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Abbreviations

ADB	Asian Development Bank
BoQ	Bill of Quantity
CBD	Community Based Development
CC	Climate Change
DDC	District Development Committee
DPR	Detail Project Report
DUDBC	Department of Urban Development and Building Construction
EIA	Environmental Impact Assessment
FAR	Floor Area Ratio
GESI	Gender Equality Social Inclusion
GIS	Geographical Information System
GoN	Government of Nepal
IAP	Integrated Action Plan
IDP	Integrated Development Plan
IEE	Initial Environmental Examination
INGO	International Non-governmental Organization
IUDP	Integrated Urban Development Project
LFA	Logical Framework Analysis
LSGA	Local Self-Governance Act
MHH	Mid-Hill Highway
MoUD	Ministry of Urban Development
MSIP	Multi Sectoral Investment Plan
NBC	National Building Code
NGO	Non-governmental Organization
NPC	National Planning Commission
NT	New Town
NTPCO	New Town Project Coordination Office
PDP	Physical Development Plan
PPP	Public Private Partnership
ROW	Right of Way
STUEIP	Secondary Town Urban Environment Improvement Project
SWOT	Strength, Weakness, Opportunity, Treat
TDC	Town Development Committee
ToR	Terms of Reference
UGDP	Urban Governance and Development Program
VDC	Village Development Committee

Annexes

Annex 1: Strategic Sectoral Plan with Multisectoral Development Plan (in Nepali)

Annex 2: Community Level Projects

Annex 3: Strategic Meeting Minutes

Annex 4: Maps

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EXECUTIVE SUMMARY

Government of Nepal decided to construct Mid-Hill Highway connecting major settlements of Mid-Hill Region so that potential towns in the hilly region could be developed and Hill to Terai migration could be controlled. 1776 km Mid-Hill Highway starts from Chiyo Bhanjyang of Panchthar District in the East and ends at Jhulaghat of Darchula District in the West of Nepal.

The government had already selected 10 potential towns along the Mid-Hill highway. Phidim (Panchthar District), Basantapur (Terhathum District), Khurkot (Sindhuli District), Baireni-Galchhi (Dhading District), Dumre-Bhansar (Tanahu District), Burtibang (Baglung District), Chaurjahari (Rukum District), Rakamkarnali (Dailekh District), Sanfebagar (Achham District), Patan (Baitadi District) are the selected 10 new towns along the Mid-Hill Highway. The government has already started plan interventions in these new towns and investing in infrastructure improvement projects through the New Town Project Coordination Office (NTPCO) at central level, and by New Town Project Office (NTPO) at local level of each town.

In this context, preparation of Integrated Development Plan (IDP) of new towns is crucial for urban management and infrastructure development. This IDP integrates Physical, Social, Economic, Environmental, Tourism and Cultural, Financial, Institutional development plan and will be the basis for investing sectoral line agencies in the New Town. This plan will be the guiding document for sectoral development to develop sustainable and liveable city in the future. The sectoral plans have been formulated through the participatory planning methods and tools, which means political actors should take ownership for implementing the plan. This IDP focuses primarily Basantapur New town but also covers entire Laligurans municipality area for its strategic projects.

Municipal profile, base map (reports and maps), building construction bye-laws, physical block model are major output components including main sectoral planning report within this integrated development plan. Participatory consultation meetings were the basis for formulating sectoral plan, contextualizing its existing situation where as base maps and stakeholder's consultation meetings were the basis for examining/assessing the existing physical condition, and proposing the infrastructure projects. Building bye-laws is a product prepared to guide/regulate city development for the future. Profile, base map and building bye-laws are prepared in separate volumes within this assignment. Similarly, physical block model is prepared to translate existing situation as well as proposed infrastructure in the city so that the form of future city will be reflected and visualized in the model.

Baseline information for plan formulation was acquired through the secondary and field based primary data but demand and potentialities were analyzed based on planning norms and standards. Sectoral development plans such as physical development plan has focussed to develop city as physically sound infrastructure (e.g. ROW, standards, road hierarchy, settlement linkages, open spaces, parks and basic urban facilities) where as social

development plan has focused to develop education, health, social inclusion, participation, gender inclusion, development of needy people and so on. Similarly, economic development plan has focused agriculture, employment, trade and business in the NT area with particular focus to marginalized and needy communities. Environmental management and disaster mitigation plan mainly focus to identify the major environmental problems, sanitation, solid waste management, disaster prone area delineation, risk sensitive land use plan etc. with reference to slope, altitude, geology and fragile landform for safer and sustainable city. Tourism and cultural development plan has mainly highlighted to develop NT's tourism potentialities and investment in tourism focussed development. Institutional development plan advocates to institutional aspects required for new town development in the future, particularly for institutional capacity, cooperation, management of infrastructure, resources, sustainability, implementation strategy and appropriate framework for integrated town development of the town.

There are huge potentialities of urban development and growth in Basantapur particularly for a touristic hill town. Locating at the triple junction (Terhathum, Dhankuta and Sankhuwasabha districts), the town can be a growth centre of surrounding VDCs. Similarly, with an initiation taken from the local stakeholders and the private sectors, the town has potentiality to become a major tourist destination hill town of Eastern Development Region (province 1). Trekking tourism, recreational tourism, cultural tourism, adventure tourism are major potentialities of Basantapur New Town. With the potentiality of linear urban growth and development in Basantapur, the city development will take place along the highway corridor in number of pocket areas (Basantapur, Chitre, Deurali, Lasune, Solma, Sungnam, Dagpa, Phulek). The town will appear as 'Scattered Pocket Town' within Laligurans Municipality having sufficient greenery.

The long-term vision of Basantapur New Town is "**Agriculture, Tourism, Infrasructure and Culture are the basis of Properous Laligurns (Rhododendron) City Basantapur**". It advocates that agricultural development, tourism and physical infrastructure are the major leading sectors of development of Basantapur New Town. To make vision functionable stakeholders and line agencies should give emphasis for agriculture (cash crop such as tea, cardamom, vegetable farming), tourism focus development to Basantapur. It means development objective should go through linking to agriculture, tourism and cultural development which is the future of the town. If investment goes in direction of the long-term vision, the city will be a prosperous city through agriculture (cash crop farming, vegetable farming and tourism).

However, challenges such as sufficient budget allocation, institutional strengthening and cooperation, human resource management are major to be managed in implementation of the projects. For this effective institutional set up should be established in the town. Municipality, TDC and NPCO are recognized directly implementing agencies of the projects in Phidim. Effective/functional coordination is required among those three institutions. Level of effectiveness of those local bodies will be the basis of performance measure of the new town development.

कार्यकारी सारांश(नेपालीमा)

नेपाल सरकारको राष्ट्रिय गौरवका आयोजनाहरु मध्ये मध्य-पहाडी लोकमार्गको निर्माण पनि एक हो । नेपाल सरकारले मध्य-पहाडी क्षेत्रलाई पूर्वबाट पश्चिम जोड्ने राजमार्गको निर्माणगरी ती क्षेत्रमा संभाव्य शहर छनौट गरी १० वटा ठूला आकारका शहरहरु निर्माण गरी योजनाबद्ध वस्ती विकास गर्ने रणनीति लिएको पाइन्छ । यसको मूल उद्देश्य पहाडी क्षेत्रबाट तराईतिर हुने बसाइसराई नियन्त्रण गर्नु रहेको छ । यसै पृष्ठभूमिमा छानिएको पूर्वाञ्चल विकास क्षेत्रमा अवस्थित बसन्तपुर (तेह्रथुम जिल्ला) नया शहर तीनवटा जिल्लाहरु तेह्रथुम, धनकुटा र संखुवासभा को मिलनविन्दुमा रहेको शहर हो ।

शहरी विकास तथा भवन निर्माण विभाग अन्तर्गत नया शहर आयोजना समन्वय कार्यालयको समन्वयमा तयार भएको यस एकीकृत शहरी विकास योजना नया सहर बसन्तपुरको महत्वपूर्ण योजना दस्तावेज भएकोले यो बसन्तपुर नया शहर विकासको लागि प्रमुख आधार दस्तावे हुनेछ । यसले बसन्तपुरको दिगो तथा बस्नयोग्य शहर विकासमा उल्लेखनीय योगदान दिनेछ । भौतिक, सामाजिक, आर्थिक, वातावरणीय, संस्थागत र पर्यटन तथा संस्कृतिलाई एकीकृत गरी तयार पारिएको यस योजना दस्तावेजको आधारमा नै बसन्तपुर नया शहर (लालीगुराँस नगरपालिका) मा रहेका सरोकारवाला निकायहरुले योजना कार्यान्वयन गर्दै जानु जरुरी छ । सहभागितामुलक वैज्ञानिक पद्धतिद्वारा तयार गरिएको यस योजनालाई स्थानीय राजनैतिक निकायले समेत अपनत्व ग्रहण गर्नु जरुरी छ । यस एकीकृत विकास योजनाले बसन्तपुर नया सहलाई मुख्य केन्द्रविन्दु मानेतापनि रणनीतिक योजनाहरुको लागि लालीगुराँस नगरपालिका क्षेत्रलाई समेटेको छ ।

नगर पार्श्वचित्र, आधार नक्शा, भवन निर्माण मापदण्ड, शहरको नमुना तयार गर्नु यस योजना तयारीको मुख्य कार्यक्षेत्रहरु हुन् । नगरको पार्श्वचित्र तथा सहभागितामुलक कार्यशाला गोष्ठी, भेलाहरुबाट प्राप्त सूचना एवं स्थलगत अध्ययनका आधारमा क्षेत्रगत योजना तयार गरिएको छ भने आधार नक्शा र अन्तर्क्रिया तथा छलफलका आधारमा विद्यमान शहरी नर्स र स्ट्याण्डर्डलाई मनन गरी भौतिक पक्षको मूल्याङ्कन/निरीक्षणको र आयोजनाहरुको प्रस्ताव गरिएको छ । यसैगरी निर्माण मापदण्डले भोलिका दिनमा शहर/वस्तीको स्थानिक महत्वका आधारमा अझ बढी व्यवस्थित बनाउने छ । यो योजना तयारीको क्रममा पार्श्वचित्र, योजना, आधार नक्शा (प्रतिवेदन), निर्माण मापदण्ड छुट्टा छुट्टै भागमा तयार गरिएको छ । यसैगरी, शहरको नमूना सम्बन्धित शहरमै लगी भोलिका दिनमा कस्तो शहर निर्माण हुन्छ भन्ने कुरा झल्किनेगरी राखिने छ ।

योजना तयार पार्दा आवश्यक हुने आधारभूत सूचनाहरु द्वितीय तथ्याङ्क, परामर्श छलफलबाट प्राप्त गरिएको थियो भने नगरको आवश्यकता, संभावनालाई योजनाको नर्स, स्ट्याण्डर्ड तथा नागरिकहरुसँगको प्रत्यक्ष परामर्श छलफलबाट प्राप्त सूचनालाई नै आधार बनाइएको थियो । क्षेत्रगत विकास योजनाहरु जस्तै: भौतिक विकास योजनाले शहरको विद्यमान तथा भावि भौतिक पक्षलाई जोड दिएको छ भने सामाजिक विकास योजनाले शिक्षा, स्वास्थ्य, समावेशीकरण, सहभागिता, लैङ्गिक सहभागिता तथा लक्षित समूहको आवश्यकतालाई आधार बनाएको छ । यसैगरी, आर्थिक विकास योजनाले कृषि, रोजगारी, व्यपार तथा व्यवसायलाई जोड दिई लक्षित समूहलाई विशेष जोड दिने प्रयत्न गरेको छ । वातावरण विकास तथा प्रकोप न्यूनकरण योजनाले वातावरणीय समस्याहरु पहिचान, सरसफाई, फोहोर व्यवस्थापन, जोखिम क्षेत्र

पहिचान, जमीनको ढाल, भौगर्भिक संरचना, जमीनको जोखिम अवस्था समेतलाई समेटेको छ । पर्यटन तथा संस्कृति विकास योजनाले पर्यटकीय संभावना, पर्यटन मैत्री लगानीलाई जोड दिनुपर्ने कुरालाई अघि सारेको छ । संस्थागत विकास योजनामा संस्थागत स्रोत परिचालन, संस्थागत सुदृढीकरण, समन्वय र उपयुक्त संस्थागत संरचना सहित प्रस्ताव गरिएको छ ।

वसन्तपुरको सन्दर्भमा शहरी विकासलाई पर्यटकीय क्षेत्रसँग सापिप्यता राखी विकास गर्दैजानुपर्ने देखिन्छ । वसन्तपुर पूर्वी क्षेत्रको पहाडमा अवस्थित पर्यटकीय शहर बन्ने संभावना बोकेको शहर हो, जसले वरिपरिका अन्य बजार तथा वस्तीहरूलाई सेवा सुविधा प्रदान गर्दछ । तेह्रथुम, धनकुटा, संखुवासभाको मिलन बिन्दुमा रहेको यो शहर प्रमुख केन्द्रको रूपमा विकास हुने देखिन्छ । पूर्वाञ्चल विकास क्षेत्रकै प्रमुख गन्तव्य हुने संभावना रहेको यस वसन्तपुर नया शहरमा पैदल पर्यटन, मनोरञ्जनात्मक पर्यटन, सहाशिक पर्यटन, सांस्कृतिक पर्यटनको संभावना रहेको छ । राजमार्गको आसपासमा रेखाकार रूपमा शहरी विकासको संभावना रहेको लालीगुरास नगरपालिका भित्र वसन्तपुर, चित्रे, देउराली, लसुने, सोल्मा, सुङनाम, दागपा, फुलेक मुख्य शहरी विकासका संभाव्य पकेट क्षेत्रहरू हुन् । यो नगर भविष्यमा हरियाली भित्र 'छरिएको पकेट वस्ती'को रूपमा विकास हुने देखिन्छ ।

वसन्तपुर नया शहरले 'कृषि, पर्यटन, पूर्वाधार र संस्कृति: लालीगुरासको राजधानी वसन्तपुरको समृद्धि' भन्ने दीर्घकालीन सोच निर्धारण गरेको छ । यसको अर्थ कृषि, पर्यटन, पूर्वाधार र संस्कृतिको विकास गरी यस नगरलाई समृद्ध बनाउन सकिन्छ भन्ने हो । निर्धारित दीर्घकालीन सोच प्राप्त गर्नको लागि सरोकारवाला निकायहरूले आ-आफ्ना कार्यक्रमहरूमा कृषि (अलैची, चिया, तरकारी, पशुपालन), पर्यटनलाई लक्षित गरी योजना कार्यान्वयन गर्दै जानुपर्ने देखिन्छ । यसको अर्थ विकासको उद्देश्य कृषि, पर्यटन र संस्कृतिलाई जोड्नु नै वसन्तपुरको भविष्य हुन आउँछ । सरोकारवाला निकायको लगानीलाई सोही अनुरूप केन्द्रित गर्न सकेमा पक्कै पनि भविष्यमा वसन्तपुर समृद्ध बन्नेछ ।

योजना कार्यान्वयनको लागि अगाडि थुप्रै चुनौतीहरू छन् । प्रभावकारी योजना कार्यान्वयनका लागि संस्थागत सुदृढीकरण तथा सुधारको खाँचो रहेको छ । नगरपालिका, नगरविकास समिति, नया शहर आयोजना कार्यालयहरू यो एकीकृत विकास योजना कार्यान्वयनकाप्रत्यक्ष र मुख्य निकायहरू हुन् । प्रभावकारी र कृयाशील समन्वय यी तीनै निकायहरूबीच हुनु अत्यन्त जरुरी छ । यी निकायहरूबीचको प्रभावकारी समन्वयले नै नयाशहरको विकासको प्रगति मूल्याङ्कन हुनेहुँदा पनि समन्वयात्मक प्रयास अत्यन्त जरुरी छ ।

1 INTRODUCTION

1.1 Background

Large number of towns and cities are growing rapidly in Nepal and our society is being more urbanized. The history of urban growth in Nepal begins since 1944. Since then Nepal has also experienced a rapid growth of urbanization. Many small towns and city were developed in around the Kathmandu valley and the Terai region. In 1952-54 (2009-11 BS) there were 10 urban centres delineated in Nepal. Among them, five were in the Kathmandu valley and remaining five were out of Kathmandu particularly southern Terai region of Nepal. The number of urban centres rose up to 16 in 1961, which were 23 in 1981. Similarly, the number of urban centres in 1991, 2001 and 2014 were recorded 33, 58 and 191 respectively. Most of them are developed in the Terai and mid-hills mountain region. There are a very few municipalities/urban centre developed in the high mountain region. In addition to 191 municipalities, there are several small towns and market centres, which are also providing goods and services for the rural areas and that of the backbone of the economic development and the catalyst of change. As a result, the rural areas emulate the development-oriented changes that occurred or going to occur in the urban areas.

The number of towns and market centres has been increasing with the construction of new roads and highway. Increasing population pressure in the newly emerging towns have made more difficult to provide basic physical and social infrastructure and services, even the local bodies have made more difficult to managed urban areas in a plan way. During 1960s, many people from hill and mountain were resettled in the Terai due to displace from natural disaster and national parks. In 1969, Physical Development Plan of Kathmandu Valley was prepared. Kathmandu Valley Physical Development Concept (1984), Kathmandu Valley Urban Development Policy (1990) and Kathmandu Valley Urban Development Plans and Programmes (1990) were conducted. But due to lack of institutional and legal mechanism and financial resources, these were largely failures and not implemented properly.

In 1970s, Regional Development concept was initiated in Nepal. Four growth poles and several other growth centres were identified in order to reduce the regional disparity in Nepal. Biratnagar, Kathmandu, Bhairahawa-Jomsom, Nepalganj-Jumla were identified as a main centre of development. Other growth centres were planned at a strategically significance location. In this period, series of north-south growth axis (development corridor) linking the diverse region have been defined. Each growth axis has a road constructed and planned. These roads will link a series of growth centres where development efforts will be concentrated in order to achieve full economics of scale and encourage agglomeration economies (Gurung, 1969). The important aspects of the growth centres is the positive nature of polarized development as it takes place and the mechanisms whereby the growth centres spreads growth to the surrounding areas (Dahal, 2001). Master plan of four regional headquarter (e.g. Dhankuta, Pokhara, Surkhet and Dipayal) was prepared and implemented in

this period. But proper implementation of these master plans was not successful due to lack of institutional and legal mechanism.

In late 1980s, structure plans of all designated urban centres was prepared whereas in 1990s, Integrated Action Plans (IAP) was popular theme and some urban areas were prepared and introduced IAP but at the end of the 1990s the Government of Nepal was introduced Self Governance Act.

In 2000, Long Term Concept of Kathmandu Valley (Vision 2020) was prepared. After that many municipalities have been prepared their periodic plans, and implemented. The current national plan (13th National Plan) has also encouraged to municipality to make their own periodic plan. On the other hand, Department of Urban Development and Building Construction (DUDCB) has prepared physical Development Plan and GIS Based Urban Map of some selected municipalities and urban centres in Nepal. The main aim of these activities is to make balance national urban structure, promote healthy and economically vibrant urban environment and strengthen the effective urban management.

Despite these attempts, it provided neither approved land use plan nor concrete physical plan implementation mechanism regarding the major urban centres in the country. Municipal plan prepared in the past employing IAP technique. IAP's overwhelming concentration on ward level problems has also led to neglect of municipal level vision and desires. As a result, through several municipalities show some improvement in physical aspects, progress is still found lagging in several critical urban areas such as education and health. Issues such as social exclusion or deprivation, urban poverty, environmental conservation, economic development, financial mobilization and municipal capacity building have remained largely unattended in the previous planning efforts.

The Government of Nepal has already enacted and has been implementing National Urban Policy 2007. The policy conspicuous by prioritizing investment to the lagging regions of the country while fostering development of regional cities and intermediate towns. Therefore, with an objective of reducing migration to Kathmandu and other larger Cities, encouraging planned development of potential hill cities and building infrastructure that can facilitate about one hundred thousand population in the hilly cities, the Government of Nepal has initiated to develop 10 new towns (Phidim, Basantapur, Khurkot, Baireni-Galchhi, Dumre-Bhansar, Burtibang, Chaurjahari, Rakam-Karnali, Safebagar and Patan) in the junctions of Mid-Hill Highway and North-South road corridor. Hence the government prioritization on the development of Mid-Hill Highway and the recent policy intention through its budget speech for the development of these New Towns comprises significant economic base of the national development.

Government of Nepal initiate to develop planned city of all kind of facilities, and is providing technical and financial supports to facilitate the Integrated Development Plan (IDP) preparation, urban base map and profile of base information, building by-laws, and to promote their planned development and improvement in the quality of life of people of new towns along the Mid-Hill Highway.

In the above context, this Final Report on “**Preparation of Integrated Development Plan of Basantapur new towns**” has been prepared and submitted by **RIBS Engineering Consultancy and Nepal Development Consultancy (NDC) JV** as per the agreement made between **New Town Coordination Office, Department of Urban Development and Building Construction (DUDBC)** and above mentioned JV consultants.

1.2 Objectives of the Study

The main objective of this assignment is to prepare integrated development plan, building bye-laws of Basantapur new town of the corridor of Mid Hill Highway. Following are the specific objectives of this assignment;

1. To set out Long term Vision and overall Goal, objectives and strategies for new town development.
2. To prepare physical development plan, land use plan, social, cultural, economic, financial and institutional development plan, environmental and risk sensitive land use plan, climate change perspective plan, multi-sectoral investment plan (MSIP etc on the basis of sectoral goal, objectives, output and programs
3. To prepare building bye-laws to regulate development in the towns integrating land use and road network plan and long-term vision of the town
4. To update GIS based Base Maps

1.3 Scope of Work

The main scope of the assignment is to prepare Integrated Development Plan and Building Bye-Laws of Basantapur New Town which include the following;

- Update GIS based base maps of new towns
- Preparation of long-term vision of the town in a participatory way
- Prepare overall integrated development plan of entire area including existing and future (5,10 and 20 years) land use plan.
- Conduct additional study on local economy and its activities based on the study completed by NTPCO that may also change in demographics and migration trend for 5, 10 and 20 years period.
- Identify potential area for urban development based on land suitability and other factors. Analyse present and future (5, 10 20 years) housing needs/market, stock, condition and recommend strategies for land acquisition, distribution of land and housing in the future.
- Conduct studies on present and future (5, 10 and 20 years) demand in infrastructures (such as transportation, communication, electricity, water supply and sewerage system) and their supply. Recommendation about complete street pattern, major roads, highways, arterial roads, traffic circulation, truck yard, bus bays and bus parks have also been done.

- Study of existing social infrastructure such as health/education/sports/communication/ security centres and other community facilities by addressing present deficiencies and future (5, 10, 20 years) demands has also been done.
- Identify and assess critical, sensitive and other natural resources including parks, green belts, recreational area, along with strategic for their protection, preservation and stewardship against the adverse impact of future development and land use changes has also been done.
- Verification about Government, Guthi and Public Land Identification by NTPCO and assess the area required for future development and expansion of the town including land required for government and public purposes has also been done.
- Prepare the proposed land use plan for 5, 10, 20 years based on: i) the policies enunciated for different urban activities ii) population to accommodate minimum one hundred thousand, iii) Requirement of additional social and physical infrastructure iv) transportation and work centres v) parks, green belt, recreational areas, vi) cultural and historical resources vii) others.
- Provide a full study of land use zone and recommend bye-laws for the construction of building and other infrastructure i) residential zone, ii) institutional zone, iii) industrial zone iv) preserved zone, v) airport zone vi) sport zone, vii) urban expansion zone, viii) stream/river bank zone, ix) green zone x) apartment housing xi) petrol pump/electric line/cinema theatres and xii) others.
- Prepare Building Bye-laws that clearly spells minimum in the following areas regarding the construction of buildings: a) Minimum land area b) Maximum ground coverage c) Maximum floor area ration (FAR), d) Maximum building height e) maximum number of floors f) right of way of roads g) set back in four sides of buildings h) minimum parking area i) lift j) minimum distance to be left in both sides of stream/river
- The building bye-laws of the town has been prepared in accordance with bye-laws 2064 of Kathmandu valley prepared by Kathmandu Valley Town Development Committee, model building bye-laws prepared by MoUD, NBC, Building Act and Apartment Act of Nepal.
- Recommend an implementation strategy (including a suggested action program that generally describes the action, costs, timeframe, responsibilities, procedure and towns capacity to use them) necessary for implementing the Integrated Development Plan of the town.
- Prepare summary of IDP of each town in Nepali language for the purpose of approval from government of Nepal

1.4 Expected output

The completed Integrated Development Plan, programme and building bye-laws/project report include the followings;

- a) **Town Profile:** Town planning profile has been prepared comprising of base line information of the existing physical, social, economic, environment, financial and organizational state of NT. Apart from the key statistics, such base line information

including textual descriptions, maps, charts, diagram and key problems prevailing in the settlements and the municipality/VDC are also included.

b) Analysis: the section contains at least the followings:

Trend Analysis: The analysis reveals growth trend of population, migration, land use, infrastructure provisions, import-export of goods, agriculture outputs, jobs and other economic opportunities.

SWOT Analysis: This reveals the potentiality of the NT based on its strength and opportunities. The analysis also reveals the weaker side of the town which tends to pose threat to the future development of the NT.

Spatial Analysis: this analysis reveals demand and supply situation of vacant land including land develop-ability analysis. The analysis therefore clearly shows the location where the future growth can be channelized.

Financial Analysis: this analysis reveals income potential and financing sources including TDC/NT expenditure pattern of the NT for the fifteen year plan period.

c) NT Vision: To make the vision operational, standard principles were followed. Vision and principles were formulated with broadly participated TD committee meetings.

d) Sectoral goal, objectives, output, programme: These have been formulated by using Logical Framework Approach (LFA), and has been supplemented by performance indicators and means of verification of such indicators as far as practicable. Within sectoral goal, objectives, output and programmes, baseline data, projected output have also been included. Such sectoral plans and programme have been formulated by forming sub-steering committees.

e) Long-term Physical Development Plan (PDP): Such physical plan (can be termed as physical master plan) reveals the future desired urban form of the new town, keeping in view of planning horizon of 20 years and also classify the town broad urban areas, urban expansion areas, natural resources areas and also calamity prone area. Similarly, land use zoning, road network and hierarchy, risk sensitive area were also identified and proposed in this section.

f) Social Development Plan: Social development plan significantly contributes to bring qualitative improvement in the lives of the common people. Attention was given to cover the following aspects:

- Education
- Public health
- Security (physical as well as social)
- Main streaming GESI: inclusion of women, dis-advantages groups, child elder, physically challenged etc.
- Cultural and sports
- Parks and open spaces

- Other urban social service enters (information, library and space for social gathering)
- g) Cultural and Tourism Development Plan:** in cultural and tourism development plan, preservation of tangible and intangible cultures, local cultures, tourism and cultural linkages, tourism development were main concern.
- Identification and conservation of important cultural heritages sites within the NT area and hinterland
 - Identification of specific non-material cultures in the area
 - Plan for conservation of both material and non-material cultures and linked them to tourism development plan
 - Culture centre (local craft, paint, architecture, museum, culture exchange, exhibition)
- h) Financial Development Plan:** within the financial development plan, resource mobilization, use, capacity etc were included
- Financial analysis and assessment of possible financial resources for the implementation of IDP in NT
 - Analysis and projection of town income and expenditure, revenue improvement action plan
 - Allocation of development budget (for coming five year) cost sharing among sectoral agencies and expenditure management action plan
 - Promotional strategy of private sector and civil society (PPP)
 - Financial and economic analysis of proposed priority sub-projects
- i) Institutional Development Plan:** Within institutional development plan, existing human resources and capacity, organizational development/structure, proposed appropriate institutional structure have been covered as follows;
- Decentralization, good governance and mobilization of people's participation
 - Appropriate and optimum use of local resources and skills
 - Institutional coordination and establishment of network
 - Organizational capacity and capacity building
- j) Environmental Management Plan:** The environmental management plan has been formulated by studying and analysing in details of the following;
- Solid waste management: 3R promotion-reduce/reuse/recycle, sanitary land fill site
 - Waste water management
 - Air, water visual and noise pollution
 - Urban greenery (forestry, agriculture) park, garden etc.
 - Control and management of built environment
 - Conservation of requirement of EIA/IEE of major sub-projects
- k) Disaster Management Plan:** The risk sensitive land use planning/mapping of the NT due to the following disaster causes were done and included the following;
- Landslide/soil erosion, floods areas
 - Pre-disaster plan

- Action plan for during or immediate after disaster
- Post-disaster plan
- Disaster/calamity occurred previously in that area were overlapped in the updated geological and disaster event maps (overlays of historical events)

l) Climate change adaptation plan: the climate change perspective study covers:

- Studying increasing climate change impact
- Adaptation plan/measures
- Agriculture practice and changes according to climate change impact

m) Building bye-laws: the complete planning and building bye-laws were formulated based on the review of existing bye-laws, construction practice and so on. This was based on the NT vision and Land use objectives. This covers the following:

- General definition
- Zoning classification and bye-laws/regulation
- Implementation mechanism & procedures etc
- Expected behavioural change from NT citizens

n) Multi-sectoral investment plan (MSIP): Such plan reveals short and long-term programme/projects, cost estimate, and probable financing sources prioritized in sequential manner for the planning period of each five years. Major stakeholders in project implementing were identified and their roles and responsibilities were categorically explained so that implementation of strategic projects could be easily implemented.

o) Block Physical Model of Town: Physical block model with 1:10000 has been prepared and installed at the site so that future city could be observed.

Maps

- Index map/location map
- Hinterland map
- Existing and proposed land use map and zoning maps including an overlay of cadastral map, and contour line with approved intervals (≤ 5 m)
- Urban expansion areas map
- Existing and proposed road network map, by bays/stop, bus park (inter/intra city), truck yards, and location of underground infrastructures etc.
- Existing and proposed water supply network plan
- Existing and proposed sewerage/drainage network map
- Existing and proposed electricity network map
- Existing and proposed communication network map
- Proposed solid waste disposal/landfill site map with an overlay of contour line of agreed interval
- Environmental sensitive maps
- Geological sensitive map

- Maps showing government/public/guthi land
- Proposed public infrastructure maps

1.5 Limitations

In preparation of ID of Basantapur New Town, following limitations are applicable;

- 1) Preparation of Town profile mostly focused on secondary data sources. However, some of the data sources were field verified.
- 2) Base Map of the town is prepared based on the latest achieve satellite imagery and field update was done at local and strategic level consultation meetings, field observation.
- 3) Cadastral database has been overlaid covering main town area. It was not possible to cover entire cadastral data of the municipality.
- 4) Strategic project locations are identified through the local stakeholders consultation meetings.
- 5) Local names were assigned through the local people'/stakeholders' consent.

2 METHODOLOGY

2.1 The Methodology

To achieve the objectives stipulated in the ToR, the study has been undergoing through the following steps of the methodology

2.1.1 Preliminary work and Collection of Secondary Data

At the first stage before the consultant's team being started for the field survey, preliminary works including interaction/consultation at NTPCO, DUDBC and collection of existing documents were conducted. The preliminary works includes the collection and review of relevant documents, literature, maps, photographs and preparation of the data sheet for the records physical, socio-economic data as well as preparation of inventory sheets of existing infrastructures. The desk study and preliminary survey comprised along with the methodology to be adopted for the execution of the work and the timing for the breakdown of work with manning schedule. Detail checklist, data record sheets, questionnaire etc were prepared. The following procedure was adapted to make the assignment's output more reliable and quality standard for IDP.

2.1.2 Start-up Meeting with the Client

Before start of the works, the Team Leader along with his concerned technical experts conducted discussion with the officials of the Client's (NTPCO). The agendas for the discussion were:

- Review/ refinement on the proposed methodology,
- Define the brief scope of works relevant to the project,
- Assistance required from the NTPCO/NTPO for the collection of data services and their source,
- Start up the fieldwork,
- Planning process and strategic projects to be covered during the planning process,

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- Start up the fieldwork,
- Planning process and strategic projects to be covered during the planning process,

2.1.4 Consultants' Internal Project Staff Meeting

The consultant organized a brief meeting between the staffs who would be involved in entire planning period. During this meeting, the Team Leader described about all the scope, objective, problems and issue that would arise during fieldworks and the strategies of the consultant to complete the project with stipulated time frame. Actually it was preparatory works for the fieldwork in which specific role of each expert was briefly discussed.

2.1.5 Collection and Review of Reports, Maps of the NTs

Data, reports and documents relevant to the project were collected from the DUDBC, NTPCO and other related sources from the central government body. The documents were thoroughly reviewed and some outlines of study scope were framed out. Following maps and documents were collected and reviewed before team mobilization in the field:

I) Maps

- Topographic maps prepared by Survey Department / Finida 1:25000 scale
- VDC/municipal map prepared by Survey Department 1:15000 scale
- District map of the concerned new towns
- Aerial Photographs/Digital maps of the concerned new town
- GIS base map prepared by the project office of the concerned settlements
- Satellite images of the town area

II) Existing Literature, Reports and Other Documents

- Local Self Governance Act (LSGA) 1998, LSGA Regulation 1999
- Building bye-laws of Kathmandu Valley, 2050
- NBC
- Existing planning documents / reports (including IAP and previous studies report) of the concerned settlements.
- National Urban Policy, 2007
- National Urban Development Strategy 2015
- Planning Norms and Standard, 2013
- National Transport Policy, 2001
- National Agriculture Policy, 2004
- Tourism Policy, 2008
- National Industrial Policy, 2011
- National Land use Policy, 2012
- Urban Expansion, Urban Development and Building Construction Guidelines, MOFALD, 2072

- Inclusive Cities: Resilient Communities, Preliminary Draft Report, Ministry of Urban Development, 2025
- TDC Act
- Tourism Policy
- Building Construction Bye-laws

2.1.6 Finalization of Appropriate Procedures and Specification for the Study

After discussion in the proposed staffs meeting, an appropriate procedures, design specification and project requirements were finalized to adopt during the project fieldwork. Main concern of this process was to finalize the detail study methodological framework for the study and planning process.

2.1.7 Preparation of the Field Team

After finalization of appropriate procedures and detailed study methodology with the consultation with NTPCO specifications, the consultant conducted orientation training to all their staffs (Field and Office) to be involved in this project. Such orientation focussed on the followings:

- Process for Coordination and Liaison with the NT/ NTPCO /TDC /Municipality /VDC/Local Community;
- Coordination with Other Agencies at the field level;
- Client's roles and Activities;
- Consultant's roles Activities;
- Conduction of effective and efficient fieldwork;
- Collection of sectoral plans and strategies for IDP;
- Project assessment and prioritization;
- Preparation of Building bye-laws;
- Long-term development plan;
- LFA analysis;
- MSIP Preparation;
- Preparation of Physical Block Model;

2.1.8 Mobilization of Consultant's Field Team

The Consultant mobilized the field team for the detail fieldwork. All the key technical experts were present in the team. The concerned stakeholders, NTPO, TDC and Municipality in particular were informed in advanced about the field schedule.

2.2 Detail Fieldwork

Detailed fieldwork for preparation IDP was carried out as described below;

2.2.1 Coordination and Telephone Conversation with Stakeholders

As per the terms of reference, it was planned to conduct fieldwork in various stages. At the first stage, coordination with TDC, New Town Project Office, Municipality, New Town Project Coordination Office had been done for pre-planning workshop/consultation meetings at the town level. Such coordination with local stakeholders was conducted by phone. Formal notification to NTPCO was also done before mobilizing the field team.

2.2.2 Preliminary Consultation with Division Office

Before formalization the planning process, preliminary consultation with Division Office DUDBC and New Town Project Coordination Office Basantapur was carried out. The consultation meeting was conducted by the planning team of the consultant. Issues relevant to New Town were covered and discussed during the consultation meeting. It was also informed to the Division Office regarding the process of IDP and method for carrying out the study.

2.2.3 Pre-planning Workshop and Formation of Steering Committee

As planning process begins with mobilization of local stakeholders and dissemination them about project objectives, scopes and outputs, it was important to conduct pre-planning workshop. The pre-planning workshop date was fixed with consultation of local key stakeholders (TDC, Municipality, New Town Project Office). In the pre-planning workshop, the line agencies and stakeholders including local political representatives, academicians, professionals, social actors and potential key actors of the concerned new towns were formally invited to participate. List of actors (political, social, official) were prepared first in consultation with (TDC, Municipality and NTPO). The main objective of such preparation was to make active participation from all sectors of all stakeholders in the planning process.

