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DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE OF BASANTAPUR

By

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A CASE OF BASANTAPUR

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DEVELOPMENT DYNAMICS OF NEW TOWN IN MID-HILL HIGHWAY CORRIDOR:

A CASE OF BASANTAPUR

DECLARATION

I hereby declare that the thesis entitled "Development Dynamics of New Town in Mid-Hill

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December, 2023

V

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ABSTRACT

This comprehensive research report explores the intricate development journey of Basantapur, nestled in Nepal's Koshi province, with a particular focus on New Town; a Transformative Project by Government of Nepal. The report commences by providing a meticulous overview of the region's geographical, demographic, and developmental facets. Basantapur's strategic location at the crossroads of major highways positions it as a promising candidate for holistic expansion.

The report scrutinizes the selection criteria for New Towns, including factors like land availability, water resources, population, literacy rates, and regional accessibility. It sheds light on the intriguing scoring and weighting of these criteria, particularly the relatively low weight given to population and migration and economic activities, despite their significant impact in the long run. Moving forward, the research explores the second objective of Basantapur New Town's IDP: improving residents' livelihoods through tourism, agriculture, and infrastructure development. Basantapur's tourism potential, owing to its natural beauty and cultural richness, is emphasized, alongside the importance of agriculture and infrastructure for economic growth. The report then investigates Basantapur's development dynamics since its designation as a New Town, examining urbanization trends, settlement patterns, land use planning, and the current development stage. Challenges such as funding constraints, governance issues, economic diversification and infrastructure improvement are identified.

To address these challenges, this report of study recommends a midterm assessment of the project; along with the development in phases and construction of some large scale industries for business and employment. Other recommendations presented are securing additional funding, enhancing public participation, introducing appealing programs, diversifying economic opportunities, improving infrastructure, preserving cultural heritage and adopting long-term planning.

Incorporating these recommendations is vital for Basantapur's transformation into a vibrant, sustainable new town, attracting residents and visitors while preserving its cultural heritage and natural environment. Effective implementation, transparent decision-making, and community engagement are essential for this endeavor's success. The report underscores the urgency of proactive implementation to turn Basantapur's development into a thriving reality; for Basantapur's transformation into a sustainable and vibrant NEW TOWN, hinging on effective governance and community engagement for success.

Key words: Basantapur, Development, New Town, Urban, Settlement

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LIST OF ABBREVIATIONS

Abbreviations Definition

ADB Asian Development Bank
CBS Central Bureau of Statistics

DUDBC Department of Urban Development and Building Construction

EUC Eastern Urban Corridor FDI Foreign direct investment

GC Growth Centre
GD Group Discussion

GIS Geographic Information System

HH Households

IDP Integrated Development Plan

IOE Institute of Engineering

IUDP Integrated Urban Development Plan

KII Key Informant Interview
LFA Logical Framework Analysis
MOUD Ministry of Urban Development

MoFALD Ministry of Federal Affairs and General Administration

NPC National Planning Commission

NT New Town

NTPCO New Town Project Coordination Office

NTPO New Town Project Office

NUDS National Urban Development Strategy

NUP National Urban PolicyPPP Public Private PartnershipRCC Reinforced Cement Concrete

ROW Right of Way

SAARC South Asian Association for Regional Corporation

STUEIP Secondary Towns Urban Environment Improvement Project

TDC Town Development Committee

TMJ Tinjure Milke Jaljale

UEIP Urban Environment Improvement Project (UEIP)
UGDP Urban Governance and Development Program

VDC Village Development Committee

WUC Western Urban Corridor

1. INTRODUCTION

1.1. Background

A region is spatial concept with an uninterrupted area with some kind of homogeneity/ similarity in its core, with or without a clear limit. And, Regional planning is "concerned with the ordering of human activities in supra-urban space - that is, in any area which is larger than a single city." (Friedmann). Also, "Under the multi-level planning system for development, regional planning is defined as the ordering of human activities in supra-urban space in relation to other spatial units of the national territory with a view to attain social and economic integration in space and facilitate national development." (Joshi, 1979)

1.1.1. Regional planning in Nepal

For the first time in the country, Harka Gurung made an effort in developing a spatial strategy for development in Nepal. He carried out an intensive exercise for developing a regional development strategy which he formulated for the Fourth Plan of the country. It was really the first formal exercise for regional planning in Nepal. The regional development strategy developed by Gurung for the Fourth Plan tried to establish three pioneering concepts in national development efforts as the need of inception of spatial dimension in sectoral planning, Regional strategy for development, and Development of backward areas. (Gurung, Regional Development Planning for Nepal, 1969)

| Macro Region | Growth Axis | Growth Centers (Geographic location) |
|-------------------------------------|------------------------------|---|
| Kosi (eastern) Section | Biratnagar-Hedangna | 1. Hedangna (mountain); 2. Dhankuta (hill); 3. Dharan (tarai); 4. Biratnagar (tarai) |
| Gandaki (central) Section | Bhairawa-Jomsom | 1. Jomsom (mountain); 2. Pokhara (hill); 3. Syangja (hill); 4. Palpa (hill); 5. Butwal (tarai) 6. Bhairawa (tarai) |
| Metropolitan (Kathmandu) Section | Birganj-Barabise/ Dhunche | Dhunche (mountain); Barabise (hill); Kathmandu (metropolitan); Hetauda (inner tarai); Birganj (tarai) |
| Karnali (western) Section | Nepalganj-Jumla | 1. Jumla (mountain); 2. Dailekh (hill); 3. Surkhet (inner tarai); 3. Nepalganj (tarai) |

Figure 1. Regional development areas (Gurung, National Regional Strategy for Development, 2005)

This regional development strategy envisaged a series of north-south axes or development corridors linking diverse regions in both east-west and north-south directions. Growth centres were an integral component of growth axis. The most important aspect of this growth centre approach

is the positive nature of polarized development as it takes place whereby the growth spreads to surrounding areas.

1.1.2. Urban development in Nepal

For balanced urban development in Nepal, the government of Nepal passed and has been implementing the National Urban Policy since 2007 (DUDBC, 2007). By giving funding for the development of regional cities and intermediate towns to the regions that are trailing behind, the strategy was put into place to promote balanced urban growth throughout the nation. With the aim of decreasing migration to Kathmandu and other major cities, promoting planned development of prospective hill cities, and constructing infrastructure that can assist and draw in residents for the hilly cities, the Nepalese government has begun to establish ten new towns in the Mid-Hill Highway corridor since 2068 B.S. The government's decision to build planned cities in Nepal's hilly regions was one of its turning moments. (DUDBC, MOUD, 2023)

Nepal Government is putting its effort in planned urban development since 1944 and has been implementing various plans and programmes in the urban sectors. At present, the government is giving attention of urban 150 development through new town development, smart city development, preparation and implementation of various types of other action plans under the Ministry of Urban Development, Department of Urban Development and Building Construction (DUDBC). The Department is preparing intervening plans and programmes to 40 towns for planned urban development. (DUDBC, MOUD, 2023) Among these towns:

- 15 new towns are located in Tarai-Madhesh Region,
- 10 new towns are located in Mid-Hill Highway corridor of Hilly region,
- 2 more new towns are also located in Hilly region in Pyuthan and Surkhet district.
- Similarly, 13 smart cities are located both in Terai and Hilly districts.

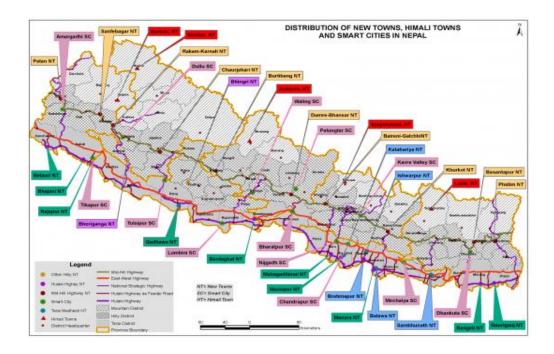


Figure 2. Distribution of 40 strategic towns in Nepal (DUDBC, MOUD, 2023)

The government is focussing to develop cities in lagging areas so that stagnant areas and population would be connected in the planned city network. Some of these towns are already in some pace of development and some others are in infancy stages. (Kedar Dahal, 2017).

1.1.3. New towns in the mid-hill highway corridor

About 7 million people live immediately along the Mid-hill Highway, also known as Pushpalal, which links 24 mountainous districts, spanning from Chiyo Bhanjyang in Panchathar District in the east to Jhulaghat in Baitadi District in the far west. It is intended to make many of the less accessible and frequently unproductive settlements in Nepal's mid-hills easily accessible. These hilly towns, which are characterized by low income, a growing number of young people leaving the workforce, limited access to public services, and other issues, are anticipated to gain from having greater access to Terai's and other higher level market centers' resources. In order to alleviate the increasing demand from people living in large cities, such as Kathmandu, the capital, the government launched this massive urban development project. (DUDBC, MOUD, 2023)

The Government of Nepal has started to develop 10 new towns in Mid-Hill Highway corridor of Nepal since 2068 B.S. to develop planned cities in hilly areas of Nepal with an objective of:

- 1. reducing migration to Kathmandu and other larger cities,
- 2. encouraging planned development of potential hill cities and
- 3. building infrastructure that can facilitate and attract the population in the hilly cities.

