roads Class "B"

Study and analysis concluded that Kaski district has 19 numbers of district roads class "A" and 24 numbers of district roads class "B". Most of the district roads are earthen surface, which are mostly Fair weather roads. Moreover construction quality of the road is poor and has to be upgraded to all weather roads to provide accessibility throughout the year to the people to improve overall transport situation of the district. Different roads need different types of interventions which can be viewed in the summary table. The briefs on individual district roads are described below:

4.4.2.1 Chorepatan-Shantistupa-Bhumdi-Ulleri-Kuvinde Road (40B001R)

The road alignment starts at Chorepatan. It passes through Pokhara N.P., PhumdiBhumdi.The settlements passing through this corridor are Chorepatan, Shantistupa, Tallagam, Pumdi, Kalabang, Kavre, Okhale, Tersalek, ulleri, Kuvinde. The major market center on the road corridor is chorepatan, shanistupa, Bhumdi, ulleri, Kuvinde etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Chorepatan and ends on Kuvinde and has been providing the road access facility for the people of Pokhara N.P. and PhumdiBhumdi VDC. The total length of the road is 18.3 km out of that 10.2km road is gravel and remaining portion is earthen condition In which 3 km section from Bhumdi to Ulleri is very poor and Vehicles are not running.

4.4.2.2 Mahendra Gufa-Armalakot-Aatighar Mauja Road (40B002R)

The road alignment starts at Mahendra gufa. It passes through Pokhara N.P., Lamachaur, Armala, Mauja VDC .The settlements passing through this corridor are Mahendra Gufa, Dihi, Patle, Armalakot, Sibini, kuragau, Aatighar. The major market center on the road corridor is Mahendra gufa, Armalakot and Aatighar etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Mahendra gufa and ends on Aatighar and has been providing the road access facility for the people of Pokhara N.P., Lamachaur, Armala and Mauja VDC. The total length of the road is 13.06 km out of that 0.8km road is Blacktop, 1km road is gravel and remaining portion is earthen condition in which 4.2 km section is very poor and vechicles are not running. The Major River and khola crossing to this corridor is Gharmi khola and kali khola.

4.4.2.3 Samibagar-Lahachowk-Machhapuchre Road (40B003R)

The road alignment starts at Samibagar. It passes through Lahachowk, Ghachowk, Machhapuchre VDC .The settlements passing through this corridor are Samibagar, Bhirkatera, Miteritol, Tuse, Dhipran and Kharpani. The major market center on the road corridor is Samibagar, Lahachowk, Kharpani etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Samibagar and ends on Kharpani and has been providing the road access facility for the people of Lahachowk, Ghachowk, and Machhapuchre VDC. The total length of the road is 11.00 km out of that 3 km road is in gravel condition and remaining portion is earthen condition The Major River and khola crossing to this corridor is Lasti khola and Dhipran Khola.

4.4.2.4 Fursekhola-Ramdi-Matthikhan Road (40B004R)

The road alignment starts at Furse khola. It passes through KristiNachnechaur, Pumdibhumdi VDC .The settlements passing through this corridor are Fursekhola, Kamere, Ramadi, and Mattikhan. The major market center on the road corridor is Furse khola, Mattikhan etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Furse khola and ends on Mattikhan and has been providing the road access facility for the people of KristiNachnechaur, Pumdibhumdi VDC. The total length of the road is 9.7km out of that 0.1km road is Blacktop, 0.2km road is gravel and remaining portion is earthen condition The Major River and khola crossing to this corridor is Furse khola.

4.4.2.5 Chisapani - Sigarebash – Danlin Road (40B005R)

The road alignment starts at Chisapani at Dhikurpokhari VDC. It passes through dhikurpokhari VDC.The settlements passing through this corridor are Chisapani, chisapani Pakha, Gairegau, Jibredhunga, Surtane, Agrakhe, Singrabash and danlin (Syanjya) . The major market center on the road corridor is Chisapani, Singrabash etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Chisapani and ends on Danlin (Syanjya) and has been providing the road access facility for the people of Dhikhurpokhari VDC. The total length of the road is 12.00 km which is in earthen condition The Major River and khola crossing to this corridor is Sauraudi khola.

4.4.2.6 Saurya-Lippani-Ramkot-Hanshpur-Thulabesi Road (40B006R)

The road alignment starts at Saurya at Majhthana VDC. It passes through Majhthana and

Hanshpur VDC.The settlements passing through this corridor are Saurya, Raikar, patle, Kaphaldada, Kaule, Syaklun, Ramkot, Dansimaran and Thulabesi. The major market center on the road corridor is Saurya, Hanshpur, Thulabesi etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment has been providing the road access facility for the people of Majhthana and Hanshpur VDC. The total length of the road is 22.87 km in which 2.20 is in gravel condition and remaining portion is in earthen condition.

4.4.2.7 Bhalam-Ryalechaur-Mauja Bisauna Road (40B007R)

The road alignment starts at Bhalam. It passes through Bhalam and Mauja VDC .The settlements passing through this corridor are Samibagar, Bhalam, Ryalechaur, Mauja Bisauna.The major market center on the road corridor is Bhalam, Ryalechaur etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Bhalam and ends on Mauja Bisauna and has been providing the road access facility for the people of Bhalam and Mauja VDC. The total length of the road is 6.19 km out of that 0.9 km road is in gravel condition and remaining portion is earthen condition The Major River and khola crossing to this corridor is Pasmaran Khola.

4.4.2.8 Sagrabash -Kyolene -Madhbesi Road (40B008R)

The road alignment starts at Sagarbash. It passes through Majhthana and Hasnshpur VDC .The settlements passing through this corridor are Sagarbash, Kolyene, Madhbesi.The major market center on the road corridor is Sagarbash, Madhbesi etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Sagarbash and ends on Madhbesi and has been providing the road access facility for the people of Majhthana and Hasnshpur VDC. The total length of the road is 6 km which is in earthen condition.

4.4.2.9 Mardipul-Samibagar-Rivan-Saideghatta Road (40B009R)

The road alignment starts at Mardipul. It passes through Lahachowk, Reevan, Lwanghalel VDC.The settlements passing through this corridor are Mardipul, Samibagar, Humdi, Saideghatta .The major market center on the road corridor is Samibagar, Saideghatta etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Mardipul and ends on Saideghatta and has been providing the road access facility for the people of Lahachowk, Reevan, and Lwanghalel VDC. The total length of the road is 12.57 km out of that 2.2 km road is in gravel condition and remaining portion is earthen condition The Major

River and khola crossing to this corridor is Madi River.

4.4.2.10 Ghatichina - Makawanpur - Bhanjyang Road (40B010R)

The road alignment starts at Ghatichina. It passes through Chapakot, Bhadaure Tamagi VDC.The settlements passing through this corridor are Ghatichina, Makwanpur, Patharegau, Bhanjyan.The major market center on the road corridor is Ghatichina, Makwanpur etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Ghatichina and ends on Bhanjyan and has been providing the road access facility for the people of Chapakot, Bhadaure Tamagi VDC. The total length of the road is 12 km which is in earthen condition

4.4.2.11 Talbesi - Lippani - Chamare Odar Road (40B011R)

The road alignment starts at Talbesi. It passes through Rupakot,Hanspur VDC.The settlements passing through this corridor are Talbeshi, Syaklun, Lipeyani, Hadikholagau, Chamereodar.The major market center on the road corridor is Talbesi, Lipeyani etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Talbeshi and ends on Chamereodar and has been providing the road access facility for the people of Rupakot,Hanspur VDC. The total length of the road is 11 km which is in earthen condition.

4.4.2.12 RaniPauwa-Bhalam-Batulechaur Road (40B012R)

The road alignment starts at Manipal Hospital. It passes through Pokhara N.P., Kahu, Bhalam VDC .The settlements passing through this corridor are Manipal Hospital, Batulechaur. The major market center on the road corridor is Ranipauwa, Batulechaur etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Manipal Hospital and ends on Batulechaur and has been providing the road access facility for the people of Pokhara N.P., Kahu, Bhalam VDC. The total length of the road is 6 km out of that 1.82km road is Blacktop, 0.2km road is gravel and remaining portion is earthen condition The Major River and khola crossing to this corridor is Bhalam Khola and Kali Khola.

4.4.2.13 Gahatedada-Lamakhet-Mauja Road (40B013R)

The road alignment starts at Gahatedada. It passes through Arbabijaya, Mauja VDC.The settlements passing through this corridor are Ghahatedada, Amalachaur, Dhadbesi, Lamakhet, Lamdada, Mauja.The major market center on the road corridor is Gahatedada, Mauja etc. It passes

through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Gahatedada and ends on Mauja and has been providing the road access facility for the people of Arbabijaya, Mauja VDC. The total length of the road is 12.05 km out of that 0.4 km road is in gravel condition and remaining portion is earthen condition The Major River and khola crossing to this corridor is Bijayapur Khola.

4.4.2.14 Gairepokhari-Khalte-Shisaghat (40B014R)

The road alignment starts at Gairepokhari. It passes through Deurali, Siddha and Sisaghat (Tanahu).The settlements passing through this corridor are Gairepokari, Khalte, Sishaghat.The major market center on the road corridor is Gairepokhari, Sishaghat etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Gairepokhari and ends on Sishaghat and has been providing the road access facility for the people of Deurali, Siddha and Sisaghat (Tanahu). The total length of the road is 7.71 km out of that 1.36 km road is in gravel condition and remaining portion is earthen condition The Major River and khola crossing to this corridor is Khalte Khola.

4.4.2.15 Lumle-Chandrakot-Tanchowk-Landruk Road (40B015R)

The road alignment starts at Lumle. It passes through Lumle VDC.The settlements passing through this corridor are Lumle, Chandrakot, Tanchowk, Malem, Landruk.The major market center on the road corridor is Lumle, Landruk etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Lumle and ends on Landruk and has been providing the road access facility for the people of Lumle VDC. The total length of the road is 16 km.