In the pre-planning workshop, consultant had presented the overall process, methods, issues, time table and so on regarding for preparation of IDP. All the participant stakeholders were given open forum to provide views and suggestions for the preparation of IDP. In this workshop most of the stakeholders such as: local level political leaders, Chief District Officer, Local Development Officer, as well as other related district level government officers and their representatives, line agencies' representative, journalists, non-governmental office's representative, civilian, district and NT were present. Most of the participants express their views and curiosity one by one during the workshop. Their views and ideas were thoroughly noted out as information for preparation of IDP.

Similarly, steering committee was formed for guiding and monitoring the overall planning process and effective mobilization of the sub-committees as well as local stakeholders under the chairmanship of TDC. During the consultant presentation, role of steering committees were presented. Minute of pre-planning workshop including with formation of steering committees and sectoral committees is shown in the annex 3. Some photographs during the pre-planning workshop are as follows;



Figure 1: Photographs about pre-planning workshop



Figure 2: Presentation during the pre-planning workshop



Figure 3: Participants in the workshop



Figure 4: Stakeholders sharing their views

2.2.4 Formation of Sub-committees

Main objectives, including other, of the pre-planning workshop was to formulate sectoral sub-committees for planning of new towns. As per the project scope and objectives, following sectoral sub-committees were formed;

- 1) Physical Development Plan
- 2) Social Development Plan
- 3) Economic Development Plan
- 4) Environmental Management, Climate Change Adaptation and Risk Reduction Plan
- 5) Institutional Development Plan
- 6) Cultural and Tourism Development Plan

Before formation of sectoral sub-committees, their role and task during the planning process were defined so that they could provide the planning team required data and information.

2.2.5 Field Visit, Observation and Informal Interaction

During the fieldwork of pre-planning workshop, consultant team visited entire new town area for conceptualization and visualization for plan preparation. Field observation was conducted mainly covering the major potential sites for planning and development including with major infrastructure construction sites. Following are the some of the photographs of fieldwork:



Figure 5: Field visit and consultation



Figure 6: Field visit and Observation



Figure 7: Field visit and Observation

2.2.6 Consultation Meetings with Local Level Communities and Target Groups

Local level issues have been collected through local level consultation meetings. For this purpose, strategic locations were selected for consultations. Different communities such as ward level marginalized communities, poverty clusters, youths, children, women groups were identified as target group in coordination with steering committee and sub-committees. Specific focus was given to those marginal communities in which specific attention should be given. Following strategies were applied to conduct local level meetings;

- Selection of strategic location for groups/public participation in the meetings
- Pre-informed to local Ward Coordination Committee (WCC) for pre-preparation on the local level problems and issues
- Specific attention for participation of women, disadvantages groups, Children, Dalit/Janajati in the meetings

- Revisit of the sensible area indicated by the community meetings so that plan would address the ground level real problems
- Formation of contract groups at local level in case some further clarification would be required during plan finalization

Local level community meeting was also conducted at the field level to collect local level issues and problems. For consultation at local level, major issues were categorically noted out. Such meetings were conducted by mobilizing Ward Civil Committees to make active participation of the locals. WCCs were pre-informed about the meetings and information to be covered in the consultations. Such consultation meetings were conducted to collect specific issues for strategic planning.

Similarly, during the local level consultation meeting period, verification of the Bases map (Topographic/Cadastral Map) were also performed so that basic information on the map would not miss.

2.2.7 Town Level Consultation Meetings and Workshops

Town level issues such as major determinants of development, constraints, obstacles of development, priority projects, potential sectors, specific areas of intervention in the plan, preliminary assessment etc were thoroughly discussed at town level. Similarly, series of consultation meeting at steering committee and sectoral sub-committees were done to assess the problems and projects to be developed in the NT. Such meetings focus on identifying major prominent lead sector of development of the town. Following consultations/workshops were done;

a) Consultation meetings/workshop with Steering Committee

Consultation meetings and workshop with steering committee were done particularly for vision setting, modification/correction of sectoral issues and drafting of the IDP. Steering provided guidance not only to the technical team but also lead to all sectoral thematic committees. As mentioned above, the steering committee comprises of representative of political parties, representative of TDC/DDC/Municipalities and other local stakeholders as well as local political, this team thus would be the leading team for finalizing the IDP. The steering committee also guided to formulate Vision, mission, objectives for long-term development for the NT. As we know, development plan would guide by the vision, all the sectoral plans were also formulated accordingly.

b) Consultation with Sectoral Sub-committees

Series of consultation meetings/workshop were done with sectoral sub-committees. Issues relating to the concerned sectoral committees were presented and discussed. Sectoral goals, objectives, problems, potentialities etc were explored through the concerned sectoral committees. Issues and plans were presented within and among the sectoral committees so that relevant issues would not miss in the plan document.

c) Identification of Lead Sector of New Town

Lead development sector (such as tourism, agriculture, industry, etc) would be the leading development for New Town. Generally tourism, health, industry, trade and commerce all these sector would play an equally important role but among these sectors only one sector would be identified as the most important as lead sector for development.

Lead development sectors were identified based on the base line data, information and studying existing situation of the NT.

d) Problem Identification of NT

The problems were analysed and prioritized according to participatory meeting through various stages. Local level communities meetings, sectoral sub-committees meetings and steering committees meeting were the basis for problem identification. Sectoral problems, specific problems and overall problems were identified by analyzing the data. Based on the existing situation and consultation meetings at various level in the New Town, problems were categorically prioritized. To capture local level problems, local communities were already awarded for catching up the local level problems.

For identifying the local level problems, participatory meeting was organized at community/ward level meetings. Local level community meetings such as ward level (two or three wards combined to same case), cluster meetings (poor and marginalized groups), backwarded communities were conducted to find out the relevant issues and problems.

Similarly, focussed groups (professional organizations, intellectuals, businessmen, teachers, social workers, women, industrialists etc) were also done at different locations so that focussed issues could be covered in the plan.

In order to get better participation, the meeting locations were fixed at strategic points. Main concern to this was to make possible for all level and all class peoples participation in the meetings. Community meetings focussed on the following issues;

- Identification of local level problems
- Prioritization of the problems
- Locate important information on the map
- Provide basic idea about the specific problems of the area
- Identify the strategic projects for the area
- Identification of potentials of the area

e) Setting of Long-term Vision of New Town

The long-term vision can be taken as a long-term goal of the NTs which would guide to formulate development plan, including sectoral plan. Long-term vision implies a desired future situation achieved from present condition which must be understood in the sense of improved and better situation than the present condition. The long-term vision or goal cannot be achieved without effective implementation of the plan. It is therefore, long-term vision would be the guiding development strategy for the NT.

In order to determine the vision of the new town, consultation meetings/workshops of the steering committee meeting was conducted. In such meetings present status of the New Town was presented based on the fieldwork data. Overall present situation of the NT would be the basis for formulating the Vision. In order to translate the vision into reality, the linkage with problems, lead sectors, physical development plan as well as social, economic development plan and environmental management plan of the new town. It is therefore, all sectors of development plan would be interlinked to achieve vision of the NT.

f) Awareness and Preparation for Building Bye-laws

One of the tasks of this assignment is to prepare building bye-laws of the NT. For this, technical team disseminated about the building bye-laws from the beginning so that they would ready for ROW, Building Construction, FAR etc. Our concern for this was to make aware to local and key actors for building bye-laws and municipality could act accordingly. This was done particularly with the local political actors and other concerned stakeholders. Its main objective was to make aware to local people for implementing building bye-laws.

2.2.8 Collection of Secondary Data

As we know plan preparation rely on both primary and secondary data, it was therefore very important to collect both primary and secondary data. Secondary data from the concerned offices such as District Agricultural Office, DDC, Municipality, District Veterinary Office, District Health Office, INGOs/NGOs, Chamber of Commerce etc. were collected. Based on the collected secondary data, profile of NT was prepared.

2.2.9 Preparation of Town Profile

Town profile has been prepared by arranging the collected data and information in order. Profiles have prepared based on the secondary sources of data but data validation and verification were done through consultation/presentation and workshop. Since secondary data was not sufficient for town profile, primary data were collected through questionnaire and checklist. Secondary data was collected through the concerned government offices and line agencies of the town. Profile of the town was prepared based on the primary and secondary data collected through field survey. Profile of the town is prepared in separate volume ii.

While preparing the town profiles following things have been done;

- Missing information/data were collected through the concerned offices and sites,
- Data were verified through the various sources
- Source of the data were clearly mentioned so that authentic data would be used
- The list of reference materials used in the profile have been listed in the reference
- Profile data have been verified through the data validation method presenting in the steering committees meetings

2.3 Analysis

The data and information collected through the secondary and primary sources were analysed in detail objectively with supporting data. All the data were analysed under the concerned sections as described below;

2.3.1 Geographical Analysis

Based on the Information about geographical situation, area, location, hydrology etc. geographical condition and location analysis were done. Since geography plays vital role in every sectors (land use zoning, infrastructure planning, establishment of economic activities, settlement planning etc); geographic suitability analysis were done. Similarly, the potentiality and problems resulting from geographical condition were also analysed to see location advantages and potentialities of the particular areas within the NT.

2.3.2 Analysis of Social Condition

In the analysis of social condition, population, population growth rate, fertility rate, birth, death, migration, age, sex group, density, religion, caste, language etc. were studied and analysed. Based on such data, future projection was done to see the trend of social condition. In the case of social infrastructure special attention was given to subjects like education, health, sports, entertainment etc. In the study of education the parameters like boys and girls student ratio, teacher-student ratio, dropouts, and physical facilities were covered. Existing health condition and need assessment have been done based on the planning norms and standards.

2.3.3 Analysis of Economic Condition

Economic condition including agricultural area, agricultural products and vegetable farming, import export are analysed. The relation of surrounding VDCs with the New Town (rural-urban linkage) has been studied and analysed. As urban area is the market centre of village, the relationship between settlements have been looked at the production and trading system of the New Towns.

Industrialization and urbanization are complimentary to each other therefore the condition and possibilities of industries in the new town is studied. The situation of raw materials availability and possibility of industrial development expansion etc.were studied and analyzed. The situation of export of goods produced in the NT and imports of products from outside, transport and storage facilities etc. have been studied and analysed.

2.3.4 Physical and Environmental Condition Analysis

The condition and use of physical infrastructure like road/transport, communication system, drainage system, river control, drinking water, and electricity etc were covered. Such infrastructure networks have been mapped and updated in the base map. Infrastructure networks have been overlaid in the base map and sectoral development plans have been prepared accordingly.

Similarly, waste generated and collection in the New Town has been studied under solid waste management and environment theme. Attention was given to drainage provision, solid waste management, pollution, emerging environmental issues within the NT area.

Likewise, conservation and protection area within the NT area such as world /national heritage, public land and other public property were categorically identified and conservation plan has been prepared. The open spaces like parks, green areas within the New Town have been studied so that urbanizing areas could be managed for the future. While proposing the urban expansion and public infrastructures, such land would be most appropriate.

Moreover, as the recent disaster has pinched to all development professionals, land suitability analysis have been done based on the previous data. Land suitability analysis for proposing infrastructures, urban area, buildings and other large structures would be the best way for safety and risk reduction. Slope map, vulnerability map, disaster risk/sensitive maps were prepared based on the situation analysis.

2.3.5 Institutional Analysis

As there is a lead role of the New Town in the fulfilment of long-term vision, goal and objectives, therefore the institutional capacity of the New Town needs to be analyzed in detail. While looking into the institutional aspects of the new town, following things were considered;

Analysis of Organizational Capacity: In the context of Basantapur new town, three institutions namely New Town Project Coordination Office (DUDBC), Laligurans Municipality, TDC are key actors for implementing the plans and programmes. It is therefore important to assess present condition of those institutions and need gap analysis.

Similarly, other institutions such as DDC, Government body, line agencies, and private institutions are also responsible for implementing the plans and programmes. For this, the structure of the organization (particularly NTPO, Municipality, and TDC), human resources, technical capability, working style/approach, values and strategies had thoroughly studied. Institutional analysis had done through Strength, Weaknesses, Opportunities and Threats (SWOT) techniques.

Analysis of Human Resources: The existing knowledge, skills, capacity, enthusiasm of the human resources of the New Town and other institutions including Municipality and TDC and the use of these elements play a crucial role in mobilizing and utilizing the resources to achieve the goal and objectives of the New Town. Existing human and their multidimensional nature were studied. Thus, the adequacy/inadequacy, use/misuse, productive/unproductive, motivation/non-motivation factors of existing work force along with the skills and capacity of the citizens were studied based on the works and workload to be performed according to long-term vision and goal of the New Town in the assessment of human resources.

The institution can easily attain its goal provided this aspect is strong if there are sufficient human resources for plan implementation, monitoring and management. Therefore, in order to materialize the target set by IDP it is necessary to study the availability skilled labor as per organizational structure.

Existing Revenue Analysis: Based upon the last five years information about revenue of the New Town like tax, fees, charges, grant from Government, loan and grant from other agencies the trend analysis of financial sources were carried out by collecting information on remittances, private sector contribution, investment made by government line agencies, revenue received from industries and commerce sector etc.

Future Projections: The new town project is an intervention programme made by the government of Nepal for urban development along the Mid Hill Highway in the hilly area. Therefore, on the basis of existing physical, social, environmental and economic analysis of respective town/municipality, future potential analysis was done in particularly for institutional planning, development and extension.

2.3.6 Specific Analysis

Trend Analysis: Trend analysis reveals among other things population trend, land use pattern, infrastructure provisions, import-export of goods, agricultural outputs, jobs, and other economic opportunities. The trend analysis was done based on the past two/five years or more data with field validation.

SWOT Analysis: Such analysis reveals the potentiality of the New Town based on its strength and opportunities. Such analysis was the basis for identifying the strength and weakness areas of New Town to be focussed.

Bottleneck Analysis: Such analysis helps to find out the bottlenecks and barriers encountered in implementation of IDP. Such analysis was useful for focusing the major issues to be given priority in implementation.

Spatial Analysis: The analysis clearly reveals demand and supply situation of vacant land including land develop-ability. The analysis, therefore, indicated the location where the growth can be channelized and where the growth should be restricted/stopped. Identification of risk sensitive area, conservation/protected area, potential area, land use zoning and mapping were done through the spatial analysis.

Cross-cutting Issues: Cross-cutting issues such as social inclusion, participation, child and women friendly development, inclusions of scheduled/marginalized case ethnic groups etc was analysed. Similarly, emerging issues such as climate change responsive plan, hazard risk reduction, disaster mitigation, climate change resilience and adaptive plan and mechanism, sustainable ecological planning, green city development etc are the major issues covered in the plan document.

Financial Analysis: Financial analysis including the resource mobilization for implementing the project is very crucial for plan implementation. Within the budget plan, possible sources were clearly indicated in the report.

2.4 Formulation of Integrated Development Plan (IDP)

Based on the fieldwork data and the analysis, IDP was formulated with sectoral plan and programmes. Sectoral objectives, strategies outcomes and major projects were formulated in the LFA format. As per scope of work and objectives of this assignment, following plans were formulated;

2.4.1 Formulation of Long-term Physical Development Plan

Long-term physical development plan provides necessary directions for the systematic urban development process of a city. This Plan requires the preparation of policies and maps regarding where the city will be expanded in the future (urban expansion areas) and for what purposes the available urban land where urban expansion take place.

Similarly, for the effective implementation of the urban expansion areas and land use zoning, various programmers and regulations including infrastructure development plans and investment policies for infrastructure development were also identified. Within this physical development planning process, road network plan, drainage/sewerage network plan, communication network plan, electricity network plan, urban expansion area delineation and zoning etc.were done to regulate urban development in a planned way. Long-term physical development plan was formulated through the following procedure:

Procedure for Delineating Urban Expansion Area for Future Development

Urban expansion areas of the new town were delineated by identifying the strengths, weaknesses, opportunities and threats in the process of urban expansion of the city and by carrying out proper analysis of the available facilities. Delineation of urban expansion areas involves careful analysis of various thematic maps, resource maps, potential analysis maps, understanding of environmentally sensitive areas and availability of existing physical Infrastructures and facilities. Following areas can be regarded as constraints and opportunities for urban expansion:

Constraints

- Environmentally sensitive areas (forests, rivers, streams, lakes, landfill sites, riverbanks etc.)
- Steep slope areas which prone to landslides
- Existing built up areas (areas occupied by settlements, market areas, industries, etc.)
- Right of ways and high voltage line areas, as identified by the concerned line agencies
- Areas where the provision of basic amenities becomes very expensive
- Fault line and earthquake affected areas, areas affected by natural calamities

Opportunities

- Infill areas within the existing settlements

- Areas having provision of physical infrastructures or areas where infrastructure extension can easily be carried out
- Government owned areas
- Areas with high land transaction rate
- Areas having good water resources
- Area having future expansion land
- Area which are safer for urban expansion

Thematic Map Preparation

Thematic maps help for understanding the status of physical and social infrastructures and facilities of an area. These maps are used for necessary analysis in preparing a Physical Development Plan for the master planning. Separate maps for different themes of physical and social infrastructures and facilities were prepared to simplify the process of physical analysis. For instance, thematic map of road showing road network and related information is an example of a thematic map. Similarly, as per requirement, maps on various themes such as drainage, electricity, drinking water supply, telecommunication, tourist sites, environmental sensitive area, river, streams and rivulets, religious sites and monuments, education, health etc. have been prepared.

Predominant Land Use Zone

To ensure planned development of the city it is necessary to take judicious decisions regarding what uses were useful. A land use zoning map, hence, was prepared identifying the predominant land use zones. Land use zones such as residential zone, commercial zone, Industrial zone, agricultural zone, institutional zone, open spaces, protected zone, etc were prepared. Regulations regarding which uses are to be permitted and which not to be permitted were also identified and indicated in the bye-laws report.

2.4.2 Preparation of Sectoral Plan

As per specified in the ToR, sectoral development were prepared within this IDP. Sectoral plans were prepared with sectoral goal, objectives, output and programmes in LFA approach with verifiable indicators. Sectoral plans were formulated based on the issues raised by the sub-committees formed during the pre-planning workshop. Besides the physical development plan, following sectoral plans were formulated in LFA framework with justified verifiable indicators;

- Social development plan
- Economic development plan
- Environmental management, climate change adaptation and disaster risk reduction plan
- Institutional development plan
- Tourism and cultural development plan

Prepared sectoral plan will guide to the New town for future development course. It will guide to investors and development practitioners for channelize the development/investment

direction in the NT. Government authority will also be guided by the priority sectors and lead to development sector for sustainable NT management and Development. Concerned line agencies and Donor will also be guided by the sectoral plan so that their investment could be rightly allocated.

2.4.3 Multi Sectoral Investment Program (MSIP)

Lack of co-ordination between different organizations and sectoral programs result the basic problems of urban development in Nepal. The MSIP is an attempt to resolve this by taking a multi-sector approach to bring them in consolidated development. Such plan was prepared for the new town which includes all those agencies who are involved in urban development, i.e. line agencies, non-government and semi government organizations and donors. Such multi-sectoral development plan will be the basis for investment planning and project implementation for New Towns. This will also guide to invest to the line agencies in the concerned sector in development projects.

Objective of MSIP

- To coordinate and consolidate all the programs and investment of the different agencies working within the new town.
- To provide guidelines to the new town about how to spend their annual development budget in a planned and rational way so that the benefits of development are maximized.
- To bring a balance between required and available resources of new towns and different agencies
- To utilize the limited resource of different agencies according to the needs of the local people
- To support the implementation of the master plan

Following are the steps of preparation of the MSIP:

- Financial resource analyses,
- Project formulation,
- Project prioritization,
- Project programming,
- Defining the role of the concerned line agencies in implementing.

Such plan reveals short and long-term programme/projects, cost estimate, and probable financing sources prioritized in sequential manner for the planning period. Such programme/projects link closely to long-term development plan, sectoral goals and objectives, and the vision. It is suggested that the plan/projects that have to implement by different line agency in MSIP, included after thoroughly consultation with the concern offices. The cost estimate of the project has been done according to LS district rate of concerned NT.

2.4.4 Preparation of Building Bye-laws

The IDP consists of sectoral plan including building bye-laws of the town. At this stage of preparing for building bye-laws of NT, strategic road network of the NT has been

categorized. The bye-laws was prepared based on the consultation meetings, existing building construction practice, road network and review of existing bye-laws of Nepal Government. The strategic road networks of both towns have been prepared in the GIS environment. Similarly, potential urban expansion area, availability of developable land, environmental sensitive area etc. have been identified and delineated on the map. Following things were given in attention for preparing the building bye-laws;

- General definition
- Zoning classification and bye-laws/regulation
- Implementation mechanism & procedures etc
- Expected behavioural change from NT citizens
- Existing bye-laws prepared by the MoFALD
- Bye-laws of Other towns

Such building bye-laws will be the guiding documents for urban development, sustainable city management, controlling haphazard urban growth and sustainable urban development to the new town. As explained in the literature review section, ‘Building Bye-laws’ of Kathmandu Valley and recent urban development and building construction guidelines prepared by MoFALD were major basis for preparation new towns building bye-laws.

2. 5 Block Physical Model of Town

Block physical model was prepared at 1:10000 scale covering entire municipal area. The size for covering entire are of Laligurans Municipality will be 48*56”. Similarly the physical model was prepared 1:3500 scale covering main core bazaar area of the town (municipality). Existing condition including with the existing infrastructure as well as proposed infrastructures are presented in the model. Photographs of the model are presented in the annex 4.

2.6 Flow Chart of Preparation of Integrated Development Plan (IDP)

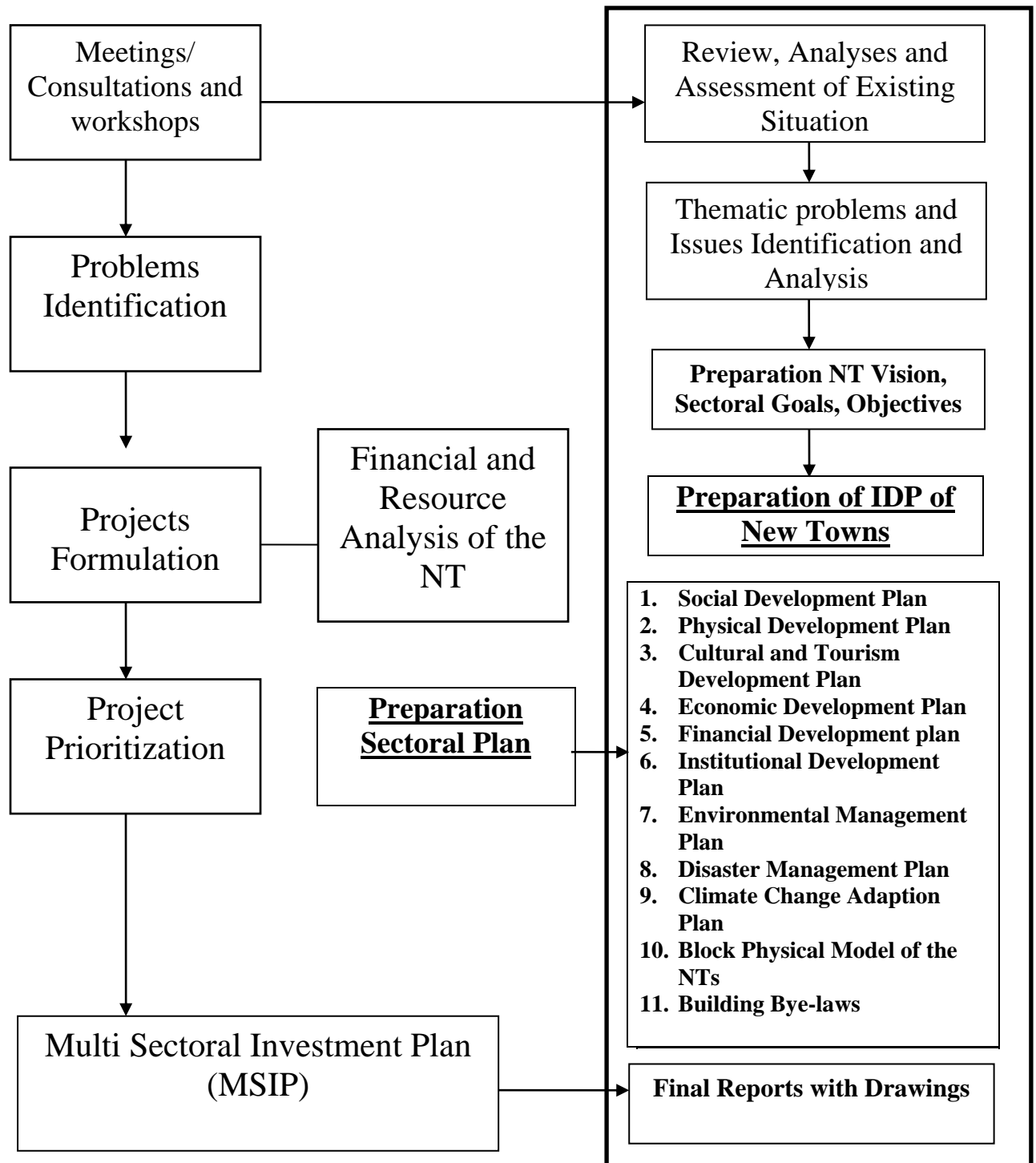


Figure 8: Flow Chart of Preparation of Integrated Development Plan

3 REVIEW OF LITERATURE

To make this assignment scientific and valid, literature review of various cases and documents have been done so that integrated development plan of New Towns would be realistic and implementable. Here for the practical and theoretical ideas various cases, approaches related to integrated development plan have been reviewed.

3.1 International Cases Reviewed

South Africa: South African municipalities find themselves confronted with a harsh reality and that is that after 12 years of legislated Integrated Development Planning (IDP), poverty remains widespread and persists alongside affluence, while inequalities are increasing. The mechanism of service delivery in municipalities is hampered by bureaucratic settings within Local Government and the ambiguity attached to some of the projects. The service and infrastructural developments targeted for the poor, and the involvement of communities in the affairs of the Local Government might be seen as a partial panacea for poverty alleviation in South Africa, however the capacity of Local Governments to effectively carry out this developmental challenge assigned to them might be a new twist in the developmental challenge facing Local Governments in South Africa.

The commonly-employed approach to local development to the challenges of co-ordinating and integrating efforts has revealed clear evidence of the usefulness of sustainable local development which helps to promote effective planning methods based on a multi-sectorial approach to poverty reduction and community development for an integrated local development planning process.

This document reveals that integrated development planning in Africa only focused on the physical aspects rather than socio-economic so poverty gap is increasing and socio-economic growth stagnant.

Romania: Romanian cities were experiencing a remarkable phase of transition. This passage could be seen under many viewpoints; the historical background is the change from a centrally planned to a market-based economy. As this process of change started 18 years ago (with the Romanian revolution and the end of the Ceausescu regime), it still doesn't achieve that "good balance" providing quality of life and tangible example of sustainable development. Romania, among the eastern European countries, still presents substantive delay in many relevant fields. Cities lag behind in infrastructure, services, economy and environmental protection. The quality of life of Romanian citizens is still low under many aspects. There are a number of factors contributing to the present state of art in the Romanian urbanism and in the way Romanian towns and cities developed during the last 18 years. Drawbacks of Romanian integrated development planning were notices as:

- A weak planning system with an urgent need of innovative planning instruments (lack of suitable planning tool for managing urban transformations).

- Political Agendas (at central and local level) that don't consider as crucial the urban questions.
- A rare diffusion of strategic visioning among politicians and professionals in municipalities
- Local government reforms in the country (decentralization, devolution of power, and privatization) not well defined and often in deadlocks.
- A scarce effort in introducing more local autonomy, citizen participation and rebalancing of public and private sector roles.

Romanian case seems very similar to Nepal since we are in transition phase of political stability and country is suffering for federal constitution writing for long time. In such transitional phase, integrated development plan of new Town can be another challenge for sustainable development plan which should be considered while formulating IDP of New Towns.

3.2 Review of Planning Approaches and Methods

Literature review about planning approaches and methods have been done as follows;

a) Planning as Vision for New Town Development

If you give a man a fish, you will feed him once
 If you take a man fishing, you will feed him for a week
 If you teach a man to fish, he will never be hungry
(Leo Tse)

Similarly, there is an Oriental saying:

Where the vision is one year, cultivate flowers.
 Where the vision is ten years, cultivate trees.
 Where the vision is eternity, cultivate people.

Oriental saying

Above proverbs direct to a planner and development activists to adopt vision oriented development planning within the given socio-economic context. These also indicate that a planner should know and adopt local context and situation so that the planning concept can be adopted in a regional development perspective. Planner needs to look at the core and potential issues to direct a city or a region in planning way. Planning is vision for future which guides line agencies to work with. To look at the urban planning in the context of new town development in Nepal, structural as well functional plan should be prepared which ultimately helps development practitioners for sustainable development of the new town. In the context of new town development plan, long-term development plan with vision, mission and objectives in an integrated way is necessary. Therefore, this document will be the basis for managing emerging issues of new town for sustainable city development planning.

b) Linkage of Centre and Periphery: Forward Backward Linkages

Market centres are the centres which provide services to its surrounding areas. These centres provide specific goods and services to its hinterland people. Therefore, market centres develop at some strategic location and people living at its hinterland will get services. As proposed by Christaller, 1933 (Central Place Theory), some market centres can function as specialized centres and some other function as some other specialized function, thus developing settlement hierarchy in a given region. While studying small and large market towns, it should be taken in mind about the settlement system and market centre functions. The possible developable areas lying nearby the settlement, therefore, should be considered while studying emerging market centres. Therefore, Christaller's Central Place theory would be applicable while studying the development growth centre and its linkage to its periphery of new town, which will be the growth centre and its vicinity and other settlements will be the hinterland.

The idea within in this approach is that proposed new town would be the growth centre and surrounding settlements would be the hinterland. Growth centre would provide serves to the hinterland benefiting by the production and labour from its vicinity i.e. hinterland. Thus the entire settlement of the area would balance growth.

c) Flow of Goods and Services between Settlements/Markets

Rural urban linkage is most popular for exchange of rural urban services between two different settlements. As urban settlement provides market for rural population in terms of labour work, rural products and others, urban settlements are important for providing goods and services. Similarly, rural settlement can sell its product to urban market centres and these two settlements are interconnecting by goods and services.

Traditionally, development policy and related research have adopted a simplified concept of rural and urban areas, with the words rural referring to more “remote farming areas” and urban to “crowded cities.” To a larger extent, this view has facilitated the isolated treatment of issues affecting each space, and it has as a result failed to acknowledge the important poverty-reducing inter-linkages that exist between the two spaces and the many variants of the spaces. In reality, farming areas (the very rural) and the megacity (the very urban) coexist along a continuum with multiple types of flows and interactions happening between those two spaces.

While studying new towns located in the corridor of Mid Hill Highway as the growth centre, it should therefore, focus to see the flow of goods and services between small and large market centres and their function. If this approach would applied for studying new towns as growing settlements and rural settlements would exchange goods and services and finally will emerge as developed town, then we need planning for sustainable urban development.

This approach not only would be applicable for studying the goods and services exchange between hinterland and the growth centre but creates opportunities for employment, physical

development, infrastructure planning, development of urban infrastructures and sustainable urban development. Within this background, this approach would be applicable and we are considering this approach as tool of planning for new town.

3.3 Review of Building Bye-laws

Building bye-law can foster the following components;

- a) Prior organization of land use, infrastructure and structure to guarantee optimal
 - Economic Outcomes
 - Social Stability and Harmony Outcomes
 - Aesthetic and Cultural Outcomes
 - Environmental/Ecological Outcomes
 - One, some, all and in that order of objectivity?
- b) Seek APPROPRIATE SOCIAL BEHAVIOUR/ACTION in the town
 - Private citizen,
 - Private corporative
 - Public bodies
 - And Conform to an order, cause sought outcomes and not hamper these.

It means building bye-laws Seek appropriate social behaviour/action of the town. It helps for planned development for land use, infrastructure and structure to guarantee optimal Economic Outcomes, Social Stability and Harmony Outcomes, Aesthetic and Cultural Outcomes, Environmental/Ecological Outcomes and development a healthy city. In the context of Nepal, building bye-laws has not been implemented well. In case of New towns, formulation and implementation of building bye-laws is necessary. It prohibits unplanned development and haphazard urban growth.

Since, Nepal government is planning to develop new potential towns in the corridor region of Nepal, it is better from the beginning that enforcement/implementation of building bye-laws is necessary. It will be helpful for land use planning, zoning, spatial planning, infrastructure planning and ultimately for developing sustainable city.

Building Bye-laws of Kathmandu Valley: Building bylaws and regulations are one of the major factors which play a vital role in shaping urban form and built environment. People have become more aware of the urban forms and their impact the built environment. Practices have already been started in most of the cities where codes are developed which will help to control the haphazard urban growth and create a better urban form and the built environment. But in the case of Kathmandu city, the building bylaws and regulations limited with floor area ratio (FAR), ground coverage, setbacks, height of the building and right of way (ROW), which only controls the physical components of the building. In addition, all the laws and codes are specified for the individual building only.

Nothing has been formulated to address the various issues of urban design such as the relationship between the buildings, urban form, public realm, streetscapes, public open spaces

etc. There is no urban design vision in any sector of the development. Scale, density, urban aesthetics, spaces between buildings, massing, layout, landscape, are not taken into consideration in the bylaws. It is also found that when the bylaws and regulations were introduced, it was done haphazardly without consultation with other departments such as department of roads, housing, water supply etc. which are all related with each other.

This has resulted in the present scenario of the urban development of Kathmandu city which seems to be very haphazard and uncontrolled. So there are many issues and questions aroused regarding the current building bylaws and regulations, that they should be revised and re-formulated by introducing urban design guidelines in order to have a better image of the city.

Present assignment should also focus on the core issues urban planning particularly for building bye-laws to regulate haphazard urban growth. Building bye-laws not only shape the urban form of the city but lead to develop sustainable urban development in a planned way. Therefore from the beginning of new towns, IDP is pre-requisite.

3.4 Review of Legislation, Policies, Laws and Guidelines

‘Urbanization’ seems a popular development slogan to path of modernization in Nepal in recent years. Due to this urban based development modality, rural-urban migration has been increased. It is found that nearly 38% populations of urban area in Nepal are migrated either from the rural districts or from the outside. Generally, urban centres in Nepal are concentrated either at along the East-West Highway corridor or Kathmandu valley and the surrounding area. Many of them are growing haphazardly or with no proper planning framework. Haphazardly growing such centres creating many social economic and environmental problems and seems unhealthy living environment of the urban areas. Cities are failing to cope with the demand of infrastructures services and job opportunities and increasingly reeling under the externalities of the haphazard urbanization. To address such issues, some efforts have been made through introducing several acts, rules- regulations and guidelines for the urban development and development planning processes in Nepal.

Table 1: Urban Sectors Legislative Framework

Year	Acts/Rules/Regulation/Guidelines
1973	Town Plan Implementation Act
1975 (2032)	Town Development Planning Implementation Regulation
1982	Decentralization Act
1988	Town Development Act
1989 (2045)	Kathmandu Valley Development Authority Act
1989 (2045)	Town Development Act
1992	Municipal Act and Rules
1997	Town Development Fund Act and Regulation
1998 (2055)	Building Act
1999	Local Self Governance act
2000	Local Self Governance Regulation

2001	National Transport Policy
2004	National Agriculture Policy
2007	National Urban Policy
2008	Tourism Policy
2011	National Industrial Policy
2011 (2068)	Kathmandu Valley Development Authority Regulation
2012	National Landuse Policy
2013	Planning Norms and Standard
2014 (2071)	National Settlement Policy
2014	Business Plan
2015	National Urban Development Strategy (Final Draft)

Nepal has experienced some settlement planning attempts since 1944; Rajbiraj was planned to resettle people from Human Nagar. Nepal experienced a fifth-year plan (National Periodic Plan) in 1957 (2013BS), but the concept of urban planning begun with **Third National Plan (2067-71)** particularly through introducing targets of Housing and Town Planning: Third National Plan stated that:

In order to develop the city areas in Kathmandu Valley, a master plan of Kathmandu and Patan is under preparation. Master plan for neighbouring cities will also be prepared during the plan period. On the basis of such plans, steps will be undertaken to improve the city area of the Kathmandu Valley.