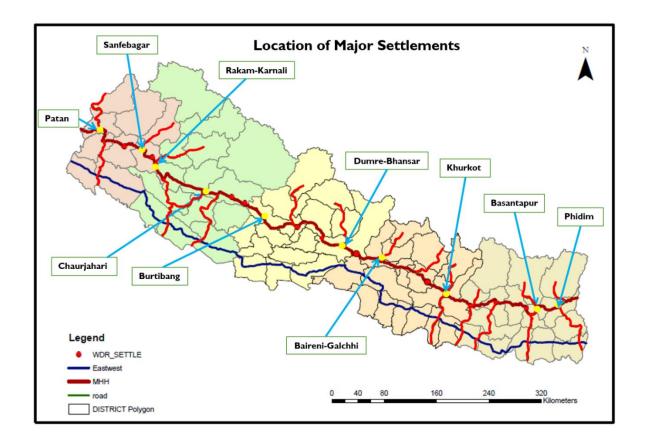


Figure 3. Distribution of 10 New Towns along the Midhill Highway

The new towns of Mid-Hill Highway corridor are: Phidim (Panchthar), Basantapur (Terhathum), Khurkot (Sindhuli), Baireni-Galchhi (Dhading), Dumre-Bhansar (Tanahun), Burtibang (Baglung), Chaurjahari (Rukum), Rakam-Karnali (Dailekh), Safebagar (Achham) and Patan (Baitadi). These towns belongs to all provinces which seems adoption of balance urban development strategy in the hilly region (DUDBC, 2068 B.S.). (DUDBC, MOUD, 2023)

The government is currently investing in its infrastructure projects, particularly in the areas of water supply, sanitary land fill building, road renovation, land development, drainage construction, and other urban infrastructure projects in the new towns. However, the availability of land for the building of public infrastructure has become increasingly difficult in the majority of these towns due to their hilly terrain and the elites' growing desire to preoccupy land. As a result, the new town project office is having more and more difficulty obtaining land in these communities so that urban infrastructure can be built. In addition, plans have been difficult to implement because of a lack of political commitment, poor cooperation, and underdeveloped implementing institutions. allocated budget spending trends in the majority of the towns seems very low. (DUDBC, MOUD, 2023)

1.2. RATIONALE OF THE RESEARCH

1.2.1. Need

Nepal adopted the federal system of government as directed by the Constitution of Nepal 2015 as federal, provincial and local level of government. The urban growth trend of the cities in nodal location with Mahendra highway and north-south corridor are very intense. All of these cities are now recognized as metropolitan (Bharatpur) and sub-metropolitan city (Itahari, Hetauda, Kohalpur (Nepalgunj) and Attariya (Dhangadi)). The allocation of these 10 new cities in mid-hill highway may show the same character in near future and can grow as an important urban centers in the hilly region. The development dynamics in Basantapur from different time frame till now will persue a detail knowledge about how these cities will behave in the nearer future. Various study like the selection criteria, development model and pattern adopted in the case and political committement plays an important role in this justification.

1.2.2. Importance

As discussed earlier, the proposed new towns in hilly areas plays an important role in serving the balanced regional development in the country if they were allocated scientifically. Or if they were just allocated as per the political pressure and popularity, huge amount of national budget, human resource and plans would go waste. This research tends to find out the gap in reality between the planning and actions in the field. So, this research would be important to urban planners and even the government in selecting and implementing the planned plans in proposed new towns as envisioned.

1.3. PROBLEM STATEMENT

The Ministry of Urban Development proposed 12 new towns in mid-hill corridors under certain guidelines and scientific reasons. After federalism and decentralization, there was a need for balanced regional development in the country. But, the allocation of those towns (with all other 42 towns) and their physical location always arises a question for their feasibility and sustainability in the nearer future. Though MOUD, NTPCO and local government are working for the sustainability of these cities as new towns, plans are formulated and budget allocation are also

started; there is a doubt for implementation of those plans as they does not seem satisfactory which hindered the urban development plans as envisioned. Despite all these situations, there are only limited studies conducted to know and attain improvement in this topic. Hence, there is an utmost need to figure out the development dynamics in new towns in the field.

1.4. OBJECTIVES

The overarching objective of this study is to assess the development dynamics of new-towns in mid-hill highway corridor: Basantapur in delivering balanced regional development in the country. The specific objectives of this study are:

- a) To analyze the selection criteria of new towns in mid-hill highway corridor city: Basantapur (its connectivity, production and regional and sub-regional role).
- b) To explore the dynamism of city development in different time frame and the development model adopted.
- c) To access the current stage of development of Basantapur as a New-town and find out gap between planning and reality in the field.

1.5. VALIDITY OF THE RESEARCH

With the concept of New Towns being introduced in the country, various efforts are made in national, provincial and local level of the government. Although the cities are allocated and planned well, this research regarding the mid-hill city: Basantapur as a new town in eastern Nepal would examine its allocation and sustainability in many regards. The same findings of this research would validate to all other cases in the same context (remaining all other new-towns in the mid-hills). Overall, this research represents a valuable step towards achieving the goals of the National Urban Policy and addressing the complex issues of urban development in Nepal's hilly regions.

1.6. LIMITATIONS

This research is limited to the study of Basantapur, a proposed new city in Koshi Province of Nepal and the findings obtained will be context based. This study will be assessing the development model, urban growth pattern, capacity in terms of budget allocation, infrastructural resources and political committements in terms of cities in nodal location with the east-west and north-south corridors but not with the others. The findings cannot be generalized in all, however they can have contextual relevance.

1.7. EXPECTED OUTCOME

The expected outcome from this research are:

- The implementation framework of the planned new-town development is accessed.
- The gap between the planning and implementation of those new town development from paper to the field is examined and the challenges are analysed. (National Planning Commission, 2007)

2. RESEARCH METHODOLOGY

2.1. Conceptual framework

Research paradigm, as defined by (Kuhn, 1970) is a set of common beliefs and agreements shared between scientists about how problems should be understood and addressed. The urban development though it manifests itself physically in the reality of physical world, it has the social dimension which the residing population experience which is subjective and entirely different from the scientific/natural reality. This research belongs to the pragmatist's paradigm which describes as being a paradigm where the researchers believe that the reality needs to be constantly negotiated, debated, and interpreted. Pragmatic paradigm has the freedom to use mix of methods by understanding their limitations and complementary nature. Mix methods use quantitative and qualitative data to better understand the reality. Pragmatism involves our interaction with the reality than representing or conceptualizing it. This research on studying the development dynamics of new towns in mid-hill corridors is mostly qualitative in nature involving the reviews of documents and interviews with key informant interviews, but also integrates quantitative data derived from collecting, analyzing, and integrating the findings of those surveys.

The ontological position of this study is that for achieving the outcomes envisioned by MOUD, the allocation of new towns in mid-hill corridors must be enhanced physically, economically, statistically and geographically in accordance with the variable indicators pertaining to conceptualization, designing, implementation and benefit sharing.

The epistemological position for this study is that the development dynamics of new towns in midhill corridor can be assessed through the character of those cities in different time frame that lies in the nodes of mid-hill highway and north-south corridors.

In this research, the objective has been set to assess the development dynamics of new-towns in delivering urban and regional development planning. This particular research can't be approached through the positivist paradigm as the subject taken is a phenomenon of social world. In positivist paradigm, the scientific research is done in a controlled environment inside a lab and regardless of personal values of the researcher, the universal results obtained in a research. The phenomenon taken for this study cannot be tested in the scientific lab so, this particular research objective can't be achieved through the positivist paradigm.

In post positivist paradigm, the idea of the truth or reality can't be universal and the reality can be measured/ quantified only imperfectly. As this research is not based on critical realism, multiple causes and effect of the phenomenon cannot be assessed. There is no possibility of subjectivity and generalization. So, this research cannot be studied under post-positivist paradigm.

Interpretive paradigm suggests that the reality is socially constructed. Research located in interpretivist paradigm do not really begin with a theory (as in post-positivist) rather the researchers generate a theory and pattern of meanings throughout the research process. (Uprety, 2023) So, the approach of interpretivist paradigm is not followed in this research too.

The assessment of feasibility of allocation of new towns in mid-hill corridor can be done through both the qualitative and quantitative interpretation of interaction with various stakeholders, review of available documents and analysis of the studied data. This suggests that the objectives of the research can be addressed through pragmatic paradigm.