4.4.2.16 Pulchowk-Sishaghat Road (40B016R)

The road alignment starts at Pulchowk. It passes through Thumki, Siddha VDC, Sishaghat (Tanahu).The settlements passing through this corridor are Pulchowk, Polangtar, Sishaghat.The major market center on the road corridor is Pulchowk, Sishaghat etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Pulchowk and ends on Sishaghat (Tanahu) and has been providing the road access facility for the people of Thumki, Siddha VDC, Sishaghat (Tanahu). The total length of the road is 7.5 km which is in earthen condition. The Major River and khola crossing to this corridor is Khalte Khola.

4.4.2.17Thumsikot-Mugrebesi-Gorge-Mijuredada Road (40B017R)

The road alignment starts at Thumsikot. It passes through Bhachowk, Mijuredada VDC.The settlements passing through this corridor are Thumsikot, Mugrebesi, Gorge, Mijuredada.The major market center on the road corridor is Thumsikot, Mijuredada etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Thumsikot and ends on Mijuredada and has been providing the road access facility for the people of Bhachowk, Mijuredada VDC. The total length of the road is 14.34 km which is in earthen condition. The Major River and khola crossing to this corridor is Bardi Khola, Kyaudi Khola, Bhur khola.

4.4.2.18 Ghatte Khola- Khani Gau- Dhampus Road (40B018R)

The road alignment starts at Ghattekhola. It passes through Dhampus VDC.The settlements passing through this corridor are Ghattekhola, Fedi, Dhampus, Deurali, Lekkuna Gau, Khanigau.The major market center on the road corridor is Dhampus. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Ghattekhola and ends on Khanigau and has been providing the road access facility for the people of Dhampus VDC. The total length of the road is 13 km out of that 6.5 km road is in gravel condition and remaining portion is earthen condition The Major River and khola crossing to this corridor is Majhuwa Khola.

4.4.2.19 Thumsikot-Bhachowk Road (40B019R)

The road alignment starts at Thumsikot. It passes through Bhachowk VDC.The settlements passing through this corridor are Thumsikot, Makaikhola gau, Kayare, Bhattedada, Bhachowk.The major market center on the road corridor is Thumsikot. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Thumsikot and ends on Bhachowk and has been providing the road access facility for the people of Bhachowk, VDC. The total length of the road is 9.26 km which is in earthen condition. The Major River and khola crossing to this corridor is Bhumle Khola.

4.4.2.20 Thumsikot-Gahatedada-Mijuredada Road (40B020R)

The road alignment starts at Thumsikot. It passes through Bhachowk and Mijuredada VDC.The settlements passing through this corridor are Thumsikot, Thulo Swara, Gahate, Mijuredada.The major market center on the road corridor is Thumsikot, Mijuredada. It passes through cultivated

land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Thumsikot and ends on Mijuredada and has been providing the road access facility for the people of Bhachowk and Mijuredada VDC. The total length of the road is 7.31 km which is in earthen condition. The Major River and khola crossing to this corridor is Bhumle Khola.

4.4.2.21 Milanchowk-Bhagwatitar-Saimarang Road (40B021R)

The road alignment starts at Milanchowk. It passes through Majhthana, Saimarang VDC.The settlements passing through this corridor are Milanchowk, Bhagwatitar, Karki gau, Baral Dada, Khima, and Saimarang.The major market center on the road corridor is Mianchowk, Bhagwatitar etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Milanchowk and ends on Saimarang and has been providing the road access facility for the people of Majhthana, Saimarang VDC. The total length of the road is 6.97 km which is in earthen condition. The Major River and khola crossing to this corridor is Madi River.

4.4.2.22 Chorepatan-Khalse-Kubinde Road (40B022R)

The road alignment starts at Chorepatan. It passes through Pokhara N.P., Phumdibhumdi VDC .The settlements passing through this corridor are Chorepatan, Pipaldali, Chhapswara, Khalse, Kuvinde. The major market center on the road corridor is Chorepatan, Kuvinde etc. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Chorepatan and ends on Kuvinde and has been providing the road access facility for the people of Pokhara N.P., Phumdibhumdi VDC. The total length of the road is 8.84 km out of that 0.8km road is Blacktop, 1.5 Km road is gravel and remaining portion is earthen condition The Major River and khola crossing to this corridor is Furse khola.

4.4.2.23 Naudada- AdhakariDada- KarkiTahara Road (40B023R)

The road alignment starts at Naudada. It passes through Dhikurpokhari, Kaskikot VDC.The settlements passing through this corridor are Naudada, Simpali, Adhakaridada, Karkiko tahara.The major market center on the road corridor is Naudada, Karki Tahara. It passes through cultivated land, Forest, potential key growth centre, VDC centre; school etc. This alignment starts from Naudada and ends on Karki Tahara and has been providing the road access facility for the people of Dhikurpokhari, Kaskikot VDC. The total length of the road is 11.5 km which is in earthen condition.

Table 4.4:- List of Existing Others Road

S.N.	Road Name	VDC Lies	Settlement Passes Through	Total Length Km
1	Chanaute-Aishaluchaur -Tarebhir	Bhadaure Tamagi, Chapakot, Phumdibhumdi	Chanaute, Lamakhet, Khorpakha, Auselechaur, Tarebhir	9.65
2	Bhalam-Dadagau-Armalakot	Bhalam, Armalakot	Gaireswara, Khor, Dadagau, Armalakot	8
3	Birethati-Dangshing-Morahiya-Chane Road	Dangshing, Ghandruk	Birethati, Khaune, Dansin, Chaudun, Phulban	14
4	Mahendra gufa-Kalamuda Road	Pokhara N.P., Armala	Mahendra Gufa, Kalamuda	4
5	Fedi-Ramadi-Maudada	Deurali, Siddha	Phedi, Ramadi, Kaire Pakha, Maudada	12
6	Thulakhet-Harpan-Tamagi-Panchase	Bhadaure Tamagi	Thulakhet, Chainpur, Harpan, Kuiredada, Tamagi, Panchase	16
7	Dharapani-Andheri Khola- Deurali-Salyan			
8	Bamdi-Okhaldhunga-ghaderi-tarebhir	Chapakot, PhumdiBhumdi	Bamdi, Okhaldhunga, Ghaderi, Tarebhir	9
9	Dopahere-Kristi-Majhgau-Bakrek	Kristi	Dopahere, Kristi, Majhgau, Bakrek	8
10	Dobilla-Nirmalpokhari-Chlaunekharka-Shulighopte	Nirmal Pokhari	Dobilla, Nirmal Pokhari, Chilaunekharka, Lamakhet, Shulighopte	12
12	Hemja-Sajha-Tibetian Camp	Hemja	Hemja, Tibetian Camp	5
15	Shiva-Chandi Road	Thumki	Rambazar, Pulchowk	6
18	Nayapul-Jhowang-Thamarjung Road	Salyan, Parbat	Nayapul Jhowang, Thamarjung	10
19	Sisuwa-Syankhudi-Saurya Road	Lekhnath N.P., Majhthana	Sisuwa, Syankhudi, Saurya	7
20	Arba-Kaseri-Surkemaidan Road	Arba, Kalika	Arba, Kaseri, Surkemaidan	10
23	Shantistupa- Net-Neurani-Chapakot Road	Chapakot	Net, Tallogau, Simle, Lamdada, Chapakot	8
24	Gharmikhola- Jumleti- Dhikidada- Sudako Mukh-Amareshowr-Puranchaur	Armala, Puranchaur	Gharmikhola, Jumleti, Dhikidada, Sudako Mukh, Amareshowr, puranchaur	
25	Fursekhola-Paharidada-Kristi	Kristi	Fursekhola, Pakhridada, Bayeli, Dopahere, Kristi	8
26	Kahu-8,- Bhalam- Mauja	Bhalam, Mauja		
13	Kalimati-Shantistupa			
14	Dopahere-Bakrek-Pauwegaude Road			

S.N.	Road Name	VDC Lies	Settlement Passes Through	Total Length Km
11	Lahachowk Mul Marga			
16	Chabi Smiriti Road			
17	Bamdi-Chapakot-Ghaderi-Tarebhir			
21	Deurali-Aappata-Chitepani-Thulaswara-Tham lankyar Road			
22	Gairekhor-Tariko Basti Rural Road			