His Majesty's Government will provide necessary incentives to the private sector in order to construct 400 new houses in Kathmandu, particularly for the use of the middle and low income groups. In addition, 51.28 hectares of new plots of land will be acquired during the plan period. Utilities such as water, electricity, schools, roads etc., will be arranged on this land and plots will be sold to persons interested in constructing houses. It necessary, the land will also be sold on an instalment basis.

Tenth Plan (2002-2007) objectives for the Urban Development were to 'develop the cities and strengthen the rural-urban linkages by providing with the modern physical facilities and by protecting and promoting the cultural, touristic and historical areas in their present form'. Strategies were focused on the preparation of physical development plans, development of satellite towns surrounding Kathmandu valley, private sector and the local bodies' mobilization to construction, operation and management of urban infrastructure, and promote rural-urban partnership.

Three Year Periodic Plan (2067/68-2069-70) (Urban Development Sector) aimed to develop safety, clean and economically viable urban centres. Ten new town development programmes was also included one of the main programme of the plan period.

Thirteen Plan (2070/71-72/73) (Urban Development sector) has aimed to improve urban quality through providing adequate infrastructure, safety, clean and manageable urban areas. The plan has set up the following vision, objectives and strategies:

दीर्घकालीन सोच: शहरीकरणलाई व्यवस्थित गरी ग्रामीण क्षेत्रसँगको अन्तर्सम्बन्ध सुदृढ गर्दै राष्ट्रिय अर्थतन्त्रको विकासमा सघाउने ।

उद्देश्य: पर्याप्त पूर्वाधार सहित सुरक्षित, स्वच्छ, व्यवस्थित र आर्थिक रूपमा सबृद्ध शहरहरूको विकास गर्ने ।

रणनीति: नयाँ नगरपालिका तथा शहरोन्मुख गाउँहरूको व्यवस्थित शहरी विकासको लागि शहरी पूर्वाधारको उपयुक्त कार्यक्रम तर्जुमा गर्ने । शहरी क्षेत्रको व्यवस्थित विकास गर्नका लागि आवश्यक पूर्वाधार तयार गर्दै जाने ।

Similarly, one of the main working policies of the thirteen plans is to develop manageable urban centres and settlement along the main highway including urban centres developed at along the mid-hill highway. Similarly, one of the main programme is to prepare integrated action plan in which urban mapping, periodic plan, physical development plan, detail engineering design of the projects, feasibility and impact study of the projects are included.

National Transport Policy 2001 aimed to developed sustainable urban transport system to improve social and economic development of the country. The policy emphasized to north-south and east-west linkages including Mid-hill highway.

National Urban Policy 2007 is a guiding document of the urban development in Nepal aimed is to develop a balanced national urban structure, promote healthy and economically vibrant urban environment and strengthen the effective urban management. The policy has also guided to the current urban environmental and governance projects, for example Secondary Town Urban Environment Improvement Project (STUEIP), Integrated Urban Development Project (IUDP), Urban Governance and Development Projects (UGDP). But National Urban Policy has not been able to link with various sectoral plans and programmes, and also unable to deal the linkages between inter urban and urban-peripheral relationship.

Town Development Act 1988 provides the legal basis for implementation town development plan. The act deals with the formulation and approval of town and local plans, formulation of Town Development Committee (TDC) and the function, duties and powers of the committee.

Local Self Governance Act 1999 defined District Development Committee, Municipality and Village Development Committee and their formulation processes, roles and responsibilities of each local body. The act has been given ample authority to municipality to prepare and implementation planning, monitoring development projects through the utilization of local natural resources. The act has also defined metropolitan city, sub metropolitan city and the municipality based on the pre-defined criteria. The most important thing is the act has made local governments autonomous bodies. The act recognized 58 municipalities as urban areas. But there are several small towns and market centres which are designated as a municipality recently; and other settlements along the mid-hill highway need

to be recognized. Department of Urban Development and Building Construction (DUBDC) has identified 23 settlements with high potential growth rate along the Mid- Hill Highway and has identified Ten major areas to be developed as New Towns. At present there are 191 municipalities considered as a municipalities. However, Basantapur, Khurkot, Chaurjahari and Rukumkot which developed along the Mid-Hill Highway and among the Ten New Town are not getting municipality status.

National Land Use Policy 2012 (2069) is a milestone in the context of optimum utilization of land resources through the classification of land into seven broad categories: Agriculture, Residential, Forest, Industrial, Commercial, Public Service Area, and Other lands. It is an effective document for the enforcement of the land use control accordingly. The policy discouraged land fragmentation and emphasized on the land use according the suitability and appropriateness. Generally, agriculture land needs to preserve while settlements are encouraged in the safer location.

Business Plan 2014 prepared by the DUBDC is a very useful document for guiding effective implementation of housing, urban development and building construction activities. The plan intended to mobilize possible resources for the implementation of the activities based on the long term vision, mission, goals and objectives. The potential obstacles and risks are also defined in the document and also try to give alternative solutions.

National Urban Development Strategy 2015

National Urban Development Strategy 2015 (final Draft) has prepared with a vision of balanced and prosperous national urban system, and provides desirable conditions and strategies for the next 15 years (up to 2030 AD) by covering various sectors of urban area such as infrastructure, environment, urban system, urban finance, urban economy, investment, land management and governance; through the analysis of existing scenario, critical issues of the urban area and urbanization trends in Nepal. The strategy report has also indicated the social, economic and cultural vision of urban area. Each strategy is backed by a number of activities recommended for each lead and supportive agencies within the different levels of the government, NGOs and the private sectors.

The main aim of these acts, plans and policies is to make balance national urban structure, promote healthy and economically vibrant urban environment and strengthen the effective urban management. However, urban areas in Nepal are becoming unmanageable.

Tourism Policy 2008

Tourism Policy 2008 has provided standard guidelines to tourism based industries, tourism products, entrepreneur and tourist. It has addressed relevant issues like rural tourism, eco-tourism, agro-based tourism, adventure tourism, education tourism and health tourism and has prioritized the insurance of tourism entrepreneurs. The policy aims to diversity tourism products and services and take tourism to new areas.

National Industrial Policy 2001

The Industrial Policy 2010 was created to bring positive changes in the overall economic and social sectors of Nepal through acceleration of industrial development. The policy aims to boost industrial development activities, create employment, and ensure that the industrial sector contributes to the national economy as a leading sector. The policy has determined the vision to make remarkable contribution in national economy through sustainable and broad-based industrial development in an effective, coordinated and collaborated partnership of public, private and cooperative sectors thereby to support poverty alleviation.

The main objectives of this policy are to increase export of industrial products along with growth in national income and employment through enhancement of quality and competitive industrial products and productivity. Other objectives are to increase contribution of industrial sector in the balanced national and regional development by mobilizing local resource, raw materials, skills and means.

To establish industrial entrepreneurship as a sustainable and reliable sector by utilizing latest technology and environment friendly production process are another objective of the policy. To create strong basis of investment having developed productive human resources and managerial capacity required for industrial development thereby establish Nepal as attractive place for investment in the South Asian region and in the world as well and to protect industrial intellectual property rights are other objectives of the policy.

National Agriculture Policy 2004

National agriculture policy 2004 was created to improve the standard of living of Nepalese through sustainable agriculture development while transforming the current subsistence-oriented farming to a commercial and competitive farming system. The policy places special priority on the development of high value agricultural products in areas adjoining the north-south highways and feeder roads, and production of low-weight and high value agriculture products in remote areas. The policy has three major objectives as follows:

- I. to increase agriculture production and productivity
- II. the bases of a commercial and competitive farming system will be developed and made competitive in the regional land world markets
- III. Natural resources as well as the environmental ad bio-diversity, will be conserved, promoted and properly utilized.

Planning Norms and Standards 2013

Planning norms and standards provides basic principles for the planning of urban development works in Nepal. Department of urban Development and Building Construction prepared a single Planning Norms and Standards in 2013 to use as a tool for standardizing the planning of urban development projects. It was prepared after completing a comprehensive literature review of national and international planning documents, existing norms and standards and policy of urban development related agencies. Also, discussions and meetings were held with experts from related planning organizations.

The complete Planning Norms and Standards have three broad headings: infrastructure norms and standards, land use norms and standards and urban form norms and standards. However, Planning norms and standards 2013 has only the infrastructure section.

3.5 Review of Development Planning Attempts

Rajbiraj: It was the first township in Nepal to have urban planning and had one of the first airfields in the Tarai. However, border cities like Birganj and Biratnagar surged ahead but Rajbiraj is bypassed by the east-west highway and became a stagnant. There are many reasons for getting behind in development of Rajbiraj; however lack of implementation of development plan is one of them.

The district headquarters of Saptari, Rajbiraj was the earliest planned township in the country. Systematically designed in 1938, it was declared a municipality in 1959. Rajbiraj served as a trade Centre, occupying a prominent place in the economy due to the Hulaki highway. Rajbiraj was also the cradle of the democracy movement, where the anti-Rana agitations began with the jail break by political prisoners of the nearby Hanumannagar Prison.

There seems to be a consensus here that the construction of the east-west highway which bypassed played a major role in the town's decline. Locals from the area believe that Rajbiraj would be a thriving economic Centre if the road had passed the town; instead it went through the Lahan, to its north. Lahan has now sprung up as a major township and highway junction.

Industrialists are reluctant to invest in Rajbiraj because of the lack of infrastructure, and other basic services. With its fertile soil, access to irrigation, and its location on the border Rajbiraj should have been a major hub for trade in cash crops. But harvests are stagnant and there is very little innovation. Dirt-poor peasants are just struggling to survive from season-to-season. Unmanaged parking, road encroachments, operation of the bus park, construction of urinals, and uncontrolled human settlement are the major problems within the city area.

It reveals that bypass of road/highway was the major reason for getting behind of the pre-planned Town. However, political willingness, people's attitude and low level of awareness with the people are the causes behind stagnation of this town. Therefore, implementation of plan with long-term vision is important rather than just formulation of good plan.

Pokhara: A master plan that was prepared in 1974 to develop Pokhara as a well-managed city is yet to be executed fully. The master plan had aimed to develop the tourist town as a green and well planned city. The major focus areas of the plan were Green city, Tourism city with healthy leaving by implementing urban norms such as bye laws, right of way, safety measures and so on.

Another integrated action plan was also prepared focusing on environment conservation and preservation. The action plan resembled in the purpose with the first comprehensive master

plan. It had focused on lake conservation, environmental management, risk management to make Pokhara healthy liveable city.

Likewise another Pokhara valley construction standard came into existence in two years ago. Nearly a decade and a half back, geo-utility policy was devised with a loan assistance of the ADB. Although the policy stated that plots of land at ward number 10, 14 and 18 were suitable for agricultural purpose, many houses and buildings have been constructed in those areas.

However, a stretch of New Road is the only activity carried out in Pokhara over the last four decades as a part of the master plan. The city development committee of Pokhara has prepared plans time and again in the past; however the purpose of all the plans to develop Pokhara as a well-managed city has become only a dream.

Failure to execute those plans has been evident for the fact that the plans have just been limited to become nominal at a time when Pokhara ranks in the 10th position out of 14 cities in terms of dense human settlements, as per the Ministry of Urban Development.

Recently, the Ministry of Urban Development prepared a 20-year long-term plan for Pokhara valley. The major issues of this plan was to preserve environment, develop corridor development, prepare tourism friendly infrastructure, implementation of building code and standards, implementation of disaster sensitive plan and develop Pokhara really as regional administrative Centre of western development region.

Reviewing of Pokhara plans suggests that it was not problem for formulating plans for Pokhara but its implementation part is lacking. Even the city has great potentialities of tourism development; concerned stakeholders are falling behind for implementing tourism infrastructure in Pokhara. Besides, lack of implementation of disaster sensitive land use plan of Pokhara has pushing Pokhara more disaster prone city.

Surkhet (Birendranagar):The administrative structure of Nepal was reviewed and amendments were made in 2019 B.S.as a result of which, Nepal has been divided into 14 Zones and 75 Districts. According to this newly amended administrative structure of Nepal, zonal and district administrative centres were established. For Surkhet district, initially the district administrative Centre was selected as Gothikada but later the administrative centre was relocated to Chauhanchaur of Surkhet valley and renamed as Birendranagar Municipality.

In 2028 B.S., nation took the regional development approach and Nepal was divided into five development regions, among which for the mid-western development region, Birendranagar Municipality was selected as the regional headquarter. The settlements have increased in Birendranagar Municipality only after the malaria eradication programme was launched at 2023 B.S. and prior to that, people used to work in the agricultural fields in the day and before evening return to their homes about four kilometres uphill in the places such as Katkuwa, Gothikada, Jarbuta, Bayalkada or Ramrikada while very few people of the people belonging to Raji community and Tharu community used to live in the valley. In 2022 BS

airport was constructed and operated and in 2038 B.S after Ratna highway was constructed, after which Birendranagar grew as a market centre for Jumla, Humla, Mugu, Dolpa and Kalikot of Karnali zone as well as Dailekh, Jajarkot and Achham districts. Birendranagar was previously known as Chauhan Chaur which was renamed as Birendranagar at 2029 B.S and at the same year master plan was approved and implemented for Birendranagar Municipality. Birendranagar is one of the oldest 36 municipalities and regarded as one of the planned city of Nepal and recently Jarbuta VDC located eastern side of Birendranagar has been annexed.

In 2007, Dept. of Urban Development and Building Construction put forth a notion of periodic plan for the development of Birendranagar Municipality. The periodic plan took the bottom up approach for the need identification procedures rather than top down approach in the master plan. The periodic plan states the comprehensiveness of master plan approach is being an obstacle for implementation of it as Ward level problems are not addressed by master plan as it requires action plan approach for the mitigation of the problems. The periodic plan states rapid urbanization, lack of resources and poor institutional capacity of the local bodies and political upheavals are the reasons which are making master plan approach very difficult to implement and is being limited only in the text and hence the periodic plan is required for the development of Birendranagar Municipality. The periodic plan of Birendranagar Municipality recommended the densification of the existing urban areas and coordinated development of the sparse urban settlements outside the core urban area around Mangalgadhi Chowk at the same time conserving the areas of cultural importance.

In 2008, Dept. of urban development and Building Construction launched another programme stated as of Master Plan of Review of Surkhet valley. The main objectives of the project were to review the appropriateness of the master plan prepared in 2033 BS in today's context, amend the master plan according to the physical development plan approach and prepare the building byelaws, multi-sectoral investment plan as well as overlay the existing plan into the cadastral map of Surkhet valley. The project come up with the recommendations such as incorporating VDCs and Birendranagar Municipality as a holistic approach for planning approach, developing Latikoili Shiva temple area, Uttarganga area, and old Dhuswara area as urban development centres. Similarly, the project recommended on developing the areas around Mangalgadhi Chowk as main urban canter, developing ring road as a bypass of the Ratna highway and joining the roads extending to the southern part of the valley as arterial road.

The review of Surkhet plan also reveals that plans have been preparing for municipal plan for long time but the situation is that proper implementation of such plans have been a challenge. Being highly urbanized, Surkhet now facing many challenges for urban planning and development and has turned crowded city. Long-term development vision needs to revisit and proper implementation of plans and programmes are necessary for sustainable management of Birendranagar.

Furthermore, DUDBC has been preparing physical development plan of major towns, cities and small towns of Nepal. Most of the physical development plans and master plans of DUDBD have focused on the following issues:

- General profile, problems and potentialities
- Situation analysis
- Infrastructure plans, road, drainage, sewerage, utility infrastructures (existing and future expansion)
- Land use plan (existing and future)
- Environmental situation and plan
- Implementation of urban norms, regulation and standards

3.6 Past Planning Efforts

The evolution of planned development in Nepal can be traced back to the 1950s. A planning agency by the name of Planning Commission was constituted for the first time in Nepal in 1956 under the Chairmanship of the Prime Minister. To make it more capable and effective, The Yojana Mandal (a planning body) was set up the same year in accordance with the Yojana Mandal Act, 1957. In addition to the responsibility of plan formulation, the Yojana Mandal was entrusted with various executive powers. Following the overthrow of the multiparty democratic system in 1960 and with the beginning of Panchayat Political system thereafter, Rastriya Yojana Parishad (National Planning Council) under the Chairmanship of His Majesty late King Mahendra was constituted. As the decisions of the Council were treated as equivalent to that of the cabinet, the Council was regarded as the highest authority in the sphere of economic planning and policies. In the beginning, a separate Secretariat was set up to serve the Council. However, with the creation of the Ministry of Economic Affairs in 1962, the Ministry itself carried out the functions of the Secretariat. Various activities pertaining to development budget and foreign aid were directly mandated to the National Planning Council.

With the dissolution of the National Planning Council in 1963, a new central planning body, with an identical name, was constituted under the Chairmanship of the Chairman of the Council of Ministers. All the Ministers were designated as Ex-officio members and the Ministry of Economic Affairs was renamed as the Ministry of Planning.

In 1968, all the works related to development budget and foreign aid hitherto carried out by the Ministry of Economic Planning was assigned to the Ministry of Finance. The National Planning Council under the Chairmanship of the Chairman of Council of Ministers was replaced by the National Planning Commission, under the Chairmanship of the Prime Minister, and a separate Secretariat was set up to serve it.

A comprehensive study on the functions and responsibilities of the central planning agency resulted in the preparation of the report in 1972 and the National Planning Commission was reconstituted accordingly.

Planning activities were carried in accordance with the Report on Central Planning Agency, 1972. In 1987, some minor changes were introduced in the structure of National Planning Commission. With the restoration of democracy, following the people's movement of 1990

and the establishment of constitutional monarchy in the country, some changes were made in the structure and organization of National Planning Commission in 1991. The reconstituted Commission was headed by the Prime Minister and consisted of a Vice-Chairman and five members and a member-secretary. The Chief Secretary and the Finance Secretary were included as the Ex-officio Members.

Besides some other governmental agencies/departments, Local Bodies have been continuously working on urban and rural development planning sectors since last four decades. Among the major planning efforts of Nepal, Integrated Action Plan, Master Plan, Periodic Plan, Local Area Development Plan, Physical Development Plan, Action Plan are have been implemented by the Government of Nepal. All these above mentioned plans were aimed to reduce poverty, development of physical infrastructure, social and economic sector. Most of the plans implemented by government either failed or could not achieve their objectives as expected due to various reasons such as lack of implementation strategy, political instability, absence of good governance, lack of fund and low level of public participations.

Master Plan is detailed plan with long-term vision and contains a detail list of planning activities. Master plan in fact could not be implemented as it aimed. In this situation several master plans could not achieved their objectives or it had been difficult to implement due to its vague objectives, huge budget and ambitious plans. Therefore several master plans sit on a government shelf and never come to implementation phase. Government also introduced several Local Area Plans. But they were aimed to small geographical boundary and could not be more effective to address real ground problems. Later, after the formation of Local Self Governance Act in 1999, local government bodies like District Development Committee (DDC) and Municipality have started to prepare Periodic Development Plans. Periodic Plans aimed to five years multi-sector development plans (social, economic and physical infrastructure). Some, periodic plans have been just a shopping list of projects with lacking of proper implementation strategy. On the other hand, Physical Development Plans basically focused only on development of physical infrastructure rather than other sectoral development plans. Hence, New Town Project Coordination Office (NTPCO) under the Department of Urban Development and Building Construction (DUDBC) has introduced Integrated Development Plan (IDP) for the ten new towns to be developed along the corridor of Mid-Hill Highway. This integrated Development Plan aims to prepare long-term physical development plan, land use plan, social, cultural, economic, financial and institutional development plan, environmental and risk sensitive land use plan, climate change perspective plan, multi-sectoral investment plan for the overall development of new towns. It is therefore, IDP can be regarded as SUPER plan with covering multi-sectors of the new towns.

3.7 Review of Settlement Plan, Urban Plan, Building Construction Guidelines (MoFALD), 2015

The April 2015 devastating earthquake killed Nearly 9,000 people and more than 30,000 were injured and thousands of people were made homeless. Many villages destroyed across

many districts of the country. Geophysicists and other experts had warned for decades that Nepal was vulnerable to a deadly earthquake, particularly because of its geology, urbanization, and architecture. The devastating earthquake and subsequent aftershocks have caused damage of billions of national economy, physical infrastructure and assets which demands billions of rupees to be spent in the coming years to regain lost property, restore physical assets and improve livelihoods of the people.

While investing for reconstruction the physical infrastructure, Ministry of Federal Affairs and Local Development (MoFALD), has promulgated/developed settlement plan, urban plan and building construction guidelines, 2015. The guideline is prepared to make the infrastructures including buildings safer. The major features of the guideline are given below:

Table 2: Major Features of Settlement Plan, Urban Plan and Building Construction Guidelines 2015

Road Width	<ul style="list-style-type: none"> ▪ Minimum width of road 6 meters ▪ Minimum setback of road to be left from road side 1.5 meters ▪ Minimum rights of way 6 meters ▪ Except Kathmandu valley and plain area, in mountain and gentle slope hilly land, minimum setback of road from road side 4 meters ▪ Minimum radius of turning or bend of road at least 20% more than road width ▪ Building design cannot be approved taking Public land as a road,
Land to be vacant	<ul style="list-style-type: none"> ▪ 30% vacant area for residential building construction of 250 sq m area. 40% vacant area for building construction having 250 sq meter and more area. ▪ 50% vacant area for governmental, semi-governmental and public building construction.
Open space	<ul style="list-style-type: none"> ▪ Develop Public, Parti and Ailani land as a greenery park ▪ Don't provide any public land to anybody without cabinet permission
Basic information at construction site	<ul style="list-style-type: none"> ▪ hoarding board at construction site For A and B class building construction showing building construction permission paper, design map, setback, ground coverage ratio, floor area ratio etc.
Outside Valley Criteria	<ul style="list-style-type: none"> ▪ Municipality outside Kathmandu Valley: Follow building code 2071 prepared by ministry of urban development.
Land Plotting	<ul style="list-style-type: none"> ▪ Take planning permit from respective authority ▪ Major road width 8 meter ▪ Minimum road width 6 meter and 1.5 meter setback

	<ul style="list-style-type: none"> ▪ Open space at appropriate location ▪ Minimum area required by local authority for plotting ▪ Local authority prepare regulations to manage land plotting ▪ Installation of drinking water tap, electricity and construction of other infrastructure will be interrupted if accepted criteria is not fulfilled and interruption of land registration
Compound Wall	<ul style="list-style-type: none"> ▪ Leave setback for compound wall ▪ Maximum height of compound wall 4 meter and maximum 3 feet net above the wall ▪ Compound wall Naksa pass Mandatory ▪ Plantation for the security of land and property ▪ Dismantle risk wall immediately
Safety Tank	<ul style="list-style-type: none"> ▪ Include safety tank in Naksa Pass
Banking and Insurance	<ul style="list-style-type: none"> ▪ No banking and insurance without construction completion paper
Restriction of building construction in risk areas	<ul style="list-style-type: none"> ▪ Construction of building in more than 300 slope land is prohibited ▪ Building construction at prohibited area declared by land and mine department and district natural calamities rescue committee is not allowed
Changing purpose	<ul style="list-style-type: none"> ▪ No provision to change residential building into commercial building ▪ If part of the residential building is used for commercial purpose then entire house will be taken as commercial building
Building construction permission around runway	<ul style="list-style-type: none"> ▪ Civil aviation authority regulations will be applied for the construction of building around runway ▪ Civil aviation authority regulations will be applied for the building located at 500 meter far from the runway outside boarder and 17 meter tall building

3.8 Building Construction Model Bye-laws, Ministry of Urban Development, 2014

Nepal has 216 municipalities. Among them only 8 municipalities have implemented the building permit provision where the implementation of building code, bye-laws and act has not been uniform. Therefore, ministry of urban development has prepared building construction model bye-laws for the development of sustainable, clean, healthy, environment friendly and uniform urban infrastructure. The major objectives of these bye-laws are to provide the uniform building code and guidelines to all the municipalities for the healthy, green, clean and sustainable urban environment and to develop planned infrastructure. The

ministry has expected to implement this model bye-law in all the urban areas at least in the municipalities.

This bye-law has five chapters. Preparation and implementation of bye-laws as well as importance of building code, act and bye-laws are clearly mentioned in the first chapter. Rights of building code and its utilization are described in the second chapters.

Chapter three deal with the development and construction provisions of both residential and non-residential sectors. Bye-laws of heritage building and national conservation areas are discussed in chapter four. Lastly, provisions related to fire security are discussed in chapter five.

What are the major guidelines of this???

3.9 Nepal, Inclusive Cities: Resilient Communities, Ministry of Urban Development, 2015

According to National Population census of 2011, only 17.1 per cent of Nepal's total population lives in the urban areas or municipalities. At present Nepal ranks top with 38.26% of urbanization level among SAARC countries due to addition of 133 new municipalities in 2014. The country's total population and urban population according to 2011 census was 26,494,504 and 4,523,820 respectively. The urban population of Nepal is estimated to be 10,355,900 at present. Generally, the growth rate of urbanization in Nepal is higher than the country's population growth rate and this is true at present. Therefore, urban planning has been very challenging and complex to provide safe, comfortable and environmental friendly services to increasing population with limited resources. Realizing this fact, ministry of urban development has prepared a study named "inclusive cities: resilient communities" in 2015.

This study has discussed briefly on urban planning with reference to urban demography, available land and environment, housing and basic urban services/facilities. The study has identified several challenges which are mentioned below:

- Increasing trend of informal settlements in urban areas
- Low urban densities, which creating difficulty in providing urban service and increasing investment cost
- Great demand for the rental housing
- Growing housing colony and apartment
- Insufficient water supply and sanitation
- High demand of domestic energy in urban areas
- Low road density and standard or urban transportation

Future challenges and issues identified in these areas are:

- After promulgation of new constitution maintaining cordial relation with the cities and other concerning places of different providence is a bigger challenge ahead

- Demand of huge amount of house due to the increasing urban population and fragmentation of families
- Decreasing source of drinking water
- Increasing demand of clean and renewable energy
- How to provide rapid and mass transport service

Lesson learnt in these areas:

- A suitable repayment modality is made for removing informal settlement and improving housing condition in the city
- Cooperative housing approach of construction and operation of housing for the low income groups
- Operation of rental housing in the major urban areas to meet the demand of housing unit
- Rainwater harvesting and ground water recharge
- Business opportunity for the private sector through urban infrastructure development
- Installation of solar home system and bio gas plant
- Mass electric vehicles and public busses

3.10 National Settlement (Awas) Plan, 2014

In order to manage the settlement to achieve the target aimed by national settlement plan, ministry of urban development, government of Nepal has prepared National Settlement Plan, 2014. This plan has discussed briefly on present status of settlement in the country. The demand and supply of settlement for high, middle and lower class has been clearly examined in this policy. Similarly, appropriate technology and infrastructure, different time's settlement policy and international experiences on settlement plans were clearly examined and discussed in this policy. Other important parts of settlement plan like financial arrangement and role of concerned stakeholders on settlement sectors were also discussed in settlement plan, 2014.

This plan has aimed to provide secure, enough and status based settlement for entire people of the nation. This plan has tried to cover the people living in scattered/informal settlements and people living below poverty level. The three major aims of this plan are as follows:

- Provide appropriate, secure and environment friendly settlement for all level people and enhance the quality of present settlement
- Effective mobilization of economic sources of settlement sector
- Organisational reform and identify the role of governmental, non-governmental, private sector and community working in settlement sector

3.11 Urban Development (Sahari Bikash): Special Issue on World Habitat Day, 2063

Department of Urban Development and Building Construction (DUDBC) has published an special issue named "Sahari Bikas" in 2063 BS on the occasion of world habitat day. The

issue is a collection of several articles based on building code, urban planning, role of department, urban morphology and environment, urban infrastructure and settlement, development goals and other several issues related to urban development and planning written in both Nepali and English. This issue has been an important document and future guidelines for planners, researchers, policy makers, governmental and non-governmental and professional organizations. Views regarding implementation of rights of home, urban architecture, land pooling/development projects in planning, building code, role of private organization in housing and development, urban environment, green city, good governance, service to the urban poor, safe city, risk reduction etc. are the major theme of discussion.

3.12 Concluding Remarks: Lesson Learned

Nepal has been trying to develop the country on the basis of various development plans. So far, thirteen national periodic such plans have been completed. Based on such plans, a huge infrastructure has been created. Nepal has a wider prospect of fostering development if it can minimize its challenges in the path of development on the one hand and intensify the people's participation on the other. However, its challenges are not always the same. For example, the major challenges at present are the presence of various types of conflicts, lack of economic confidence among domestic and foreign investors and lack of rule of law that has been causing the vandalism at all parts of the country. The country has opportunities also along with challenges. The opportunities like challenges also change time to time. Because of changing nature of opportunities and challenges, the development plans in Nepal have been found taking new turns in the course of time. So far, there has been found three major turns in the history of planned development of Nepal. First turn is associated with the fifth plan which had been made basically to focus the regional development and strengthen the involvement of government control in economic activities through the policy of party less Panchayat system. The second turn is found with the launch of eighth plan which was the first in itself after the restoration of democracy in Nepal. It had focused the concept of privatization and economic liberalization. The third turn is in the form of three year interim plan that has been started after the downfall of kingship because of the historic people's movement in 2006.

The planning efforts have been analysed basically on the basis of visions/objectives and strategies of the plan on the one hand and the change in socio political situation in the country on the other. As far as the development plans are concerned, these are good until and unless these produce positive economic results. The effects of plans are positive. Nevertheless, these are not that much effective as expected. Various factors are responsible for this. However, lack of accountability at various levels, absence of good governance and lack of people's participation to the desired extent are some of the major impediments on to the path of development plans.

To sum up, following points were learned and examined through the review of literature;

1. Most of the plans have focussed to physical infrastructure development planning efforts rather than integrated planning;
2. Most of the local level plans have been some short of project list without proper implementation strategy;

3. Participatory planning is the heart and therefore, plan formulation should be based on local broad range of public participation;
4. Sectoral integration in the development plans are lacking even though periodic plans have some short of provision to integrate sectoral plans;
5. Diverse issues of planning have been considers in the urban planning and development;
6. Intra and inter agency coordination should be strengthen so that plan formulation and implementation could be rightly tapped;
7. Important issues relating to planning have been identified and effort have been giving to integrate in the plans;
8. Some recently prepared urban development related guidelines provided the basis for plan formulation, particularly the urban development and building construction guidelines of MoFALD.
9. Actually problem of most of the plans is lacking of implementation rather than its content.

4 SITUATION ANALYSIS OF THE NEW TOWN

4.1 Urbanization Trend

Basantapur is an old hub and market center of Terahathum as well as Dhankuta and Sankuwasava district. Urbanization in Basantapur is rapidly increasing in these days. Being market center of district, urbanization trend was found notable in the past. However, after declaration of New Town by the Government of Nepal, rapid increase in urbanization and building construction trend found rapidly growing. To analyze the urbanization trend, some of the indicators such as built-up area, population, household, absent population, economic active population, major industries, access of road and drinking water facilities, uses of fuel for cooking etc of different years have been presented and analyzed.

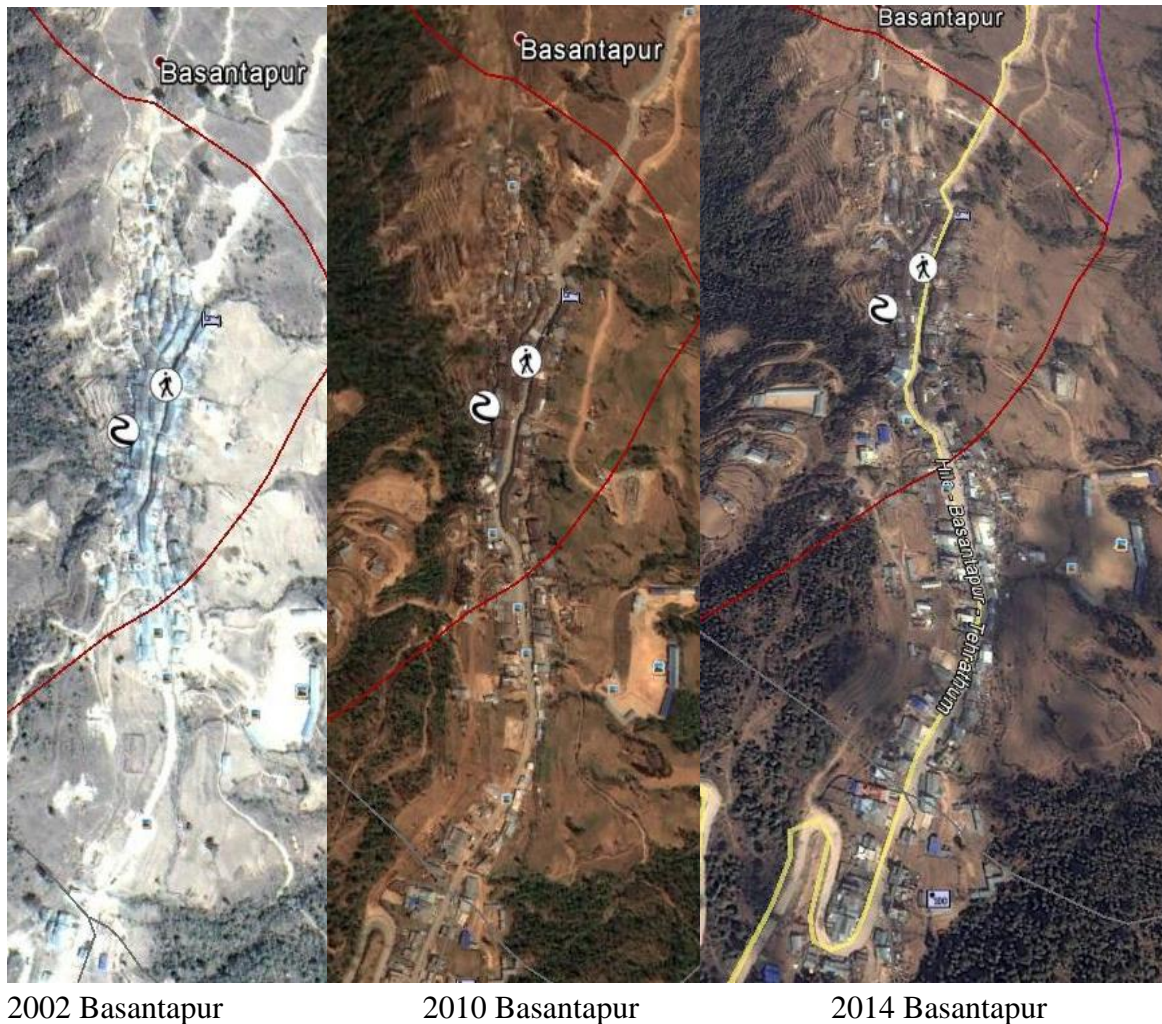
Table 3: Urbanization Trend of Laligurans Municipality

S.No	Indicators	Year		
		2002	2010/11	2015/16
1	Built-up Area (Sq km)	2.1	3.2	4.6
2	Population (no)	18205	19936	22000*
3	Households (no)	3598	3677	3800*
4	Population Density	212	220.27	-
5	Economically Active Population (percentage)	56.5	57.75	-
6	Major Industries (no)	2	3	3
7	Blacktopped Road (km)	25.6	30.58	32.58
8	Concrete Road (km)	-	-	0.5
9	Drinking Water Supply (hh coverage percentage)	73	84	81.51
10	Uses of Fuel for Cooking (LP Gas user percentage)	10.1	14.31	15.0*
11	Cable Television, Computer and Internet User Househlds (no)	120, 44 and none	231, 57 and 24	400, 120, 65
12	Non agricultural Occupation	0.29%	2.5%	-
13	Types of Concrete Houses (no)	-	40	75

Source: CBS 2002, 2011 and Fieldwork, 2071

*represents the estimated based on the consultation, interaction and observation.