2.2. Methodology

This research will be approached through both qualitative and quantitative methodological approach. The methodologies namely literature review, case study and consultations with various stakeholders will be carried out in this study of research. For this particular research, the review of literature begins with the observation that are specific and proceeds to a generalized conclusion, so this literature review will be based on inductive logic. Likewise, a case study will be conducted being based on the generalized conclusions and facts and those findings needs to be consulted with the experts in personal interviews and consultations. Here, the core ideas and findings are required to reach the conclusion which suggests that the abductive logic will be used in the analysis and findings sessions.

For the different methodologies mentioned, the following methods of information designated in the table below will be used:

Table 1: Methodologies and Methods of information

| Methodologies | Methods/ Source of information |
|-----------------------|--|
| Literature review | Secondary data from the websites and documents, journals and articles. |
| Case study | Primary data from case study, KIIs and GDs; Secondary data from the published literature |
| Consultation sessions | Consultative meetings, brainstorming (KIIs, GDs) sessions with the experts |

The following steps will be carried out in chronological order to proceed with this research:

- I. Desk review of the literature documents
- II. Case study and analysis of Basantapur, a New Cities at Mid-Hills Highway Corridor
- III. Analysis from the literature and case study
- IV. Consultation of the findings with experts

Table 2: Matrix design for attaining the objectives of research

| S. N | OBJECTIVES | DATA REQUIRED | SOURCE S | DATA COLLECTI ON METHOD | ANALYSIS | INFERENCES |
|---------|--|---|-------------------------------|--|--|---|
| 1 | To analyze the selection criteria of new towns in mid-hill highway corridor city: Basantapur (its connectivity, production and regional and subregional role). | Feasibility study report of Basantapur as a New Town | NTPCO | Secondary method | The qualifying criteria and weightage of different indicators of different cities are analysed | Morever a scientific method of selection of New Towns in Midhills; with quite sufficient land availability for agriculture at present and needs a thoughtful planning for residential and other purpose for future. |
| 2 | To explore the dynamism of city development in different time frame and the development model adopted. | Documents of IDP Google earth maps Site survey | NTPCO Literature review | Both Primary and Secondary methods | NT Basantapur was growing to some extent but constant at present | A developing city in many aspects as tourism and agriculture at certain time but seems constant at present; needs precise implementation plans of IDP. |
| 3 | To access the current stage of development of Basantapur as a New-town and find out gap between planning and reality in the field. | Current Site situation Literature and case analysis | Site study Literature review | Both Primary and Secondary methods: (Questionnaire Survey, Key Informants' Survey and Group discussions) | Delays in development projects and difficult to complete the project in pre-assigned time period | A city trying for its development at present, but facing problems like migration. Insufficient budget, coordination and ownership are the major gaps in its implementation. |

3. LITERATURE REVIEW

3.1. Development dynamics

Development dynamics refers to the patterns, processes, and factors that influence the overall progress, changes, and transformations within a particular area or context. It encompasses various aspects such as social, economic, political, environmental, and cultural dynamics that shape the development trajectory of a region.

On the other hand, urban development dynamics specifically focus on the patterns, processes, and factors that shape the growth, transformation, and management of urban areas. Urban development dynamics take into account the unique characteristics and challenges of urban environments, including aspects such as population growth, land use planning, infrastructure development, housing, transportation, environmental sustainability, social dynamics, and economic activities.

While development dynamics can be applied to any context, urban development dynamics specifically zoom in on the dynamics and complexities of urban areas. Urban development dynamics often involve aspects related to urbanization, urban planning, and the management of urban spaces and resources. It looks at the interactions between different stakeholders, policies, and practices that shape urban growth, sustainability, and quality of life in cities and towns.

Development and urban development dynamics can be assessed through various indicators that measure progress, changes, and transformations. In this research, the urban development dynamics will be studied in brief. Here are the indicators used to analyze these dynamics:

- a. Economic development
 - Gross Domestic Product (GDP) and GDP growth rate
 - Employment rates and unemployment rates
 - Income levels and poverty rates
- b. Infrastructure development
 - Physical infrastructure
 - Connectivity and transportation (road networks, public transport, etc.)
 - Housing availability and affordability
 - Access to basic services (water, sanitation, electricity, etc.)
 - Land use patterns and urban sprawl
- c. Social infrastructure
 - Demographic dynamics

- Population growth rate and demographic changes
- Education indicators (literacy rates, enrollment rates, etc.)
- Health indicators (life expectancy, infant mortality rate, etc.)
- d. Environmental indicators
 - Carbon emissions and air quality
 - Water and natural resource consumption
 - Waste management and recycling rates
 - Biodiversity and ecosystem health
- e. Institution and governance
 - Quality of governance and institutions
 - Transparency and corruption levels
 - Implementation of urban planning and zoning regulations
 - Public participation and citizen engagement

These indicators help policymakers, researchers, and stakeholders assess the progress and effectiveness of development efforts, as well as identify areas that require attention or improvement in both general development and urban development contexts.

3.2. Regional planning theories

A planning concept's use of the term "region" might be interpreted in terms of its geographic characteristics, climatic characteristics, demographic characteristics, administrative structures, settlement patterns, political dimension and level of development. Some locations may be blessed with an abundance of natural resources, lush soil, stunning scenery, a distinct socio-cultural identity, etc. regional planning is thus essentially the planning of spatial development to ensure that the benefits of social and economic development are fairly among the areas. Bridging the gap between local and national development planning is another important goal of regional planning.

Under the multilevel planning system for development, regional planning is defined as the ordering of human activities in supra urban space in relation to other spatial units of national territory with a view to attain social and economic integration in space and facilitate national development. The main aim of regional planning may be said as to explore the development potential alternatives of the regions, which are usually bypassed under the sectoral plan, and to give focus to promote development process of depressed region for attaining balanced development. (Bhandari, 2022)

3.2.1. Growth pole and axis

The French economist Perroux outlined in the 1950s that economic development, or growth, is not uniform over an entire region but takes place around a specific pole (or cluster). This pole is often characterized by **core industries** around which **linked industries** develop, mainly through direct and indirect effects. Direct effects imply the core industry is purchasing goods and services from its suppliers (upstream-linked industries) or providing goods and services to its customers (downstream-linked industries). Core industries can thus have relationships either as customers or as suppliers for linked industries. The conceptualization of the growth pole theory relies on a series of assumptions. The main assumption is that leading (core) industries create multiplying effects on other firms that depend on realized economic opportunities. Another critical assumption is creating a series of complex links between the industries of the pole. These links can be forward or backward to the core industry, and the creation and expansion of these links are fundamental drivers of the economic dynamism of the pole. Then, growth poles are based on economies of agglomeration that can be considered the summation of the linkages and the proximity of the firms within the pole. Global supply chains have challenged several dimensions of the growth poles theory since growth and linkages generated by a core industry could concern activities located elsewhere. (Rodrigue, 2020)

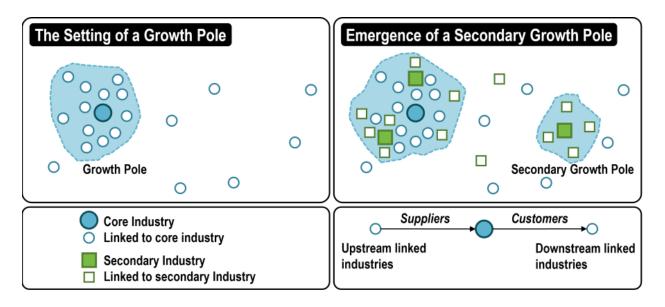


Figure 4: Growth pole and axis

The development of a region corresponds and evolves through certain nodes at variable intensities. The growth is not ubiquitous and rather occurs at poles, center and points. Traditional towns of Nepal have been parasitic nodes, for retaining of Indian commodities. The expansion of road

networks in the hills without complementary economic activities has further reinforced this southward direction. (Bhandari, 2022)

"There is a lack of specialized studies as regards these matters, whilst in general, there is no systematic investigation of the development potential and the prospectus of poles, center and growth axes. (in terms of inputs, relations and interdependencies, zones of influence, etc.) and finally, of the special role of each one of them, in the development process at regional, national and even further afield." (Papadaskalopoulos & M.Christofakis, 2011)

3.2.2. Gateway model

Gateway model is a framework for explaining the evolution of market centers and their hinterland areas. It refers to centers locating at a strategic entrance to (and exit out of) an extended hinterland region. Due to its contrasting situation for the patterns of growth of GCs (growth centers), it has a heterogenous resource potential. Gateway model functions in the hierarchy of growth centers and has a shape and size of hinterland area of GCs.