Table 4.5:- List of Existing Road Identified in Illaka Level Workshop

S.N.	Road Name	VDC Lies	Settlement Passes Through	Length Km
1	Kharani-Rakhidada, Kalika	Lekhnath N.P., Kalika	Kharaniphat, Ghari, Rakhidada, Nareshpur, Kalika	8
2	Majhthana-begnash-Khudiyanmohan-Sisuwa	Lekhnath N.P., Majhthana	Majhthana, begnash, Khudiyanmohan, Sisuwa	
3	Chainpur-Deurali-Barpauwa-Chauhadi	Bharatpokhari	Chainpur, Deurali, Barpauwa, Chauhadi	11
4	Chitepani-Ghachowk	Puranchaur, Ghachowk	Chitepani, Ghachowk	4
5	Dhiprang-rumja-karwa-poche tatopani tourism road	Machhapuchhre	Dhiprang, Rumja, Karwa, Poche, Tatopani	
6	Bhurjun Khola-Khairman Rural Road	Sardikhola	Bhurjun Khola, Khaimaran	8
7	kholako chew-aapukhola-bhorle-Phalbhanjyan	Rupakot, Deurali	Kholko Chew, Aapukhola, Bhorle, Phalbhanjyan	12
8	Kholakochew-bhangera-Taalbeshi	Rupakot	Kholako chew, Bhangera, Talbeshi	8
9	Sauryabash-Phalbhanjyan-Kharagau-Derali-Ramadi	Rupakot, Deurali	Sauryabash, Kharagau, Derali, Ramadi	16
10	SheraJaubari-deurali-Ankuna	Hemja, Kaskikot	Sherajaubari, Deurali, Ankuna	13
11	Bhakune Bhanjyan-Rauseodar	Kaskikot, Sarangkot	Bhakune Bhanjyan, Rauseodar	12
12	Katre-BAmdi-Chanaute-Ghatichina	Chapakot, Bhadaure Tamagi	Katre, Bamdi, Chanaute, Ghatichina	
13	Sedi-Methlan-Gyarjati	Sarangkot	Sedi, Methlan, Gyarjati	5
14	Katre-Margi-Phumdibhumdi	Chapakot, Phumdibhumdi	Katre, Magri, Phumdibhumdi	10
15	Saimarang-Lamtari	Saimarang	Saimarang, Lamtari	5
16	Mijuredada-Kasna-Posi-Umdi	Mijuredada	Mijuredada, Kasna, Posi, Umdi	14
17	fursekhola-Bhaldada-Kristi	Kristi	Fursekhola, Bhaldada, Kristi	9
18	Deurali Gaira-Thakuri Gau-Mattikhan	Kristi	Deurali Gaira, Thakuri gau, Mattikhan	6
19	Tilahar-Tarebhir-Motichowk Raod	PhumdiBhumdi	Tilahar, Tarebhir, Motichowk	7
20	Dobilla-Maidan-Thuliswara-Suruadi	Nirmal Pokhari	Dobilla,Maidan, Thuliswara, Suruadi	15
21	Nirmalpokhari-Baspani-Kapase	Nimalpokhari	Nirmalpokhari, Baspani, Kapase	7
22	Dobilla-Damsadi-Shivalaya-Mahabari-Jamarke	Nimalpokhari	Dobilla, Damsadi, Shivalaya, Mahabari, Jamarke	16
23	Damsadi Khola-Phoksin-Simle-Khampur	Kristi, Nirmalpokhari	Damsadi Khola, Phoksin, Simle, Khampur	11
24	Jamunabot-Dhurseni-Thuliswara-Mahabari-Simle	Nirmalpokhari, Bharatpokhari	Jamunabot, Dhurseni, Thuliswara, Mahabari, Simle	13
25	Arbabijaya Ma. Bi.-Dihigau-Buddha chowk	Arbabijaya	Arbabijaya Ma. Bi., Dihigau, Buddha chowk	9
26	Sajha-Kulayan Mauja Marga	Arbabijaya	Sapthako Dil, Sigdelthar, Amalachaur, Mauja	6

S.N.	Road Name	VDC Lies	Settlement Passes Through	Length Km
27	Fedi-Hymjakot-Dhital	Dhital	Fedi, Hyanjakot, Dhital	6
28	Ghalel-Kalimati-Ghipli-Ramche	Lwalghalel	Ghalel, Kalimati, Ghipli, Ramche	8
29	Patle-Armaleshowr-Netapokhari-Aalebari-Armala	Armala, Purunchaur	Patle, Armaleshowr, Netapokhari, Aalebari, Armala	11
30	Kharpani-Bharabhari-Kavre Tourism Trial	Sardikhola	Bhurjunkhola, Khadrjun, Ghalekharka, Khaimaran	7
31	Armala Bisaune-Gharmi-Kevere Road	Armala, Purunchaur	Armala Bisaune, Gharmi, Kevere	4
32	Pame-Baskot-Gairabari-guntechaur-Phallapani	Kaskikot	Pame, Baskot, Gairabari, Guntechaur	5
33	Ghatichina-Kumdidada-sidane-Panchase	Bhadaure Tamagi	Ghatichina, Kumdidada, sidane, Panchase	17
34	Chainpur-Simpani-Bimirabohar-Panchase	Bhadaure Tamagi	Chainpur, Simpani, Bimirabohar, Panchase	7
35	Ghatichina-Makwanpur-PAnchase	Chapakot, Bhadaure Tamagi	Ghatichina, Barang, Makwanpur, Sidane, Panchase	20
36	Parsyan-Netakochautara-Methlang-Gyarjati	Pokhara N.P., Sarangkot	Parsyan, Netakochautara, Methlang, Gyarjati	6
37	Talbesi-Hangebange-Ramkot-Thulebesi	Hanspur	Talbeshi, Kaure, Hangebange, Ramkot, Hashpokhari, Thulebesi	10
38	Hangebange-Dharapani-Dhittabatho-Indragufa	Hanspur	Hangebange, Dharapani, Dhittabatho, Indragufa	6
39	Mugregau-Balauwa-Charagau(Lamjung)	Mijuredada, Lamjung	Mugregau, Balauwa, Charagau(Lamjung)	6
40	Deurali-Aapukhola Road	Rupakot, Deurali	Rupatal chew, Pipaldali, Apukhola, Deurali	
41	Thati-Kolthumki-Bilmade Road	Siddha, Tanahun	Thati, Kolthumki, Bilmade	
42	Pame-Chankhapur-Bhanjyan-Padeli	Sarangkot	Pame, Chankhapur, Bhanjyan, Padeli	10
43	Thulachaur-saibhanjyan-Paugaude Road	Kristi, Syanjya	Thulachaur, saibhanjyan, Paugaude Road	6
44	Deuraligaira-malagiri-Haprak-Dadeligau-Majhgau-Bakrek	Kristi	Deuraligaira, malagiri, Haprak, Dadeligau, Majhgau, Bakrek	5
45	Kaphaldada-Sasarku Road	Chapakot	Motirajchowk, Kaphaldada, Patle, Simle, Sasarku	7
46	Naudada-Sherachaur-Saurani-Thullachau-Thulakhet	Dhikurpokhari, Bhadaure Tamagi	Naudada, Sherachaur, Saurani, Thullachaur, Thulakhet	10
47	Naudada-Bhirmuni-Lakuribot-Simle-Karkitahara	Dhikurpokhari, Kaskikot	Naudada, Bhirmuni, Lakuribot, Simle, Karkitahara	8
48	Bhirkot-Lamshalthar-Machhapuchure Khahare	Lahachowk, Ghachowk, Machhapuchhure	Bhirkot, Lamshalthar, Machhapuchure, Khahare	7
49	Milanchowk-Gaurishankar-Campus Gate	Hemja	Milanchowk, Gaurishankar Campus Gate	5
50	Majhbhatti-Tulsichowk-Gahate-Astham Tourism Trial	Hemja, Dhital	Majhbhatti, Tulsichowk, Gahate, Astham	

Table 4.6:- List of Existing Trail Bridge

S.N.	District	Bridge No.	River Name	Type	Span (m)	River Name	Trial Type	VDC in left Bank	VDC in Right Bank	Completion (FY)	Funding (Foreign)
1	Kaski	39 5 005 18 06 1	Mukhiya Khola	D	39	Mouri Khola	Local	Bhachok	Saimarang	2001/2002	SDC
2	Kaski	39 5 034 18 06 2	Mardi Khola	D	62	Mardi Khola	Local	Lahachok	Lahachok	1995/1996	KAABGN
3	Kaski	39 5 038 18 06 1	Sardi Khola	D	68.5	Sardi Khola	Local	Sardikhola	Sardikhola	2000/2001	SDC
4	Kaski	39 5 027 18 06 4	Matathanti Khola	D	35.2	Matathanti Khola	Local	Dangsing	Dangsing	1995/1996	KAABGN
5	Kaski	39 5 029 18 06 8	Modikhola Bridge	D	120	Modi Khola	Local	Lumle	Ghandruk	2007/2008	RAIDP+SDC/DFID
6	Kaski	39 5 027 18 06 5	Tikhe dhunga	D	29.6	Mauja Khola	Local	Dangsing	Dangsing	1996/1997	KAABGN
7	Kaski	39 5 036 18 06 2	Ghatte Khola	ST	16	Ghatte Khola	Local	Machhapuchchhre	Machhapuchchhre	1997/1998	KAABGN
8	Kaski	39 5 036 18 06 3	Setimure Ghat	D	55	Seti Khola	Local	Machhapuchchhre	Machhapuchchhre	1997/1998	KAABGN
9	Kaski	39 5 031 18 06 1	Thulo Khola	D	49	Thulo Khola	Local	Lumle	Lumle	1997/1998	KAABGN
10	Kaski	39 5 019 18 06 1	Gejabas						Lama Chaur	2001/2002	
11	Kaski	39 5 029 18 06 1	Himalkyu	LN	28.1	Modi Khola		Bhachok	Ghandruk	1977/1978	
12	Kaski	39 5 029 18 06 2	Dhahoo Khola	D	53	Dhahoo Khola	Local	Ghandruk	Ghandruk	2004/2005	KAABGN
13	Kaski	39 5 020 18 06 1	Syanikhola	D	65.5	Syani Khola	Local	Mauja	Arba Bijaypur	2003/2004	SDC
14	Kaski	39 5 001 18 06 1	Wardi	LN	44.8	Wardi Khola			Bhachok	1972/1973	
15	Kaski	39 5 039 18 06 1	Huimo Khola	D	71	Huimo Khola	Local	Bhadauretamago	Bhadauretamago	2004/2005	KAABGN
16	Kaski	39 5 021 18 06 1	Dovan Puchhar	D	50	Kahun Khola	Local	Mauja	Bhalam	2001/2002	SDC
17	Kaski	39 5 027 18 06 1	Chimrung	LN	56	Modi Khola		Lumle	Dangsing	1985/1986	
18	Kaski	39 5 027 18 06 2	Birethanti	ST	32	Modi Khola	Main	Lumle	Dangsing	1995/1996	