Table above reveals the time series data of the different period. Data shows that population, households, population density of the municipality observed slightly increasing in the recent years which indicates slow pace of urbanization trend in the municipality. Following periodic satellite images also reveals the increasing trend of urban area in Basantapur. However, recently building construction trend in the municipality has been increasing.



Satellited images of different period show historical trend of expanding of urban areas which indicates rapid urbanization trend in Basantapur Area. Images of different period of Basantapur Bazar area is observed slightly increased.

4.2 Building Construction Trend and Pattern

Trend of building construction in Laligurans Municipality has been increasing rapidly. Being district second largest market center, new town and declared as a municipality people from neighbouring and outer area migration trend has been increased gradually. New building construction is rapidly increasing with respect to nepal government's policy of developing Basantapur (Laligurans Municipality) as new town. Building construction trend of the Municipal area is presented in the following table:

Table 4: Urbanization Trend of Laligurans Municipality

S.No	Description	Year		
		2002	2011	2016*
1	Mud Bonded bricks/stone (percent)		91.1	91
2	Cement bonded bricks/stone (percent)		0.7	1.2

3	RCC with Pillar (percent)		1.1	1.5
4	Wooden Pillar (percent)		6.0	5.5
5	Thatch/straw (percent)		37.9	37.0
6	Galvanized Iron (percent)		56.8	56.0
7	Tile/Slate (percent)		0.4	0.5
8	Buildings with 3 and more stories at the main Bazar Area (no)		15	25

Source: CBS, 2002, 2011 and Field observation, 2016

*some date of 2016 are estimated based on the fieldwork consultation and informal conversation

Table above and field work reveal that building construction trend in Basantapur is increasing slightly. Recently some of the buildings are being constructed 3 and more stories.

4.2.1 Building Typology and Uses

It was observed that people are constructing new building with concrete structure and majority of the new constructions are designed for residential purposes. But after completion of the construction, the use of the building has been profoundly changed which make the building vulnerable. This can be one of the factors causing disaster and vulnerable to disaster risk.



Figure 9: Building Construction Trend

However, there are still some traditional architectural buildings exist in the municipal area. Most of the buildings in the municipality are two storied with mud morer constructed representing the rural characteristics.

4.2.2 Building Heights

During the field survey none of the buildings find followed the complete National Building code. However, some of the buildings were found seismic resistant as those buildings were constructed from the masons who have taken the earthquake resistant training. Fieldwork data also reveals that newly constructed building are of more heights as they are supposed to be strong by construction of concrete structure. However, most tall building are found rapidly constructed in the Main Bazar area specially in Basantapur and Lasune Bazaar. While looking at the heights of the buildings in the core market area of Basantapur, most of the building are up to three stories and very few are found less than three stories. This indicates that the bazar tends to be increasingly urbanizing where as other ares seems rural character.

4.2.3 Violation of Building Bye-laws

Basantapur including Fulek, Dagapa, Solma, Sungnam VDC have been merged and declared as a Laligurans Municipality in 2015. But, till date, municipal bylaws have not been

implemented. However, Ministry of Urban Development has already prepared basic bylaws for the urbanizing village development committees like Laligurans, which has been initiated for the implementation. At present, it was observed that some of the newly constructed buildings were seen to violate the building bylaws (right of way) along the highway corridor. If we consider ROW 50 meter highway standards, more than 80 buildings along the highway are constructed within the ROW.

4.3 Settlement Pattern and Urban Form

Settlement pattern varies in different geography, climate, available construction materials, caste/ethnicity, local culture and economic condition of the local people. In mountainous region, settlements are generally scattered and even few households clustering together may form a settlement whereas in Terai region settlements are generally dense and there can be many households clustered in one settlement. The situation in Hill resembles the situation in between Mountain and Terai.



Figure 10: Linear Settlement, Basantapur

Settlement pattern of Basantapur area found linear in the Bazar area and scattered in the rural areas. Basantapur has linear type of settlement along market area such as Basantapur, Deurali, Lasune, Chitre. Linear settlement is increasing in ward no 1, and 3. Most of the households are concentrated along the two sides of the Highway whereas scattered settlements are found in the rest of the areas of the municipality.

Nodal point and road junctions of various location some cluster settlements have been developing to serve as small market centres such as Lasune, Chitre and Dandakharka etc. These market centres serve as suppliers of goods and services and collectors of location production. On the basis of government policies and local initiation laligurans Municipality is formed merging five VDCs; Basantapur, Dangpa, Phulek, Solma and Sunnam. That could be far better for backward and backward linkages in the settlement system within the municipality area.

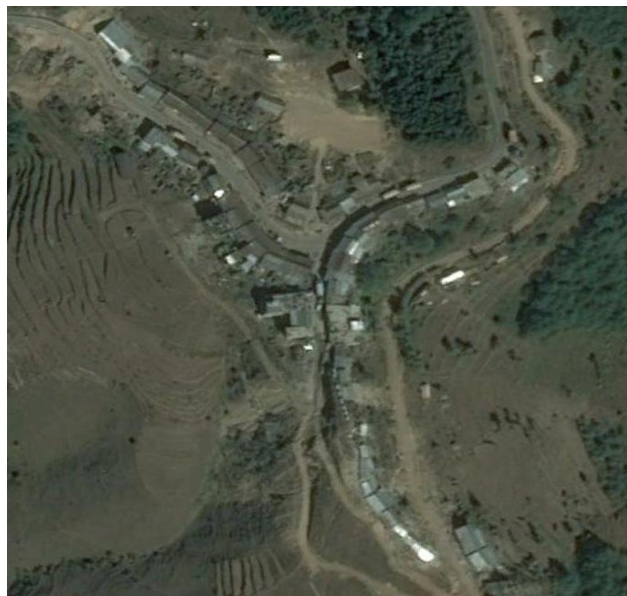


Figure 11: linear settlement, Lasune Bazar



Figure 12: Scattered Settlement with very rural character

All this indicates that at present Basantour has some pocket area of cluster settlements with linear pattern and many other parts have scattered settlements with very rural character.

4.4 Lead Sectors of NT

For the better and sustainable development of any town we should tap the town's development lead sectors. Lead development sectors show the development direction. During the field work, interaction among the local stakeholders and formal and informal consultation in the municipality, following sectors have been identified for potential lead sectors. Those sectors would be the guiding sectors of development of Basantapur NT. The lead sectors of the Basantapur NT are;

- a) Tourism
- b) Agriculture
- c) Market and Service Centre

Short description of those lead sectors are given as follows;

A) Tourism

Laligurans municipality is known as the capital of Rhododendron. Number of important flora and fauna, religious and spiritual values gives its touristic identification to Basantapur. Basantapur has several tourist destinations. Rock and Rhododendron Garden, Tinjure Milke Area, Gufa and various temples are major tourist attraction sites. Similarly, Laligurans municipality is also known for ethnic, cultural and religious diversity. There are more than eighteen ethnic groups, who have their own cultural and religious practices, traditions and languages. The majority of people belong to the Limbu ethnic groups followed by the Brahman and Chhetri, Sherpa and Bhote and Tamang Gurung, Magar, Newar and Dholi. Cultural and religious diversity has huge tourism potentiality in Laligurans Municipality.

It is therefore very important to note tourism as main leading development sector. It has potentialities to develop natural, cultural and religious tourism in the future. Therefore, this IDP has focused tourism as leading sector of development and long-term vision has also tapped tourism as path of development.

B) Agriculture

Agriculture including cash crop is still major economic activity of Basantapur. Since New Town Basantapur is recently declared as a Laligurans Municipality (merging with Basantapur, Dangpa, Phulek, Solma and Sungnam). Most of the areas are still rural character. People are engaged in agriculture as their first economic source for income. More than 70 percent people are still dependent in agriculture. This indicates that agriculture would be the leading economic activities of New Town Basantapur.

Similarly, cash crop such as vegetables, tea, cardamom, citrus fruits are the major cash crops of Basantapur. With all this background, agriculture (including cash crop) can be a key leading sector of New Town Basantapur and thus plans and programmes have been formulated accordingly.

C) Market and Service Center

Basantapur is an old rural market and service center. It has been giving service since long time. With the time being Basantapur has also been changing itself as a modern market and service center. After the government declared it as a new town, development pace of the town is moving its speed. It is second largest market and service centers of Terhathum District. It provides service not only the residence of Basantapur but also some neighbouring districts Dhankuta and Sankhuwasava VDCs. Being a potential service centre of the hill town, it has strong backward and forward linkages for economic growth and development. Market and service centre as one of the another important leading development sector for New Town Basantapur.

Lead sectors including with long-term vision of New Town Basantapur is graphically shown as follows;

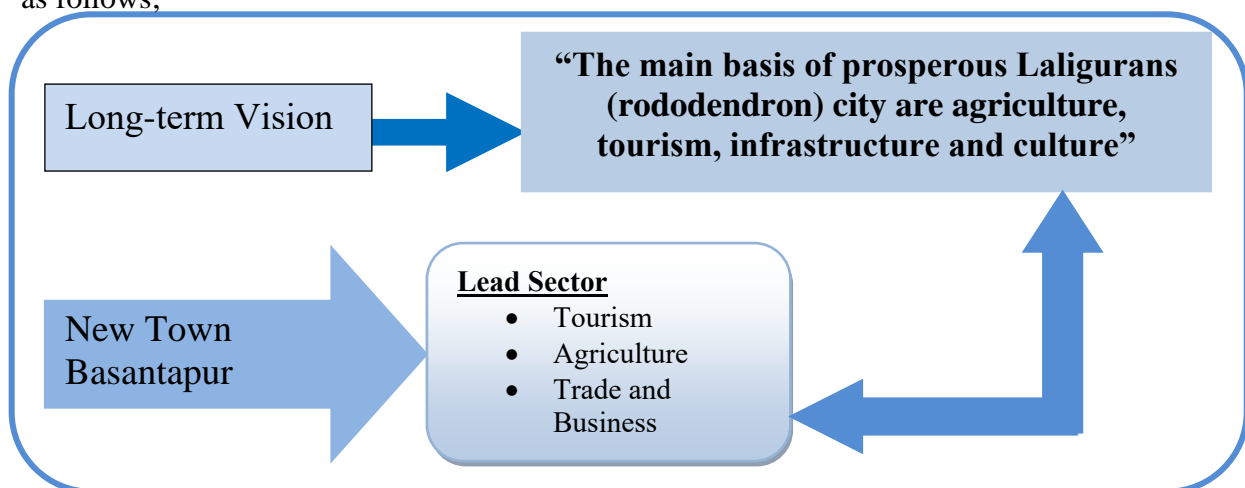


Figure 13: Long-term vision with leading development sectors

4.5 Demand Analysis

Plan document should be based on existing baseline information and indicators which helps to project future needs. In this heading, demand analysis based on the projected population of the town has been done. Demand analysis has been done based on the planning norms, standards with the fieldwork impression. Following table has been created to present future demand based on existing baseline indicators;

Table 5: Demand Forced of Basantapur New Town

S. No	Types of Infrastructure	Norms	Standards	Space Requirement	Projected Population in 20 years	Demand forecast based on projected population	Present Status	Gap
1	Physical Infrastructure							
1.1	Road	Expressway, Arterial, Sub arterial, collector street and local street All of 90% of households are within 1 km from motorable road		20% of the total built up area	100000	This study has proposed maintenance, upgrading and new construction of arterial, sub-arterial, collector street and local street road in major settlement's considering to cover maximum percentage as far as possible		
1.2	Water Supply System	80% households have metered house connection and distribution Treatment plant (lab, dosing and guardhouse) with storage facility: reservoir (24 hrs requirement) Provision of rain water harvesting in public buildings (catchment area, storage and treatment facility)	Quantity: 80-100 lpcd Minimum diameter of distribution pipe: 80 mm $10 \times 10^4 \text{ l} = 10\text{MLD}$ (capacity) Storage capacity: 25% of the total treatment capacity	2 ha per site (treatment plant and storage)	100000			

1.3	Sanitation/Sewerage System Storm Water Drainage System	Public Sewer System (Septic Tanks) Sewage Treatment Plant Pumping Station Provision of public latrines (male, female, disabled)	Mind diameter of trunk line: 200 mm 0.2 ha/MLD – 0.75 ha/MLD 1/2000 passerby at a distance of 500 m	0.01 ha – 0.02 ha per site 5 ha – 7 ha per site	100000			
1.4	Integrated Solid Waste Management System	Collection points (0.3 kg/person/day) Total Waste = Around 33 tons/day Transfer Station Sanitary Landfill site	Separation of Waste at household level Community collection/door to door collection 1 collection point/container/roadside pickup point serves a radius of 200 m 1 transfer station for 1 city if the final disposal is at distance of more than 10 km Only 30% of the total waste generated should go to landfill site. 70% = reduce, reuse, recycle Sanitary landfill site: medium (> 25 and < 500 tons per day)	0.15 ha – 0.2 ha per site (waste only gets collected and transferred) 1 ha per site (if there are recycling platform, compost plant and window composting etc) 3 ha – 5 ha (without buffer zone)	100000			

1.5	Electricity Supply System	National grid supply line and Alternative energy (panels, battery 400 AH)	Power access to 100% coverage. Electric sub-station 66/33 KV Transmission Tower Distribution Tower 150-200 watt solar home system	0.55 ha per site 80-100 sq. m 20-25 sq. m	100000				
1.6	Tele communication	Landline/mobile Public telephone booth (TB)	100% coverage Telephone exchange office (1 exchange with a capacity of 6500 line capacity) Telephone transmission tower	0.02 ha per site ROW: 5m Standard Booth	100000				
2	Economic Infrastructure								
2.1	Hall	City hall (Multipurpose)	1 per 10,000 population	0.2 ha per site	100000	10city hall and 2 ha land required	No city hall	10 city hall needed	

2.2	Sports Complex	City level (football ground, volley ball, swimming pool etc) District Sports Centre	1 for 5,000 population 1 per 1,00,000 population	1-3 ha per site 3 – 19 ha per site	100000	20 city level football/volley ball, swimming pool and 20-60 ha land required 1 districts sports complex and 3-19 ha land required	There are some 4 football and 5 volleyball grounds in local schools and college 1 district level football ground	16 football and 13 volleyball ground needed Existing grounds need infrastructural improvement 20 swimming pool is needed District level football ground need infrastructural improvement
2.3	Movie Hall	City and local level	5 seats per 1000 population		100000	500 seats required	Available	But need infrastructure improvement
2.4	Vegetable market	Neighborhood level	1 Wholesale, 1 retail and 1 slaughter house for 2 neighborhood (1 neighborhood = 3000 population)	0.5 ha per site	100000	16 wholesale, 16 retail and 16 slaughter house and 24 ha land required for all sites	Wholesale and retail shops are available but no slaughter house	24 slaughter house is needed
2.5	Parking space	Parking (Two/three/four wheeler) Taxi park	1 parking lot each 3000 population (1 neighborhood = 3000 population)	0.04 ha per site	100000	33 parking lot (two/three/four wheeler) and 1.32 ha land required for parking 33 taxi park and 1.32 ha land required	No parking lot for two/three/four wheeler No taxi park lot	33 parking lot needed 33 taxi park needed

2.6	Transportation system	Intra City Bus Terminal (Linking with other cities) Inter City Bus Terminal (within the city)	1 parking lot for 100 buses and 100 trucks 1 parking lot for 100 buses	4 ha per site 2 ha per site	100000	One intra city bus terminal and 4 ha land required One inter-city bus terminal and 2 ha land required	No intra city bus terminal No inter-city bus terminal	One intra city bus terminal is needed One inter-city bus terminal is needed	
2.7	Helipad	Not mentioned in planning norms and standards but seems required for new town			100000	A helipad is required	No helipad	A helipad is needed	
3	Social Infrastructure								
3.1	Primary School	1 per 3000 population at a distance of 0.4 - 0.8 km	0.2 ha per site		100000	33 primary school and 6.6 ha land required	20 primary schools	13 more primary schools are needed	
3.2	Higher Secondary School	1 per 7500 population at a distance of 30 min in public transportation	0.65 ha per site		100000	13 higher secondary school	7 secondary and 5 higher secondary schools	8 higher secondary schools are needed	
3.3	Graduate/Post Graduate	1 per 25,000 population at a distance of 45 min in public transportation			100000	4 graduate/post graduate college	1 college	3 more graduate/post graduate college are needed	
3.4	Technical Institution	Not mentioned in planning norms and standards but seems required for new town			100000	1 technical institution	No technical institution	1 technical institution is needed	

3.5	Primary Health Care Centre	1 per 20000 population (5-15 beds)	0.25 ha per site		100000	5 primary health care centers (25-75 beds) 1.25 ha land required	1 primary health post, 1 sub-health post and 1 health post (5 beds)	4 more primary health post with 20-70 beds Existing health post and sub-health post need technical and infrastructure improvement
3.6	District Hospital	1 per 50,000 population (25-50 beds)	1.3 ha per site		100000	2 district hospital (50-100 beds) and 2.6 ha land required	No district hospital	2 district level hospital is needed (50-100 beds)
3.7	Open Space: Parks	5% of total city area			100000			
3.8	Open Space: Parade Ground (Tundikhel)	Neighborhoods Park (with play equipment) Local Park Community Park Parade Ground	1 @ 800 population 1 @ 10000 population 1 @ 20000 population 1 @ each city	0.4 ha per site 1 ha per site 2 ha per site	100000	125 neighborhood parks and 50 ha land required 10 local parks and 10 ha land is required 5 community parks and 10 ha land is required 1 parade ground is required	2 Community parks 1 football ground is available	3 community parks needed

3.9	Library	Community Level Central Level	1 per 10,000 population 1	0.5 ha per site	100000	10 community level libraries and 5 ha land is required 1 central level library is required	1 private run library No central level library	9 community level libraries needed 1 central level library is required
3.10	Fire Station	City level service	1 fire station for 5 to 7 km radius	1 ha per site	100000	1 fire station and 1 ha land is required	No fire station	1 fire station is required
3.11	Religious Institutions	Incineration/cremation areas Cemetery/Burial ground	1	0.5 ha per site	100000	An incineration/cremation and a cemetery/burial ground is required 1 ha land is required	1 incineration	Requirement fulfilled but needs improvement
3.12	Museum/Art Gallery	City level	1/1	0.5 ha per site	100000	1/1 city level museum and art gallery and 1 ha land required	No city level museum and art gallery	1/1 city level museum and art gallery are required
3.14	Old age home, orphan, center for differently able people, sanatorium	City and community level	1 per 20,000 population	0.3 ha per site	100000	5 old age home, 5 orphan home, 5 center for differently able people and 5 sanatorium required 6 ha land required	No old age and orphan home No sanatorium	5 old age home,, 5 orphan home, 5 center for differently able people and 5 sanatorium required
12	Security	Police Post Police Station	1 per 10,000 population 1 per 40,000 population	0.1 ha per site 0.5 ha per site	100000	10 police posts and 1 ha land required 2 police station and 1 ha land required		

13	Exhibition Centers	City level	1 per 50,000 population	4 ha per site	100000	2 exhibition centers and 8 ha land required	No exhibition center	2 exhibition centers are required
<i>Source: Based on Planning Norms and Standards, DUDBC, Kathmandu, 2013 and projected population</i>								

This table is based on Infrastructure Norms and Standards of “Planning norms and standards, 2013” for the city having 40000 to 100000 population. In Basantapur NT, government has planned to developed infrastructure to settle 100000 people. According to the population Census 2011, Basantapur NT has only 16934 population. The present population growth rate (1.29) is not enough to meet 100000 population in 20 years. Therefore, New town coordination project will invest large amount of money in Basantapur and it will have reasonably good physical, social and economic infrastructure after few years. Similarly, Basantapur has expandable area for the development of a new town. Besides, the town has better road access. Hence, it is expected that several people will come to Basantapur from surrounding area for better opportunity and life in future. Realizing this fact, here demand forecast is calculated for 1000000 population.

4.6 Identified Major Planning and Physical Development Issues

Based on the public opinion, views of community people and technical teams expertise, following major planning and physical development issues were identified;

- Road Improvement (widening and upgrading)
- New Road Construction (new construction in the municipal area)
- Tourism infrastructure development including tourism information centres
- View Tower construction
- Bus Park Construction
- Utilizing of open spaces
- Drainage and Swage Network Plan (Town Area)
- Slaughter House (Management)
- Solid waste management
- Management of Periodic Market
- Cold Store
- Community Hall
- City Hall
- Stadium
- Building bye-laws implementation

4.7 Overall Potentials and Problems (SWOT)

Based on the empirical data and literature, New Town Basantapur has some potentialities and weakness of developemnt which are presented in the SWOT format below:

Table 6: SWOT Analysis

Strength	Weakness
<ul style="list-style-type: none"> ➤ Developing and growing as a New Town ➤ Established as a tourism hub ➤ Market and service center of three district (Terharhum, Dhankuta and Sankhuwasava); Triple Junction ➤ Availability of developable land for urban development ➤ Access of Koshi Highway with connecting to Terai Region ➤ Gradually developing and expanding physical infrastructures ➤ Rich with multi-cultural and multi-ethnic communities ➤ Potentiality of agriculture and cash crop production ➤ Rich in Natural resources (Land, Water and Forest) 	<ul style="list-style-type: none"> ➤ Poor road conditions (most of the roads are earthen with narrow width) ➤ No proper drinage and sewerage networkssystem ➤ Lack of solid waste management ➤ Not implementation of building bye-laws and building code ➤ Poor coordination between and among theline agencies ➤ Lack of planned development practice ➤ Haphazard urbanization ➤ Coarse Topography ➤

Opportunities	Threats
<ul style="list-style-type: none"> ➤ Possibility to develop as tourism transit city ➤ Increase of income and employment through tourism sectors ➤ Possibility to increase national and international investment for the development projects ➤ Use of open spaces for urban development ➤ Possibility to develop as multi-cultural and multi-ethnic community ➤ Potentiality to expand and develop cash crop farming activities 	<ul style="list-style-type: none"> ➤ Poor public awareness has created poor condition of implementation of building bye-laws and building code ➤ Poor/weak coordination between stakeholders ➤ Due to the the vacuume of elected local bodies, it has been difficult to implement plans and programmes ➤ High demand of budget bult low resource mobilization ➤ Effective political commitment and implementation of plans ➤ Improving public awareness and participation in development programmes

4.8 Community Level Problems and Demand

Community level problems were identified through community level interaction and discussion. Community level consultation meetings were conducted at ward level in the municipality (annex 2). Following table reveals the community level demand frequency based on the issues raised in the community level meetings. The numbers indicated in ward number column of the table below represents the total demand of particular projects.

Thematic Area	Ward Number											Total
	1	2	3	4	5	6	7	8	9	10	11	
Road												
Widening	2	1	2	1	1	1	1	1	1	1	2	14
Black top	2	1	1	1					1	1	1	8
New Construction	3	1	2	2	1	1	1	1	1	2	1	16
Expansion	1		1	2	1	1	2	1	1	1	1	12
Construction completion					1			1				2
Electricity												
Transformer upgrading	1	1	1	1	1	1	1	1	1	1	1	11
New pole installation	1	1	1	1	1	1	1	1	1	1	1	11
Electrification	1		1	1	1	1	1	1		1	1	9
Street Light	1			1								2
Drinking Water												
Tap connection	2			1	1	1	1	1		1	1	9
Maintenance	3	1	2	2	1	1	1	1	1	2	1	16
Source conservation	8	1	3	1	2	2	2	2	1	1		23
Construction of water tank	3	1	2	2	1	1		1	1	1	1	14
Capacity increase of water tank	2	1	2	3	1	1		1		1	1	13
Feasibility of new water source	1	1	2	1			1		1			7
Drinking water project	4		2		1			1		1	1	10
Irrigation												

Chapter IV: Situation Analysis of the Town

Management	1	1		1	1	1	1	2	1	1	1	11
Construction	2	1	2	2	2	1	1	1	1	2	1	16
Maintenance				1	1	1	1	1	1	1	1	8
Upgrading		1		1		1	1	1			1	6
Agriculture												
Vegetable farming training	1	1	1	1	1	1	1	1	1	1	1	11
Agriculture training	1	1	1	1		1	1	1	1	1	1	10
Cold store construction	1							1		1		3
Collection center	1		1	1		1	1	1	1	1	1	9
Seed bank	1							1		1		3
Veterinary hospital	1		1	1			1	1			1	6
Education												
School building construction	1	3	1	2	1	2	1	2	1	1	1	16
Sports ground construction				1				1		1		3
School upgrading	1		1		1		1	1		1	1	7
Building maintenance	1	1	1	1	1	1	1	1	1	1	2	12
Compound wall construction	1		1	1	1	1	1	1		2	1	10
Construction of library block	1			1	1	1					1	5
Management of books at library	1				1						1	3
Construction of science labs			1		1						1	3
Construction of school hostel	1											1
Construction of drinking water tank		2			1	1	1		2	2		9
Public library	1			1			1	1		1	1	6
Communication												
Distribution of landline phone	1					1		1	1		1	5
Upgrading of mobile tower	1	1	1	1	1	1	1	1	1	1	1	11
Now mobile tower construction	1	1	1	1	1		1	1	1	1	1	10
Economic												
Industry and commerce	1			1						1	1	4
Land acquisition for periodic market	1										1	2
Income oriented training		1	1	1	1	1	1	1	1	1	1	10
Sports												
Construction of sports ground	1		1	1	1							4
Construction of stadium	1										1	2
Sports tournaments	1	1		1	1	1	1	1	1	1	1	10
Strengthen of local clubs	4	2	3	1	2	2	1	2	1	2	3	23
Health												
Upgrading	1	1	1	1	1	1	1	1	1	1	1	11
Skilled health manpower	1	1	1	1	1	1	1	1		1		9
Training	1	1	1	1	1	1	1	1		1	1	10
Health equipment purchase	1	1		1	1				1	1	1	7
Hospital Construction	1						1	1				3
Health post		1	1	1	1	1			1	1	1	8
Health camp	1	1	1	1		1	1	1	1	1	1	10
Drainage and waste management												
Side drain	1	1										2
New construction	2		1	2	1	1	1	1	1	1	1	12
Vehicle purchase for garbage collection	1		1								1	3
Land fill site	1						1	1			1	4

Chapter IV: Situation Analysis of the Town

Separation of waste	1	1	1	1		1		1	1	1	1	9
Environment and disaster risk reduction												
Construction of park	1						1					2
Conservation of local forest	1	1	2	2	3	2	2	2	1	1	1	18
Conservation of local flora and fauna	1	1	1	1	1	1	1	1	1	1	1	11
Management of Park	1											1
Construction of public toilet	1	1	1				1	1				5
Garbage collection	1											1
Landslide prevention	1	2		1	1	1	1					7
Flood prevention	1							1				2
River training								1				1
Climate change adaptation training		1		1		1	1	1	1	1	1	8
Culture and Tourism												
Home stay	1	1	1	1					1	1	1	7
Picnic spot development	1	1		1		1	1	1	1	1	1	9
View Tower	1			1			1		1	1	1	6
Tourist information centre	1		1						1		1	4
Conservation of spring					1	1		1				3
Coordination among the stakeholders	1	1	1	1	1	1	1	1	1	1	1	11
Tourism development program	1		1	1				1		1	1	6
Construction of quality hotel	1			1					1		1	4
Cultural and Religious												
Construction of temple	1		1	1	1		1	1	1	1	1	9
Compound wall of religious sites	1			1	1	1	1	1	1	1	1	9
Conservation of local culture	1	1	1	1	1	1	1	1	1	1	1	11
Construction of monastery	1											1
Women, children and aged people												
Old aged home	1		1	1			1			1	1	6
Construction of crematory		1			1	1	1	1	1	1	1	8
Skill training for women		1	1	1	1	1	1	1	1	1	1	10
Organizational												
Conservation of public land	1		1		1		1	1	1	1	1	8
Land development	1	1	1						1		1	5
Fire Engine purchase	1	1										2
Capacity development training	1	1	1	1	1	1	1	1	1	1	1	11
Public Infrastructure												
Bus park	1										1	2
Multipurpose community hall	1			1	1			1	1		1	6
Shed construction for periodic market	1		1			1	1	1		1	1	7
Red Cross building construction	1									1		2

Source: Community level consultation meetings (fieldwork, 2072).

Table above shows the community level demand frequency based on the community level (ward level) consultation meetings. Local people have focused for road construction and improvement in entire wards of the municipality.

4.9 Regional Importance and Linkage Analysis of NT

Basantapur is a new emerging as a market and urban center. It has been established as a second largest market, service, touristic destination and urban center of the Terhathum district. It has been providing its services to surrounding VDCs, settlements and small market centers as well as some parts (VDCS) of Dhankuta and Sankhuwasava districts.

Basantapur is old market and service center of the Terhathum district. It is also situated in the strategic location among the three districts Terhathum, Dhankuta and Sankhuwasabha districts. People residing in the surrounding VDC named Dangpa, Phulek, Solma, Sungnam and some other boundaries VDCS (Dhankutta and Sankhuwasabha district) used to come Basantapur for buy daily consumer goods and household's amenities. People from these areas have also sell their agriculture/domestic products in Basantapur. After the construction of Koshi Highway, access and service provided by Basantapur has been expanded its hinterland. Now, a number of public buses, jeeps, trucks, tractors and private vehicles run every day in Koshi Highway. As a result, Basantapur has direct access to large cities of Eastern Nepal namely; Dhankutta, Dharan, Itahari, Biratnagar, and Damak. People also used to take their agriculture products to Siliguri and Kolkota (Indian Market).

Till date more than sixty percent VDC of Terhathum district are connected with road access either graveled or earthen road with Basantapur. As a service, touristic and business center of the district, New Town Basantapur has been providing its services sixty percentage VDCs of the district. Nowadays, people living in the southern part of Sankhuwasabha and northern part of Dhankuta district also come to Basantapur for trade, shopping, and tourism purpose. This means, the hinterland of Basantapur has extended beyond the surrounding VDCs and settlements. Thus New Town Basantapur has been established as a regional market, business hub and service center of eastern hilly districts.

Locating at strategic and a nodal point of Koshi Highway and Mid-hill Highway, Basantapur will play a role of regional business hub for the major market centers of eastern hilly districts such as Terhathum, Sankhuwasabha, Dhankuta, Myamlung, and so on. After selection of New Town and a newly declared municipality, it has been getting new identification as a new town and given high priority from government has increased the role of Laligurans Municipality in the regional context. Later than the completion of national pride Mid Hill Highway, the access and geographical coverage of the area will be extended towards the districts (Terhathum, Dhankutta, Sankhuwasabha, Bhojpur and Terhathum), VDCs, district headquarters (Myamlung, Dhankutta, Bhojpur) and market centers (Sangratibazar, Phidim, Hile, Leguwaghat, Jarayotar) located along the Mid Hill highways. So, with extending road access and coverage, Laligurans will increase its economic, social linkage broadly.

Mid-Hill Highway could reduce the time and cost for people living in the eastern hilly area to go Dhankuta, Sankhuwasabha, Bhojpur, Terhathum, even Dharan also. As a new town, physical and social infrastructure will be developed in the coming years in Basantapur. These new and improved physical, social and economic infrastructures will establish Basantapur as a major hilly town in eastern hill of Nepal and therefore definitely establish as strategic regional city.

4.9.1 Inter Linkages of Basantapur and other Towns/settlements

Every place has its own special inter linkages to other surrounding places. The inter linkage is determined by the size of settlement/town/city, population size and distribution pattern, distance from market centers, transportation/road access and physical infrastructure, available facilities, quality of goods and so on. Major types of inter linkage of Basantapur New town to other surrounding settlements, market centers, VDCs, districts and large cities are discussed below:

- Social and cultural linkage
- Economic Linkage
- Tourism Linkage
- Community service provided by Basantapur New Town

Most of the consumer goods, medicine, petroleum products, construction materials and other several types of merchandises are imported to Basantapur from Dharan and Biratnagar via North South Koshi Highway. Moreover, fruits, cash crops, vegetables, medicinal herbs and turmeric produced in Basantapur are exported to large cities of Terai, Kathmandu and abroad. People from neighboring settlements and VDCs come to Basantapur for buying goods, selling their households products and domestic animals. In this way, economic linkage of Basantapur is extended from surrounding areas to large cities of Terai and Kathmandu. After the completion of Mid Hill Highway, economic linkage will further extended towards the districts, hilly towns and market centers situated along the Mid Hill Highway.

If tourism infrastructures are developed in Basantapur, it would be a popular hill station and holiday destinations for the people of eastern hill and Terai. People living in the eastern Terai region may visit Basantapur during summer for holiday to avoid scorching sun and heat. Likewise, during winter people can visit Basantapur for snow fun. Basantapur is also famous for 34 different species of rhododendron, majestic view of mountains and magnificent views of sunrise and sunset. Different species of rhododendron spread from Basantapur to Sankhuwasabha district is suitable for Rhodo trail. The famous Tinjurel, Milke and Jaljale (TMJ) Rhodo trail can attract tourist and may prolong their stay at Basantapur. The place has huge potential for both research and conservation tourism as well. Therefore, Basantapur is ideal destination to visit in both winter and summer seasons for different tourist activities.

As a new town, Basantapur will have social and economic infrastructure such as school, college, hospital, financial institutions etc. People living around Basantapur will come for higher education and treatment, financial solution and other economic opportunities.

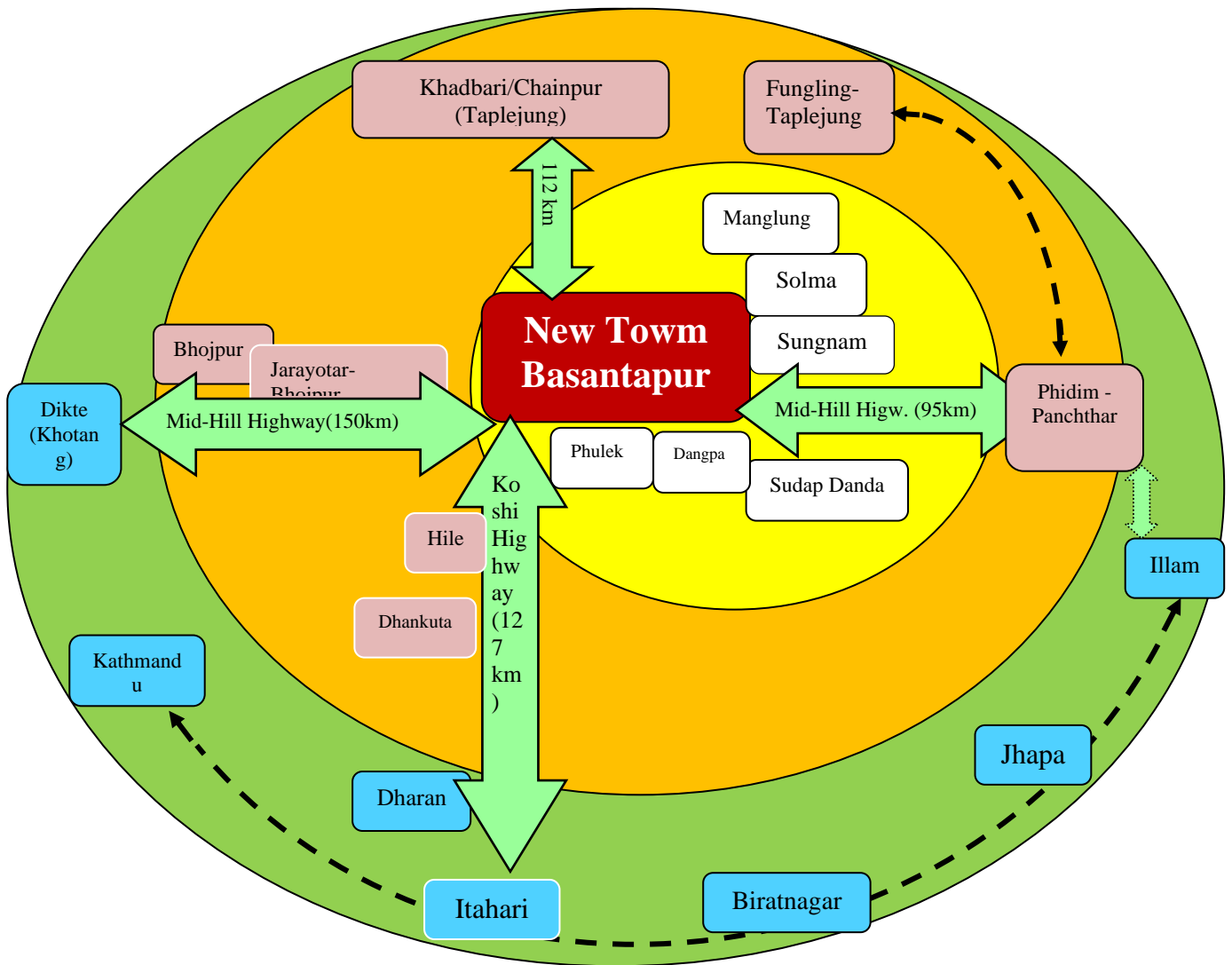


Figure 14: Inter linkages of Basantapur NT

5 VISIONING OF NEW TOWN

5.1 Vision of the New Town

Vision provides the basis for town development direction. Vision statements is articulating dreams of a town, as well as establishing a strong foundation for planning and intervening process. Basantapur new town should have a development vision, and based on which concerned line agencies formulate their business plan. The vision will guide for development actors for intervening the projects based on the potential development sectors of the town. Therefore, it is believed that concerned line agencies and stakeholders will adopt the vision of the town in their annual plans and programmes to achieve its goal and objectives.