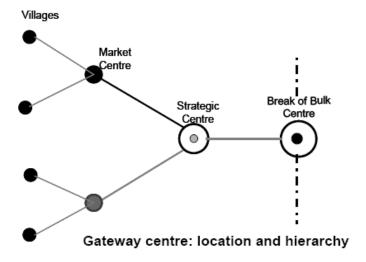


Figure 5: Gateway centre: Location and heirarchy

The main features of gateway model are:

- Strategic location at entrance of hinterland
- Connection between GCs and national centers through the hinterland region
- GCs develop as transport centers in the contact zones between areas of differing intensities or types of production

Locationally, GCs tend to develop at break-of-bulk points or nodes of transport lines in response to long distance trade or the setting of sparsely populated frontier areas. The line radiated out from the GC usually in one direction, connecting centers along the lines of communication/transportation leading to create a dendritic market network hierarchy in which all market centers are oriented to the primary GC.

Break-of-bulk point: The point at which goods are unloaded and broken up into smaller units prior to delivery, minimizing transport costs. This theory fits well into Nepal's context as:

- Primary GCs: Biratnagar, Birgunj, Janakpur, Siddharthanagar, Nepalgunj, Dhangadi (strategically located at break-of-bulk points in relation to Indial railheads and trade route leading the the hills; initial growth as gateway dettlements and later acquired other administrative and service functions)
- Secondary GCs: Dharan, Hetauda, Butwal, etc (towns developed on the Chure foothills)
- Tertiary GCs: Dhankuta, Chainpur, Tansen, etc (hill towns) (A.C.Lal, 2022)

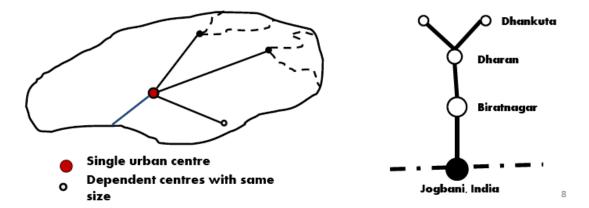


Figure 6: Gateway model

3.2.3. Central place theory

Central place theory is concerned with the size, number, functional characteristics, and spacing of settlements, which are nodal points for the distribution of goods and services to surrounding market areas. The most efficient spatial arrangement of central places takes the form of a triangular lattice so that each central place has a hexagonal market area. Central place theories are put forward to understand service location in a network of market towns and cities. (Malczewski, 2009)

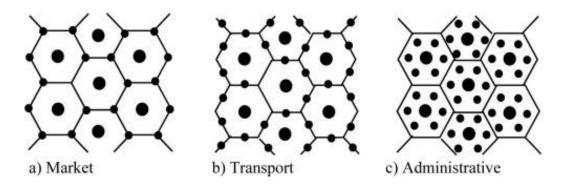


Figure 7: Central place theory: centre and hexagonal network

Central place theory argues that the development efforts and investments should be concentrated in a limited number of growth points organized in a hierarchical and functionally integrated way. (eg. Village, Service center and District headquarter). Regional development occurs in a matrix of growth points around which the regional economic base will cluster. In identifying a hierarchical system of growth points;

- Threshold population- candidates for growth point.
- Major growth points- candidates having greatest potential for future economic growth.
- establish a hierarchy among selected growth points based on their sizes and areas of influence.

However, center place theory tends to exist relatively in homogenous productive region and are characterized by local trade connections. The central place theory says the spatial structure of a region mainly depends on tertiary activities and its location.

This theory does have assumption such as:

- The region is homogenous in topography (even plain), population distribution and distribution of natural resources.
- Under above assumptions, the competition among service provider for individual service gives the range of services and eventually hexagonal market of central place emerges.

• As a result, hierarchy of central place emerges.

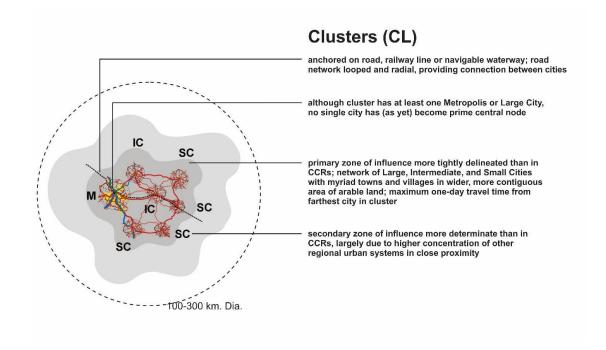
On further elaboration of the concept, the formation of the clusters and corridors can be established. (Bhandari, 2022)

3.2.4. Clusters and corridors:

Interactions between firms and between households are highest in Regional Urban Systems where 'agglomeration economies' are strongest. Regional development policy in Nepal needs to facilitate agglomeration economies in Clusters and Corridors by maximizing flows through connectivity, removing friction to flows (e.g. regulation, land and labour markets), and fostering concentration of firms and households in space. The underlying principle guiding the EUC and WUC Integrated Development Strategies is facilitating flows of people, goods, capital, knowledge, and services within each corridor and between each corridor and other regional urban systems in Nepal and Asia.

Three types of Regional Urban Systems have been identified in Nepal and a fourth by default - isolated settlements of villages, towns, and some small cities that are not part of any regional system in any obvious way as:

- I. Single City centered systems in which a single Metropolitan Region (Kathmandu, Pokhara) plays a major role in regional production, employment and distribution and can cover a radius from the central city ranging from 100-300 km.
- II. Regional Clusters of villages, towns and cities at or below the Metropolis scale across an area of 100-300 km. radius; unlike Single City-centered Regions, no single town or city appears to play a dominant economic role.
- III. Regional Corridors, which are very similar to Regional Clusters but stretch in a linear form along a major road, rail line, river, or coastline. (EUC, 2019)



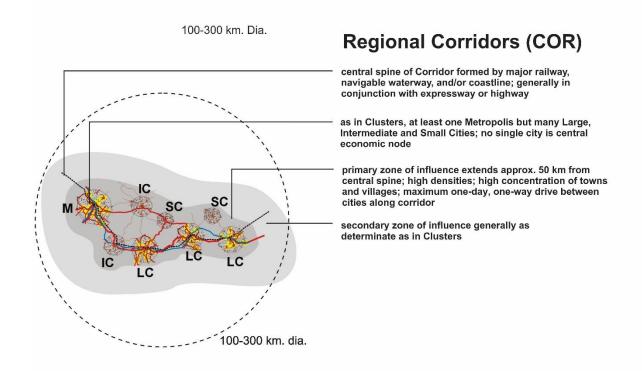


Figure 8: Cluster and Corridor

3.3. Regional connectivity

"Nepal in the mid-1970s is not just very poor country that appears to be increasingly unable to provide adequately for its now rapidly growing population- that would be a misleading oversimplification, and in some respects an under-statement, of the problems that exists. The country is now in a period of crisis, whose major components, over the next decade, will include serious over population relative to employment opportunities, ecological collapse in the densely populated and highly vulnerable hill areas... and the elimination of certain important 'natural' resources... both in the hills and in the plains. These will be associated with an increasing inability to pay for imported commodities with growing food shortages, and consequently with the development of widespread unrest in both rural and urban areas, which together will threaten the viability of the prevailing political system and even Nepal's position as an independent state." (Piers Blakie & Mishra*, 1980)

Eastern Urbanizing Corridor

The Eastern Urbanizing Corridor refers to the Biratnagar-Duhabi-Itahari-Dharan Urban Corridor and other networks of municipalities, small towns and market centers that are contained within a functional service area. The service area is delineated based on one-hour vehicular travel from the four urban centers outlined above. The outlying local bodies of the service area include village development committees (VDCs) and they are delineated referring to a distance polygon of one-hour travel time that intersect these local bodies. Such polygon is created through network analysis using Geographical Information System (GIS), based on existing road standards and average vehicular speed (assumed consistent with real life experience) in the (sub)region.

This EUC Integrated Development Strategy has been prepared in the context of the Government of Nepal's, ADB's, and other development partners' policies and development programs affecting corridor development in Nepal and the surrounding region. The EUC Strategy is based on four critical transitions which Nepal is experiencing:

- a. economic re-structuring and modernization;
- b. development of key national infrastructure;
- c. urbanization and the emergence of Corridors; and
- d. decentralization.