S.N.	District	Bridge No.	River Name	Type	Span (m)	River Name	Trial Type	VDC in left Bank	VDC in Right Bank	Completion (FY)	Funding (Foreign)
19	Kaski	39 5 027 18 06 3	Nepane Khola	D	33	Nepane Khola	Main	Dangsing	Dangsing	2005/2006	KAABGN
20	Kaski	39 5 040 18 06 1	Andheri Khola	D	69	Andheri Khola	Local	Dhikur Pokhari	Dhikur Pokhari	2000/2001	SDC
21	Kaski	39 5 029 18 06 3	Chane Khola	D	23	Chane Khola	Local	Ghandruk	Ghandruk	1994/1995	KAABGN
22	Kaski	39 5 033 18 06 1	Seti Khola (Ratopani)	D	118	Seti Khola	Main	Sardikhola	Ghachok	2004/2005	KAABGN
23	Kaski	39 5 029 18 06 4	Kyuri Khola	D	60	Kyuri Khola	Local	Ghandruk	Ghandruk	1995/1996	KAABGN
24	Kaski	39 5 012 18 06 1	Sindi Ko Mukh	D	167.3	Bijayapur Khola	Main	Arba Bijaypur	Kalika	2000/2001	SDC
25	Kaski	39 5 029 18 06 5	Satkyu Khola	D	23.6	Satkyu Khola	Local	Ghandruk	Ghandruk	1995/1996	KAABGN
26	Kaski	39 5 012 18 06 2	Suntike-Bhaise	D	93	Madi khola	Local	Thumakodanda	Kalika	2000/2001	SDC
27	Kaski	39 5 001 18 06 2	Makai khola Ghat	D	112	Wardi khola	Local	Mijuredanda	Bhachok	2006/2007	SDC
28	Kaski	39 5 029 18 06 6	Koronja	ST	32	v	Local	Ghandruk	Ghandruk	1997/1998	KAABGN
29	Kaski	39 5 017 18 06 1	Phurse Khola	N	79	Phurse Khola	Main		Kristi Nachnechaur	1992/1993	
30	Kaski	39 5 001 18 06 3		D	100	Makai Khola	Local	Bhachok	Bhachok	2006/2007	RAIDP+SDC/DFID
31	Kaski	39 5 029 18 06 7	Siwing	D	26	Siwing Khola	Local	Ghandruk	Ghandruk	1997/1998	KAABGN
32	Kaski	39 5 017 18 06 2	Mausuli Khola	D	77	Mausuli		Kristi Nachnechaur	Kristi Nachnechaur	2002/2003	KAABGN
33	Kaski	39 5 003 18 06 2	Tanting Bridge	D	81	Tanting khola	Local	Namarjung	Namarjung	2006/2007	RAIDP+SDC/DFID
34	Kaski	39 5 034 18 06 1	Dhab Ghat	N	127	Seti Gandaki	Main	Puranchaur	Lahachok	1986/1987	
35	Kaski	39 5 028 18 06 1	Majuwa khola Bridge	D	60	Majuwa khola	Local	Dhampus	Dhampus	2006/2007	RAIDP+SDC/DFID
36	Kaski	39 5 035 18 06 1	Mordi Khola	N	127	Mordi Khola	Main	Ribhan	Lwangghalel	1986/1987	
37	Kaski	39 5 035 18 06 2	Mardibang	D	73.5	Mardi khola	Local	Lwangghalel	Lwangghalel	2000/2001	SDC
38	Kaski	39 5 036 18 06 1	Seti Khola	D	97	Seti Khola	Main	Sardikhola	Machhapuchhre	2005/2006	KAABGN

S.N.	District	Bridge No.	River Name	Type	Span (m)	River Name	Trial Type	VDC in left Bank	VDC in Right Bank	Completion (FY)	Funding (Foreign)
39	Kaski	39 5 013 18 06 1	Madi Khola	D	58	Madi Khola	Main	Saimarang	Majhthana	1979/1980	
40	Kaski	39 5 013 18 06 2	Madi River (Bhagavati)	D	121.5	Madi River	Main	Saimarang	Majhthana	2004/2005	KAABGN
41	Kaski	39 5 003 18 06 1	Ghyamrang Ghat	D	70	Ghyamrang Khola	Local	Namarjung	Namarjung	2003/2004	SDC
42	Kaski	39 5 016 18 06 1	Damsadi Ghat	D	195.1	Phurse/Pardi khola	Main	Pokhara Sub Metropolitan	Nirmalpokhari	1999/2000	
43	Kaski	39 5 004 18 06 1	Idukhola Ghat	D	73	Idu Khola	Local	Parche	Parche	2000/2001	SDC
44	Kaski	39 5 004 18 06 2	Tagimadi Ghat	D	108	Madi Khola	Local	Namarjung	Parche	2002/2003	SDC
45	Kaski	39 5 004 18 06 3	Mailakuna	D	105	Padku Khola	Local	Parche	Parche	2003/2004	SDC
46	Kaski	39 2 001 18 06 1	Kali Khola	N	92	Kali Khola	Main	Bhalam	Pokhara Sub Metro	1979/1980	
47	Kaski	39 2 001 18 06 2	Tulsi Bagaincha	D	91	Seti Gandaki	Main	Pokhara	Pokhara	1979/1980	
48	Kaski	39 5 018 18 06 1	Chimri Ghat	D	68	Bhangere	Local	Pumdi Bhumdi	Pumdi Bhumdi	2000/2001	SDC
49	Kaski	39 5 025 18 06 1	Hemja		15		Local	Hyangja	Hyangja	1984/1985	KAABGN
Lamjung and Kaski Border											
50	Kaski	37 5 035 18 06 2	Rudi Khola	D	60	Rudi Khola	Main	Mijuredanda	Pasgaun	1981/1982	
51	Kaski	37 5 035 18 06 3	Rudhi Khola	D	71.7	Rudhi Khola	Local	Mijuredanda	Pasgaun	1994/1995	SDC
52	Kaski	37 5 035 18 06 4	Rudi Khola Bridge	D	43.3	Rudi Khola	Local	Mijuredanda	Pasgaun	2001/2002	SDC
53	Kaski	37 5 035 18 06 5	Tamja Bridge	D	37.3	Togo Khola	Local	Mijuredanda	Pasgaun	2004/2005	SDC
Syangja and Kaski Bordar											
54	Kaski	41 5 037 18 06 1	Kuling Khola	D	73.9	Kuling Khola	Local	Kahun	Kyakmi	2005/2006	KAABGN
55	Kaski	41 5 002 18 06 1	Saraundi Khola Dovan	D	80.9	Saraundi Khola	Main	Kristi Nachnechaur	Taksar	2002/2003	KAABGN
56	Kaski	41 5 047 18 06 1	Hungi Ghat	D	228	Kali Gandaki	Main	Hyangja	Tulsi Bhanjyang	1982/1983	
57	Kaski	41 5 053 18 06 1	Arghali	D	199.6	Kali Gandaki	Main	Argala	Chandibhanjyang	1996/1997	

CHAPTER V: - DISTRICT NETWORK PLANNING

Rural transportation mainly deals with providing accessibility abutting people, mechanizing and commercializing the agriculture, promoting the non-farm sector and providing the extension and administrative services to the local people. In the context of Nepal, A fixed point system model is adopted for networking where junctions are confined to a finite set of location (market, historical location).

5.1 Accessibility Situation

Accessibility comprises use or consumption of the services of available infrastructures as per the affordability of people. The access gained through improving physical infrastructure development and complementary activities can bring positive changes on the lifestyles of rural people. Accessibility has three major elements namely; a) location of individuals, b) location of supplies of survices or infrastructure to which individuals need access and c) the link to bring the two together.thus, accessibility implies majority (of users) and proximity (to services)

After collecting all existing roads within the district with GPS machine, all the data collected from field were transferred into the GIS Map. An attempt was made to assess the accessibility situation of the district with the help of modelling in GIS. The Kaski district belongs to hill area so, the area from where people can reach the roadhead of all weather road within 4 hours walk has been considered as accessibility area and beyond that area considered as inaccessibility araea. The study reveals that all of the available roads are earthen and fair weather in nature so, road can be open only during winter season.

5.2 Zone of Influence Area

The zone of influence (ZOI) area of each road has been considered the area within 4 hours walk distance from left and right of that road.

5.3 Delineation of Accessible Area

By the using Modeling in GIS map, area within 4 walk hour's distance from right and left side of existing road had been delineated as a accessibility area.

5.4 Accessible Area, Coverage and Population

Accessibility situation of the Kaski .district has been assessed based on serviceability of the transport linkage i.e. all weather and fair weather type of roads. In Kaski district, except strategic road, all are fair weather roads. Study reveals that accessibility area can be categorized

into accessible and partially accessibilbe VDC. Almost the north part of the district is higher Himallaya range so there are neither settlements nor road accessibility. Table 5.1 shows that about 44.95 % (907.65 Sq.km) of total area are under accessible area based on serviceability of all weather raod. Similarly all total area falls under accessible area based on serviceability of all fair weather roads. Only 16 VDCs have fair weather serviceability situation. The following table shows the accessibility area, coverage and population.