On the basis of standard process and methods, visioning of New Town Basantapur had been worked out which has been described as follows;

5.1.1 Process of Preparing Vision

Vision is a statement for reaching desire future. It is an inspirational description of what the plan would like to achieve or accomplish in the long-term. It is intended to serve as a clear guide for choosing current and future courses of action and therefore, vision guides city planning to get its direction. So, vision is a basis for sectoral plan formulation and implementation. It directs action plan to accomplish the intended objectives and goals.

While formulating vision of new towns Basanapur, participatory meeting was organized. In such participatory meeting existing situation analysis was presented so that existing general scenario could be disseminated among the stakeholders. Stakeholders then grouped into different groups to prepare sectoral/thematic vision statement revealing to city development. All the groups discussed for preparing sectoral vision statement and presented their statement and then final vision statement was prepared based on the vision statement provided by the different groups. Thus, methods of setting vision of the new town was more participatory and scientific. Overall process of formulating the vision is shown in the following chart;

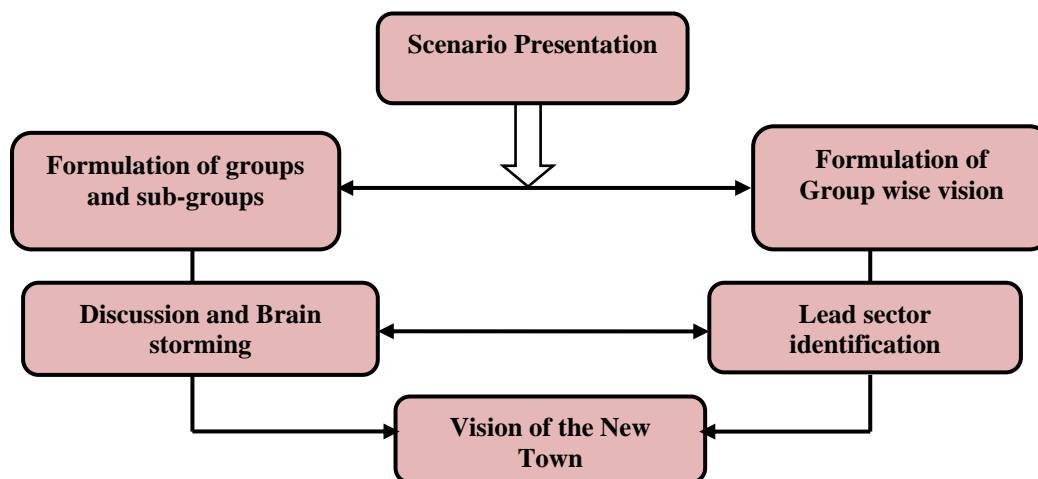


Figure 15 : Process of Vision Formulation

5.1.2 Vision Statement from Individual Group

Four groups were formed for preparing vision statement of the new town. Participatory brainstorming among the groups and creating individual group vision statement were the methods. All the groups provided their own vision statement as follows:

Group A

Group 'A' provided vision statement focusing agriculture, tourism and infrastructure as leading sectors to Basantapur as "Agriculture, infrastructure and development of tourism are the basis of prosperous Laligurans town" which is read in Nepali as follows:

“कृषि, पूर्वाधार र पर्यटन विकास : समृद्ध लालीगुरास शहरको आधार”

Lead sectors of Group 'A' was Agriculture, Tourism through infrastructure development for new town.

Group B

Group 'B' provided vision statement focusing agriculture and tourism as leading sectors to Basantapur development as "Agriculture and tourism are the basis of self-esteemed, clean, beautiful Town of Laligurans" which is read in Nepali as follows:

“कृषि र पर्यटन आत्मनिर्भरताको आधार: स्वच्छ, सुन्दर लालीगुरासको शहर”

Lead sectors of Group 'B' was Agriculture, Tourism and Self-reliance City.

Group C

Group 'C' provided two vision statements focusing clean, beauty and prosperity in first and agriculture, tourism, human resources and infrastructure in the second. The statements were "Clean, beauty and prosperity touristic town Basantapur" and "agriculture, tourism, human resources and infrastructure are the holistic basis of sustainable Basantapur City" . The statements are read in Nepali as follows:

क) “स्वच्छ, सुन्दर र समृद्ध पर्यटकीय नगरी वसन्तपुर”

ख) “कृषि, पर्यटन, मानव संसाधान र पूर्वाधार: समग्र वसन्तपुरको दीगो विकासको आधार”

Lead sectors of Group 'C' was Agriculture, Tourism, Human Resources, Infrastructure .

Group D

Group 'D' provided vision statement focusing agriculture, tourism, infrastructure and culture as leading sectors to Basantapur as "agriculture, tourism, infrastructure and culture are the determinants of rhododendron city of Basantapur" which is read in Nepali as follows:

“कृषि, पर्यटन, पूर्वाधार र संस्कृति: लालीगुराँसको राजधानी वसन्तपुरको उन्नति”

Lead sectors of Group 'D' was Agriculture, Tourism and Culture with Physical Infrastructure.

All the groups focused to tourism, agriculture, infrastructure, culture, human resources, city identity of the town directly and indirectly in their groups vision statement. Groups vision statement would suggest to include agriculture and tourism in the long-term vision for new town development which ultimately included in the long-term vision of Basantapur.

5.1.3 New town vision

Vision of the new town focuses on agriculture, tourism, infrastructure and cultural development, which is stated as:

“कृषि, पर्यटन, पूर्वाधार र संस्कृति
लालीगुराँसको राजधानी बसन्तपुरको समृद्धि”

The reading to the long-term vision statement in English is "**the main basis of prosperous Laligurans (rhododendron) city are agriculture, tourism, infrastructure and culture**". Vision of the town indicates that agriculture, tourism, infrastructure and culture are the basis of prosperous Basantapur, and therefore these sectors should be tied up to all sectoral development plan of Basantapur. While preparing sectoral development plan, agriculture, tourism, infrastructure and culture should be tied up and linked for sustainable development catching up of the lead development sectors.

5.1.4 Interpretation of Vision

Approved vision of Basantapur new town has indicated to develop agriculture, tourism and infrastructure for prosperous rhododendron town Basantapur. Within agriculture development, cash crop such as cardomum, tea; vegetable such as potato, cabbages, tomato as well as cattle harvesting should be main focus. Within tourism natural tourism, cultural tourism, adventurous tourism all have potentialities to boost up. On the one hand natural beauty (Mountain View), natural rhododendron are main touristic attractions of Basantaour and on the other hand Gurung, Magar, Sherpa cultures are another aspects of tourist attraction. Similarly, infrastructure is the word included in the vision statement to indicate physical infrastructure such as road, drainage, community, and public infrastructure development. Physical infrastructure development is important in such an emerging town like Basantapur. Likewise, culture is associated to cultural development as well as human culture that are essential element in new town like Basantapur. It means civilized and cultured inhabitants of Basantapur. These all aspects should be considered for the development of Basantapur at first and Laligurans Municipality as a whole which is the indication of the Vision.

5.2 Mission

The mission is to develop Basantapur new town as a prosperous, sustainable and liveable city.

5.3 Goal

Prosperous, sustainable and livable Basantapur is the goal through development of tourism, agriculture and infrastructure and culture within Basantapur NT and Laligurans Municipality as a whole focusing on comparative advantages.

5.4 Objective

The objective is to prepare sectoral development plan through the following objectives;

- 1..To develop physical infrastructure in coordination with concerned stakeholders in the New Town;
- 2..To promote tourism and cash crop farming, and develop tourism infrastructure in the city for economic development of the local people;
- 3..To establish new town as equitable, viable and sustainable city providing basic social services and good governance to its people;
- 4..To prepare building bye-laws and planning norms within the city for safe and livable city;
- 5..To prepare city level strategic plan for overall development of the new town to develop basic urban infrastructure.

5.5 Strategies

Urban development strategies of New Town Basantapur will be based on the vision, mission, goal and specifically the objectives which are through pointed out below;

Strategies relating to objective ‘a’

- i. Public private partnership will be established to develop physical infrastructure in the new town
- ii. Basic services such as drinking water, telephone, electricity and other social infrastructure will be provided in the new town
- iii. Land use plan and building bye-laws will be implemented mandatorily in the municipal area
- iv. Smooth and public friendly transportation system will be developed in the municipality

Strategies relating to objective ‘b’

- i. Tourism entrepreneurship and tourism activities will be promoted in the NT
- ii. Cash crop farming by identifying value added crops/farms will be given priority and subsidies will be provided to the farmers
- iii. Employment generating activities and business will be promoted in the New Town/Municipality
- iv. Effective coordination between stakeholders in the new town particularly (NT, Municipality and TDC) for budgeting and implementing will be established for the projects implementation
- v. Safe environment to the private sectors for investing in trade, business and tourism activities will be created

Strategies relating to objective ‘c’

- i. Service delivery and governance will be improved through effective mobilization of human resources
- ii. Service in the municipality area will be provided in effective and transparent way
- iii. Inclusive policy in the development planning will be adopted so that marginal communities could have good access in social services and service delivery mechanism
- iv. Green area and open spaces provisions will be strictly followed in the new urban expansion area

Strategies relating to objective ‘d’

- i. Building bye-laws will be adopted mandatorily in the construction of public and private structures
- ii. Provisions of building construction permit will be effectively implemented in the municipal area
- iii. Provision of open space, green belt, public services will be effectively implemented particularly in the new urbanization areas within the new town
- iv. Provision of basic urban facilities (fire brigades, police stations et) will be established in the municipality level

Strategies relating to objective ‘e’

- i. Coordination with the stakeholders will be done to implement city level strategic projects
- ii. Tourism master plan, DTMP, Municipal Transport Master Plan, Energy sector plan will be the basis for implementing the plans and programmes in the municipality
- iii. Basic urban infrastructure will be developed and established in the municipality in the phase-wise basis.

5.6 Guiding Principles

Guiding principles are the best way to implement plans and programs for planned and sustainable development. Following guiding principles will be the basis of plan implementation in the New Town Basantapur;

5.6.1 Infrastructure development and upgrading

Infrastructure will be developed as per the demand and need basis. Road (construction and upgrading), sewerage/drainage (within the NT area), tourism infrastructure, bus park, periodic market, stadium, community buildings and convention centres, tourism infrastructure, public infrastructures will be constructed within the Laligurans Municipality. Similarly, existing road network will be upgraded to make connectivity and access within entire municipal area. While investing infrastructure development, strategic projects and actual needs will be the governing agenda for project selection and prioritization.

5.6.2 Social development

Within social development education, health, sports will be the focus and priority will be given accordingly. Especial attention will be given to excluded and marginalized communities to improve their access to social services. Social inclusion, women participation, women empowerment, ageing management, social security, incentives are the basis for social development.

5.6.3 Improvement of urban environment and diaaster management

Basantapur is newly emerging urban centre. Therefore, environmental management should be given priority from the beginning. Existing emerging environmental management issues such as solid waste management, drainage and sewerage management, waste collection and management will be given priority. Similarly, disaster risk management such as landslide, hazard risk management will be given priority. Earthquake risk mitigation will be considered by implementing building code and norms in the building construction.

5.6.4 Development through participation and coordination

Participatory development planning will be adopted in close coordination with the concerned stakeholders. Public private partnership, coordination among the stakeholders, involvement of private sectors will be the basis of plan implementation. Effective coordination among municipality, TDC, NT and other district level line agencies will be the basis for development practice.

5.6.5 Good governance and transparency

Transparent and public friendly policy will be adopted for good governance and transparency. Social auditing, public hearing, consultation meetings, project briefing will be done regularly among the stakeholders in the NT area. Improvement in service delivery mechanism within municipality, NT and TDC will be done to provide public service to its citizens. This will be done within the institutional development plan.

5.6.6 Focus to poor and marginal groups and inclusive development

While formulating plans and implementing programmes, special focus will be given to poor and marginal communities. Similarly, principle of inclusive development will be adopted to bring poor an marginal communities in the main stream of development. Inclusive development will be the basis for bringing marginalized and needy people.

5.6.7 Conservation of religious and cultural significant heritages

Religious and cultural significant tangible and intangible heritages will be given priority for promotion and conservation. These religious and cultural assets are the prosperity of Laligurans Municipality and as well as cultural religious values. Through which we could promote tourism industry.

5.6.8 Institutional development for effective coordination and evaluation

Mechanism for effective coordination between and among the institutions such as municipality, TDC, NT and other line agencies will be established. Special attention will be given particularly for programme duplication, overlapping and institutional strengthening. Inter and intra institutional cooperation will be adopted in plans and programme implementation.

5.6.9 Decentralization and capacity development

Decentralization and capacity development will be adopted to strengthen NT working capacity. NT office should be upgraded with additional human resources and office assets. More technical experts such as urban planner, civil engineer, GIS experts are needed and therefore existing organization capacity should be enhanced. Similarly, municipality and TDC will also be made resourceful and capable.

5.7 Integrated LFA Analysis for Long-term Plan

Logical Framework Analysis is a management tool for effective planning and implementation of developmental projects. It provides clear, concise and systematic information about a project through a framework. Within logical framework analysis, various components of a project such as goal, objectives, activities, results and indicators are clearly explained in a result base framework. The LFA helps in connecting all these components in one framework, presenting the tight relationship between them, leading to the achievement of the expected outcomes. Thus, the Logical Framework Approach (LFA) is an analytical process and set of tools used to support objectives-oriented project planning and management. It provides a set of interlocking concepts which are used as part of an iterative process to aid structured and systematic analysis of a project. LFA helps to;

- Analyze an existing situation, including the identification of stakeholders' needs and the definition of related objectives;
- Establish a causal link between inputs, activities, results, purpose and overall objective;
- Define the assumptions on which the project logic builds;
- Identify the potential risks for achieving objectives and purpose;
- Establish a system for monitoring and evaluating project performance;

To present all indicators and its desired output in an integrated logical framework approach, Integrated LFA has been prepared. Its main objective is to present major indicators, baseline and desired direction of planning for New Town. Integrated LFA is presented as follows;

Table 8: LFA Analysis

Description	Indicators						Means of verification	Assumption
	Unit	Baseline	Target (in 20 years)	Measuring indicator	Location	Target Groups		
Goal: Improve livelihood of the people of Basantapur NT through development of tourism, agriculture and infrastructure	Percent	24.5	7	Poverty Line	Laligurans Municipality	All marginalized, excluded community groups and areas	<ul style="list-style-type: none"> ➤ Municipal profile ➤ NT profile and Report ➤ NTPCO Report ➤ DDC Profile 	<ul style="list-style-type: none"> ➤ Sufficient allocation of development budget ➤ Planned development ➤ Coordination of Municipality, TDC and NTPO ➤ Creation of investment guarantee to private sector
	Percent	25.5	10	Human poverty Index	Laligurans Municipality	Focused Group	<ul style="list-style-type: none"> ➤ Human Development Report ➤ Municipal Profile 	
	Percent	750	1200	Per capita income	Laligurans Municipality	All community	<ul style="list-style-type: none"> ➤ Human Development Report ➤ Municipal Profile 	
	Year	70	80	Life expectancy	Laligurans Municipality	All people	<ul style="list-style-type: none"> ➤ Human Development Report ➤ Municipal Profile ➤ NT level survey report 	
	RS	60	100	Drinking water	NT Area	All people	<ul style="list-style-type: none"> ➤ New Town profile ➤ Report of Drinking water supply 	
	Year	75	100	Primary school enrollment rate	Laligurans Municipality	Children of age 6 and above	<ul style="list-style-type: none"> ➤ Human Development Report ➤ Municipal Profile ➤ Educational Flash Report 	
	No per year	10000	200000	Tourism Sector Employment	Laligurans Municipality		<ul style="list-style-type: none"> ➤ NTPCO Report ➤ NTO Reports ➤ Municipality Reports 	
Objectives: 1) Agricultural improvement and increase in cash crop farming	Metric Ton per day	1	5	Vegetable Production	Laligurans Municipality	Farmers	<ul style="list-style-type: none"> ➤ Municipal profile ➤ NT profile and Report ➤ NTPCO Report 	<ul style="list-style-type: none"> ➤ Sufficient allocation of budget ➤ Farmers are interested to participate ➤ Favorable Environment to invest private sector ➤ Security and provision of subsidies
	Tons per year	10	25	Cardamom production	Laligurans Municipality	All interested farmers	<ul style="list-style-type: none"> ➤ DDC Profile ➤ DDC agricultural statics 	
	Metric Ton per year	500	700	Ginger Production	Laligurans Municipality	All interested farmers		
	Liter per day	3000	7000	Milk production	Laligurans Municipality	All interested farmers		

2) Improvement of tourism activities and increase in tourist arrival in Basantapur	no	2000	20000	Annual Tourist arrival	Laligurans Municipality	National and International Tourist	<ul style="list-style-type: none"> ➤ Municipal profile ➤ NT profile and Report ➤ NTPCO Report ➤ DDC Profile ➤ Fieldwork and evaluation 	<ul style="list-style-type: none"> ➤ Sufficient allocation of budget ➤ Peace and security ➤ Tourism campaign and promotion
	no	0	2	Tourism information Centre	Laligurans Municipality	All tourist		
	no	0	200	Trekking guides	Laligurans Municipality	Local interested trekkers		
	no	-	5	Standard Hotels	Laligurans Municipality			
3) Increase and improve infrastructure development in NT area	Percent	20	100	15 minute travelling distance	Laligurans Municipality	Municipal Residence	<ul style="list-style-type: none"> ➤ Municipal profile ➤ NT profile and Report ➤ NTPCO Report ➤ DDC Profile ➤ Fieldwork and evaluation 	<ul style="list-style-type: none"> ➤ Implementation of PPP model in infrastructure development ➤ Sufficient Budget allocation
	km	31	200	Road Black topped	Laligurans Municipality	Municipal Residence		
	km	-	100	Road widening	Laligurans Municipality	Municipal Residence		
	percent	60	100	Accessibility of community facilities	Laligurans Municipality	Municipal Residence		
	percent	75	100	Safe drinking water facilities	Laligurans Municipality	Municipal Residence		
4) Improve education condition of Laligurans municipality	percent	80	100	Literacy Rate	Laligurans Municipality	Municipal Residence	<ul style="list-style-type: none"> ➤ Municipal Profile ➤ Flash Report ➤ NT Profile 	<ul style="list-style-type: none"> ➤ Commitment of District Education Office ➤ Private Involvement
	no	2	15	Higher College (+2)	Laligurans Municipality	Municipal Residence		
	no	-	1	Technical college	Laligurans Municipality	Municipal Residence		
5) Improve of health condition of Laligurans Municipality	no	-	2	Hospitals	Laligurans Municipality	Municipal Residence	<ul style="list-style-type: none"> ➤ Municipal Profile ➤ NT Profile ➤ Field work 	<ul style="list-style-type: none"> ➤ Involvement of private sectors ➤ Budget allocation
	no	4	11 (1 in ward level)	Health centre	Laligurans Municipality	Municipal Residence		
	No per 1000	25	10	Child mortality rate	Laligurans Municipality	Municipal Residence		
6) improve and increase of access and facilities to women, marginal groups and scheduled caste ethnic groups of Laligurans	Percent	20	10	Malnutrition below 5 years of age	Laligurans Municipality	Municipal Residence	<ul style="list-style-type: none"> ➤ Municipal profile ➤ NT profile ➤ District health report 	<ul style="list-style-type: none"> ➤ Gender balance policy ➤ Coordination by the male ember in the society ➤ Public awareness
	Indicators	0.641	0.50	Human development	Laligurans Municipality	Municipal Residence		
	percent	15	0	Poor among scheduled caste groups	Laligurans Municipality	Municipal Residence		
7) Increase of income level through industrial	Employment	5000	20000	People indirectly benefitted by industrial sectors	Laligurans Municipality	Municipal Residence	<ul style="list-style-type: none"> ➤ Municipal profile ➤ NT profile ➤ Report of industrial and 	<ul style="list-style-type: none"> ➤ Active Involvement of private sectors

and commercial activities	no	500(estimated)	10000	People involved in tourism	Laligurans Municipality	People interested in tourism	commerce	➤ Peace and security for investment
	no	5	40	Medium and large scale industries	Laligurans Municipality	Municipal Residence		
8) Proper management of forest and community forest for landslide risk reduction and sustainable development	hectare	2785	maintained	Community forest	Laligurans Municipality	Forest users group	➤ Report of DFO ➤ Municipal Profile ➤ Evaluation and study	➤ Coordination between community forest user groups
	no	4760	5000	Households involved	Laligurans Municipality	Forest users group		
	Families	-	0	Landslide affected	Laligurans Municipality	Vulnerable area		
9) decrease the loss of life and property through Disaster risk	Status	no	mandatory	Implementation of building code	Laligurans Municipality	Municipal Residence	➤ Municipal Profile ➤ District disaster report ➤ Evaluation and study	➤ Coordination between public and private sector ➤ Municipal active role in implementation of building code
	Status	no	yes	Implementation of risk sensitive land use plan	Laligurans Municipality	Vulnerable area		
	percent	10	Above 80	Conscious on building construction for earthquake risk reduction	Laligurans Municipality	Municipal Residence		
10) increase the capacity of Municipality, TDC and NT for service delivery	no	-	7	Trained manpower	Laligurans Municipality	Municipal Residence	➤ Municipal performance ➤ Municipal profile ➤ MCPM Report ➤ Study and evaluation	➤ Training and capacity development ➤ Coordination and interaction
	no	2	5	Deployed high skilled manpower	NTP	Municipal Residence		
	no	-	3	Deployed high skilled manpower	TDC	Municipal Residence		
	Status	-	yes	Coordination between line agencies	Laligurans Municipality	All stakeholders		

6 SECTORAL DEVELOPMENT PLANS

6.1 Introduction

This chapter presents sectoral development plan of Basantapur New Town. Sectoral development plan such as Physical Development Plan, Social Development Plan, Economic Development Plan, Tourism and Cultural Development Plan, Environmental Management including with Disaster Risk Reduction Plan, Financial Management Plan, Institutional Development Plan are covered. Participatory meetings (Steering Committee, Sub-committees and Local Level) were main basis of formulating the sectoral development plan. Feedback collection through the presentation at NTPCO and NTPO were also carried out to cover major issues.

To some extent some sectoral plans are interlinked to each other. Physical infrastructures such as community buildings/halls are also fall under social development plan. Similarly, environmental management, disaster risk reduction plans are also interlinked to each other. Likewise, tourism infrastructure such as tourism information centre, view tower etc are also fall under physical infrastructure.

While presenting the sectoral plans, sectoral problems and sectoral key issues are presented first, and based on the existing situation sectoral strategic plans and programmes are presented in LFA framework. By presenting development plans in the logical framework, it helps to know what the project is going to achieve, what activities will be carried out to achieve its outputs and purpose, what resources (inputs) are required, what are the potential problems which could affect the success of the project, and how the progress and ultimate success of the project will be measured and verified.

6.1.1 Planning Process

Sectoral development plan is prepared based on the layers of consultation meetings and processes as shown in the following figure;

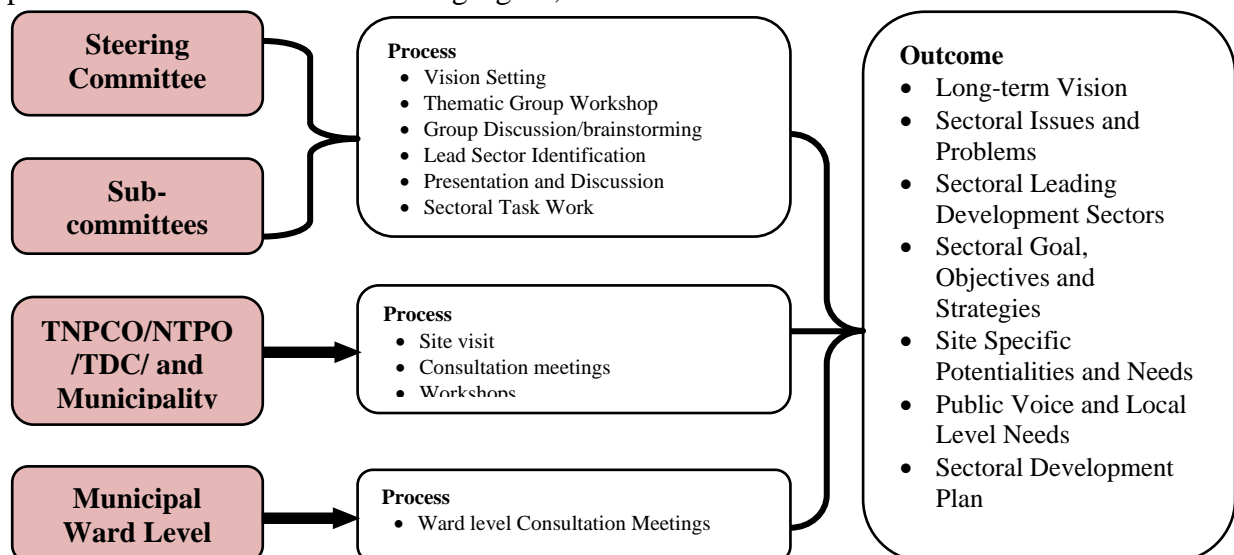


Figure 16: Process of Planning

6.2 Physical Development Plan

6.2.1 Concept

Physical development plan mainly consists of physical infrastructures including road, sewerage, drainage, electricity, irrigation canal, public infrastructures such as stadium, community/conference hall etc. Within physical development plan, land use planning and zoning, road hierarchy and networking, land pooling etc are also included. Physical planning focused on the concern with the design, growth and management of the physical environment in accordance with pre-determined, and agreed policies, where balanced social and economic objectives may be achieved.

It is very important to think physical planning such as planning of buildings, parks and gardens, roads, basic social infrastructures and other physical things which basically guide overall development of a town. It is the art and science of controlling the use of land, the character and arrangement of building so as to achieve economy, convenience and beauty.

6.2.2 Present Status

At present, new town Basantapur possesses some basic level of physical infrastructures but it demands more improvement and upgrading in it. Basantapur NT is still in poor condition of infrastructure, particularly road, drainage, sewerage and other community level infrastructure. The present physical infrastructures is shown in the following table

Table 9: Present Physical Condition of Basantapur

Physical Infrastructures	Status	Remarks
Road		
a) Black Topped (km)	30.58	
b) Concrete (km)	0.5	
c) Earthen (km)	164	
Drinking water supply (piped water)		
a) Households (no)	2997	
b) Coverage (%)	81.51	
Drainage and Sewerage		
a) Drain Coverage (km)	20	Drain along the highway
b) Types of drain (open or closed)	-	
c) Sewerage coverage	no	
Electricity		
a) Coverage (%)	90.4	
b) Households (no)	3324	
c) Road light (coverage)	no	
Public/Community Infrastructures		
a) Community hall (no)	no	
b) buss park	-	

c) parks (no)	2	
d) Hospitals (no)	-	
e) Colleges- Multiple College (no)	1	
f) Public toilets (no)	no	
g) Library (no)	-	
h) Stadium/playground (no)	1	
i) petrol pump (no)	2	
Open Spaces and Greenery		
a) Open Space		
b) Green Area (including forest)		
Housing Condition (construction types)		
a) Mud Bonded bricks/stone HH (%)	91.13	
b) Cement bonded bricks/stone HH (%)	0.71	
c) RCC with Pillar HH (%)	1.09	
d) Wooden Pillar HH (%)	6.04	
Housing Condition (Roofing types)		
a) Thatch/straw HH (%)	37.91	
b) Galvanized Iron HH (%)	56.76	
c) Tile/Slate HH (%)	0.35	
d) RCC HH (%)	1.55	
e) Wood/planks HH (%)	0.54	
Area suitable for urban development (ha)	24	

Source: Fieldwork, 2016 and Population Census 2011

6.2.3 Physical Development Planning Issues

Issues and problems related to physical development plan are listed below so that physical development plans could be identified and presented in the LFA format.

1. Most of the road networks are poor condition (earthen, narrow, seasonal)
2. Lack of sewerage and drainage networks
3. Lack of solid waste management facilities (no sanitary landfill site, waste management mechanism)
4. Lack of plan documents for guiding physical planning
5. No proper land use plan in practice
6. No implementation of building code/bye-laws
7. No clear Right of Way
8. Lack of community infrastructures
9. Limited coverage of drinking water supply (main Bazar Area only)

6.2.5 Land Suitability Analysis for Land Use Zoning

National Land Use Policy 2069 has categorized the land use/zone in its policy paper broadly as six major types of land use. They are i) agriculture, b) residential, c) industrial, d) forest, e) public, f) others. However, there are many other sub-classes within a broad class of land use zoning practice in the urban planning context. To make scientific land use zoning of various towns and market centre study, land suitability analysis is essential.

Land suitability refers to the ability of a particular type of land to support a specific use. The process of land suitability classification involves; evaluation and grouping of particular land areas based on their suitability for a defined use. Land use suitability analysis aims at identifying the most appropriate spatial pattern for future land uses according to specific requirements, preferences, or predictors of some activity.

Applications of suitability analysis can be found in many fields, such as site selection for cropland, agriculture suitability, graze suitability, forestry suitability (natural resource management field), flooding control, sustainable development (environment field), suitability for urban expansion, site selection for specific land use etcetera. Land suitability can be used in planning process to finalize most appropriate land for particular land use or activity. Land suitability analysis for land using zoning as shown in the following table;

Table 10: Land Suitability Analysis for Land Use Zoning

Factors	Indicators
Future urban development	<ul style="list-style-type: none"> ➤ Existing land use/cover ➤ Economic activities ➤ Accessibility ➤ Proximity of major road ➤ Historical and cultural value ➤ Settlement pattern
Physical Features	<ul style="list-style-type: none"> ➤ Topography ➤ Slope ➤ Elevation ➤ Landscape heterogeneity
Sustainability	<ul style="list-style-type: none"> ➤ Hazard prone area ➤ Eco-sensitive zone ➤ Ecological relation ➤ River bank regulation area
Environment	<ul style="list-style-type: none"> ➤ Barren land ➤ Forest cover ➤ Pollution ➤ Vulnerable Area
Compatibility	<ul style="list-style-type: none"> ➤ Compatibility with existing land use ➤ Distance from residence ➤ Distance from industry ➤ Distance from forest ➤ Distance from environmental sensitive area ➤ Distance from nearest major roads ➤ Distance from infrastructure facilities

To make reflection of land suitability analysis, maps relating to slope, altitude, geologic are attached in the annex 5. This implies in proposing settlement plan, infrastructure development and further urban expansion in the new town.

6.2.6 Land Use Zoning

Laligurans Municipality reveals very hilly characteristics of their landscape. It extends 600-3000 m (elevation map of is annex 5). Based on the analysis of above land use zoning factors, indicators and diversity of landform of Laligurans, land use zoning area has been delineated and proposed accordingly.

Land use zoning has been prepared based on existing land use and trend of existing development activities seen and observed in the satellite image and further verified by the fieldwork. Then formal/informal discussion at the town level stakeholders was done to prepare land use zoning for different land use pattern.

While classifying the land use zone, broad categories such as cultivation, forest, grassland, shrub land barren land, built-up, institutional, water body, sand and gravel etc have been done. Land use further sub-classified forest dense forest, grass, shrubs, scattered tree; water body as river, lakes, ponds, barren land, rock, sand, cliff etc. Similarly, while sub-classifying to the built-up area it is further classified as residential, commercial, industrial etc. Existing land use zoning map of entire municipal is prepared in the ArcGIS 10.1 environment which is submitted in GIS based base map (vol. ii) and the proposed land use zoning map of delineated NT area is presented in the annex 5.

6.2.7 Road Hierarchy and Classification

Within the urban planning context, road hierarchy such as highway, arterial roads, sub-arterial roads, collector streets and local streets are categorized. Laligurans Municipality has following road hierarchy;

- Highway-Koshi Highway (Dharan-Dhankuta-Basantapur-Terhathum Highway and Basantapur-Khandbari Highway)
- Sub-arterial roads- Proposed Ringroad, Lasune-Solma Road, Basantapur-Kebuk Road, Basantapur Musangkhel Road, Deurali-RR Garden Road;
- Collector streets-Local roads and
- Local streets- Local access roads

Road hierarchy of Laligurans can be classified into highway, arterial road, collector roads, local access road and other roads. Following table shows the present road condition of Laligurans Municipality:

Table 11: Road Condition and Width of Basantapur

S.No	Existing Road Width (m)	Total Length (km)	Proposed Road Width (m)
1	3.00	92.12	6
2	5.00	72.66	8
3	30.00	30.58	30
	Total	195.36	

Source: GIS Based Base Map and fieldwork, 2072

The existing road condition of Laligurans Municipality seems narrower than that of conceptualize by urban planning norms and building bye-laws of MoFALD and DUDBC. It is therefore, road width of the municipality is proposed based on the present government norms, bye-laws prepared by MoFALD and local needs. Similarly, some strategic importance linkages have been proposed with 15m width. The road hierarchy including with proposed road network plan of the municipality is presented in annex 5.

6.2.4 Proposed Land Use Plan

Proposed Land Use plan of Basantapur NT which is also known as general future guiding land use plan designed to guide the future actions of a community to direct development plan. It presents a spatial vision for the future, with long-range goals and objectives for all activities that affect the local government. This includes guidance on how to make decisions on public and private land development proposal. It is fundamental basis of development direction of future with planned city development.

While proposing land use plan of Basantapur, entire municipal areas land use plan is proposed according to which agricultural land occupies 17.4%, forest and shrub land occupies 46.99%, built-up area occupies including institutional and industrial about 13%, others including road, river, water body cliffs etc occupy about 8 % of the total land. Broadly, proposed land use classification of the town is presented in the table below:

Table 12: Proposed Land Use of Basantapur

Land use Category	Area (Sq. Km)	Percentage
Agricultural/Cultivation	17.40	19.29
Residential Area	6.50	7.21
Institutional Area	2.30	2.55
Industrial Area	2.60	2.88
Expanding Residential Area	4.60	5.10
Open space/Barren Land	4.60	5.10
Religious Area	1.20	1.33
Risk Sensitive Area	1.30	1.44
Forest and Bush Cover	42.30	46.90
Sandy Area	0.20	0.22
Others (Road, rivers, pond etc)	7.20	7.98
Total	90.20	100.00

Source: Calculated and Proposed Based on Base Map

The proposed land use map of entire Basantapur Municipality is shown in the annex 5.

6.2.8 Building Bye-laws

The building bye-laws has been prepared based on the existing bye law of DUDBC, MoFALD and TDC, Basantapur. To prepare building bye-laws of the NTs, following determinants have been identified;

- **Land use zoning (classification)**
 - Residential zone
 - Residential cum commercial Zone
 - Developing zone
 - Institutional zone
 - Industrial zone
 - Green zone
 - Conservation zone
 - Risk Sensitive Zone
- **Right of way**
- **Open Space**
- **FAR**
- **Building Line**
- **Building Setback**
- **Frontage**
- **Height of Building**
- **High Rise Building or Multi-storey Buildings**
- **Petrol Pump**
- **Cinema Hall/Theater/community Hall**
- **Apartment and Group Housing**
- **River**

The bye-laws is prepared in separate volume (vol IV) in Nepali Language.