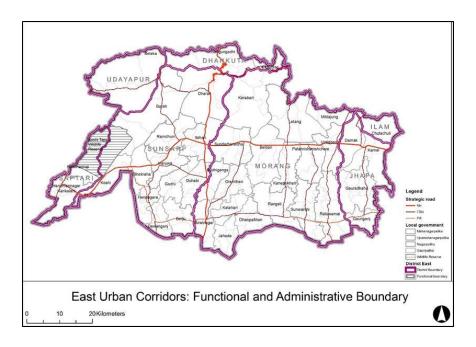


Figure 9: Districts, Municipalities, and Local Government Units in the Eastern Urbanizing Cluster



Figure 10: Eastern Urbanizing Corridor in regional and international context

The Eastern Urbanizing Corridor covers an area of 395,617 hectares. Morang (185,500 ha) and Sunsari (125,700 ha) districts occupy about 79 % of the EUC area. Parts of Jhapa, Illam, Dhankuta, Udaipur, and Saptari districts comprise the rest of the corridor area. The EUC is 104 km long along the East-West highway, and 63 km wide from north to south along the Koshi highway (linking Biratnagar-Itahari-Dharan-Dhankuta-Kimanthanka). (ADB, 2019)

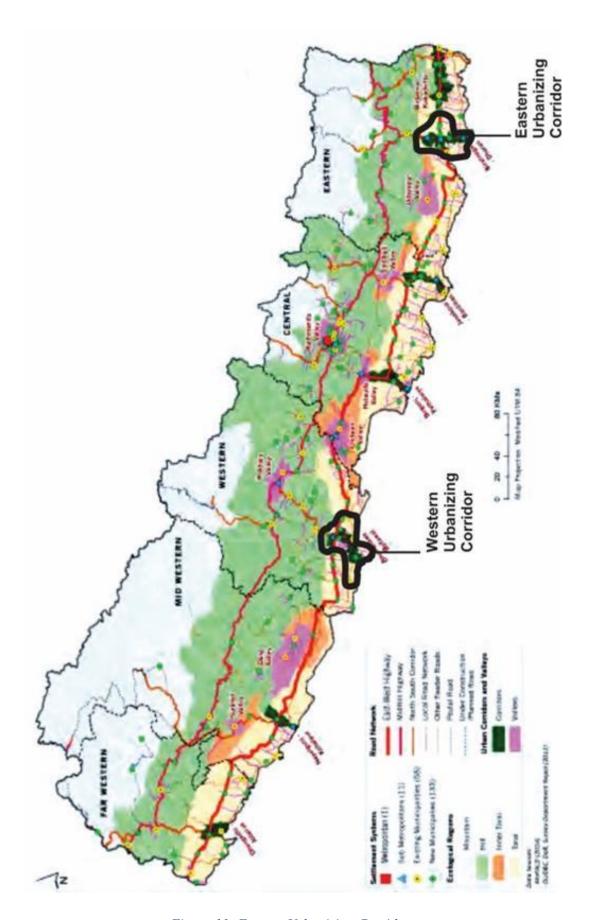


Figure 11: Eastern Urbanizing Corridors

3.4. Regional planning: Documents reviewed

3.4.1. NUDS

National Urban Development Strategy is formulated with a time horizon of 15 years. Strategies have been conceived to achieve desirable condition in each major theme – infrastructure, environment, economy and finance. Each strategy is backed by a number of activities recommended for each lead and supportive agencies within the different levels of the government and the private sector. For the urban system sector, the national objective is to strengthen the national and sub-national urban system. Strategies include – strengthening urban-rural linkages; upgrading inter and intra-provincial/regional road connectivity standards; facilitating higher level functions in major provincial/regional urban centres; improving connectivity infrastructure in key Tarai urban centres; facilitating small towns in realizing their comparative advantages; creating infrastructure for "smart" cities in priority locations; promoting environment, heritage and tourism friendly economic functions in the Kathmandu valley; and integrating future provincial capitals in the national and sub-national (provincial and regional) urban system. ((MOUD), 2017)

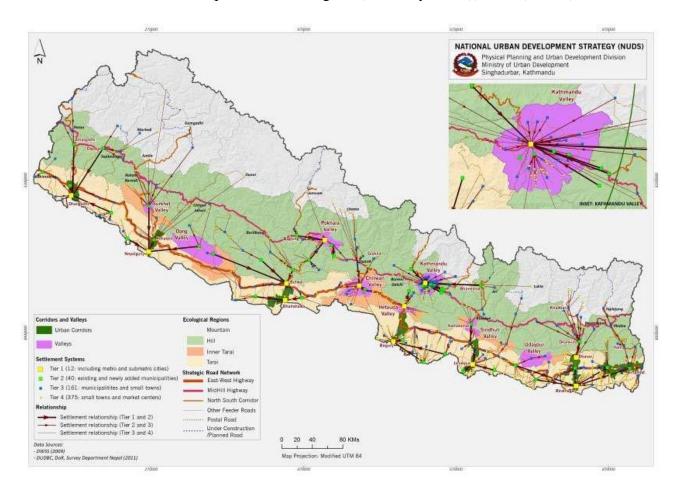


Figure 12: Settlement system relationship

Table 3. Major economic centers: Locational advantages, economic base and regional potential

| Economic | Locational advantage | Economic base | Regional potential |
|------------|---|-----------------|------------------------|
| center/ | | | |
| region | | | |
| D: | | T 1 / | T 1 |
| Biratnagar | Traditional industrial region, nearness | Trade/ services | Industrial and trading |
| | to the railhead in the Indian border; | and | center, bulk |
| | agriculturally productive hinterland, | manufacturing | manufacturing, high |
| | air connection to Kathmandu and | | value crops (tea, |
| | eastern hills | | herbs, etc) |
| | | | |

"Vision 2030: Balanced and Prosperous National Urban System" is a singular—consolidated milestone for the urban development sector. This incorporates (i) achievement of set milestones regarding physical and institutional development within each thematic area, and (ii) enhancement in the quality of urban living which includes urban environment, provision and quality of infrastructural, economic and social services, and citizen's perception of the quality of urban living. The achievement of a balanced and prosperous national urban system hinges on the coordinated and integrated efforts of the key agencies of the government dealing with transport infrastructure, environment, health, education, communication, commerce and industries, agriculture and biodiversity resources, energy in addition to the Ministry of Urban Development.