Table 5.1: Accessible Area, Coverage and Population

Serviceability	Accessible area (sq.km)	%	Accessible VDCs/Municipality	Partially accessible VDCs
All weather	907.65	44.95	Mauja, Valam, Lahachowk, Ghachowk, Bharatpokhari, Lekhnath, Pokhara, Rupakot, Deurali, Hansapur, Siddha, Bhadauretamagi, Chapakot, Sarangkot Dhital, Lwanghalel, Rivan Lamachaur, Hemja, Purunchaur Arwabijaya, Kanhu, Kalika, Armala, Pumdi Vumdi, Kristi, Nirmalpokhari, Kaskikot	
Fair weather	1414.32	70.12	All VDCs and Municipality (Parche, Sildujure, Mauja, Valam, Lahachowk, Ghachowk, Machhapuchre, Sardi Khola, Vachowk, Namarjung, Saimarang, Thumako Danda, Bharatpokhari, Lekhnath, Pokhara, Rupakot, Deurali, Hansapur, Thumki, Siddha, Bhadauretamagi, Chapakot, Sarangkot Dhital, Lwanghalel, Rivan Lamachaur, Hemja, Purunchaur Arwabijaya, Kanhu, Kalika, Armala, Pumdi Vumdi, Kristi, Nirmalpokhari, Shidda, Dhampus, Machhapuchchhare, Dansing, Ghandruk, Kaskikot	Not nesessery for High Himalaya Range

5.5 Delineation of inaccessible Area

After delineating the accessible areas, the un-served areas which are beyond the Zol (as per national transport policy) is taken as inaccessible area. The planning team proposes the road network for the inaccessible area delineated by the Zol analysis.

5.6 Inaccessible Area, Coverage and Population

Table 5.2 shows that about 29.88 % (602.68 Sq.km) of total area are found inaccessible in the case of fair weather serviceability of raod. All VDC is accessible and the upper or North part of the district is inaccessible due to high altitude and high Himalaya range. The following table shows the accessibility area, coverage and population.

Table 5.2: Inaccessible Area and Coverage

Serviciabilit	Inaccessible area	Percentag	Inaccessible VDCs
All weather	602.68	29.88 %	
Fair weather			

5.7 Network planning in-inaccessible Area

After deleanating inaccessibility area, preliminary road network have been prepared based on the nodal points/market centres and national transport policy of 4 hours i.e. from each settlement, people should reach to the road head of all weather road within 4 hours walk distance, the preliminary road network have been presented in DTICC meeting and Cluster of Illaka level workshop and indepth discussion were made and finalized the road network for that inaccessible area. Based on the requirement, following transport linkages with required intervention have been proposed for district road network. In the case of the Kaski district there is no inaccessible area where settlement and Cultivated land.

CHAPTER V: - DISTRICT NETWORK PERSPECTIVE PLAN (DTPP)

6.1 Perspective Plan of District Rural Road Networks

The DTPP has a perspective of 20 years. The DTPP is revised every five years when a new DTMP is prepared according to the rolling plan system.

6.2 Scoring system for prioritisation of Rural Roads Class A and Class B for Upgrading

The following criteria are proposed for prioritisation of District and Village Roads for Upgradig.

Table 6.1: Scoring System for Prioritisation for Upgrading

S.N	Criteria	Scoring Unit	Score
1	Traffic Unit	cost /TU	70
2	Cost	Cost /km	20
3	Market /Service centre	Centrality Index	10
		Total	**100**

Parameters for Prioritization for New Linkage

Traffic Unit

Information of traffic data has been collected from field data. Cost estimate was based on the data collected during the walkover survey for inventory of existing road. Unit cost has been calculated on the basis of district approved rate for labour and materials. The volume and type of traffic movements is the major indicator for assessing the relative importance of existing road links. However, since most of the roads being considered for rehabilitation/upgrading are fair weather earthen roads that are in a poor state or closed to traffic, the conduct of a traffic census is usually not effective in providing the data required. Instead, the data on traffic movement is gathered from RRA and discussions with key individuals within the road corridor and at district and village level. Scores are awarded on the basis of the estimated traffic volumes on each of the roads being considered for rehabilitation. In accordance with traffic coefficients given in DoLIDAR's "Approach for the Development of Rural and Agricultural Roads", large trucks (more than 10 tones carrying capacity) and buses (Over 40 passengers) are given a weight of 4.0, small trucks (up to 10 tones carrying capacity) and buses (up to 40 passengers) are given 3.0 and tractors.-(4W towed trailers) are given a weight of 3.0, cars and pick-ups, light-vans, jeeps are given a weight of 1.0.

The road having the highest beneficiaries population per investment cost is given highest score i.e. 70. The scoring of the individual District Road A and B based on traffic unit is given in annex. -

Costs

Cost estimate is based on the data collected during the walkover survey for inventory of existing road. Unit costs are calculated on the basis of district approved rate for labour and materials. The linkage having the lowest per km cost get the highest score i.e. 20. The scoring of the individual District Road A and B based on cost is given in annex.

Market/Service Centres

Market Survey is carried out to identify market and service centre. Data and information collected in the field is the main basis for determining the importance on relative importance of market/service centre and central places. For evaluation purpose, data of offices, industry, business & commerce, education, and health, are combined for the centre and its influence area. Assessment of economic facilities and services existing in the market/service centres and their catchments areas leads to the identification of the most important market/service centre. All proposed roads scores based on centrality index of market /service centre by using same calculation method. The linkage having the lowest per km cost get the highest score i.e. 10. The scoring of the individual District Road A and B based on centrality index is given in annex.

The total scoring of all parameters per road corridor for prioritization of District Road A and B for Upgrading have been compiled in Table 6.2 and 6.3 respecticely as following.

6.3 Prioritized Existing Transport Linkages for Upgrading

6.3.1 Prioritised List of District Road 'A' and 'B' For Upgrading to Black Top and Gravel (All Weather)

Based on socio-technical analysis and techno-political interface during the several field level and district level meetings during the field level study, it has been proposed that 18 numers of district A type and 7 numbers in B type of roads need to upgrade to Black Top. These entire eighteen roads have been taken in long tern pespspective plan. About 168.83 km length of road would be upgraded to Black Top. Similarly 16 roads which are earthen and their serviceability is fair-weather type, have been proposed for upgrading to gravel to bring these road upto all weather condition. The details are given in below table 6.2 and 6.3.

Table 6.2:-Prioritized District Road A for 20 Year DTPP for Upgrading to Blacktop all weather

S.N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to Blacktop km	Parameter Used for the Priorisation of Road Corridors and their corresponding Scores				
					Traffic Volume per cost (70)	Market/ Service centre (10)	Cost (20)	Total Score (100)	Priority Rank
1	40A001R	Begnash-Bhorletar Raod	24.17	21.35	70.00	12.74	2.31	85.05	1
2	40A002R	Rakhi-Mijure Road	19.77	10	62.43	18.45	2.30	83.17	2
3	40A003R	Lamachaur-Machhapuchre Road	16		54.18	20.00	2.86	77.04	3
4	40A004R	Kahu-Dudhpokhari Road	37.32	37.32	59.05	13.26	3.28	75.59	4
5	40A005R	Baidam-Pame-Ghatichina- Sidane Road	21.1	14.76	43.65	16.25	10.00	69.90	5
6	40A006R	Sisuwa-Polangtar Road	25.2	18.1	47.77	13.43	4.58	65.79	6
7	40A007R	Birethati-Chane Tourism Road	6.39	6.39	58.78	2.53	2.22	63.53	7
8	40A008R	Chorepatan-Kristi-Nirmalpokhari-Bharatpokharai	22.5	21.7	43.18	13.71	6.10	63.00	8
9	40A009R	Hemja-Khanepanimuhan- Ghalel Road	15.37	14.52	49.13	10.26	2.13	61.51	9
10	40A010R	Saatmuhane-Rupakot-Thumki Road	23.09	23.09	39.77	15.11	2.31	57.19	10
11	40A011R	Dobilla- Bagmara Road	12.19	12.19	37.74	17.73	0.10	55.58	11
12	40A012R	Naudada-Kaskikot-Sarangkot	12.5	12.5	29.98	13.32	5.25	48.56	12
13	40A013R	Kaseri-Bhainse-Thumakodada Road	17.36	17.36	34.51	10.54	0.77	45.81	13
14	40A014R	Nayapul-Birethati-Tikhethundga Road	7.5	4.35	41.57	4.03	0.05	45.65	14
15	40A016R	Melbot-Dhital-Dhampus Road	14	14	11.01	10.67	4.11	25.78	16
16	40A017R	Kahu Khola - Arba - Mauja Road	15.34	15.34	5.60	13.63	2.62	21.86	17
17	40A018R	Kande-Bhadaure-Salyan Road	10.88	10.88	0.05	18.45	0.68	19.19	18
18	40A019R	Fulbari-Kahu Tower Tourism Raod	5.5	5.5	2.77	14.59	1.11	18.47	19
19	40A020R	Baglung Buspark- Sarangkot-Dhikurpokhari Raod	14	14	0.06	10.67	2.42	13.15	20

Table 6.3:-Prioritized District Road A for 20 Year DTPP for Upgrading to Gravel

S.N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to Gravel km	Parameter Used for the Priorisation of Road Corridors and their corresponding Scores				
					Traffic Volume per cost (70)	Market/ Service centre (10)	Cost (20)	Total Score (100)	Priority Rank
1	40A015R	Kaure-Jyamdung-Tanting Road	15.5	6.7	22.72	2.91	0.55	26.18	15

Table 6.4:-Prioritized District Road B for 20 Year DTPP for Upgrading to Black Top all weather

S.N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to BT km	Parameter Used for the Priorisation of Road Corridors and their corresponding Scores				
					Traffic Volume per cost (70)	Market/ Service centre (10)	Cost (20)	Total Score (100)	Priority Rank
1	40B001R	Chorepatan-Shantistupa-Bhumdi-Ulleri-Kuvinde Road	18.3	18.3	70.00	15.38	10.00	95.38	1
2	40B002R	Mahendra Gufa-Armalakot-Aatighar Mauja Road	13.06	12.26	69.36	11.02	2.68	83.06	2
4	40B003R	Samibagar-Lahachowk-Machhapuchre Road	11	11	44.79	20.00	1.08	65.87	3
3	40B004R	Fursekhola-Ramdi-Matthikhan Road	9.7	9.6	52.44	10.81	0.90	64.14	4
5	40B009R	Mardipul-Samibagar-Rivan-Saideghatta Road	12.57	12.57	6.12	18.77	1.63	26.52	9
6	40B012R	RaniPauwa-Bhalam-Batulechaur	6	4.2	7.25	15.08	1.52	23.86	12
7	40B018R	Ghatte Khola- Khani Gau- Dhampus Road	13	12	7.20	8.15	0.05	15.39	18