6.2.9 Logical Framework Analysis

The physical development plans and programmes are also presented in the LFA analysis. Separate LFA of road and transportation, drinking water and sanitation, drainage and sewerage network, irrigation, electricity and communication are presented below with sectoral goal, objectives, outcomes and programmes.

Table 13: LFA of Road and Transport

Road and Transport	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
<p>Goal: 1.1: Construction and development of basic physical infrastructure for comfortable and easy life</p> <p>Objectives 1.1.1: Update and construction of motorable road to each settlements of New Town 1.1.2: Application of Landuse plan for infrastructure development 1.1.3: Disable and child friend infrastructure 1.1.4: Environment friendly infrastructure 1.1.5: Management of public transportation connecting major settlements of the town</p>	Km	30	80	Black topped Road	Basantapur NT	Inhabitants of Basantapur NT	<ul style="list-style-type: none"> ▪ municipal profile ▪ TPO reports ▪ district profile ▪ economic survey ▪ valuation report of infrastructure sector ▪ monitoring and supervision report of urban infrastructure ▪ traffic survey ▪ flow of goods and services within the NT area 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ public private partnership in infrastructure development ▪ good coordination among the stakeholders ▪ continue support from government of Nepal and donor agencies
	Km	-	50	Graveled Road	Basantapur NT	Inhabitants of Basantapur NT		
	Km	164	150	Earthen Road	Basantapur NT	Inhabitants of Basantapur NT		
	Km	-	50	Road Upgrading (existing road will be upgraded to all weather road)	Basantapur NT	Inhabitants of Basantapur NT		
	Km	-	25	Construction of new road	Basantapur NT	Inhabitants of Basantapur NT		
	Status	-	Implemented	Landuse plan	Basantapur NT	Inhabitants of Basantapur NT		
	Percentage	-	90	Target group road access	Basantapur NT	Inhabitants of Basantapur NT		
	Number	-	Will be applied to all new public construction	Disable friendly infrastructure development	Basantapur NT	Inhabitants of Basantapur NT		
	Number	-	Connected by public transport service	Public transportation connection	Basantapur NT	Inhabitants of Basantapur NT		

<p>Outcomes:</p> <ul style="list-style-type: none"> ▪ Preparation and implementation of municipal road master plan ▪ All settlement of New town will be connected by all-weather road ▪ Easy accessibility around the NT through improved road network ▪ Upgrading of blacktopped, graveled and existing earthen road ▪ Blacktopped road will be 50Km ▪ Additional 100km road will be upgraded ▪ 25 new road will be constructed ▪ Land use plan will be implemented in major market centers and town areas ▪ Building code will be implemented in major settlements and town areas ▪ Bio-engineering technology will be applied in road construction ▪ Mandatory afforestation policy along the road side will be implemented
<p>Activities/Programs:</p> <p>Construction of new road (25 km) Additional blacktopped road (50 km) Upgrading (100 km) Preparation and implementation of land use plan Implementation of building code in major market centers and municipal area Implementation of Mandatory bio-engineering system in road construction Construction of road proposed by municipal transport master plan</p>

Table 14: LFA of Drinking Water and Sanitation

Drinking water and sanitation	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
<p>Goal:</p> <p>1.2:Provision of safe drinking water to all</p>	Percentage	81.51	100	Tap water drinking water accessed households	Entire NT	Entire NT inhabitants	<ul style="list-style-type: none"> ▪ Municipal profile ▪ District Profile ▪ District drinking 	<ul style="list-style-type: none"> ▪ Allocation of budget

<p>NT inhabitants and make it sanitary</p> <p>Objectives:</p> <p>1.2.1: Provide safe drinking water to all NT inhabitants</p> <p>1.2.2: Construct public toilets at Basantapur bazaar, major market centers and settlements</p> <p>1.2.3: Construct girls friendly toilet in local schools</p> <p>1.2.4: Regular collection of garbage from households</p> <p>1.2.5: Construction of public taps</p>	Number	-	2	Sanitary landfill site	Basantapur and Lasune	Basantapur inhabitants	<p>water and sanitation division report</p> <ul style="list-style-type: none"> ▪ NGO/INGOs report 	<p>public private partnership in infrastructure development</p> <ul style="list-style-type: none"> ▪ food coordination among the stakeholders ▪ continue support from government of Nepal and donor agencies
	Km	-	50	Drinking water pipeline	Basantapur and major market centers	Entire NT inhabitants		
	Condition		Complete sanitation	Sanitation	Basantapur, Chitre, Lasune	Basantapur inhabitants		
	Condition		Mandatory in each school	School toilet	Entire NT	Local students		
	Condition		All school	Girls friendly school	Entire NT	Local students		
	Frequency	Twice a week in Basantapur area	Everyday	Garbage collection	Basantapur Bazar area	Basantapur inhabitants		
	Number	-	50	Public taps	Entire NT	Entire NT inhabitants		
	Number		10	Drinking water consumer groups	Entire NT	Entire NT inhabitants		
	Number		5	Drinking water project handover to public	Entire NT	Entire NT inhabitants		

Outcomes:

- Entire people of NT will have pure drinking water access
- Public awareness on health, drinking water and sanitation will be increased
- Drinking water consumer group will be strengthened and will be able to manage the project
- Every school will have girls friendly toilet
- All the market centers will have public toilet

Activities/Programs:

- Construction and connection of water supply projects
- Complete multi-year drinking water project
- Maintenance and reconstruction of old and completed projects
- Formation and hand over of water consumer groups
- Construction of public toilets (Basantapur, Chitre, Lasune)
- Construction and implementation of girl friendly toilets in each school

Table 15: LFA of Drainage and Sewerage Network

Drainage and Sewerage Network	Indicators					Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location		
Goal: 1.3: Basantapur NT will have municipal level drainage development and management	Km	4	25	Surface drain	Basantapur and major market centers	Local inhabitants	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Public private partnership in infrastructure development
	Km	-	10	Sewerage	Basantapur and major market centers	Local inhabitants	

<p>Objectives: 1.3.1: Construct drainage network in Basantapur and major market centers 1.3.2: expansion of drainage network in newly emerged urban areas</p>	Km	-	25	New construction	Basantapur and major market centers (chitre, Lasune)	Local inhabitants	<p>water and sanitation division report</p> <ul style="list-style-type: none"> ▪ NGO/INGOs report 	<ul style="list-style-type: none"> ▪ Good coordination among the stakeholders ▪ Continue support from government of Nepal and donor agencies
<p>Outcomes:</p> <ul style="list-style-type: none"> ▪ Preparation of drainage and sewerage network master plan ▪ Basantapur, Chitre, Lasune market centers areas' households will be connected to drainage/sewerage network ▪ Existing drainage condition along the highway will improved ▪ New urban extended area will have drainage facilities 								
<p>Activities/Programs:</p> <ul style="list-style-type: none"> ▪ Preparation of drainage network master plan ▪ Construct drainage network/sewerage in Basantapur, Chitre and Lasune Market centres ▪ Construct drainage network in major market centers and settlement of Basantapur NT 								

Table 16: LFA of Irrigation

Irrigation	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		

<p>Goal: 1.4: Increment of agriculture production through irrigation facilities</p> <p>Objectives 1.4.1: Increase agriculture productivity and production through providing irrigation facilities to arable land. 1.4.2: Construct small and medium irrigation project 1.4.3: Pocket area irrigation system will be implemented</p>	Hectare	58.1	100	Area irrigated by local irrigation system	Different areas of NT	Local farmers	<ul style="list-style-type: none"> ▪ Municipal profile ▪ NT profile and report ▪ Yearly report and profile of district irrigation office ▪ NGO/INGOs report 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Public private partnership in infrastructure development ▪ Good coordination among the stakeholders ▪ Continue support from government of Nepal and donor agencies
	Number	25	50	Irrigation project	Different areas of NT	Local farmers		
	Number	-	1	Multi-year irrigation project	Different areas of NT	Local farmers		
	Pockets	-	11	Vegetable Pocket area	Different areas of NT	Local farmers		
	no	-	10	Rain water harvesting and pond	Different areas of NT	Local farmers		
<p>Outcomes:</p> <ul style="list-style-type: none"> ▪ There will be irrigation facility in the arable land and agriculture pocket area ▪ Vegetable farming will be commercialized ▪ Increase in the production of vegetables ▪ Agriculture production will be increased because of extended irrigation areas ▪ Awareness among the local farmers to construct small irrigation project will be increased ▪ Small irrigation schemes will be constructed and implemented ▪ 								

Activities/Programs:

- Detail study of irrigation project for the arable land of NT
- Develop multi-year irrigation project
- Irrigation through rain water harvesting
- Construct irrigation ponds in rural areas
- Operate drop irrigation project for commercial vegetable farming
- Rain water harvesting campaign to overcome from the drought season

Table 17: LFA of Electricity and Communication

Electricity and Communication	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
Goal: 1.5: To provide electricity and communication facilities to all NT inhabitants Objectives: 1.5.1: Provide electricity facilities to entire households 1.5.2: Provide communication facilities to entire wards of	Percentage	90.4	100	Electricity accessed households	Basantapur NT	NT inhabitants	<ul style="list-style-type: none"> ▪ Municipal profile ▪ District Profile ▪ IDP mid tern evaluation report ▪ NGO/INGOs report ▪ Nepal telecom and Ncell Report ▪ Yearly report of Nepal electricity authority 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Public private partnership in infrastructure development ▪ Good coordination among the stakeholders ▪ Continue support from government of Nepal and donor agencies
	Percentage	43	100	Television owned HH	Basantapur NT	NT inhabitants		
	Percentage	8.5	50	Cable Television accessed HH	Basantapur NT	NT inhabitants		
	Percentage	2	25	Computer owned HH	Basantapur NT	NT inhabitants		
	Number	-	1	Cinema Hall/theatre	Basantapur NT	NT inhabitants		
	Number	-	2	Radio/FM stations	Basantapur NT	NT inhabitants		

Basantapur Municipality	Number	-	2	Local Newspapers	Basantapur NT	NT inhabitants	<ul style="list-style-type: none"> ▪ Investment from private sectors ▪ Active Public participation
	no	-	3	Street light	Basantapur, Chitre and Lasune	NT inhabitants	
	HH	4	500	Solar User	Basantapur, Chitre and Lasune	Basantapur, Chitre and Lasune	
<p>Outcomes:</p> <ul style="list-style-type: none"> ▪ Electricity access to entire households of Basantapur NT ▪ Upgrading of present electricity system ▪ Increased number of alternative energy used households ▪ Communication facilities to entire households of Basantapur NT ▪ Improved quality and reliable communication in NT 							
<p>Activities/Programs:</p> <ul style="list-style-type: none"> ▪ Extension of electrification work in NT ▪ Promotion and extension of alternative energy ▪ Feasibility study of small and micro hydropower in NT ▪ Install street light in NT (Basantapur, Chitre, Lasune) ▪ Transfer rural area electricity management to local people/community by forming management committee standards ▪ Organize press freedom and promotion program ▪ Capacity development of Nepal telecom and Ncell network ▪ Provide internet facilities in major market centers and tourist spots 							

6.2.10 Strategic Physical Development Planning Projects and MSIP

Physical development projects were identified at two level. At the first level at least ward level community meetings/consultation were carried out to collect local level problems and issues. Similarly, municipal/NT level interaction/consultations were conducted for strategic projects and plans. Then, information/issues collected from both level were scrutinized and prepared the list strategic projects on the priority basis. Such strategic plans have been formulated in the Multi Sectoral Investment Planning (MSIP) framework so that role and responsibility of the concerned line agencies could be identified. Detail of strategic plans and programmes with MSIP framework in specific project is shown in annex 1.

6.3 Social Development Plan

6.3.1 Concept

Social development plan focuses on the issues relating to social development in Basantapur. Inclusive development, participatory approach, focused group development will be the main concern of social development plan. While formulating social development plan, socially excluded groups, marginalized communities, children, aged people, women, scheduled caste groups will be main focus. Women participation and main streaming, mainstreaming of scheduled caste ethnic groups and marginal communities will be the method of social development and planning. Education, health, sports, women, children and excluded groups are the main coverage area of social development plan.

Education, health, cultural and sports, parks and open spaces, public infrastructures etc are focused areas of project formulation within social development.

6.3.2 Present Status

Basantapur at present reflects some level of social development initiatives but it demands more improvement in the future. It is still found some sort of social hindrances for social development due to lack of social awareness as well as social infrastructures. Summary of the present social development status is shown in the following table;

Table 18: Present Status of Social Development in Basantapur NT/Laligurans Municipality

Social indicators	Status	Remarks
Total Population as of 2011 (no)	16934	
Male (no)	7728	
Female (no)	9206	
Household (no)	3677	
Average Household Size	4.6	
Sex Ratio	83.95	
Aged Population 60 and above (%)	8.99	
Economically Active Population (%)	58	
Disable Population (no)	535	
Absent Population (%)	10.15	
Dalit Population (%)	5.85	
Below Poverty line	3.5	
Literacy Rate (%)	74.95	
Firewood users (%)	91.73	
Bio-gas users HH (%)	3.05	
Television HH (%)	62.6	
Cable Television HH (%)	8.3	

Computer HH (%)	2.1	
Internet HH (%)	1.1	
Women Participation	Low	
Inclusive Development Practice	Fair	

Source: Fieldwork, 2016

6.3.3 Social Development Issues and Problems

Issues and problems related to social development plan are listed below so that social sector plans could be identified and presented in the LFA format.

- Poverty cluster still exist in the municipal/NT area
- Lack of participation of children, women and excluded groups in the main stream of development
- Low level of women participation
- Poor condition of sanitation and increasing its social consequences
- Lack of disable friendly infrastructure in the municipality
- Lack of public infrastructures (community hall, convention centres, community library, public toilets etc)
- Lack of proper management plan of public property (temple, statue, monastery, religious and cultural places etc)
- Lack of public awareness programmes
- Poor condition of health facilities
- Decreasing social harmony

6.3.6 Logical Framework Analysis

Table 19: LFA of Education

Education	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
<p>Goal:</p> <p>1.6: To obtain cent percent literary and provide easy access of basic and secondary education in New town</p> <p>Objectives</p> <p>1.6.1: To improve the education condition of all class and community</p> <p>1.6.2: To provide minimum physical infrastructure (class room, library, science lab and school environment) to confirm the quality education for all the children</p> <p>1.6.3: To provide child friend school education and environment</p> <p>1.6.4: To provide the</p>	Percentage	74.95	100	Literacy rate	Respective Community and schools of the NT	Different age group students and community of NT	<ul style="list-style-type: none"> ▪ Municipal profile ▪ NTPO reports ▪ District profile ▪ FLASH Report (DEO) ▪ Reports of local sports clubs ▪ Report of District women and children development office ▪ Report of district child welfare board ▪ /INGOs report 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Continue support from donor agencies, government and local people ▪ Public private partnership in infrastructure development ▪ Good Coordination among thestakeholders ▪ Active and effective school management committee
	Number	1	2	College	Basantapur	Basantapur NT Inhabitants		
	Number	1	2	Technical College	Basantapur	Basantapur NT Inhabitants		
	Percentage	-	100	Trained teacher with required qualification	Respective Community and schools of the NT	Basic level students community of NT		
	Percentage	-	0	School dropout rate	Respective Community and schools of the NT	Basic level students and community of NT		
	Number	28	50	Early Child Development Centre	Respective Community and schools of the NT	Basic level students and community of NT		
	Number	-	3	Library	Basantapur, Chitre, Lasune	Basantapur NT inhabitants		

education opportunity up to secondary level to all the children	Number	-	10	Adult Literacy Programme	Respective Community and schools of the NT	Basic level students and community of NT		
<p><u>Outcomes:</u></p> <ul style="list-style-type: none"> ▪ Child, gender and disabled friendly school and physical infrastructure ▪ Trained teachers ▪ Well-functioning ECD ▪ Availability of necessary teaching material at schools ▪ Literacy Rate will be increased at 100 percent ▪ Technical college will be established ▪ Higher educational facilities will be easily accessible 								
<p><u>Activities/Programs:</u></p> <ul style="list-style-type: none"> ▪ Fulfillment of minimum infrastructure condition (class room, library, science lab and school environment) ▪ Arrangement and distribution of teacher post according to teacher student ratio ▪ Merge and remove unnecessary school on the basis of school mapping ▪ Trainings to teachers ▪ Good coordination between school and local people through school management committee ▪ Continuation and extension of scholarships and day meal program ▪ Establish library in all schools ▪ Establishment of public library ▪ Capacity development programs for stakeholders (DDC, VDC, Municipality, Teacher guardian association, teachers, head teachers, RPs, SS, parents) ▪ Establishment of technical college 								

Table 20: LFA of Health

Health	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
Goal:	Number	-	1	Hospital	Basantapur new town	Whole NT inhabitant	<ul style="list-style-type: none"> ▪ Human Development 	<ul style="list-style-type: none"> ▪ Allocation of budget

<p>2.1: Improvement in health condition providing easy and quality health services to all the NT dwellers</p> <p>Objectives</p> <p>2.1.1: Easy access of quality health service to all new town people</p> <p>2.1.2: Infrastructure development for quality health service</p> <p>2.1.3: Development and extension of ayurved services in new town</p>	Per thousand	1	3	Ayurvedic Health centre	Basantapur new town	Whole NT inhabitant	<ul style="list-style-type: none"> ▪ report index ▪ Yearly report of District Health Office ▪ NGO/INGOs report ▪ Municipal profile ▪ NT reports and profile 	<ul style="list-style-type: none"> ▪ Continue support from donor agencies, government and local people ▪ Public private partnership in infrastructure development ▪ Good Coordination among thestakeholders
	Per thousand	68 (NPC, 2011)	75	Life expectancy	Basantapur new town	Whole NT inhabitant		
	Status	-	controlled	Control on transmitted diseases	Basantapur new town	Whole NT inhabitant		
	percent	-	100	Health service access	Basantapur new town	Whole NT inhabitant		
<p>Outcomes:</p> <ul style="list-style-type: none"> ▪ Hospitals with trained health workers and doctors ▪ Improved physical infrastructure and modern health equipment ▪ Patient friendly hospitals and health centers ▪ Availability of medicine and health equipment at hospitals and health centers ▪ Improved health condition of local people ▪ Controlled of transmitted disease and flu ▪ Increased number of community health centers ▪ Required number of health workers post will be fulfilled in NT ▪ Upgraded of local health centers ▪ Regular monitoring and evaluation of local health service and system ▪ Easy and accessible treatment facilities of different diseases through periodic health camps ▪ Controlled communicable diseases in NT ▪ Increased number and services of institutional and community health service centers ▪ Establishment of ayurvedic hospital in Basantapur ▪ Establishment of medicinal herbs collection and processing center in Basantapur 								

Activities/Programs:

- Upgrading of local health centers
- Establishment of Hospital
- Training to health workers (SBA, ASBA, NSV, FP) and doctors
- Fulfillment of vacant posts in local hospital and health centers
- Supply and installation of modern health equipment
- Organization of health awareness program and health camp
- Establishment of Ayurveda hospital in Basantapur
- Organize awareness program and health camp to increase the number of delivery at health centers
- Organize awareness programs to increase the coverage of family planning service
- Organize senior citizen health promotion program
- Organize women health promotion program
- Free distribution of medicine for target groups

Table 21: LFA of Women, Children and Target Groups

Women, Children and Target Groups	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
Goal: 3.1: Social, economic, political, educational and human development situation of women, children and target groups will be improved through increased and inclusive access to resource, services and facilities Objectives 3.1.1: Inclusive	Indicator	0.498	0.51	Human Development Index	Basantapur new town	All the inhabitants of Basantapur NT	<ul style="list-style-type: none"> ▪ NTPO reports and profiles ▪ Human Development report index ▪ Yearly report of District Health Office ▪ NGO/INGOs report ▪ Municipal profile ▪ DDC yearly report 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Continue support from donor agencies, government and local people ▪ Public private partnership in infrastructure development ▪ Good
	Year	68.12	75	Life expectancy	Basantapur new town	Women and children		
	Percentage	42.63 (NPC, 2014)	15	Deprived from economic opportunities	Basantapur new town	All the inhabitants of Basantapur NT		
	Percentage	-	sufficient	Women participation in social, political	Basantapur new town	Women		

development of women, children, disabled and indigenous people, senior citizen, single women, excluded groups, backward societies through abolition of social and ethnic discrimination 3.1.2: Ensure the participation of target groups in social activities and preparation of local plans 3.1.3: Implementation of social security plan/scheme for disable, aged, marginalized and poor community	Number/pe r year	-	decreased	Domestic violence minimization centre	Basantapur new town	Women and children	District cooperative office report	Coordination among the stakeholder s
	Percentage		sufficient	Deprived group participation in social, political and economic activities	Basantapur new town	Target and excluded groups		
	Number	-	1	Religious centre	Basantapur new town	All the inhabitants of Basantapur NT		
	Number	-	1	Art and cultural centers	Basantapur new town	All the inhabitants of Basantapur NT		
	Number	-	2	Old aged home	Basantapur new town	All the inhabitants of Basantapur NT		
	Number	-	1	Disabled people home	Basantapur new town	Disabled People		

Outcomes:

- Abolition of social and ethnic discrimination to ensure the welfare and rights of single woman, disabled people, target groups and social excluded community
- Participation of focused group in main stream development
- Conservation and promotion of endangered culture, language, religion, costumes of endogenous and ethnic groups
- New town development will be inclusive
- Strengthening of target groups
- Substantial increased access to education for oppressed and marginalized children
- Illiteracy rate of women will be decreased through informal education
- Decreased domestic and sexual violence
- Increased women participation in preparation of development plan and program
- Conservation of local religion, language, culture and arts

Activities/Programs:

- Profile of Preparation of target group
- Organized literacy development program for target groups
- Provide scholarship for women and targeted groups in school education
- Construction of disable, aged and child friendly infrastructure
- Organize capacity development program for backward people to involve in main stream development
- Inclusive participation in policy making and monitoring
- Organize awareness program (road drama, hoarding board, pamphlet, interaction, workshop, audio visual programs etc)
- Provide skill oriented and income generating training
- Promotion of cooperative concept and institutional capacity development
- Provide information and consultancy service to passport making youths
- Establish day care centre for senior citizens
- Construction of children parks at Basantapur
- Construction of orphan children home and old aged home at Basantapur
- Construction of shelter home for domestic violence victim women
- Inclusive participation in monitoring, evaluation, planning and development of new town
- Organize poverty reduction, capacity development and awareness program for target groups
- Prioritized employment opportunity for marginalized, endogenous and women
- Social security schemes for disabled, old aged and single women.

Table 22: LFA of Sports

Sports	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
Goal: 4.1: Prepare national sports talents through the development of sports infrastructure	Number	-	1	Stadium	Basantapur	NT inhabitants and sports lovers	<ul style="list-style-type: none"> ▪ NTPO reports and profile ▪ IDP evaluation report ▪ Municipal profile ▪ DDC yearly 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Continue support from government, sponsor agency and local people ▪ Public private
	number	-	2	District level sports activities (yearly)	Basantapur NT	NT inhabitants and sports lovers		

Objectives 3.1.1: Development of sports infrastructure 3.1.2: Continuation of sports tournament and activities 3.1.3: Commercialization of local sports	Number	-	1	Covered hall	Basantapur NT	NT inhabitants and sports lovers	<ul style="list-style-type: none"> ▪ report ▪ Yearly reports of local sports and youth clubs ▪ NGOs and INGos Reports ▪ Information about local clubs 	<ul style="list-style-type: none"> ▪ partnership in infrastructure development ▪ Good Coordination among the stakeholders ▪ Continuation of sports tournament
	Number	-	3	Basketball court	Convenient location of Basantapur NT	NT inhabitants and sports lovers		
	Number	1	3	Local level football ground	Convenient location of Basantapur NT	NT inhabitants and sports lovers		
<u>Outcomes:</u> <ul style="list-style-type: none"> ▪ Strong social cohesion among the local community and people through sports ▪ Emergence of new sports talent in Basantapur NT/Laligurns municipality ▪ Increased participation of local players in district and national level tournaments ▪ Increased number of local sport clubs ▪ Development of new sport infrastructure in Basantapur NT ▪ Strengthening and Infrastructure development of local sports club ▪ Continuation of sport activities and tournaments in Basantapur NT ▪ Positive impacts on local inhabitant's health through sports activities ▪ Minimum sports ground will be developed in local higher secondary schools 								
<u>Activities/Programs:</u> <ul style="list-style-type: none"> ▪ Upgrading and Construction of Basantapur stadium ▪ Construction of sport ground in local higher secondary schools ▪ Organize sports activities and training programs in local high schools ▪ Provide sports goods to local sports and youth clubs ▪ Organize player coaching program ▪ Organize district and national level sports tournaments ▪ School level sports competition 								

6.3.7 Strategic Social Development Plan and MSIP

Social development projects were identified at two level. At the first level at least ward level community meetings/consultation were carried out to collect local level problems and issues. Similarly, municipal/NT level interaction/consultations were conducted for strategic projects and plans. Then, information/issues collected from both level were scrutinized and prepared the list strategic projects on the priority basis. Such strategic plans have been formulated in the Multi Sectoral Investment Planning (MSIP) framework so that role and responsibility of the concerned line agencies could be identified. Detail of strategic plans and programmes with MSIP framework in specific project is shown in annex 1.

6.4 Economic Development Plan

6.4.1 Concept

Economic development plan comprises the economic aspects to be addressed in plan. Planning for economic development is to create and maintain a strong, vibrant to local economy. This sub-chapter includes the economic development plan of Basantapur New Town to create economic opportunities to local as well as economically sustainable city development. Within economic development plan, agriculture development, trade and business, small scale entrepreneurship, self employment activities are covered. Similarly, tourism development is also linked to economic development however this is dealt in separate heading under tourism and cultural development plan below

6.4.2 Present Status

To assess the present economic condition of Basantapur NT, here summary of the present economic condition is shown in the following table:

Table 23: Present Status of Economic Activities of Basantapur

Economic Indicators	Status	Remarks
Human development index	0.498	
Below poverty line	3.5	
Human poverty index	11.4	
Deprived from economic opportunities	42.63	
Economically active population	58	
Industrial employment (direct)	80	
Employment from tourism sectors	-	
Shops	182	
Hotel and restaurant	73	
Development banks	1	
Agricultural Service Center	2	
Co-operative	8	
Finance	2	
Wholesale dealer	1	
Vegetable exports	1 tons/day	
Milk collection	3000 Lts./day	
Big Cardamom export	10 tons/year	
Zinger export	500 tons/year	
Tiger Grass export	100 tons/year	
Food grain import	10 m.t./day	
Petroleum import	1 Tanker/week	
Clothes import	One truck/day	
Periodic markets	1	

Tourist arrival	3000 yearly	
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Source: *Fieldwork, 2016*

6.4.3 Potentialities and Problems of Economic Development Plan

Economic activities such as tourism related business/industries, cash crop farming, vegetable farming are having huge potentiality in Basantapur (Laligurans Municipality). Natural, cultural, adventurous tourism can be boost up through which economic development of Basantapur can be promoted. Similarly, fruit processing industries, wine industries, tea, cardamom and Chiraito processing industries are another potentialities. Likewise, agriculture activities particularly vegetable such as cabbages, potato and other vegetable can be produced and exported to Dharan, Itahari, Biratnagar, which will be the potentiality of income generation in Basantapur (Laligurans Municipality)

However there are some sort of problems to be resolved for economic development of Basantapur. Problems related to economic development are as follows:

- Lack of processing industries (Chiraito, Forest products)
- Lack of entrepreneurship
- Political instability
- Lack of monetary and fiscal policy
- Lack of skilled manpower
- Immigration of local youngsters
- Small size of market
- Lack of physical infrastructure

6.4.4 Economic Development Strategy

The base of all economic development is investment. When private investment fails to meet a community's particular needs, public investment or public/private partnerships may be necessary. Current realities and future challenges of economic development give rise to three foundational principles on which economic development investments should be based on exports, productivity and sustainability. Exports have motivated much of economic development activity in the past, but the shift from a manufacturing service based economy and increasing global competition has emphasized the importance of productivity. A growing awareness of the need for human development and the scarcity of natural resources also highlight the need for a sustainable approach.

Exports, productivity, and sustainability are the three principles of economic development - the pillars that form the core support of the economic development structure. With too much or too little investment in any one of the three, the structure becomes unstable.

Basantapur has huge potentiality of commercial agriculture, tourism and business. Export of local production is possible through capital formation from private and public sector as well as

development of skilled work force in agriculture and energy sector. Realizing this fact some strategies of local economic development are mentioned in the following paragraph:

- Promote processing industries (Chitrait and forest products)
- Facilitate local/regional authorities to identify local and regional comparative advantages through supportive policies
- Prioritize infrastructure development for possible industrial development
- Promote investment to trigger realization of comparative advantages
- Identify socio-economic, special characteristics of poor clusters
- Development programs focused to poor and marginalized community
- Initiatives for small scale entrepreneurs
- Facilitate to cash crop farming to the local farmers

6.4.5 Logical Framework Analysis

Table 24: LFA of Agriculture Development

Agriculture Development	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
<p>Goal: 3.1 Improved livelihood and income through cash crops and commercial vegetable farming</p> <p>Objectives 3.2.1: To attract farmers towards commercial agriculture, cash crops and vegetable farming 3.2.2: Identification of new pocket area for modern agriculture development 3.2.3: Attract farmers towards commercial animal husbandry to increase their income</p>	US\$	690	1000	Per capita income	Basantapur NT	All inhabitants of Basantapur NT	<ul style="list-style-type: none"> ▪ Municipal profile ▪ NTPO reports ▪ District profile ▪ Economic survey ▪ Human Development Report ▪ Evaluation report of infrastructure sector ▪ Annual report of District Agriculture Development Office ▪ Living Standard Survey Report 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Good coordination among the stakeholders ▪ Continue support from government of Nepal and donor agencies ▪ Farmers will be attracted to cash crops ▪ District agriculture development office will conduct pocket area specific programs
	Percentage	42.62	20	Deprived from	Basantapur NT	Local inhabitants		
	Percentage	11.4	7	Human poverty index	Basantapur NT	Target group		
	Number	2	5	Large scale industries	Basantapur NT	All inhabitants of Basantapur NT		
	number	-	5	Standard hotels	Basantapur NT	All inhabitants of Basantapur NT		
	number	9	50	Small scale industries	Basantapur NT	All inhabitants of Basantapur NT		
	MT per year	1	5	Vegetable export	Feasible areas	Vegetable farmers of NT		
	Liter per day	3000	5000	Milk production	Feasible areas	Respective farmers		
	MT per year	10	20	Big Cardamom	Feasible area	Respective farmers		
	MT per year	500	1000	Zinger	Feasible area	Respective farmers		
Number			Agriculture pocket area	Feasible area	Respective farmers			

Outcomes:

- Local farmers will be involved in commercial vegetable farming and cash crop production
- Local youths will be attracted to agriculture after the commercialization and marketing of agriculture
- Agriculture production and income will be increased substantially from commercial agriculture
- Farmers will be benefitted after the identification, development and expansion of new agricultural area
- Agricultural market will be available for farmers
- All weather roads will be constructed to reach local agriculture production to the market easily
- Agriculture production will be increased by mechanization, expansion and diversification of local agriculture
- Agricultural inputs (machine, materials, fertilizer, pesticide/insecticides, technicians) will easily available
- Local farmers will be trained
- Cold storage and processing facility will be available in Basantapur
- Agriculture production collection centers will be available in Basantapur and major market centers
- Commercial agriculture and cash crops will be supportive to reduce local poverty.

Activities/Programs:

- Construction of cold store
- Management of periodic markets
- Operate agriculture subsidy/grant program effectively
- Identification and conservation of local crops and fruits
- Operate crops extension program through scientific demarcation of agriculture pocket area
- Construction of agriculture production collection center, fruits and vegetable collection center, chilling center and processing center
- Organize agriculture training, seminar and workshops
- Provide agriculture loan to local farmers without difficulty
- Operate agricultural value chain program with the support of NGOs/INGOs
- Organize best farmers honor program
- Organize seeds and plants distribution program
- Organize special agricultural production program
- Organize potato, vegetables and spice crop development program
- Organize crop development program
- Organize community managed irrigated agricultural area program

6.4.6 Strategic Economic Development Plan and MSIP

Economic development projects were identified at two level. At the first level at least ward level community meetings/consultation were carried out to collect local level problems and issues. Similarly, municipal/NT level interaction/consultations were conducted for strategic projects and plans. Then, information/issues collected from both level were scrutinized and prepared the list strategic projects on the priority basis. Such strategic plans have been formulated in the Multi Sectoral Investment Planning (MSIP) framework so that role and responsibility of the concerned line agencies could be identified. Detail of strategic plans and programmes with MSIP framework in specific project is shown in annex 1.

6.5 Tourism and Cultural Development Plan

6.5.1 Concept

Tourism development plan has been formulated focusing the policy and strategy, planning, institutional strengthening, product development and diversification, marketing and promotion, tourism infrastructure, economic impact of tourism and tourism investment, human resource development, and socio-cultural and environmental impacts of tourism. Addressing the issues covered in Long-term Vision of Basantapur, tourism related activities should be focused. Plans and programmes to be covered within tourism development plan are;

- Tourism information
- Accessibility (Transport)
- Accommodation
- Tourism activities
- Tourism zoning
- Marketing and promotion
- Institutional framework
- Statistics and research
- Legislation and regulation and
- Quality standards of tourism services

6.5.2 Present Status

Basantapur municipality has huge potentiality for tourism development. It has naturally gifted Laligurans as well as rocks that are potential for tourism development. Tourism can be an another important economic activity of Basantapur. 4-5 hours travelling from Dharan, one can reach very peaceful and colourful are Basantapur, capital of Laligurans. At present, local initiations have been highly emphasized in tourism development. Tinjur Dada, RR garden, View Tower, Patle Pokhari, Shiva Temple are the major tourism sites of Basantapur. Some of the basic infrastructures such as steps at RR garden, trekking routes, conservation and shaping of some natural beauties have already been started in various places of Basantapur. Following table reveals the inventory of Tourism Potentials of Basantapur area. While talking about tourists arrival in Basantapur, more than 2 lakhs tourist visit Basantapur particularly Tinjure area. This is no exact data available how much tourists visit Basantapur but local key respondent expressed that about 2 lakhs internal tourists visit Basantapur area particularly for picnic, viewing Laligurans and 3 thousand Indian as well as 1 thousand other foreigner visit Basantapur yearly. This is actually notable figure from which Basantapur can earn more income in the field of tourism and therefore tourism infrastructure should be focus of development plan.

Table 25: Present Status of Tourism Activities of Basantapur/Laligurans Municipality

Tourism Indicators	Status	Remarks
Internal Tourists (no)	2 lakhs yearly	
International Tourist (no)	4000 (Indian and Others)	
Hotels (small)	3	
Major Tourism attraction sites	6	Tinjure Area, Patake Danda, Solma Tea State Gurans Statue Lasun Statue Bokre Danda Basabtapur park
View Tower	2	

6.5.3 Tourism Development Potentialities

Tourism can be an another important economic activity of Basantapur. 4-5 hours travelling from Dharan, one can reach very peaceful and colourful are Basantapur, capital of Laligurans. At present, local initiations have been highly emphasized in tourism development. Tinjur Dada, RR garden, View Tower, Patle Pokhari, Shiva Temple are the major tourism sites of Basantapur. Some of the basic infrastructures such as steps at RR garden, trekking routes, conservation and shaping of some natural beauties have already been started in various places of Basantapur. Following table reveals the inventory of Tourism Potentials of Basantapur area:

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Surrounding of mountains, lakes and greenery. Offering excellent respite from city life, the diverse landscape includes terraced fields as well as the Terai plains covered with the different types of vegetation. The mixed pastures, hills of colourful Rhododendron and jasmines, beautiful sunrise and sunset, friendly people and a rich Limbu culture offer additional appeal. Basantapur also hosts trekkers on the way to Mt. Kanchenjunga in Taplejung and the popular Teenjure Milke-Jaljale Trail.

The best time to visit are autumn and spring, between October-December or from Feb-Apr. The weather is cool and temperate here most times of the year, which makes Basantapur ideal for visit anytime. Summers are pleasant with temperatures ranging from 10-20 degree Celsius, while winters are not extreme even though temperatures could sometimes fall below 0 degree.