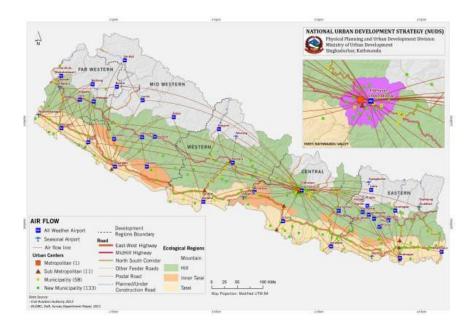


Figure 13: Settlement system relationship: Air flow

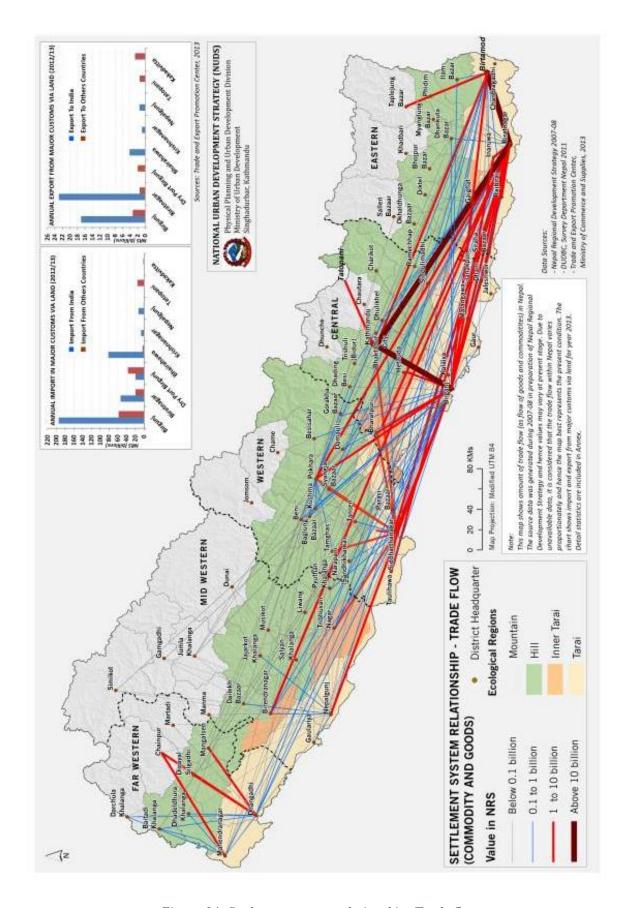


Figure 14: Settlement system relationship- Trade flow

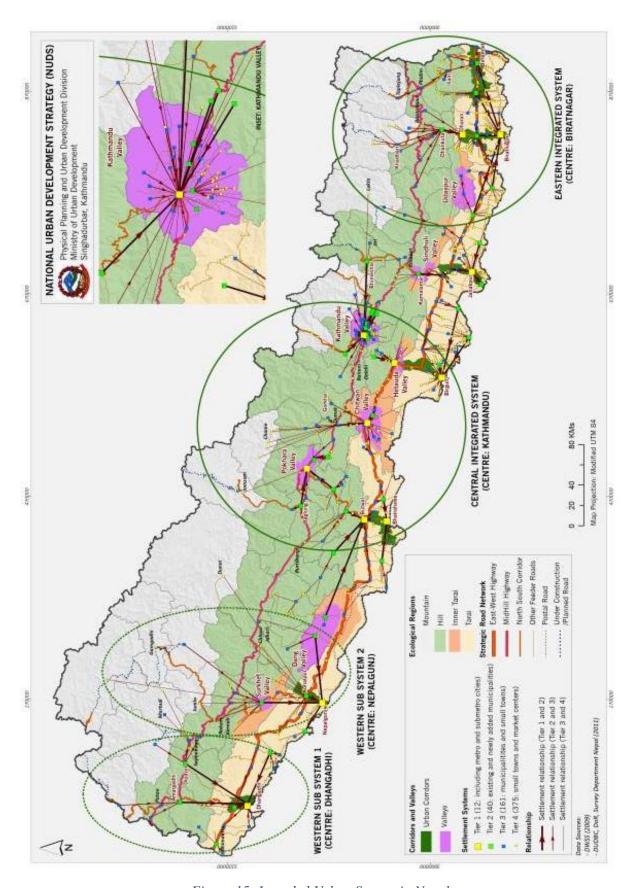


Figure 15: Intended Urban System in Nepal

3.4.2. HABITAT III

The goal of Habitat III, the 2016 United Nations Conference on Housing and Sustainable Urban Development, is to expand on the 1996 Habitat Agenda of Istanbul, which was adopted during Habitat II (3–14 June 1996) and to reaffirm the world community's commitment to sustainable urbanization. The report outlines a Plan of Action as a transformative response to future difficulties, presents a New Urban Agenda for the next 20 years, assesses the overall accomplishments of the 1996 Habitat Agenda, and focuses on the concerns and challenges in regard to six major areas. The urban economy, housing and basic services, environment and urbanization, urban governance and legislation, and urban demographics are the six main categories. (MoUD, 2016)

Some of the key supporting activities in managing urbanization as states in Habitat III report include:

• Implementation of "Secondary Cities" development programs/ projects such as the Urban Environment Improvement Project (UEIP), Secondary Towns Urban Environment Improvement Project (STUEIP), Integrated Urban Development Project (IUDP), and Urban Governance and Development Program (UGDP), and New Town Projects in order to de-concentrate economic activities outside Kathmandu Valley. (MoUD, 2016)

The major challenges experienced and lessons learnt in Managing rapid urbanization are:

- Uneven population distribution among metropolitan areas has made managing Nepal's fast urbanization difficult. Major cities are rapidly becoming more urbanized on the one hand because of the availability of jobs and basic amenities. Conversely, new urban areas are expanding relatively slowly. Regarding this, the NUP, 2007's implementation has not been successful in focusing development on particular secondary towns in order to achieve balanced urbanization and lessen regional inequality. The strategy is not supported by sufficient funding for urban development or by comprehensive investment plans that are prioritized and connected to the country's urban system, as was later planned in the NUDS, 2015. (MoUD, 2016)
- The integration of the NUP, 2007 with sectoral plans and programs has also been hampered by the severely limited technical and financial capabilities of local bodies and the ineffective institutional arrangement at the central level. This has resulted in inefficient investment, duplication, and delays in the project implementation. The development of

essential sectors for the local economic base, rural-urban links, and interurban economic linkages are not connected with the investment in various infrastructure projects. (MoUD, 2016)

- Assigning priority to the urban sector and allocating sufficient resources remains a significant concern, even with the gradual change in resource limits brought about by investigating external sources from financing agencies.
- Major obstacles to the development of new towns and growth centers continue to be the scarcity of cash for urban infrastructure investment, the difficulty of obtaining land, and the inadequate budgetary allocation. (MoUD, 2016)

The Way Forward: Land pooling schemes should be expanded to take advantage of economies of scale in order to contribute significantly to planned urbanization. In addition, land pooling initiatives ought to be expanded to include the business sector, local government, and landowners in a more inclusive and participatory manner. Land pooling is a valuable tool for land management, and the government of Nepal has launched several ambitious plans to construct new settlements. Large-scale land pooling is impractical in developed metropolitan regions; instead, innovative land development models that incorporate existing buildings as well. (MoUD, 2016)

Plan of action: The plan of action as stated in HABITAT III report for new towns are:

I. Urban Demography

| | Issues | | Objectives/ Activities | | Lead Agencies | Supporting Agencies* |
|----|--|------------------|---|-----------|------------------|-----------------------------|
| 1. | people from rural | 1.1 | Create a balanced urban system with equitable resources allocation in all regions | | | |
| | to urban areas, and high population growth in most of | 1.1.1. 1.1.2. | Adopt national urban system as intended in the NUDS Increase strategic investment in designated urban corridors and small towns | > 5 years | MoUD | NPC, MoFALD, MoPE, MoPIT |
| | the urban areas | 1.1.5. | Speed up the establishment of New Towns through priority investment and by resolving issues related to land | | | |

II. Land and Urban Planning

| | Issues | | Objectives/ Activities | Time Frame | Lead Agencies | Supporting Agencies* |
|----|---|-------|---|--------------------------------------|------------------|-------------------------|
| 1. | Unplanned urban growth with inadequate infrastructure | 1.1 | Integrate infrastructure development/ extension into spatial planning ensuring sufficient investment in basic services like water supply, sanitation and housing | | | |
| | and services in both emerging and established urban areas including | 1.1.4 | Promote PPP and private sector investment in the overall urban development sector (including social housing, infrastructure development, new towns development) | < 2 years (Policy environment) | NPC | MoUD, MoF, FNCCI |
| | Kathmandu Valley, the capital region | | | | | |

3.4.3. New Urban Agenda

The New Urban Agenda, adopted at Habitat III in Quito, Ecuador, on 20 October 2016, presents a paradigm shift based on the science of cities and lays out standards and principles for the planning, construction, development, management and improvement of urban areas. The New Urban Agenda is intended as a resource for different actors in multiple levels of government and for civil society organizations, the private sector and all who reside in urban spaces of the world. The New Urban Agenda highlights linkages between sustainable urbanization and job creation, livelihood opportunities and improved quality of life, and it insists on incorporation of all these sectors in every urban development or renewal policy and strategy. (HABITAT, October 2016)

Drawn from UN-Habitat's decades of experience in urbanization, the New Urban Agenda (NUA) is a focused, action oriented approach to improving the quality of urbanization. It identifies five distinct Action Areas as follows:

- 1) National Urban Policy
- 2) Urban Legislation rules and regulations
- 3) Urban Planning and Design
- 4) Urban Economy and Municipal Finance
- 5) Planned City Extensions / Planned urban renewals

These Action Areas are further divided into 30 Key Action Points, each of which is a clear, specific and implementable tool to help governments and municipal authorities reverse the current downward trend in the Quality of Urbanization.

NATIONAL URBAN POLICY: A national urban policy distinguishes levels of responsibility for all tiers of government and other stakeholders, establishes mechanisms for coordination, and guarantees accountability for urban development outcomes. Creating a metropolitan governance system prevents duplication of services and wastage of resources and helps with the planning of consistent transportation routes and other services. Urban plans with the force of law ensure that development is transparent and that a city's public spaces and services are protected. National urban policies ensure minimum standards when planning urban basic services such as water, sanitation, and energy, or the basic design features of streets that promote safe walking and cycling and access to public transport.

<u>URBAN LEGISLATION- RULES AND REGULATION</u>: Established land management systems are crucial for sustainable urban development. Legal frameworks should be accessible to everyone. Public spaces, like streets and green areas, form the backbone of human settlements. Inclusive

regulations for basic services, economic activities, and cultural uses should be available to all. Basic services such as water, sanitation, waste management, and public transport must be universally accessible. Public investment in infrastructure and community support enhances property value, benefiting property owners and urban development.

Building codes should promote economic vitality, inclusivity, and safety at street and neighborhood levels, while also considering environmental efficiency. Regulations should efficiently achieve policy objectives, support good governance, and cater to diverse urban contexts for inclusive outcomes.

<u>URBAN PLANNING AND DESIGN</u>: Urban patterns greatly impact livability and sustainability. Accessible areas facilitate efficient service delivery and commerce. Well-designed mixed-use areas, with housing close to workplaces, encourage social interaction and flexible public spaces. Greenery and fresh air benefit everyone. Placing urban residents at the heart of planning, with a focus on affordable housing, is essential.

Effective crisis planning involves all stakeholders, enhancing resilience and reducing damage during emergencies. Comprehensive planning also supports economic growth, fostering diverse urban economic spaces that accommodate small-scale entrepreneurs and promote a better quality of life for workers.