Table 6.5:-Prioritized District Road B for 20 Year DTPP for Upgrading to Gravel all weather

S.N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to Gravel km	Parameter Used for the Priorisation of Road Corridors and their corresponding Scores				
					Traffic Volume per cost (70)	Market/ Service centre (10)	Cost (20)	Total Score (100)	Priority Rank
1	40B005R	Chisapani - Sigarebash - Danlin	12	12	32.48	18.09	1.63	52.20	5
2	40B006R	Saurya-Lippani-Ramkot-Hanshpur-Thulabesi	22.87	22.87	26.94	14.19	2.11	43.24	6
3	40B007R	Bhalam-Ryalechaur-Mauja Bisauna Road	6.19	6.19	12.69	15.64	0.57	28.89	7
4	40B008R	Sagrabash -Kyolene -Madhbesi Road	6	6	13.48	11.48	2.10	27.06	8
5	40B010R	Ghatichina - Makawanpur - Bhanjyang Road	12	12	11.36	9.07	5.22	25.65	10
6	40B011R	Talbesi - Lippani - Chamare Odar Road	11	11	13.56	10.16	1.73	25.45	11
7	40B013R	Gahatedada-Lamakhet-Mauja Road	12.05	12.05	14.26	9.17	0.17	23.60	13
8	40B014R	Gairepokhari-Khalte-Shisaghat	7.71	7.71	12.97	9.73	0.79	23.49	14
9	40B015R	Lumle-Chandrakot-Tanchowk-Landruk Road	16	16	12.21	10.57	0.61	23.40	15
10	40B016R	Pulchowk-Sishaghat	7.5	6.13	8.67	13.88	0.69	23.24	16
11	40B017R	Thumsikot-Mugrebesi-Gorge-Mijuredada Road	14.34	14.34	7.82	10.48	1.06	19.36	17
12	40B019R	Thumsikot-Bhachowk Road	9.26	9.26	4.99	9.75	0.21	14.94	19
13	40B021R	Milanchowk-Bhagwatitar-Saimarang Road	6.97	6.97	10.51	3.74	0.08	14.33	21
14	40B022R	Chorepatan-Khalse-Kubinde Road	8.84	8.04	2.11	4.56	7.15	13.82	22
15	40B023R	Naudada- AdhakariDada- KarkiTahara Road	11.5	11.5	7.96	4.89	0.43	13.28	23

CHAPTER VII: FIRST FIVE-YEAR DISTRICT TRANSPORT MASTER PLAN (DTMP)

7.0 First Five-Year District Transport Master Plan

The first five-year District Transport Master Plan, District Transport Master Plan (DTMP) is prepared based on projected financial plan and prioritized transport linkages to indicate the year-wise target various categories of interventions is prepared and main trail (bridge only) for new construction.

7.1 Five Year Projected Financial Plan

The first five-year projected financial plan is prepared by considering all possible funding sources mainly DDC development grant, VDC's allocation, DDC's own resources, DoLIDAR support, GON's Grant and support from other donor agencies. This is project base on existing trend of funding.

Table 7.1 Possible Funding (Roads) for coming five years budget

Projected Financial Plan for Roads NRs.'000

S.N.	Source of Budget	Fiscal Year					Remarks
		067/68	068/69	069/70	070/71	071/72	
1	MLD's Grant	35000.00	40250.00	46287.50	53230.63	61215.22	15 % Increase each year
2	DDC Fund (Internal Budget)	35000.00	40250.00	46287.50	53230.63	61215.22	15 % Increase each year
3	Agrculture Road grant (DTMP Road)	25000.00	28750.00	33062.50	38021.88	43725.16	15 % Increase each year
4	Road Board	5000.00	5750.00	6612.50	7604.38	8745.03	15 % Increase each year
5	LGCDP	15000.00	17250.00	19837.50	22813.13	26235.09	15 % Increase each year
6	RAIDP	60000.00	69000.00	79350.00	91252.50	104940.38	15 % Increase each year
Total		**175000.00**	**201250.00**	**231437.50**	**266153.13**	**306076.09**	
For New Road Construction if Required		**10000.00**	**11500.00**	**13225.00**	**15208.75**	**17490.06**	
Budget for Upgrading and Maintenance		**165000.00**	**189750.00**	**218212.50**	**250944.38**	**288586.03**	
Grand Total		**1112492.91**					

Table 7.2 Projected Financial Plans for Trail Bridges NRs.

S.N.	Fiscal Year	Projected Financial Plan for Trail Bridge			Remarks
		Routine Maintentance	Major Maintentance	New Construction Bridges	
1	**067/68**	50000		5000000	New Construction is founded by TBSS
2	**068/69**	60000		5000000	
3	**069/70**	72000		5000000	
4	**070/71**	86000		5000000	
5	**071/72**	100000		5000000	
Total		368000		25000000	
Grand Total		25368000			

7.2 Sharing of Budget

The annual budget available for the development of transportation sector in this district will be shared for various intervention new construction, maintenance and rehabilitation and further divided into district road and village/agriculture road. As per local situation of the district, the sharing of fund will be done as per chart given below.

Sharing of Budget

Total Annual Budget (Road)
Nrs, 000
1112492.91
100%

Gravel Road

Maintenance to Gravel		Upgrading to Gravel	
6.95%		46.35%	
82626.53		550843.50	
District Road A	District Road B	District Road A	District Road B
42.98%	57.02%	42.98%	57.02%
35511.6	47114.925	236744	314099.5

Blacktop Road

Upgrading to Blacktop		Maintenance to Blacktop	
40.61%		6.21%	
482612.00		73849.13	
District Road A	District Road B	District Road A	District Road B
73.59%	26.41%	72.14%	25.89%
355162	127450	53274.3	19117.5

7.3 Year Wise Sharing of Budget

Table 7.3 Year Wise Sharing of Budget for Roads

S.N.	Fiscal Year	Total Budget (NRs)	Total Budget (NRs. In '000) and percentage for upgrading and Maintenance to Gravel and Blacktop							
			Maintenance to Gravel		Upgrading to Gravel		Maintenance to Blacktop		Upgrading to Blacktop	
			Amount	%	Amount	%	Amount	%	Amount	%
1	068/69	176032.80	13716	7.79%	91440	51.94%	9244.8	5.25%	61632	35.01%
2	069/70	204717.83	14079.8	6.88%	93865.5	45.85%	14079.83	6.88%	84150	41.11%
3	070/71	232403.50	16693.5	7.18%	111290	47.89%	13620	5.86%	90800	39.07%
4	071/72	267315.20	16432.2	6.15%	109548	40.98%	18435	6.90%	122900	45.98%
5	072/73	308004.50	21705	7.05%	144700	46.98%	18469.5	6.00%	123130	39.98%
Total		**1188473.83**	**82626.53**	**6.95%**	**550843.50**	**46.35%**	**73849.13**	**6.21%**	**482612.00**	**40.61%**

7.4 Year Wise Targets

Table 7.4 Year Wise Targets of Roads

S.N.	Fiscal Year	Road Category			
		District Road A Km		District Road B km	
		Rehabilitation/ Upgrading to Gravel	Maintenance/ Upgrading to Blacktop	Rehabilitation/ Upgrading to Gravel	Maintenance/ Upgrading to Blacktop
1	067/68	26.50	23.69	49.70	2.00
2	068/69	23.53	28.50	46.00	2.20
3	069/70	22.27	32.00	49.53	0.00
4	070/71	27.00	30.10	33.86	8.50
5	071/72	45.02	13.35	27.32	22.50
Total Km		**144.32**	**127.64**	**206.41**	**35.20**
Grand Total Km		**271.96**		**241.61**	

7.5 Year Wise Target for Trail Bridge

Year	Year Wise Target	
	Routine Maintenance	New Construction Bridge
	Number of Bridges	Number of Bridges
067/68	7	2
068/69	8	2
069/70	12	2
070/71	15	2
071/72	15	2
Total	57	10

According to the projected financial plan, year-wise physical targets are set as follows

Table 7.6 Year-wise physical targets for Upgrading and Maintenance to Black Top

S. N.	Class of Transport Linkage	2068/69		2069/70		2070/71		2071/72		2072/73		Total	
		Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km
1	Class A Blacktop	56032	23.69	77550	28.5	90800	32	93150	30.1	37630	13.35	355162	143.64
2	Class B Blacktop	5600	2	6600	2.2	0	0	29750	8.5	85500	22.5	127450	35.2
3	Class A Blacktop Maintenance	8404.8		11632.5		13620		13972.5		5644.5		53274.3	
4	Class B Blacktop Maintenance	840		990		0		4462.5		12825		19117.5	

Table 7.7 Year-wise physical targets for rehabilition/Upgrading to Gravel

S.N.	Class of Transport Linkage	2068/69		2069/70		2070/71		2071/72		2072/73		Total	
		Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km
1	Class A Gravel	31800	26.5	31765.5	23.53	34518.5	22.27	48600	27	90060	45.02	236744	144.32
2	Class B Gravel	59640	49.7	62100	46	76771.5	49.53	60948	33.86	54640	27.32	314099.5	206.41
3	Class A Gravel Maintenance	4770		4764.82		5177.77		7290		13509		35511.6	
4	Class B Gravel Maintenance	8946		9315		11515.73		9142.2		8196		47114.93	