Predominant Culture: As in Kanchenjunga region further, Limbu culture is predominant in the surrounding areas of Basantapur as well. Other ethnic groups that reside in the area are Gurung, Rai, Tamang, Brahmin and Chhettri. Tharu, Newar and Marwadi people also live in some areas. Most of the people here are farmers by occupation.

Following are the major touristic important places to visit Basantapur;

Tinjure Dada: From Tin Jure (3,660m) edge one can see magnificent views of sunrise and sunset and majestic view of the mountains. Thirty four varieties of Rhododendron are found here. Tin Jure Danda is about half-hour away from Basantapur Bazaar.

Tinjure Milke Jaljale Trail, also known as the Rhododendron Trail, spreads across Taplejung, Terathum and Sankhuwasabha districts. Hile, north of Dharan, is good place to start out. Alternately, you can start from Basantapur at the end of a newly completed dry season dirt road that traverses Ilam's young tea estates.

Heading northeast out of Hile, the trail climbs gradually through settlements of recent migrants from the northern Olangchung region, trans-Himalayan yak drivers who live for months on tsampa (roasted barely flour), dried yak meat, and cheese. Gupha Pokhari is a serene lake set on a ridge looking east at the Kanchenjunga massif and west at Makalu and the Khumbu Himal. From here, a shorter trek follows the Milke Danda ridge due north, climbing to 4'700m into the Jaljale Himal, a remote area spotted with lakes and inhabited by mountain people from Tibet. You can then descend east to the Mewa stream and continue to Taplejung's airfield and further to the Kanchenjunga Conservation Area.

Milke Danda : On the way to Taplejung is another popular Rhododendron forest known by the name of Milke Danda (2,905 m). Milke Danda provides a closer view of the Kanchenjunga and Kumbhakarna mountains and offers beautiful sunrise and sunset surprises when weather is clear. It is on the trekking trail between Taplejung and Basantapur Bazaar.

Pattek Danda: Pattek Danda (2,500m) is equally beautiful for sunrise, sunset and also offers a wide view of the Himalayas including Mt. Everest and Mt. Kanchenjunga . Pattek Danda is ideal for short treks and is also a good area for picnics. There is a popular Goddess Kali temple, 2-hour walk from Basantapur Bazaar. Pattek Danda, about 3 km from Basantapur can also be reached via Chitre that is 15-minute drive away. From here Pattek Danda is a 30-minute trek. Gupha Pokhari is a natural pond that lies on the trekking trail to Taplejung from Basantapur. Picturesque views of mountains, sunrise and sunset can be seen from here. This pond has religious significance and is also a good resting place for Taplejung trekkers.

Margh Pokhari (2,600m) is another natural pond on the lap of the hills. The pond holds religious value and has scenic beauty. The pond has contributed to keep the surroundings green. The Margh Pokhari watershed area has a dense forest that habitats popular species of Rhododendron and precious plants. Margh Pokhari is on the way to Basantapur from Sindhuwa, which is 5 km from Basantapur.

Panchakanya Pokhari is another popular tourist site. Also known as Chhathar Pokhari, Panchakanya Pokhari is approximately 2-hour walk further down from Sukrabare Bazaar. Among the many ponds here, the largest pond in the area is Panchakanya.

6.5.4 Problems

Though Basantapur is naturally and geographically rich and are having huge potentials of tourism development, here are some problems and challenges to promote the tourism in Basantapur;

- No sufficient tourism infrastructure
- Lack of Transportation facilities
- Lack of accommodation facilities
- Lack of marketing and promotion
- Lack of skilled human resources
- Lack of trained guides
- Lack of banking facilities at tourist sites
- Lack of airports
- Political instability

6.5.5 Logical Framework Analysis

Table 26: LFA of Tourism and Development

Tourism Development	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
<p>Goal: 3.3: Economic development through promotion and conservation of religious, cultural and natural heritage</p> <p>Objectives 3.3.1: Organize tourist arrival program to increase tourism activities 3.3.2: Development of tourism infrastructure (view tower, hotel, lodge, information center, trekking route etc) in major tourist destinations 3.3.3: Keep tourism sector in priority to create new employment opportunities</p>	Number	100	5000	Employment in tourism sector	New Town area	NT inhabitants	<ul style="list-style-type: none"> ▪ Tourism Statistics ▪ Tourism reports of DDC and municipality ▪ Tourism Board Reports ▪ District Based Tourism Development Committee Reports ▪ Archeological report ▪ FNCCI Report ▪ Hotel Association Report ▪ Tourism ministry report ▪ TAAN yearly report ▪ Tourism Statistics 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Continue support from donor agencies, government and local people ▪ Public private partnership in infrastructure development ▪ Good Coordination among the stakeholders ▪ Investment from private sectors ▪
	Number	1	3	Tourist information center	Tourism potential area	NT inhabitants and tourists		
	Number	-	3	Hoarding board	Along the Mechi Highway and other necessary places	NT inhabitants and tourists		
	Number	-	2 in a year	Tourism promotion campaign	Basantapur, Birtamod and other necessary places	NT inhabitants and tourists		
	Village	1	3	Home Stay	Potential villages	NT inhabitants and tourists		
	Number	2	5	View Tower	Potential villages	NT inhabitants and tourists		
	Number	3	10	Moderate Hotel	Basantapur and other potential areas	NT inhabitants and tourists		
	Number	-	3	Standard Hotel	Basantapur, Chitre and Lasune	NT inhabitants		

3.3.4: Organize tourist guide, trekkers, porter, hotel management, cook etc training to local youth and entrepreneurs.	Number	20000	500000	Tourist arrival	Basantapur and other potential	NT inhabitants and tourists		
	Number	5000	100000	Tourist arrival	Basantapur NT	NT inhabitants and tourists		
	Number	-	500	Tourist guide	Basantapur NT	NT inhabitants and tourists		
<p><u>Outcomes:</u></p> <ul style="list-style-type: none"> ▪ Annual tourist arrival will increased in Basantapur NT ▪ Major tourist destinations will be conserved, promoted and developed ▪ Plans and programs recommended by district tourism master plan will be implemented gradually ▪ Substantial increment in tourist arrival in Basantapur new town ▪ Local people will be involved in tourism activities ▪ Large sum of revenue will be collected from tourism sector by government ▪ New employment opportunities will be created in tourism sectors ▪ Number of households involved in tourism sectors will be increased ▪ Positive impacts and contribution on Basantapur overall economy ▪ Tourism will be one of the major income source of local inhabitants through increased tourism activities 								
<p><u>Activities/Programs:</u></p> <ul style="list-style-type: none"> ▪ Gradual implementation of tourism master plan ▪ Construction and development of view tower, tourism service center, picnic spot, trekking route, hoarding board, home stay ▪ Conservation and renovation of local religious and cultural heritage ▪ Organize and provide professional training for tourism entrepreneur, porter, tourist guide, cook, etc ▪ Promotion of local tourist destination ▪ Establish tourist service center ▪ Organize home stay training ▪ Development of home stay ▪ Develop agro-tourism ▪ Install hoarding board along the Mechi Highway and other necessary places to attract tourist ▪ Development and extension of quality hotels and lodges ▪ 								

6.5.6 Strategic Tourism Development Plans and Programmes and MSIP

Physical development projects were identified at two level. At the first level at least ward level community meetings/consultation were carried out to collect local level problems and issues. Similarly, municipal/NT level interaction/consultations were conducted for strategic projects and plans. Then, information/issues collected from both level were scrutinized and prepared the list strategic projects on the priority basis. Such strategic plans have been formulated in the Multi Sectoral Investment Planning (MSIP) framework so that role and responsibility of the concerned line agencies could be identified. Detail of strategic plans and programmes with MSIP framework in specific project is shown in annex 1.

6.6 Environmental Management and Disaster Mitigation Plan

6.6.1 Concept

There is a strong link between natural hazards and environment as the former, especially those leading to disasters, are normally caused by sudden or systematic changes in the state of environment. These changes are mostly introduced through natural phenomena, where through a gradual course, nature responds to multiple climatic and geological processes acting upon the environment. Apart from the natural phenomenon, environmental changes are also induced through human activities, which are of sudden nature. Environmental degradation makes especially poor communities more vulnerable to hazards because their livelihoods are more often fully dependent on natural resources.

In environmental management and planning of this IDP, Basantapur should focus particularly for solid waste management, sewerage and drainage management, open space management, public land conservation, control of deforestation, greenery management in the urbanizing areas and so on.

6.6.2 Present condition

People are not much aware about the disaster risk mitigation in Basantapur. There are lacking environmental management plans and programmes and the municipality is lacking of landfill site. Major environmental issues in Basantapur are environmental pollution/degradation, lack of solid waste management, land slide occurrence, public land encroachment, lack of safety measures in construction of building structures etc. General scenario of Baantapur about environmental condition is presented in table below;

Table 27: Plan Formulation Strategy

Indicators	Status	Remarks
Landslide prone area		
Human death toll	No	
Loss of property		
Concerned agencies	Red Cross, DAO, DDC, DSCO, Security forces	
District Disaster Relief Committees	Formed	
Fire engine	Under procurement	
Backhoe loader	Under procurement	
Dozer	Available at DDC	
Ambulance	Available	
Disaster relief fund	Lack	
Disaster rescue technical team	Not formed	
Early warning system	Lack	
Open space	Available	
Emergency shelter	No available	

Stock of relief materials	Limited	
Disaster awareness programs	no	
Disaster preparedness plans	no	
Public awareness	Moderate	
Public participation	Good	
Mitigation initiation	Poor	
EIA and IEE provision	Yes	
Use of local technology to reduce landslide	Moderate	
Implementation of landuse plan	Not yet	
Implementation of building code	No	
Building bylaws	Under construction	
Coordination among the local stakeholders	Poor	

6.6.3 Issues and Problems

Disaster management is a difficult task. Disaster happens all of a sudden. Thus, the suddenness of a disaster and its destruction, especially during a very serious natural disaster, it becomes very difficult to cope with a normal administrative set up and limited funds and resources. In view of the above situation, Basantapur is facing a number of severe problems which are mentioned below:

- Poor public awareness
- Poor access of physical infrastructure
- Unplanned settlement
- Lack of political commitment
- Lack of preparedness of District Disaster Relief Committees (DDRC)
- Slowdecision-making process
- Lack of cooperation and coordination among various disaster management related agencies
- Inadequate funds and resources
- Lack of relief equipment and machine such as fire engine
- Lack of modern technology especially early warning system

6.5.4 Logical Framework Analysis

Table 28: LFA of Environmental Management and Disaster Mitigation

Environmental Management and Disaster Mitigation	Indicators						Means of Verification	Major Assumptions	
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups			
<p>7.1: Goal Safe and comfortable life through sustainable management of forest, environment and soil conservation</p> <p>Objectives 7.1.1: Effective conservation of local forests 7.1.2: Income generation through the development of forest products and medicinal herbs 7.3.3: Afforestation program in barren land for greenery 7.3.4: Greenery management at urban areas 7.3.5: Adopt bio-engineering method</p>	Hectare	2785.9		Community forest	Basantapur NT	All inhabitants of NT	<ul style="list-style-type: none"> ▪ Annual report of district forest office ▪ Annual report of federation of community forest ▪ Annual report of federation of district forest consumer group ▪ Annual report of district soil conservation office ▪ Mid-term evaluation of IDP ▪ Annual progress report of DDC Terhathum ▪ Annual progress report of Basantapur Municipality ▪ Annual report of 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Continue support from donor agencies, government and local people ▪ Public private partnership in infrastructure development ▪ Good and regular coordination among the local stakeholders 	
	Hectare	4760		Benefited population from community forest	Basantapur NT	Forest consumer groups and area			
	Hectare			Open area	Basantapur NT	Local inhabitants			
	Hectare			Greenery area and parks	Basantapur NT	Local inhabitants			
	Number	2	7	Forest based industries	Basantapur NT	Local inhabitants			
	Number	-	10	Agro forestry program	Basantapur NT	All inhabitants of NT			
	Hectare	Yes	Mandatory	Provision of EIA and IEE	Basantapur NT	All inhabitants of NT			
	Provision		Mandatory	Building code application	Basantapur NT	All inhabitants of NT			
	Provision		mandatory	Environmental friendly	Basantapur NT	All inhabitants of NT			
	Provision		mandatory	Bio-engineering	NT roads	All inhabitants of NT			
	Number/p er year		Nil	Forest and bush fire case	Local forests	All inhabitants of NT			

for the cons ruction of environment friendly road	Hectare			Public barren land	Barren land of NT	All inhabitants of NT	Nepal Red Cross Society, Terhathum	
<p><u>Outcomes:</u></p> <ul style="list-style-type: none"> ▪ Management of illegal mine extraction and environmental exploitation ▪ Environment friendly provision will be applied in infrastructure development ▪ Management of sanitary landfill site for solid waste management ▪ Improvement in watershed and river ecosystem ▪ Maximum utilization and long term management of medicinal herbs ▪ Management of public parks, lands, and ponds ▪ Land use zone demarcation will be done for the implementation of local plans ▪ Earthquake resistance building will be constructed in Basantapur and major settlement areas ▪ Greenery zone will be developed in major market areas <p><u>Activities/Programs:</u></p> <ul style="list-style-type: none"> ▪ Improved alternative measures will be applied for management and use of natural resources ▪ Effective implementation of IEE and EIA ▪ Effective monitoring of mine management and agreement ▪ Organize environmental awareness programs at local schools ▪ Apply bio-engineering method for local development ▪ Apply slope stabilization strategy for road construction ▪ Apply code of conduct for the use of heavy equipment like dozer and excavators for road construction ▪ Organize awareness program for the minimization of garbage in source area ▪ Application of environmental service charge for the management of special environmental conservation fund ▪ Conduct sanitary landfill site feasibility study ▪ Construction of sanitary landfill site on the basis of feasibility study ▪ Management of garbage through separating degradable and non-degradable garbage ▪ Construct public toilet at Basantapur and major market centers ▪ Final outflow of sewerage after processing biological and bio-engineering method ▪ Construct pond in each village for rain water controlling ▪ Control land slide and soil erosion around the source of water for the conservation water spout ▪ Apply integrated community watershed development program ▪ Give emphasis for good governance and handover of community and leasehold forest ▪ Local organizations working for forest conservation will be awarded and honored 								

6.6.5 Strategic Environmental Management and Disaster/Risk Mitigation Plan and MSIP

Environmental Management and disaster risk management projects were identified at two level. At the first level at least ward level community meetings/consultation were carried out to collect local level problems and issues. Similarly, municipal/NT level interaction/consultations were conducted for strategic projects and plans. Then, information/issues collected from both level were scrutinized and prepared the list strategic projects on the priority basis. Such strategic plans have been formulated in the Multi Sectoral Investment Planning (MSIP) framework so that role and responsibility of the concerned line agencies could be identified. Detail of strategic plans and programmes with MSIP framework in specific project is shown in annex 1.

6.7 Climate Change Adaptation Plan

6.7.1 Concept

Globally climate change resulting from growing greenhouse gas emissions is expected to lead to rising temperatures and hanging rainfall patterns. Climate change will have a disproportionate effect on particular geographic locations, communities, and demographic groups. The impacts of climate change raise environmental justice issues. Environmental justice focuses on the health of and environmental conditions affecting minority, low-income, and indigenous populations.

In this context climate change impacts generally to all level of society but vulnerable and poor clusters suffer most. During the consultation meetings, discussions at different locations of Basantapur, local people expressed that climate change has been challenging to them particularly in cropping calendar, production trend and increase in various diseases. It was difficult to find out the specific problems since climate change impacts data are rare. However, based on the qualitative data and impression at the fieldwork, climate change adaptation plan has been prepared.

6.7.2 Present Status

Climatic information and data is derived through the fieldwork impression rather than quantitative data. Following table shows the climatic impacts perceived in Basantapur;

Table 29: Present Status of Disaster Situation of Basantapur

Indicators	Status	Remarks
Landslide frequency	Increasing	
Landslide displaced people		
Average annual rainfall	Decreasing	
Mean monthly temperature	Increasing	
Agriculture calendar	Shifting gradually	
Crop pattern	Changing gradually	
Integration of climate change adaptation plan in local planning	Not yet	
Agriculture pocket area	Shifting gradually	

Note: qualitative information is acquired from local stakeholders

6.7.3 Issues and Problems

Limited capacity and weak economy create great challenges to adapt to climate change. Human vulnerability to climate change is linked with poverty, exclusion, reliance on rain-fed agriculture, lack of basic services and limited alternative livelihoods. It is also linked with

social inequalities, limited access to information, and exclusion from key decision-making process. Major climatic problems of Basantapur are listed below;

- Erratic rainfall
- Landslide
- Rising temperature
- Lack of public awareness
- Low adaptive capacity
- Poverty
- Rain-fed agriculture
- Lack of basic service
- Weak infrastructure
- Limited alternative for livelihood
- Social inequalities
- Lack of fund

6.7.4 Adaptation Strategy

Adaptation means anticipating the adverse effects of climate change and taking appropriate action to prevent or minimize the damage they can cause, or taking advantage of opportunities that may arise. It has been shown that well planned, early adaptation action saves money and lives later. There are some key factors enabling adaptations which are mentioned below:

Table 30: Key Factors Enabling Adaptations

System	Details
Communications	The presence of diversified media and accessibility of information about weather and in general and hazards in particular
Transportation	A system which function even during extreme events
Finance	Access to banking, credit and insurance products which spread risk before, during and after extreme events
Economic diversification	Access to a range of economic and livelihood products
Education	Basic language and other skills necessary to understand risk and shift livelihood strategies as necessary
Organization and presentation	Right to organize and to have access to and voice concerns through diverse public, private and civil society organizations
Knowledge generation, planning and learning	The social and scientific basis required to learn from experience, proactively identify hazards, analyse risk and develop response strategies that are adapted to local conditions

6.7.5 Logical Framework Analysis

Table 31: LFA of Climate Change Adaptation Plan

Climate Change Adaptation Plan	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
<p>Goal: 8.1: Minimization of damage from drought, land slide, soil erosion and other natural calamities</p> <p>Objectives: 8.1.1: Identification of landslide areas and effective implementation of action plan 8.1.2: Minimization of risk from natural calamities 8.1.3: Regular implementation of climate change adaptation plan</p>	hectare	-	New construction projects	Bio-engineering technology applied to mitigate land slide affected area	NT area	All NT inhabitants	<ul style="list-style-type: none"> ▪ Annual report of district forest office ▪ Annual report of district soil conservation office 	<ul style="list-style-type: none"> ▪ Allocation of budget ▪ Continue support from donor agencies, government and local people ▪ Public private partnership in infrastructure development ▪ Good and regular coordination among the local stakeholders ▪ Implementation of climate change adaptation and management program in private partnership and fund
	Status	-	completed	Preparedness for disaster risk reduction	NT area	Local inhabitants	<ul style="list-style-type: none"> ▪ Annual progress report of DDC Terhathum ▪ Annual progress report of Basantapur Municipality 	
	Number	-						
	Number							
	Number		Implemented	Environment friendly local development plan	NT area	Local inhabitants	<ul style="list-style-type: none"> ▪ Annual report of Nepal Red Cross Society, Terhathum District 	
	Number		Implemented	Climate change adaptation program for development	NT area	All NT inhabitants	<ul style="list-style-type: none"> ▪ Report of district soil conservation office ▪ District Environmental 	
	Number							

Outcomes:

- Land slide risk will be managed and minimized
- Major Sensitive areas will be well managed
- Climate change adaptation plan will be operated
- Climate change effects will be minimized
- Earthquake risk will be reduced by application of building code
- Landuse plan will be implemented
- Climate change effects on agriculture production will be decreased

Activities/Programs:

- Organize awareness program for climate change minimization and adaptation
- Organize shepherd awareness program and provide alternative pastureland to them
- Organize climate adaptation program
- Operate carbon emission industries according to the standards
- Formation of junior red cross unit in entire schools for disaster risk reduction and management
- Provide fire brigade service in Basantapur and major market centers
- Implementation of earthquake resistance building code
- Organize bio-diversity awareness and richness management program
- Identify climatic behavior and its consequences upon local agriculture
- Institutional strengthening

6.7.6 Strategic Climate Change and Adaptation Plan and MSIP

Climate change adaptation plans and projects were identified at two level. At the first level at least ward level community meetings/consultation were carried out to collect local level problems and issues. Similarly, municipal/NT level interaction/consultations were conducted for strategic projects and plans. Then, information/issues collected from both level were scrutinized and prepared the list strategic projects on the priority basis. Such strategic plans have been formulated in the Multi Sectoral Investment Planning (MSIP) framework so that role and responsibility of the concerned line agencies could be identified. Detail of strategic plans and programmes with MSIP framework in specific project is shown in annex 1.

6.8 Financial Development Plan

6.8.1 Concept

Financial management plan mainly deals with the financial resource mobilization for New Town Development in Basantapur. Laligurans is recently declared municipality. New town project is establish for implementing plans and programmes in Basantapur under Ministry of Urban Development, Department of Urban Development and Building Construction (DUDBC). Internal resource mobilization has not been well developed yet. It is therefore, implementation of plans and programmes are mostly relied on central government budget (i.e. DUDBC).

6.8.2 Financial Resource Mobilization Strategy

Following are the major financial resource mobilization strategies to be taken in planning and implementing the development projects in Basantapur;

Conservation of Land Resource

Land is a scarce commodity as its supply is limited and it cannot be mass created. It is, therefore, most essential to ensure that utilization of the available land is judicious and in the best interest of the community through the instrument of development plans. Conservation of public land and utilization in development of infrastructure should be the major strategy.

Land planning techniques and Land development mechanism

Public private participation is achieved in land development through various techniques. Land planning techniques prevent concentration of land in few hands and promote its efficient social and economic allocation.

- **Land Acquisition:** bulk land acquisition by State
- **Land Pooling:** land pooling approach and redistribution scheme

City Infrastructure Fund

The infrastructure plays a vital role in the growth and development of cities in the current context. Keeping in mind the demands and requirements of urban development, Government has also been emphasizing and providing finance for development of infrastructure. Following the same line thought, a City Infrastructure Fund can be established at urban centres by the Executive order. It should be other than the Budget fund and dedicated only for the Urban and Regional Infrastructure development. Sources of possible funding for such fund could be:

- Capital gain tax on real-estate property,
- Land use conversion fee,
- Entry tax on vehicles in special areas (inner city, CBD etc.) of cities,
- Part of the TDS on real-estate transactions valued over 50 Lakhs,
- Vacant tax on Municipal FAR rather than vacant land,
- Toll tax,
- Part of funds raised through auction of strategic plots,
- Betterment levy on special zones (transport corridors etc.).

- Leverage Urban Infrastructure Bonds with long term loans from multilateral development banks

Land-based financing sources along Transport Corridors can be tapped through the following:

- Conversion charges,
- Betterment charges,
- Periodic revision of property guidance value, especially along Transit corridors,
- Impact fees,
- Development charges.
- Higher FSI & Mixed Land Use in influence zone of Transit corridors within overall planning guidelines,
- Pricing of Floor Space Index (FSI) above a certain limit,
- Prepare city-wide inventory of land assets,
- Transparent and accountable mechanism for monetization of public land with attention to the poor,
- Dedicated Urban Infrastructure Fund at city & state levels: For regular inflows of funds from various beneficiaries of improved urban transport facilities.

Coordination Between Municipality, TDC and NTPO

These three bodies are major bodies implementing projects in Basantapur. It is very important to make effective coordination among these local bodies.

Budgeting and Implementing by NTPCO

Department of Urban Development and Building Construction (DUDBC), New Town Project Coordination Office (NTPCO) is one of the key agency for implementing the project in Basantapur. It is therefore, sufficient budget allocation should be done to implement the priority projects in Basantapur .

6.9 Institutional Development Plan

6.9.1 Concept

The concept of Institutional Development and Organizational Strengthening (ID/OS) has become increasingly important in relation to development projects and planning. More and more development organizations talk about and address issues like institutional development, institutional strengthening, institutional capacity building, and organizational development. Though using different words, it all boils down to an increased attention to the organizational set-up of projects and development activities. There are various reasons for this increased attention.

6.9.2 Present Status

In order to implement a plan, an institution needs some elements such as physical infrastructures, work force, guidelines, byelaws and standards, planning, mission, vision and goal and support from stakeholders. Political and administrative situation, local working environment are some other key elements for the successful execution of a plan. List of some key elements for institutional development are mention below:

Table 32: Present Status of Institutional Development Indicators

Institutional Indicators	Status	Remarks
Governmental office	16	
Non-governmental office	27	
Community based organizations	28	
Forest user group	47	
Civil society	6	
Number of cooperatives	60	
Financial institutions	2	
Project implementation bodies	3	(NTPO, TDC, Municipality)
Plans and programs	-	
Evaluation and monitoring	-	
Coordination of TNPO, TDC and Municipality	fair	
Facilities with local implementing agencies	fair	

6.9.3 Major Issues and Problems

Major issues and problems are;

- Lack of human resources for effective mobilization for plan implementation
- Lack of sufficient physical infrastructure/assets within NTPO, TDC and Municipality

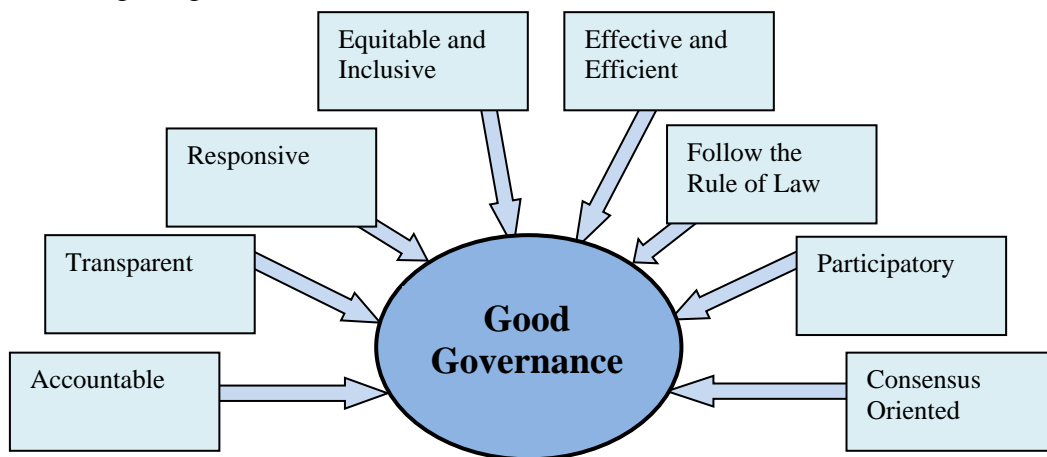
- Lack of convention/meetings/conference hall
- No sufficient coordination among the implementing stakeholders
- Challenges of completion of on-going projects timely
- No effective mechanism for working with public

6.9.4 Strategies of Institutional Development Plan

The institutional development plan of the new town is expected through the following strategies;

a) Good Governance

It is described as accountable, transparent, responsive, equitable & inclusive, effective & efficient, follows rule of law, participatory and consensus oriented. Following are the characteristics of good governance:



Source: UN ESCAP, Good Governance guide: Municipal Association of Victoria

Figure 17: Characteristics of Good Governance

Stakeholders/line agencies of NT should be aware about good governance aspects for institutional strengthening. Organizational strengthening can be achieved through coordination between line agencies, information sharing/knowledge transformation, capacity building, empowering local stakeholders.

b) Institutional Set-Up and Relation

Effective coordination between Municipality, TDC and NT in the new towns context is most important since these three LUBs are functioning for implementation of IDP. Similarly, there should be a good relationship between NTPCO and NTPO regarding project planning, implementation in the NT. Decentralization policy needs to be adopted for strengthening the NTPO at the town.

c) Institutional Coordination

Major three institutions namely Municipality, TDC and New Town Project Coordination Office are the implementing agencies. It is therefore very important to have strong coordination between these three as shown in the figure below;

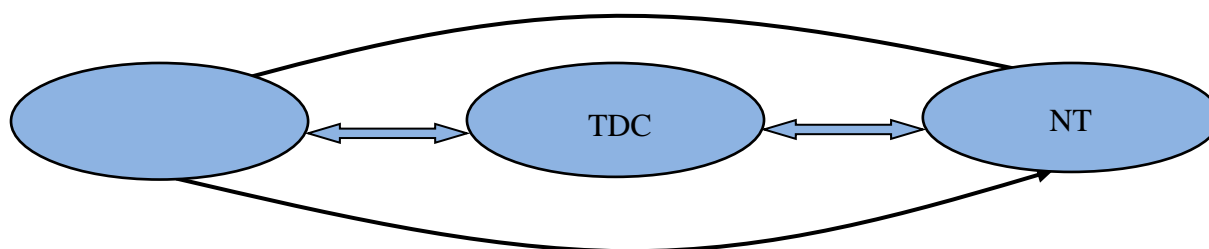


Figure 18: Coordination between LUBs

d) Human Resources/skills

Human resources planning is a process that identifies current and future human resources needs for an organization to achieve its goals. Human resources planning should serve as a link between human resources management and the overall strategic plan. In the context of these requirements, institutional set-up has a vital role. Table below reveals the existing human resources available in NT.

Table 33: Existing Key Human Resources

Municipality		Town Development Committee		New Town Project Office	
Designation	Number	Designation	Number	Designation	Number
Executive Officer	1	Chairperson	1	Planner	-
City Town Planner	-	Members	-	Senior Engineer	1
Governance Facilitator	1	Planners	-	Engineer	1
Engineer	1	Engineers	-	Office Manager	1
Sub-engineer	2	Sub-engineers	-		
Total	6		1		2

Table reveals that there is no strong institutional set-up as looking through eye of human resources. Skilled/technical human resources are weak in all three major stakeholders in the NT. It is therefore very important set up additional human resources in NT. While proposing the institutional set up for town planning and implementation of projects in the NTs, the following body of unit is expected to form and mobilized in the new town;

Table 34: Proposed Key Human Resources

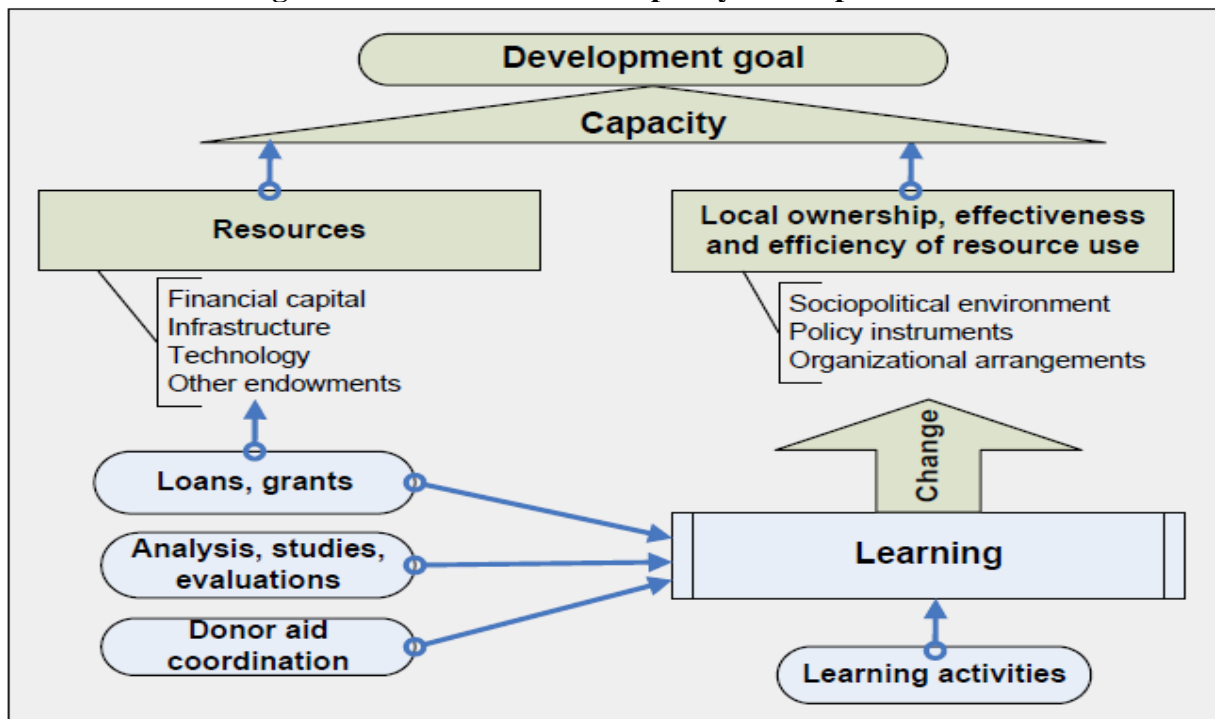
Municipality		Town Development Committee		New Town Project Office	
Designation	Number	Designation	Number	Designation	Number
Executive Officer	1	Chairperson	1	Planner	1
City Planner	1	Members	-	Senior Engineer	1
Urban Planner	1	Planners	1	Engineer	2
Engineer	2	Engineers	1	Sub-engineer	3
Sub-engineer	3	Sub-engineers	2		
Total	8		5		7

Table above proposes some of the key experts that new town demands for project implementation.

e) Capacity Development

Human resources in NT including Municipality and TDC need capacity development program for effective implementation of plans and programmes. Present capacity of all the stakeholders is lesser than that demand in NT development and project monitoring. Effective capacity development programmes are expected at the NT.

Figure 19: Framework for Capacity Development Plan



Source: Adapted from the World Bank, 2009

f) Participatory Planning and Implementation Strategy

The approach of planning has shifted from top-down to bottom-up approach to make planning process more broad; partnership based and negotiated principles and practices. Greater public support is obligatory, to ensure that plans are relevant, before implementation. People can participate in the development process in the following realms:

- Participation in decision making in plan formulation, identification of development priorities,
- Participation before finalization and implementation of development programmes and priorities,
- Participation during implementation and evaluation of development programmes and project,
- Participation and sharing the benefits of development, managing the assets etc.