<u>URBAN ECONOMY AND MUNICIPAL FINANCE</u>: Identifying sustainable finance sources and strengthening a city's economic capacity create opportunities for residents and fund basic services and affordable housing. Smart investment plans promote long-term city growth, revenue generation, and realistic capital budgets. In developing countries, local finance plays a pivotal role in urban infrastructure development. Leveraging planning rules and local financial tools like land value sharing can attract external investments such as bonds and commercial loans.

Planning instruments, like land readjustment, maximize land value and stimulate development. Using both internal and external financing sources for infrastructure upgrades and construction while integrating sustainability into design is essential. Low-income housing options require creative policies, including cross-subsidies, mortgage finance, support for social and rental housing, non-collateral credit mechanisms, developer and contractor support, and resilient construction materials.

<u>PLANNED CITY EXTENSIONS/ PLANNED URBAN RENEWALS</u>: Informed planning, based on demographics and economics, ensures a balanced quality of life with vital and affordable infrastructure. Integration is crucial for equitable service provision, with improvements designed as holistic, incremental packages. Sustainability should be integrated into these enhancements.

Sufficient land supply for urban growth is vital. Planned city extensions offer control over land markets and boost affordability. Uncontrolled speculation hinders equitable city growth and planning, leading to empty plots and financial challenges. Legal mechanisms must address this issue. (HABITAT, October 2016)

3.4.4. Regional Development Strategy: National Planning Commission

Economic Regions and Sub-Regions: Due to variations, most divide into sub-regions which generally conform to the ecological zones, mountains, hills and Terai. Among the 8 economic regions, this area falls under Biratnagar region.

Biratnagar region – includes areas to the east of Sankhuwasabha, Bhojpur, parts of Khotang, Udayapur and Saptari. The core economic area comprises the economic centres of Biratnagar-Dharan including Itahari and Inaruwa. The eastwest highway and the Biratnagar-Dharan and Dharan-Dhankuta highways are the major transport spines of this region at present.

This region is second largest industrial and trading centre of the country. Major industries include agro-based, food processing, mineral based, forest based, chemicals, cement, iron rod, jute, tea, biscuits, flour, textile and apparels. Some of these (such as jute, tea and apparels) are export oriented. Additional potential activity includes the establishment or expansion of oil and fats, dairy products, sugar, jute products and beverages. Attention should also be given to exploiting the region's locational advantage (lower transportation cost for import of raw materials and export products to India and elsewhere).

Tourism is not without potential and includes the Makalu-Barun National Park (east of the Everest area, at the borders of regions 7 and 8) and Kanchanjungha Conservation Area in the vicinity of Kanchanjunga (third highest peak in the world). These offer good treks, although neither are popular and attract only few visitors. Also, there are many sites capable of development as hill stations, in particular Illam, Shree Antu, Pashupatinagar, Bhedetar, Dhankuta and Hile.

Ecological diversity offers potential for cultivation of off-season vegetables, tropical fruits, spices, tea and other raw materials required for agro-industries. Produce could include cauliflowers,

cabbage, radish, peas and tomato; and vegetable seeds (radish, onion and carrot), jute, tobacco leaves, oilseeds, lentil, mango, banana, watermelon, pineapple, orange, large cardamom and tea.

Non-timber forest products, including medicinal and aromatic plants, also have comparative advantages. Plants such as Chiraito, Rittha, Jatamasi, Panch Aaule, Sal seed, Majitho, Kurilo, Sindure, Tulispatra, Rittha, Rudrakshya, Resin, Tejpat and Amilo have good potential. Managed harvesting is required to sustainably exploit plants from forest or wild areas. (National Planning Commission, 2007)

Table 4: Tentative List of Economic Centres for Facilitation of Envisaged functions

| Economic centers | Region 8: Biratnagar |
|---|----------------------------------|
| Major economic centers | Biratnagar, Kakarbhitta |
| Cross-road towns and corridor of economic core areas including foothill towns, and towns of the inner Terai | Dharan, Itahari, Birtamod, Lahan |
| Hill towns with road links | Illam, Terhathum, Phidim |
| Hill/mountain market towns without road links | Khandbari |

National spatial framework: The upper reaches form a sub-region that includes the Sagarmatha National Park. Mostly accessed by air, this sub-region is distinct from the remainder of the region and should continue to operate as a primary destination for tourists. The remainder of the region, that includes the lower hills and the Tarai have a role to play that is similar to regions 1 and 2. However, with the opening of the Dhulikhel - Sindhuli road to Kathmandu Valley it is anticipated that the economic core of Janakpur will benefit and may over time grow in prominence to rank with Biratnagar. This is to be encouraged as the manufacturing, trade and service sectors are relatively underdeveloped despite the close proximity of Indian markets.

4. CASE AREA

For this study, the case of Basantapur, Koshi province is taken whose development dynamics will be studied, accessed and the gap between planning and implementation in the field will be analysed.



Figure 16. Images of a beautiful Basantapur city

Basantapur is a beautiful city located in the Therathum district of Koshi Province, Nepal. It lies in the nodal location of mid-hill highway and north-south highway (koshi highway). It is mainly served by Biratnagar following Itahari, the nodal city in the south (along the intersection of mahendra and koshi highway).

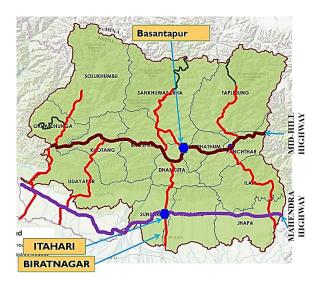


Figure 17. Location of Basantapur in the map of Koshi province

This lies in Biratnagar region as per the economic region. The core economic area comprises the economic centres of Biratnagar-Dharan including Itahari and Inaruwa. The eastwest highway and the Biratnagar-Dharan and Dharan-Dhankuta highways are the major transport spines of this region at present. (National Planning Commission, 2007)

4.1. New Town Basantapur

New Town Basantapur is the one major urban centre situated in Mid Hill Lokmarga in Terhathum District of Koshi Zone of Eastern Nepal. It is situated in the node point of Dhankuta, and Sankhusavha and Terhathum District and Koshi Highway and Mid Hill Highway. Among 10 new towns Basantapur is one of the major new towns of Mid Hill Highway declared by Nepal Governmet. It is also ranked as top five major tourism destination of eastern development region. It was declared as a Laligurans Municipality merging with five VDCs i.e. Basantapur, Phulek, Dangapa, Sungnam and Solma. The total area of the Laligurans is 90.27 sq. Km. According to population census 2011, the number of household is recorded as 3677 and total population is 16936 where male population is 45.63% and female population is 54.36%. (Government of Nepal, 2015)

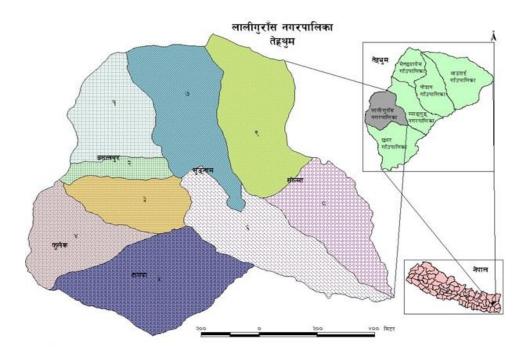


Figure 18: Map of Laligurans municipality with division of wards

(Municipality, 2019)

Basantapur lies between latitudes 27° 4' 33" and 27°10' 59 North and longitudes 87° 23' 44" and 87° 30' 59" East. It is located at 587m (Tributary of Limbu Khola and Ping Khola also Known as Limbu Dhoban) to 3034 metre (Tinjure View Tower) altitude from mean sea level. The municipality is surrounded by Murtidhunga and Marek Khatera VDC of Dhankuta District and Tamafok VDC of Sankhuwasava in the West and Maglung Municipality in the East, Likewise Tamafok VDC of Sankhuwasava in the North and Angdim, Sudap and Okhre VDC in the south. (Government of Nepal, 2015)

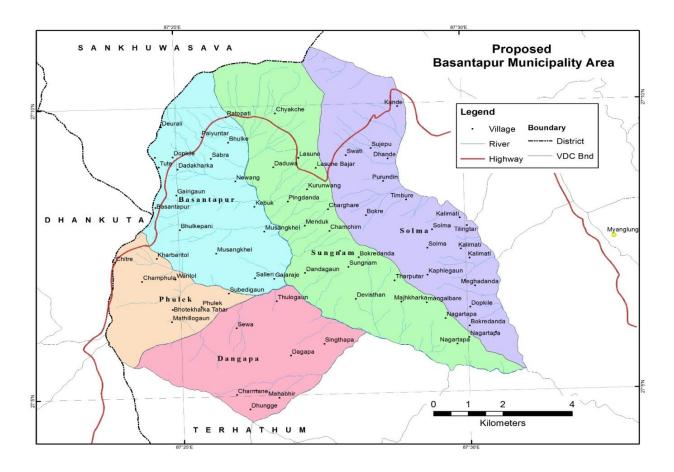


Figure 19. Map of Laligurans Municipality with highway, villages and surrounding municipalities

This is a timeline showing various stages of development of New Town Basantapur from the commencement of the project to its targeted time of completion.