7.4 Prioritized Transportation Linkages for the First Five Year Plan (DTMP)

7.4.1 Prioritized District Roads A for the First Five Year Plan (DTMP)

Table 7.8 Investment Plan for Prioritized Distrivt Road A for the First Five Year Plan (DTMP) for Upgrading to Blacktop

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to BT km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
1	40A001R	Begnash-Bhorletar Raod	24.17	21.35	5600	2.00	6000	2.00	6600	2.00	21000	6.00	35530	9.35	74730	21.35	DDC/LGC DP/MoLP Fund
2	40A002R	Rakhi-Mijure Road	19.77		400	4.00	450	3.00	1000	5.00	1000	4.00	1200	4.00	4050	20.00	Major Maintenance
3	40A003R	Lamachaur-Machhapuchre Road	16.00		500		600		700		800		900		3500	16.00	Only Maintenance
4	40A004R	Kahu-Dudhpokhari Road	37.32	3.00							10500	3.00			10500	3.00	RAIDP
5	40A005R	Baidam-Pame-Ghatichina-Damdame-Sidane Road	21.10	5.00					6600	2.00	10500	3.00			17100	5.00	DDC/LGC DP/MoLP Fund
6	40A006R	Sisuwa-Polangtar Road	25.20	9.10	5600	2.00	6000	2.00	6600	2.00	10850	3.10			29050	9.10	DDC/LGC DP/MoLP Fund

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to BT km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
7	40A008R	Chorepatan-Kristi-Nirmalpokhari-Bharatpokharai	22.50	7.00			9000	3.00	13200	4.00					22200	7.00	RAIDP
8	40A009R	Hemja-Khanepanimuhan-Lumre-Ghalel Road	15.37	5.00			9000	3.00	6600	2.00					15600	5.00	DDC/LGC DP/MoLP Fund
9	40A010R	Saatmuhane-Rupakot-Thumki Road	23.09	10.00			6000	2.00	9900	3.00	17500	5.00			33400	10.00	DDC/LGC DP/MoLP Fund
10	40A011R	Dobilla- Bagmara Road	12.19	4.19	11732	4.19									11732	4.19	RAIDP
11	40A012R	Naudada-Kaskikot-Sarangkot	12.50	12.50	11200	4.00	25500	8.50							36700	12.50	RAIDP
12	40A013R	Kaseri-Bhainse-Thumakodada Road	17.36	5.00					9900	3.00	7000	2.00			16900	5.00	DDC/LGC DP/MoLP Fund
13	40A014R	Nayapul-Birethati-Tikhethundga Road	7.50	2.00	5600	2.00									5600	2.00	DDC/LGC DP/MoLP Fund
14	40A016R	Melbot-Dhital-Dhampus Road	14.00	4.00					13200	4.00					13200	4.00	DDC/LGC DP/MoLP Fund

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to BT km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
15	40A017R	Kahu Khola - Arba - Mauja Road	15.34	5.00					16500	5.00					16500	5.00	DDC/LGC DP/MoLP Fund
16	40A018R	Kande-Bhadaure-Salyan Road	10.88	5.00			15000	5.00							15000	5.00	DDC/LGC DP/MoLP Fund
17	40A019R	Fulbari-Kahu Tower Tourism Raod	5.50	5.50	15400	5.50									15400	5.50	DDC/LGC DP/MoLP Fund
18	40A020R	Baglung Buspark-Sarangkot-Dhikurpokhari Raod	14.00	4.00							14000	4.00			14000	4.00	DDC/LGC DP/MoLP Fund
Required Budget and Target Length (km)			313.79	107.64	56032.00	23.69	77550.00	28.50	90800.00	32.00	93150.00	30.10	37630.00	13.35	355162.00	143.64	
Total likely Available Budget and Targated Length				107.64	55703.26	23.69	76236.34	28.50	90422.58	32.00	92745.06	30.10	37394.40	13.35	352501.64	143.64	

Table 7.9 Investment Plan for Prioritized Distrivt Road A for the First Five Year Plan (DTMP) for Upgrading to Gravel

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to Gravel km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
1	40A004R	Kahu-Dudhpokhari Road	37.32	30.32	4200	3.50	4050	3.00	4650	3.00	19800	11.00	19640	9.82	52340	30.32	DDC/LGCDP/ MoLP Fund
2	40A005R	Baidam-Pame-Ghatichina-Damdame-Sidane Road	21.10	6.53	4800	4.00	3415.50	2.53							8215.50	6.53	DDC/LGCDP/ MoLP Fund
3	40A006R	Sisuwa-Polangtar Road	25.20	9.00									18009	9.00	18009	9.00	DDC/LGCDP/ MoLP Fund
4	40A007R	Birethati-Chane Tourism Road	6.39	6.39	2400	2.00	2700	2.00	3704.50	2.39					8804.50	6.39	DDC/LGCDP/ MoLP Fund
5	40A008R	Chorepatan-Kristi-Nirmalpokhari-Bharatpokharai Road	22.50	7.50	2400	2.00	2700	2.00	3100	2.00	2700	1.50			10900	7.50	DDC/LGCDP/ MoLP Fund
6	40A009R	Hemja-Khanepanimuhan-Lumre-Ghalel Road	15.37	5.00	2400	2.00	2700	2.00	1550	1.00					6650	5.00	DDC/LGCDP/ MoLP Fund
7	40A010R	Saatmuhane-Rupakot-Thumki Road	23.09	11.00									22011	11.00	22011	11.00	DDC/LGCDP/ MoLP Fund

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to Gravel km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
8	40A013R	Kaseri-Bhainse-Thumakodada Road	17.36	12.36	3600	3.00	2700	2.00	3100	2.00	5400	3.00	4720	2.36	19520	12.36	DDC/LGCDP/ MoLP Fund
9	40A014R	Nayapul-Birethati-Tikhethundga Road	7.50	5.50					3100	2.00	4500	2.50			7600	4.50	DDC/LGCDP/ MoLP Fund
10	40A015R	Kaure-Jyamdung-Tanting Road	15.50	15.50	2400	2.00	2700	2.00	3100	2.00	5400	3.00	13000	6.50	26600	15.50	DDC/LGCDP/ MoLP Fund
11	40A016R	Melbot-Dhital-Dhampus Road	14.00	10.00	2400	2.00	2700	2.00	3100	2.00	3600	2.00	4000	2.00	15800	10.00	DDC/LGCDP/ MoLP Fund
12	40A017R	Kahu Khola - Arba - Mauja Road	15.34	10.34	2400	2.00	2700	2.00	3100	2.00	3600	2.00	4680	2.34	16480	10.34	DDC/LGCDP/ MoLP Fund
13	40A018R	Kande-Bhadaure-Salyan Road	10.88	5.88	2400	2.00	2700	2.00	2914	1.88					8014	5.88	DDC/LGCDP/ MoLP Fund
14	40A020R	Baglung Buspark-Sarangkot-Dhikurpokhari Road	14.00	10.00	2400	2.00	2700	2.00	3100	2.00	3600	2.00	4000	2.00	15800	10.00	DDC/LGCDP/ MoLP Fund
Required Budget and Target Length (km)			245.55	145.32	31800	26.50	31765.50	23.53	34518.50	22.27	48600	27.00	90060	45.02	236744	144.32	
Total likely Available Budget and Targated Length				145.32	31613.43	26.50	31227.41	23.53	34375.02	22.27	48388.73	27.00	89496.14	45.02	235100.72	144.32	

7.4.2 Prioritized District Roads A for the First Five Year Plan (DTMP)

Table 7.10 Investment Plan for Prioritized Distrivt Road B for the First Five Year Plan (DTMP) for Upgrading to Blacktop

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to BT km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
1	40B001R	Chorepatan-Shantistupa-Bhumdi-Ulleri-Kuvinde Road	18.30	5									19000	5	19000	5	DDC/LGCDP/ MoLP Fund
2	40B002R	Mahendra Gufa-Armalakot-Aatighar Mauja Road	13.06	4							7000	**2**	7600	**2**	14600	4	DDC/LGCDP/ MoLP Fund
4	40B003R	Samibagar-Lahachowk-Machhapuchre Road	11.00	3									11400	**3**	11400	3	DDC/LGCDP/ MoLP Fund
3	40B004R	Fursekhola-Ramdi-Matthikhan Road	9.70	3									11400	**3**	11400	3	DDC/LGCDP/ MoLP Fund
5	40B009R	Mardipul-Samibagar-Rivan-Saideghatta Road	12.57	4							7000	**2**	7600	**2**	14600	4	DDC/LGCDP/ MoLP Fund
6	40B012R	RaniPauwa-Bhalam-Batulechaur Road	6.00	4.2	5600	**2**	6600	**2.2**							12200	4.2	DDC/LGCDP/ MoLP Fund
7	40B017R	Ghatte Khola- Khani Gau- Dhampus Road	13.00	6.5							10500	**3**	13300	**3.5**	23800	6.5	DDC/LGCDP/ MoLP Fund

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to BT km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
8	40B021R	Lumle-Chandrakot-Tanchowk-Landruk Road	16.00	4									15200	**4**	15200	4	DDC/LGCDP/ MoLP Fund
9	40B022R	Chorepatan-Khalse-Kubinde Road	8.84	1.5							5250	**1.5**			5250	1.5	DDC/LGCDP/ MoLP Fund
Required Budget and Target Length (km)			108.47	35.2	5600	2	6600	2.2	0	0	29750	8.5	85500	22.5	127450	35.2	
Total likely Available Budget and Targated Length				35.2	5567.144	2	6488.199	2.2	0	0	29620.67	8.5	84964.69	22.5	126640.7	35.2	