Taking into account the interest, attitude and behavior of the people, role of urban development professionals and obligations of local authority, a system of participatory plan approach has been suggested as shown in the following table:

Table 35: Plan Formulation Strategy

Planning Process Steps	Citizen	Urban	Officials
Determining goal and objectives	+	o	+
Data Collection		+	
Design of criteria and standards		+	
Developing alternative plans	o	+	
Choosing an alternative	+		+
Detailed design of operational plan		+	
Modification/approval of plan	+	o	+
Plan Approval	+		+
Implementation	o	+	+
Monitoring	+/o		+
Maintenance	+/o		+
Feedback	+	+	+
+= Major role. O= Facilitating or supportive			

Source: Community Planning Assistance Program, Arizona Department of Commerce and UDPMI Guidelines

Based on the analysis of some of the above elements of institutional development process, following institutional development strategy is proposed for NT development;

Table 36: Proposed Institutional Development Plan

Strategy	Proposed Activities
Good governance to the NT residents	<ul style="list-style-type: none"> ➤ Easy access of information to the public ➤ Transparency in the activities ➤ One time service guarantee to the public ➤ Regular monitoring and supervision in the project sites ➤ Participatory development process ➤ Awareness programmes to the local ➤ Social auditing ➤ Public hearing
Establishment of good institutional coordination and faith	<ul style="list-style-type: none"> ➤ Regular inter-office consultation meetings ➤ Information sharing (project, data base, ideas etc) ➤ Skills/knowledge transfer through inter-office training
Improvement of Organizational strength and human resources	<ul style="list-style-type: none"> ➤ Requirement/fulfilment of necessary human resources ➤ Improvement in equipment and facilities in the office ➤ Reward and punishment as per performance ➤ Motivational packages to the office staffs ➤ Refreshment training ➤ Inter office technology/knowledge transfer
Effective and proper mobilization of local resources	<ul style="list-style-type: none"> ➤ Implementation of tax , fees, services charges according to the rules

	<ul style="list-style-type: none"> ➤ Awareness programmes for public responsibility for paying tax ➤ Monitoring and supervision ➤ Control on exploitation of natural resources ➤ Scientific/standard (legal provision) process for bidding local resources use (forest and river)
Providing the power and authority for empowering local bodies	<ul style="list-style-type: none"> ➤ Coordination between NTPCO and NTPO regarding project implementation ➤ Devolution of power and responsibility according to the rules (project bidding, hiring, planning, monitoring etc) ➤ Fulfilment of required position
Improving planning process for effective implementation at local level in a participatory way	<ul style="list-style-type: none"> ➤ Participatory method for project selection ➤ Mobilization of ward Nagarik Manch and local level community groups ➤ Need based planning rather than voice base

6.9.5 Proposed Institutional Development Framework

Based on the above analysis and existing institutional practice in Basantapur, following framework could be appropriate. The concept in the framework is that New Town Project Coordination Office (NTPCO) will work in close coordination with the municipality and Town Development Committee (TDC) and implement urban development projects in the town. During the process of project execution, major actors (Municipality and TDC) will be empowered for project implementation in the new town. After completion of the project objectives, NTPCO will hand over to other body particularly to the municipality for further planning and implementing the project. Proposed framework is shown in the chart below;

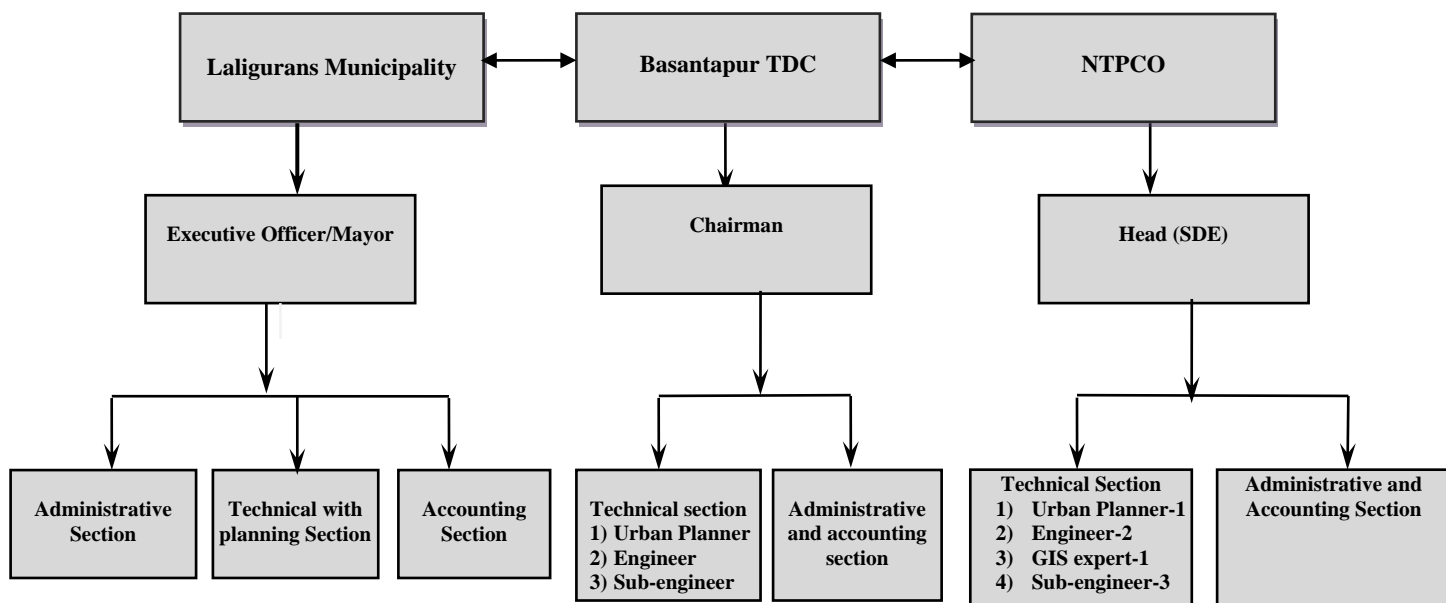


Figure 20: Proposed Institutional Development Framework

6.9.6 Logical Framework Analysis

Table 37: LFA of Institutional Development

Institutional Development	Indicators						Means of Verification	Major Assumptions
	Unit	Present Condition	Five Years Target (2077/78)	Measuring Indicators	Location	Target Groups		
<p>Goal: 6.1: Good governance through efficient and effective service delivery from local offices</p> <p>Objectives 6.1.1: To improve existing local governance situation</p> <p>6.1.2: To manage and implement citizen charter having compensation provision in NT office</p> <p>6.1.3: Online and computerized Service delivery</p> <p>6.1.4: Effective coordination among the local governmental and non-governmental office</p> <p>6.1.5: Fulfill the vacant posts in NT office</p>	Number	Is begin practice	Every project site	Project notice board	NT area	NT inhabitants	<ul style="list-style-type: none"> ▪ Evaluation Report ▪ Social audit report ▪ Public hearing report ▪ Office website ▪ Study report ▪ Social audit report ▪ Audit report ▪ Public hearing report ▪ Annual report 	<ul style="list-style-type: none"> ▪ Efficient and effective public participation ▪ Regular public hearing ▪ Regular social audit ▪ Regular audit ▪ Regular evaluation and monitoring ▪ Technology friendly staff ▪ Capacity building and enhancement training in regular interval
	Status	Selected service	All offices	Computerized system	All offices of NT	Local costumers		
	Status	Not yet	All offices	Online service/ e-governance	All offices of NT	Local costumers		
	Status	Selected office	All offices and update regularly	Website and Update	All offices of NT	Local costumers		
	Status	Is being practice	Every four months	Monitoring and evaluation	All offices of NT	Local costumers		
	Status	-	Every months	Progress meeting	All offices of NT	Local costumers		
	Status	Occasionall y	Once a year	Educational tour for staffs	All offices of NT	Local staffs		
	Status	Occasionall y	Twice a year	Demonstration and campaign	All offices of NT	Local costumer		
	Times	-	100	Resource mobilization	All offices of NT	All inhabitants		
	Times	-	100	Tax coverage	All offices of NT	Local costumer		
	Status	Is being practice	Inclusive	Promotion and encouragement to staffs	All offices of NT	Local staffs		
	Number	As per government rule	As per government rule plus other benefit as where	Beneficial package for staffs	All offices of NT	Local staffs		

			applicable/possible					
	Number	Is being practice	Every year	Annual meeting	All offices of NT	Local costumers		
<p><u>Outcomes:</u></p> <ul style="list-style-type: none"> ▪ All plans and programs will be implemented successfully ▪ Plan preparation and capacity development training (technical and skill development training, women, disable, senior citizen, backward societies and areas) will be conducted regularly ▪ Encouraging participation of private sectors, local communities and non-governmental organizations ▪ Necessary training for capable, qualified and strong human resources ▪ Good coordination among the governmental and non-governmental organization will be made ▪ All office will have suggestion box and address the suggestions regularly ▪ citizen charter having compensation provision will be implement effectively ▪ Qualified manpower will be posted in vacant post ▪ Institutional strengthen through citizen satisfaction survey result ▪ Resource mobilization and service delivery, technology, evaluation and monitoring system will be improved ▪ Profession form, established industries and economic transition bodies of NT will be identified and bring into tax system ▪ Service delivery system will be efficient and effective through online and computerized service 								
<p><u>Activities/Programs:</u></p> <ul style="list-style-type: none"> ▪ Effective coordination among the governmental and non-governmental organizations ▪ Improvement in office facilities and infrastructures (NTPO, TDC, Municipality) ▪ E-governance/online service delivery system in all offices ▪ Educational excursion and staff exchange program will be done regularly (capacity development of local human resources) ▪ Organize training, capacity development program, seminar, workshops for the capacity development ▪ Management of necessary infrastructure for office development ▪ Effective monitoring of local non-governmental organizations ▪ Recruitment of required professionals in the New Town 								

6.9.7 Strategic Institutional Development Plan

Strategic institutional development projects were identified at two level. At the first level at least ward level community meetings/consultation were carried out to collect local level problems and issues. Similarly, municipal/NT level interaction/consultations were conducted for strategic projects and plans. Then, information/issues collected from both level were scrutinized and prepared the list strategic projects on the priority basis. Such strategic plans have been formulated in the Multi Sectoral Investment Planning (MSIP) framework so that role and responsibility of the concerned line agencies could be identified. Detail of strategic plans and programmes with MSIP framework in specific project is shown in annex 1.

7 PLAN IMPLEMENTATION STRATEGY AND RESPONSIBLE LINE AGENCIES

7.1 Introduction

This section presents plan implementation strategy to focus how to enable local stakeholders and define their rights and responsibility in implementing the projects. Implementation strategy is a process of defining strategy for development, or direction, and making decisions on allocating resources in priority basis. It may also extend to control mechanisms for guiding the implementation the plan. While preparing the implementation plan, possible stakeholders/line agencies, their roles and responsibilities have been identified and proposed for development project implementation.

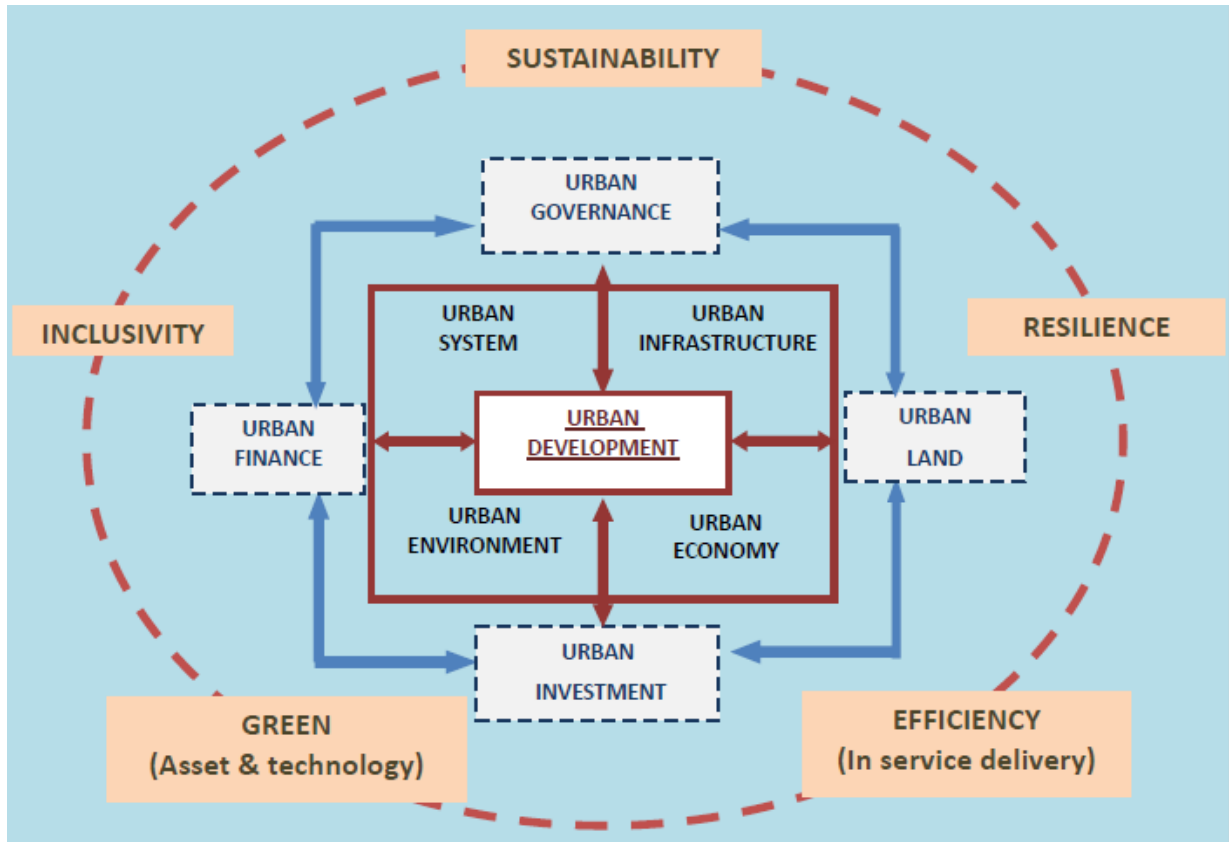
7.2 New Town Development Strategy

Urban development is the spatial indicator of the process of national and regional economic development. The strategies pursued in the new town area influence urban development to the extent that they make an impact on the spatial patterns of production, distribution and consumption. It is in this context that the critical themes considered in the development of the new town development strategy are urban infrastructure, environment, economy, investment, finance and governance. The purpose of the strategy is to indicate the desirable conditions within each theme, and the coordinated policy directions that need to be pursued to address major issues and achieve the desirable conditions. While this approach places emphasis on the physical planning aspects, there is also an appreciation of the fact that an urban area is not merely a physical construct, it is as much a political, social and cultural construct. The physical space by itself has no meaning unless it is comprehended in terms of the political, social and cultural space it provides for the dynamic expression of the heritage, ideas and values of society. Some comprehensive new town development strategies for summarized in the following paragraphs:

- This new town development strategy is formulated with a time horizon of 20 years
- To improve the new town urban system, strategies include strengthening urban-urban linkages, upgrading inter and intra town road connectivity standards, facilitating small towns in realizing their comparative advantages, and creating infrastructure for “smart” new town.
- To upgrade urban infrastructure, the strategies seek to increase local resource allocation on urban infrastructure development, promote private sector investment, orient strategic investment for shared infrastructure, and build local institutional capacities for infrastructure development and service delivery.
- Major strategies for improving urban environment include promotion of multi-hazard approach to deal with disasters and climate change, promotion of urban agriculture, promotion of innovative art, architecture and culture in new town areas, facilitation of community and civil society organizations.

- Strategies related to urban economy are geared towards enhancing the contribution of urban areas to the GDP and strengthening the economic base of urban areas so as to cover aspects of economic development, investment and finance.

Based on the review of NUDS, new town development strategies guided by five basic principles – sustainability, inclusivity, resilience, green and efficiency. The following diagram clearly shows the guiding principles of urban development strategies:



(Adopted from NUDS, 2015)

Figure 21: Five basic principles of urban development strategies

7.2.1 Urban System

Major Issues

- Unbalanced (new town is not centrally located and do not serve to its hinterland within the existing infrastructure set up)
- Weak linkages among the settlements/market centers
- Mobilizing resource potential for urban growth (location specific niche agriculture potential, bio-diversity)

Strategies

- Strengthen urban-rural linkage through identification and mobilization of local and regional resource potential
- Promote and facilitate rural-urban value chain
- Facilitates Basantapur new town to realize its comparative advantages and potentials

- Promote environment, heritage and tourism friendly economic functions in Basantapur New
- Plan and prioritize infrastructure development for future eastern hilly market center with focus on strengthening intra-town linkages

7.2.2 Urban Infrastructure

Major Issues

- Inadequate government investment on urban infrastructure
- Limited private sectors investment on urban infrastructure
- System based periodic maintenance of infrastructure
- Lagging institutional coordination in infrastructure planning and implementation
- Weak institutional capacity to deliver infrastructure services
- Infrastructure coverage and accessibility

Strategies

- Increase local resource allocation or urban infrastructure development, maintenance and service delivery
- Promote private sector investment on both basic services and higher order infrastructure
- Monitoring, updating and reporting the state of basic infrastructure
- Basic infrastructure services entire municipal areas
- Strategic investment on higher order/shared infrastructure
- Facilitate integrated and inclusive urban infrastructure planning and development
- Build local institutional capacities for infrastructure development and service deliver

7.2.3 Water Supply and Sanitation

Major Issues

- Poor coverage of piped water with sub-standard water quality
- Lack of wastewater treatment plant
- Lack of landfill site
- Households without sanitation facilities

Strategies

- Protection and management of fresh water sources
- In-built rain water harvesting in the building permit system
- Institutionalize water recharge provision in public spaces
- Strengthen system to produce and deliver safe water
- Internalize regular monitor system to assure Nepal Water Standard in place
- Community water storage facilities in place for emergency purpose
- Augment investment in increasing coverage and quantity for water supply
- Facilitative and encourage private sector involvement in water supply
- Enhance awareness and incentives for building toilets

7.2.4 Solid Waste Management

Major Issues

- Poor collection of solid waste and open dumping practice

- Sustainable long-term approach to solid waste management

Major Strategies

- Encourage community led waste segregation and collection (entity/HH)
- Promote public-private partnership in waste collection and management
- Adopt sanitary landfill site as transitional strategy to reach condition of 3R
- Promote/mandate 3R at household and community level
- Incentivize private sector to reuse and recycle waste through appropriate technology
- Establish dedicated and capacitated SWM unit in municipality
- Delineate institutional responsibility and accountability at municipal level with respect to SWM

7.2.5 Transportation

Major Issues

- Internalization of road density and standards in urban land use planning
- Sustainable urban public transport system not in place
- Standards and quality of inter and intra urban connectivity not yet established

Major Strategies

- Integration of land use and transportation in town and municipal planning
- Develop institutional mechanism and capacity to address issues related to urban transport and land use
- Provision of hierarchically balanced urban road infrastructure
- Promotion of sustainable urban public transport
- Prepare transportation management plan
- Provision of inter urban all weather roads

7.2.6 Housing

Major Issues

- Lack of affordable, adequate and safe in urban areas
- Pro-poor management
- Challenge to implement building code

Major Strategies

- Encourage private sector to provide housing to the pro-poor cluster
- Promote innovative, earthquake resistance, economic and environmental friendly buildings
- Discourage squatter settlements and encroachment on public land
- Encourage and facilitate production of serviced land through public-private/community partnership

7.2.7 Energy

Major Issues

- Inadequate and unreliable energy supply
- Increasing energy efficiency, demand and green energy

Major Strategies

- Promote optimal use of solar energy for all purpose
- Develop pricing mechanism for large institutions
- Promote passive design and use of energy efficient building materials
- Promote micro-hydro development that is oriented towards new town

7.2.8 Urban Environment

Urban environment encompasses not only the built-up environment of urban areas but also the natural and socio-cultural environment. The extent to which the socio-cultural and natural environment is enhanced by the built-up environment determines the livability of an urban area.

7.2.8.1 Urban Safety and Resilience

Major Issues

- Internalization of safety and resilience issues in urban development and management
- Building codes not in place or not enforced in new town
- Low level of resilience to different types of hazards
- Lack of information on climate change in new town area

Major Strategies

- Promote multi-hazard approach in dealing with disasters including climate change
- Prepare land use regulations, review building code and prepare by-laws from resilience perspective
- Enhance preparedness and adaptive capacity of the municipality/new town and local bodies
- Build awareness and capability of the community and civic bodies based on volunteerism and reduce vulnerability

7.2.8.2 Urban Land, Air, Visual and Water Pollution

Major Issues

- Increased level of pollution
- Decreasing water resources
- Urban land pressure
- Lack of control mechanisms

Major Strategy

- Compliance with set standards of pollution in new town

7.2.8.3 Urban Agriculture

Major Issue

- Lack of integration of urban agriculture in local land use planning and management concept

Major Strategy

- Promotion of urban agriculture for food, vegetable, horticulture and cash crops

7.2.8.4 Urban Forest

Major Issues

- Lack of integrated approach to promote and support urban forest promotion and conservation program

Major Strategy

- Promote/maintain minimum forest cover in urban areas

7.2.8.5 Urban Facilities and Amenities: Open Spaces

Major Issues

- Identification and conservation of open spaces
- Lack of municipal level information

Major Strategy

- Promote/maintain minimum stipulated open in urban areas

7.2.8.6 Urban Art, Architecture and Culture

Major Issue:

- Nature, foster and/or induce art, architecture and culture as an important aspect of urban development

Major Strategies

- Renovation of historical building, preserving its traditional facade but with modern amenities and function (with adaptive re-use)
- Documentation and development of historical and religious sites, routes, museum tied with local economy of historical areas, in visitor friendly way
- Innovation of art, architecture and cultural in new urban area

7.2.8.7 Community Organization and Youth

Major Issues:

- Community participation in urban development
- Urban development that addresses needs of special groups (focused and marginalized groups)
- Local youth participation in urban planning and development

Major Strategies

- Formation and active engagement of TLO (Tole lane organization), CBO (community based organization), WCF (ward citizen forum) in all urban wards
- Support youth focused activities in urban development
- Address issues related to focused, targeted and marginalized groups in urban development

7.2.8.8 Urban Security

- Integration of urban security in urban planning and management

Major Strategies

- Develop community security mechanism
- Practice appropriate spatial design elements in public space and neighborhood
- Increase the number of security personals in isolated and outskirt settlement and areas

7.2.9 Urban Economy

- Inability of local body in generating wealth and employment
- Urban poverty
- Sluggish rate of GDP growth

Major Strategies

- Facilitate formulation and implementation of local development plan
- Build competitiveness based on local and regional comparative advantages
- Urban regeneration program in core areas
- Mainstreaming informal urban economy
- Alleviation of urban poverty

7.2.10 Urban Investment

Major Issues

- Investment deficit for urban infrastructure (public and private)
- Lack of coordination and dispersed investment
- Lagging investment

Major Strategies

- Coordinate investment in urban areas involving all sectoral agencies including the private sector
- Guiding investment for strategic urban infrastructure projects
- Increased investment in urban area
- Prioritize investment for promoting urban growth and provision of services

7.2.11 Urban Finance

Major Issues

- Increasing number of unfunded responsibility
- Inadequate private sector participation in basic infrastructure provision

- Access to loan and other form of debt financing not readily available
- Revenue potential of municipality from taxes and fees not realized and mobilized fully
- Weak borrowing capacity of municipality

Major Strategies

- Enhanced mobilization of own source revenues
- Improved access to debt financing through strong financial intermediary institution
- Mobile investment through alternative financing instruments including private sector involvement

7.2.12 Urban Governance

Major Issues

- Coordination between Ministry of urban development (MoUD) and ministry of federal affairs and local development (MoFALD)
- Inadequate technical expertise and capacity at municipal level
- Inadequacy of Town Development Act 1998 to deal with new town
- Effective implementation of citizen charter
- Effective and efficient implementation E-governance

Major Strategies

- Improve institutional coordination between MoUD and MoFALD
- Make new town plans as basis for long term development
- Improve the current legal basis for urban development
- Facilitate research based policies and programs
- Devise social accountability mechanism
- Full Implementation of citizen charter and e-governance for fast and efficient service delivery
- Strengthen of new town and municipality

7.2.13 Urban Land Management

Major Issues

- Inadequate land acquisition and compensation mechanism
- Dominance of informality in urban land market
- Land fragmentation and public land encroachment
- Inadequate land use controls (bulk, density and usage and implementation)
- Inequitable benefit sharing from urban development
- Absence of urban land use policy

Major Strategies

- Judicious valuation for compensation of acquired land
- Land price freezing mechanism for specified period once to government shows intent to acquire land and implement project
- Establishment and internalization of land information system
- Land use control with infrastructure and environmental thresholds and standards

- Build incentives/disincentives for preserving critical agricultural land
- Classify land as urban and rural subjected to periodic revision with prioritization on land readjustment and improve in circulation and its standards

7.3 Plan Implementing Agencies

Major plan implementing agencies/stakeholders in the context of Basantapur new town are municipality, TDC, NTPO, DDC, DUDBC, Ministry of federal affairs and local development, other government agencies, donor agencies as well as public participation. Brief summary and their major role in implementing the project are described as follows:

7.3.1 Laligurans Municipality

Laligurans municipality is the major governmental agency to execute and implement the local plans and programs. As a newly declared municipality, Basantapur has to coordinate other stakeholders such as DDC, New town coordination office, non-governmental organizations, donor agencies, FNCCI, local entrepreneurs, local political parties, development committees and civil society for the successful execution and implementation of proposed plans.

The main functions of the municipality will be planning, execution of plans, preservation of heritage, monitoring, resource generation, encouraging local participation, addressing the issues of benefit sharing and so on. The roles of municipality are listed below:

- Formulation of plans
- Preparation of resource map
- Feasibility study of the projects to carried out
- Generation of resource
- Coordination among governmental and non-governmental agencies
- Operation of municipal level project
- Implementation and management of projects
- Appraisal and evaluation of projects
- Formation of consumer groups
- Operation of project by consumer's groups and non-governmental organizations
- Encourage private sectors and non-governmental organization
- Repair, maintenance and management of the project

7.3.2 Basantapur Town Development Committee

- Coordination with DDC, Municipality, TDC and other government and non-governmental organizations
- Execution of projects
- To specify necessary conditions or standard in land case area for physical development
- To classify the land on the basis of land use zoning area.
- To set guideline for institutions or local body upon prescribing condition or standard for the physical development of land

- To prepare necessary project and to implement it in town planning area for proper development and conservation of religious, cultural and historical heritage subject to prevailing law of Nepal on ancient monument.
- To prohibit the use of natural resources that causes adverse effect on nature.
- To carry out other acts as directed by the Government of Nepal from time to time as per town planning
- To prescribe condition on construction and other activities to be done in forest, stream, riverside and water area for the protection of nature and environment of town planning region, and to perform and cause to perform the act as per the said conditions.
- To prepare the project related to land development and building construction in the land use area as per town planning and to implement it
- To keep co-ordination with concerned body of the Government of Nepal in the course of performing or causing to perform an act and activity pursuant to this Act.

7.3.3 District Development Committee

Terhathum district development committees the key government stakeholders for the implementation plan. DDC can support for plan implementation, coordination, resource generation and sharing, networking, policy execution, technical guidance to Laligurans Municipality and New town project coordination office in close coordination with Ministry of Federal Affairs and Local Development, Ministry of Urban Development and other line agencies. Other role and responsibilities of the DDC are listed below:

- Formulation of Plans
- Estimation of Resources
- Preparation of resource map
- Feasibility study of the project
- Establish coordination among DDC, municipality and non-governmental organizations
- Formation of consumers' groups
- Operation of projects by consumers' group and non-governmental organizations
- Supervision and monitoring
- Appraisal and evaluation
- Examination and release of projects
- Operation, repair and maintenance of projects

7.3.4 Town Development Fund (TDF)

Town Development Fund is a major organization, which can support Laligurans Municipality and New Town coordination Office to implement local plans and programs. It can help to alleviate economic and social poverty in Basantapur through long term financing in social infrastructure and revenue generating projects. TDF can play a major role to implement the local projects through following works:

- Loan triggered urban infrastructure growth - supplemented by grants in appropriate situation
- Focus on need-specific capital projects to be undertaken by municipalities compatible with their technical and commercial capabilities.

- Linkage with matched contributions by municipalities based on the current revenue generating capability and capacity
- Upgrading of organizational capability of the municipality through
 - i. Development of long-range perspective and strategy for urban infrastructure development;
 - ii. Prioritization and sequencing of their competing community need;
 - iii. Enhancement of their capability to identify capital projects, work out the technical and economic details and plan and execute such projects within budgetary constraints, and
 - iv. Optimization of the use of scarce resources through innovation and improvisation appropriate to local circumstances

7.3.5 Department of Urban Development and Building Construction (DUDBC)

DUDBC is the pioneer institutions in the field of urban planning and building construction with the vision of Sustainable urban development. It promotes sustainable urban development and rural urban linkages through development of modern physical facilities and conservation of cultural, religious and historical heritage sites. DUDBC works on formulation, planning and implementation of urban policies/housing plans and policies, design construction, repair and maintenance of the government buildings. The major roles and responsibilities of DUDBC are as follows:

- **Preparation and Implementation of Development Plans**
 - Physical Development Plan
 - Periodic Plan
 - Integrated Development Plan
 - Long Term Development Plan
 - Urban environmental related program
- **Mapping and Data Base Preparation**
 - Municipal Base Map
 - Land Use Map
- **Management of Urban Development Project**
 - Urban and environmental improvement project
 - Urban governance development project
 - Integrated urban development project
 - New town development project
 - Secondary town integrated urban environment improvement project
- **Planning and implementation**
- **Urban infrastructure planning and construction**
- **Land development**
- **Land Pooling**

- **Guided Land Development (GLD)**
- **Human Resource Support and capacitybuilding (man power supply)**
 - Training
 - Technical personnel deputation to Municipality and TDCs,
- **Advocate in ministry for contemporary policy, acts and strategies**

Within those major working areas of DUDB, this IDP is the product and DUDBC thus should focus for implementing its priority projects through the NTPO.

7.3.6 New Town Project Coordination Office (NTPCO) and NTPO Basantapur

New town project coordination office (NTPCO) is the major governmental project under DUDBC (Department of Urban Development Building Construction) that aims to develop 10 modern and well-facilitated cities along the east-west Mid-hill Highway. Basantapur is one of the cities selected for the development in eastern hilly region. NTPCO Basantapur has been established in Basantapur new town for the development of necessary urban infrastructure. Basically, NTPO Basantapur has been working for construction of multipurpose community hall, bus parks, drinking water projects, sewerage development, land pooling, land development etc. Further, NTPCO and NTPO can contribute in the local development in the following ways:

- Development of all necessary infrastructures
- Planned urbanization in order to develop as a service centre of the eastern hilly region
- Preparation of strategic plans and programs
- Preparation of land use plan and development strategy
- Support rural development through development and promotion of agriculture, educational, tourism, services and industrial area in Basantapur new town
- Project implementation and monitoring

7.3.7 Other Government Agencies

Other government offices such as Division Office (DoR), DTO, District Irrigation Office, District Public Health Office, District Forest Office, Security units and others will have role of planning, implementing and monitoring their sectoral works in the municipality/NT. Role of concerned government offices in implementing the projects has been identified and indicated in the strategic projects and LFA.

7.3.8 INGOs and Donor Agencies

INGOs have been recognized as an important avenue for development promotion in urban management, project execution, development and institutional strengthening. A large number of INGOs operate in Nepal. United Nations, GIZ, SDC, DFID, Plan Nepal, Save the Children, USAID, Danida, UMN, Helvetas, Care Nepal, JAICA, KOICA, The World Bank, Lutheran World Federation, Red Cross, Asian Development Bank (ADB) are the major INGOs and Donor agencies working for the poverty alleviation, infrastructure development and livelihood

in Nepal. Priority of funding and input components depend upon the objectives of each INGO and its leadership's vision, group awareness raising, group formation and credit are to all programs.

- Financial and technical support
- Needs and gap analysis
- Monitoring and evaluation
- Capacity development/building
- Infrastructure development
- Public/community participation
- Coordination between government and NGOs
- Humanitarian support
- Develop global partnership for development

7.3.9 Civil Society and Political Party

Civil society has been widely recognized as an essential 'third' sector. Its strength can have a positive influence on the development work. Civil society is therefore seen as an increasingly important agent for promoting good governance like transparency, effectiveness, openness, responsiveness and accountability.

Major roles and responsibility of civil society are as follows:

- Policy analysis and advocacy
- Social auditing and monitoring of the projects
- Regulation and monitoring of project work and the action and behavior of public officials
- Build social capital and enabling citizens to identify and articulate their values, beliefs, civic norms, and democratic practices
- Mobilization of vulnerable and marginalized groups to participate fully in public affairs and development works
- Development work to improve the wellbeing of their own and other communities

7.3.10 Community Based Organizations (CBO)

Community based organizations are the local actors and local development partners particularly for plan implementation. Community level organizations will have the following major roles;

- Active participation development projects
- Community mobilization
- Understanding, support, and participation development projects and plans
- Co-operation
- Social Welfare Programs;
- Adequacy, distribution, and organization of social welfare services; and
- Food security and advocacy
- Environmental management, protection/conservation

- Youth mobilization

7.3.11 Public Private Partnership (PPP)

Public private partnership (PPP) is a government service or private business venture that is funded and operated through a partnership of government and one or more private sector companies. PPP involves a contract between a public sector authority and a private party, in which the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project.

- PPP is a way of introducing private sector technology and innovation in providing better public services through improved operational efficiency
- Incentivizing the private sector to deliver projects on time and within budget
- Increased efficiency, expertise, and innovation from the private sector contribute to better infrastructure and greater cost and time savings across the construction and operation phases, increasing the value for money equation of a project
- Projects risks (e.g. finance, timeframe, planning permits, community consultations) are distributed between the public and private sectors according to the party best equipped to deal with it, both in terms of expertise and costs
- Access to private sector financing allows increased investment in public infrastructure, as governments are able to implement projects without the need to raise or budget additional funds, as is the case in standard procurement.
- PPPs provide the private sector with access to reduced risk, secure, long-term investment opportunities that are underwritten by government contracts. Such agreements ensure private capital flows, provide investment opportunities, and stimulate local industry and job markets.

Project implementation should be given priority in PPP model so that strategic project could be implemented sustainably.

8 CONCLUSION AND RECOMMENDATION

8.1 Conclusion

Preparation of integrated development plan of Basantapur New Town is one of the important planning attempt till the date for this NT. This document will be the guiding document to develop sustainable and liveable city in the future. Integrating physical, social, economic, environmental, institutional, tourism and cultural development plan, this plan documents will be the basis for investing sectoral development in the New Town. The sectoral plans have been formulated through the scientific and valid participatory planning methods which means political actors should take ownership to it. This IDP focuses primarily Basantapur New town but also covers entire municipality area through its strategic projects.

Municipal profile, base map (reports and maps), building bye-laws, physical block model are major component including main sectoral planning report within this integrated development plan. Municipal profile is the basis for formulating sectoral plan realizing its existing situation where as base maps was the basis for examining/assessing the existing physical condition and proposing future demand according to demand forecast. Bye-laws is a product prepared to guide/regulate city development for the future based on the spatial advantages of an area. Profile, base map and building bye-laws are prepared in separate volumes within this assignment. Similarly, physical block model is prepared to install in the city so that the form of future city will be reflected and visualized in the model.

Sectoral development plans were prepared based on the existing baseline information, future demand and potentialities and spatial advantages observed in the field. Baseline information were acquired through the secondary data as well as primary data but demand and potentialities were analyzed through the planning norms and standards as well and public consultation and discussion. Sectoral development plans such as physical development plan has focussed to develop city as physically healthy infrastructure (eg: ROW, standards, road hierarchy, settlement linkages) where as social development plan has focused to develop education, health, social inclusion, participation, gender inclusion, development of needy people and so on. Similarly, economic development plan has focused agriculture, employment, trade and business in the NT area. Environmental management, disaster mitigation plan has mainly focused to identify the major environmental problems, sanitation, solid waste management, disaster prone area delineation, risk sensitive area restriction etc for safer and sustainable city development. Tourism and cultural development plan has mainly highlighted to develop NT's tourism potentiality and investment in tourism focus development. Institutional development plan advocates to institutional aspects required for new town development in the future particularly for institutional capacity, cooperation, management etc.

While looking at the potentiality of urban development and growth, Basantapur can be a major touristic hill town serving its services to its hinterland. Locating at the triple junction

(Terhathum, Dhankuta and Sankhuwasabha districts), the town can be a growth centre of surrounding VDCs. Similarly, with an initiation taken from the local stakeholders, private sectors, the town has potentiality to growth as touristic hill town. Trekking tourism, recreational tourism, cultural tourism, adventure tourism are major potentialities of Basantapur New Town. With the potentiality of linear urban development in Basantapur, the city development will take place along the highway corridor.

With the long-term vision "**Agriculture, Tourism, Infrasructure and Culture are the basis of Properous Laligurans (Rhododendron) are the main City Basantapur**", Basantapur NT demands agricultural development, tourism and physical infrastructure based on its potentialities. It also indicates that development space should go through linking to agriculture, tourism and cultural development which is the future of the town. If investment goes in direction of the long-term vision, the city will be a prosperous through agriculture (cash crop farming, vegetable farming), tourism.

8.2 Recommendation

Based on the analysis, presentation, discussion and observation of the planning team, following recommendations are made:

- Basantapur new town is primarily the planning area but entire Laligurans Municipality is considered in this IDP while proposing strategic projects. So implementation of the strategic project should be done accordingly;
- Basantapur is strategically located at triple junction of Terhathum, Dhankuta and Sankhuwasabha Districts, therefore some wards of Dhankuta (ward 3 and 5 of Marekatre VDC, Ward no 9 of Murtidhunga VDC, ward no 9 of Arkhaule Jitpur VDC), and Sankhuwasabha (ward no 1, 9 and 2 of Tamaphok VDC) should be included within the jurisdiction of Basantapur NT;
- Tourism can be a leading development sector for Basantapur, however concerned line agencies should link tourism friendly infrastructure development in Basantapur;
- More advertisement and advocacy are necessary for cashing the tourism potentialities of Basantapur;

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