Table 7.11 Investment Plan for Prioritized Distrivt Road B for the First Five Year Plan (DTMP) for Upgrading to Gravel

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to Gravel km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
1	40B001R	Chorepatan-Shantistupa-Bhumdi-Ulleri-Kuvinde Road	18.30	**8.1**	2400	2	2700	2	3100	2	3780	2.1			11980	8.1	DDC/LGCDP/ MoLP Fund
2	40B002R	Mahendra Gufa-Armalakot-Aatighar Mauja Road	13.06	**9.06**	2400	**2**	2700	**2**	3100	**2**	3600	**2**	2120	1.06	13920	9.06	DDC/LGCDP/ MoLP Fund
3	40B003R	Samibagar-Lahachowk-Machhapuchre Road	11.00	**8**	2400	**2**	2700	**2**	3100	**2**	3600	**2**			11800	8	DDC/LGCDP/ MoLP Fund
4	40B004R	Fursekhola-Ramdi-Matthikhan Road	9.70	**6.7**	5640	**4.7**	2700	**2**							8340	6.7	DDC/LGCDP/ MoLP Fund
5	40B005R	Chisapani - Sigarebash - Danlin	12.00	**12**	3600	**3**	4050	**3**	4650	**3**	5400	**3**			17700	12	DDC/LGCDP/ MoLP Fund
6	40B006R	Saurya-Lippani-Ramkot-Hanshpur-Thulabesi	22.87	**20.87**	3600	**3**	4050	**3**	7750	**5**	5400	**3**	13740	6.87	34540	20.87	DDC/LGCDP/ MoLP Fund
7	40B007R	Bhalam-Ryalechaur-Mauja Bisauna Road	6.19	**5.29**	2400	**2**	2700	**2**	1999.5	**1.29**					7099.5	5.29	DDC/LGCDP/ MoLP Fund
8	40B008R	Sagrabash -Kyolene -Madhbesi Road	6.00	**6**	2400	**2**	2700	**2**	3100	**2**					8200	6	DDC/LGCDP/ MoLP Fund

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to Gravel km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
9	40B009R	Mardipul-Samibagar-Rivan-Saideghatta Road	12.57	**8.57**	3600	**3**	2700	**2**	5533.5	**3.57**					11833.5	8.57	DDC/LGCDP/ MoLP Fund
10	40B010R	Ghatichina - Makawanpur - Bhanjyang Road	12.00	**12**	2400	**2**	2700	**2**	3100	**2**	5400	**3**	6000	3	19600	12	DDC/LGCDP/ MoLP Fund
11	40B011R	Talbesi - Lippani - Chamare Odar Road	11.00	**11**	2400	**2**	2700	**2**	3100	**2**	3600	**2**	6000	3	17800	11	DDC/LGCDP/ MoLP Fund
12	40B013R	Gahatedada-Lamakhet-Mauja Road	12.05	**11.55**	2400	**2**	2700	**2**	3100	**2**	5400	**3**	5100	2.55	18700	11.55	DDC/LGCDP/ MoLP Fund
13	40B014R	Gairepokhari-Khalte-Shisaghat Road	7.71	**6.35**	2400	**2**	2700	**2**	3642.5	**2.35**					8742.5	6.35	DDC/LGCDP/ MoLP Fund
14	40B015R	Pulchowk-Sishaghat Road	7.50	**7.5**	2400	**2**	2700	**2**	3100	**2**	2700	**1.5**			10900	7.5	DDC/LGCDP/ MoLP Fund
15	40B016R	Thumsikot-Mugrebesi-Gorge-Mijuredada Road	14.34	**14.34**	2400	**2**	2700	**2**	3100	**2**	7200	**4**	8680	4.34	24080	14.34	DDC/LGCDP/ MoLP Fund
16	40B017R	Ghatte Khola- Khani Gau- Dhampus Road	13.00	**5.5**	2400	**2**	2700	**2**	2325	**1.5**					7425	5.5	DDC/LGCDP/ MoLP Fund
17	40B018R	Thumsikot-Bhachowk Road	9.26	**9.26**	2400	**2**	2700	**2**	3100	**2**	5868	**3.26**			14068	9.26	DDC/LGCDP/ MoLP Fund

S. N.	DTMP Code No.	Road Name	Total Length (K.M.)	Targeted Length of Road for Upgrading to Gravel km	2068/69		2069/70		2070/71		2071/72		2072/73		Total		Source of Funding
					Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	Budget Nrs in '000	Km	
18	40B019R	Thumsikot-GhahateDada-Mijuredada	7.31	**7.31**	2400	**2**	2700	**2**	5130.5	**3.31**					10230.5	7.31	DDC/LGCDP/ MoLP Fund
19	40B020R	Milanchowk-Bhagwatitar-Saimarang Road	6.97	**6.97**	2400	**2**	2700	**2**	4603.5	**2.97**					9703.5	6.97	DDC/LGCDP/ MoLP Fund
20	40B021R	Lumle-Chandrakot-Tanchowk-Landruk Road	16.00	**12**	2400	**2**	2700	**2**	3100	**2**	3600	**2**	8000	4	19800	12	DDC/LGCDP/ MoLP Fund
21	40B022R	Chorepatan-Khalse-Kubinde Road	8.84	**6.54**	2400	**2**	2700	**2**	3937	**2.54**					9037	6.54	DDC/LGCDP/ MoLP Fund
22	40B023R	Naudada-AdhakariDada-KarkiTahara Road	11.50	**11.5**	2400	**2**	2700	**2**	3100	**2**	5400	**3**	5000	2.5	18600	11.5	DDC/LGCDP/ MoLP Fund
Required Budget and Target Length (km)			249.17	206.41	59640	49.7	62100	46	76771.5	49.53	60948	33.86	54640	27.32	314099.5	206.41	
Total likely Available Budget and Targated Length				206.41	592909	49.7	61048.05	46	76452.39	49.53	60683.05	33.86	54297.9	27.32	311771.5	206.41	

Table 7.12 List of prioritized Motorable Bridge

S.N.	Bridge Name	Location	Road Name	Left VDC	Right VDC	Remarks
1	Madi Nadi Bridge	Thumsikot	Rakhi-Mijure Road	Majhthana	Bhachowk	
2	Seti Nadi Bridge		Lamachaur-Machhapuchhre Road	Sardikhola	Machhapuchhre	
3	Bijayapur Khola Bridge		Kahu Khola-Dudhpokhari Road	Kalika	Kaseri	
4	Ghatichina Bridge	Ghatichina	Baidam-Pame-Ghatichina-Sidane Road	Bhadaure Tamagi	Chapakot	
5	Idi Khola Bridge	Khorako Mukh	Hemja-Khanepani Muhan-Lumre-Ghalele-kalimati Road	Lwanghalele	dhital	
6	Seti Nadi Bridge	Pashupati Ghat	Dobilla-Bagmara Road	Lekhnath N.P.	Bharatpokhari	
7	Madi Nadi Bridge	Bhainse	Kaseri-Bhainse-Thumakodada Road	Thumakodada	Bhainse	
8	Madi Nadi Bridge	Jyamdung	Kaure-Jyamdung-Tanting Road	Sildajure	Namarjung/ Thumakodada	
9	Madi Nadi Bridge	Bhagwatitar	Milanchowk-Bhagwatitar-Saimarang Road	Saimarang	Majhthana	
10	Damsadi Khola Bridge			Pokhara N.P.	Nirmalpokhari	
11	Seti Nadi Bridge			Puranchaur	Ghachowk	

CHAPTER VIII: CONCLUSION

Rural transport infrastructure is most crucial for socio-economic development of district. DDC should give more emphasis on resource collection and efficient mobilization. This DTMP will guide for this. The DTMP is the result of studies considering socio-economic, environmental analysis and potentially of various sectors as well as accessibility to the transport facilities in the district, which will draw the future scenario of the district and rural road development. DTMP focus on existing transportation situation, expected future road network accessibility and socio-economic benefits. It provides directives on ulitization of the local resources by local institutions well as other development agencies in line with the decentralized and local self-government act. In addition, it will provide Government and other donor agencies a rational basis on which to decide on future investments efficiently that will improve district transport accessibility situation.

The proposed interventions are reflection of the requirement of DDC to improve accessibility of people on goods and services and planned on current trend of financial resource availability. The study is only concerned within the district boundary but due consideration is given to the nearest road head and the inter district linkages as well. National Strategic Road/Feeder Roads/Municipality Roads are not considered in DTMP.

Construction of road linking district headquarters with national strategic road is major concern of Kaski district. The main problem of the district is difficult geographical situation requiring huge financial resource for its infrastructure development. Rational planning and proper implementation are two sides of coin; negligence in one part will make other meaningless effort. DDC should stop current ad-hoc practices of investing in roads on short-term consideration.

It is strongly recommended that every local institution especially DDC shall strictly follow the DTMP after receiving approval from the District council, in particularly the Perspective Plan of District Road Network in deciding in the sub-projects to be undertaken for development for future even beyond the fifth year evaluating the previous planning. DDC should go ahead with required revisions if the district development potentials have changed tremendously.

Construction Approach

District and rural road construction approach is recommended for labour based environmental friendly participatory (LEP) approach. Green Roads construction method is based on LEP approach which aims to optimize the amount of cut slope necessary by balancing the amount of material fill required. Fill material is disposed of in layers “tipping areas”, adjacent to the roads on the valley side. Fill material is disposed of in layers on the valley side and were necessary dry stone retaining structures over 3 meters high. Fill material is protected by terracing and re-vegetation programs. In areas where large cuts are unavoidable and it is uneconomical to transport the cut for long distance, surplus material is disposed of over the valley side. However, dry stone check dams or breast walls are built at intervals down the slope to retain this material. Terraces are used to stabilize the fill and the slopes are planted during the monsoon season.