Figure 20: Timeline of NT Basantapur

4.2. Demographic data

Laligurans is a Municipality, which is located in Terhathum district, Province No. 1 of Nepal. Laligurans has total 9 wards, which are scattered across 90 square kilometers of geographical area. According to 2021 Census conducted by Central Bureau of Statistics (CBS), Laligurans Municipality had total population of 15,329. After annexation to Basantapur, Dangpa, Phulaek, Solma and Sungam VDC, Laligurans municipality is divided into 11 wards. Total area of the municipality is 90.27 sq. km. and the population density is 119.12 per sq. km. Demographic indicators of the municipality is shown in table:

Table 5: Demographic Indicators of Laligurans Municipality

| Category | 2011 | 2021 |
|-------------------------------|---------------|---------------|
| Total Area | 90.27 Sq. Km | 90.27 Sq. Km |
| Total Population | 16934 | 15329 |
| Male | 7728 (45.64%) | 7413 (48.36%) |
| Female | 9206 (54.36%) | 7916 (51.64%) |
| No. of Household | 3677 | 3759 |
| Average Household Size | 4.6 | 4.08 |
| Sex Ratio | 83.95 | 93.65 |
| Literacy | 77.66 | 81.6 |
| Population Density per sq.km. | 187.59 | 169.81 |

(CBS C. B., CENSUS 2011, 2011) (CBS C. B., Census 2021, 2021)

4.2.1. Wardwise population and households

As per 2011 population census, Laligurans Municipality had total 16,934 population with 7,728 males and 9,206 females. Out of total wards, ward number 5 had the largest population 2,512, while number 1 ward had least number of population with 2.512. With respect to number of households, Laligurans Municipality had total 3,677 households. The ward number 2 had most households with total 513, while ward number 1 had least number of households with total 272 number of households.

After 10 years as per 2021 population census, it has total 15,329 population with 7,413 males and 7,916 females. Out of all wards, ward number 5 has the largest with 2,221 and ward number 1 has the least population with 1,233. With respect the number of households, Laligurans Municipality has total of 3,759 households with ward number 2 being the largest i.e. 569 and ward number 1 being the lease with 302 households.

This shows that the overall population of the municipality is in decreasing trend with the rate of 9.48% in 10 years. But the number of households are in increasing trend from 4.61 person per household in 2011 to 4.08 person per household in 2021.

Table 6: Demographic data of population and households in Laligurans Municipality

| S.N. | Wards | Male | Female | Total population | | Households | |
|------|------------|---------|---------|------------------|--------|------------|-------|
| | YEAR- | 20 | 21 | 2011 | 2021 | 2011 | 2021 |
| 1 | Ward no. 1 | 588 | 645 | 1224 | 1233 | 272 | 302 |
| 2 | Ward no. 2 | 945 | 1013 | 2061 | 1958 | 513 | 569 |
| 3 | Ward no. 3 | 744 | 792 | 1554 | 1536 | 326 | 345 |
| 4 | Ward no. 4 | 764 | 794 | 1675 | 1558 | 341 | 373 |
| 5 | Ward no. 5 | 1073 | 1148 | 2512 | 2221 | 495 | 528 |
| 6 | Ward no. 6 | 717 | 804 | 2051 | 1521 | 439 | 373 |
| 7 | Ward no. 7 | 850 | 900 | 1803 | 1750 | 391 | 410 |
| 8 | Ward no. 8 | 809 | 805 | 1951 | 1614 | 436 | 386 |
| 9 | Ward no. 9 | 923 | 1015 | 2103 | 1938 | 464 | 473 |
| | Total | 7,413 | 7,916 | 16, 934 | 15,329 | 3,677 | 3,759 |
| | | (48.4%) | (51.6%) | | | | |

(CBS C. B., CENSUS 2011, 2011) (CBS C. B., Census 2021, 2021)

The total absent population here in 2021 is 1719 (1646 male and 73 female) and total absent household is 1397 in number.

4.2.2. Migration

As the total population is decreasing in Basantapur, but the number of households are increasing in 2021 as compared to 2011. So, the detail data of in-migration and out-migration in the municipality is a must for this justification.

Table 7: In-migration and Out-migration in Basantapur

| S. | | | | Trade/ | Study/ | Marriage | Agric | Returning | others |
|----|-----------|-------|------|----------|--------------------|----------|--------|-----------|--------|
| N. | | Total | Work | business | training | | ulture | home | |
| 1 | In- | | | | 84 | 2967 | 36 | 155 | 380 |
| | migration | 4061 | 309 | 130 | | | | | |
| | Male | 623 | 214 | 72 | 29 | 24 | 22 | 89 | 173 |
| | Female | 3438 | 95 | 58 | 55 | 2943 | 14 | 66 | 207 |
| | | Total | | | Inside the country | | ry | Abroad | |
| 2 | Out- | | | | | | | | |
| | migration | 1719 | | | | 792 | | 927 | |

Table 8: People residing in Basantapur by former place of residence preceding the census

| S.N. | | In same | In other | In other | Foreign |
|------|--------------|--------------|-------------|-----------|---------|
| | | municipality | local level | districts | country |
| 1 | In-migration | 10425 | 1603 | 2458 | 843 |
| | Male | 6006 | 110 | 413 | 784 |
| | Female | 4419 | 4193 | 1945 | 59 |

4.2.3. Population by place of birth

The total population being born in same municipality is 6,663 whereas the total population residing here, but born in other municipalities of same district are 210 and born on other districts are 455. Likewise, all the native born population are found to be 7,328; foreign born are found 83 and 2 of them are not stated. By former place of residence, the total population of Basantapur Municipality is found to be:

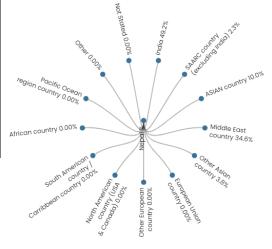
Table 9: Population of laligurans Municipality from other areas

| Category | Total | Male | Female |
|-------------------------------|-------|------|--------|
| Same palika | 68 | 81 | 55.8 |
| Other palika of same district | 10.5 | 1.5 | 18.9 |
| Other district | 16 | 6.9 | 24.6 |
| Foreign country | 5.5 | 10.6 | 0.7 |

(CBS C. B., Census 2021, 2021)

The total foreign born population by country- region of birth in Laligurans Municipality is found to be:

| Category | Value |
|---------------------------------|-------|
| India | 64 |
| SAARC country (excluding india) | 3 |
| Asian country | 13 |
| Middle east country | 45 |
| Other | 0 |
| Not stated | 0 |



4.2.4. Population by age group and sex

Table 10: Population by age group and sex of Laligurans Municipality

| | 20 | 01 | 20 | 011 | 20 | 018 | 202 | 21 |
|----------|------|--------|------|---------------|------|--------|------|--------|
| Category | male | female | Male | Female | Male | Female | Male | Female |
| 75+ | 26 | 41 | 181 | 200 | 1765 | | 194 | 229 |
| 70-74 | 21 | 25 | 144 | 143 | | | 152 | 162 |
| 65-69 | 39 | 44 | 180 | 198 | | | 224 | 245 |
| 60-64 | 56 | 46 | 237 | 239 | | | 317 | 323 |
| 55-59 | 345 | 319 | 281 | 309 | 9848 | | 348 | 395 |
| 50-54 | 70 | 58 | 371 | 398 | | | 433 | 447 |
| 45-49 | 71 | 84 | 422 | 475 | | | 318 | 447 |
| 40-44 | 91 | 113 | 357 | 502 | | | 427 | 492 |
| 35-39 | 115 | 115 | 353 | 578 | | | 480 | 509 |
| 30-34 | 115 | 142 | 348 | 586 | | | 507 | 531 |
| 25-29 | 127 | 151 | 398 | 738 | | | 581 | 687 |
| 20-24 | 144 | 225 | 531 | 822 | | | 680 | 709 |
| 15-19 | 190 | 229 | 1003 | 1077 | 4850 | | 804 | 766 |
| 10-14 | 290 | 273 | 1084 | 1170 | | | 645 | 693 |
| 5-9 | 330 | 311 | 1029 | 981 | | | 688 | 712 |
| 0-4 | 304 | 281 | 809 | 790 | 1395 | | 615 | 569 |
| Total | 2334 | 2457 | ** | N description | | | 7413 | 7916 |

The population pyramid for Laligurans Municipality visually illustrates the male vs. female population based on different age groups.

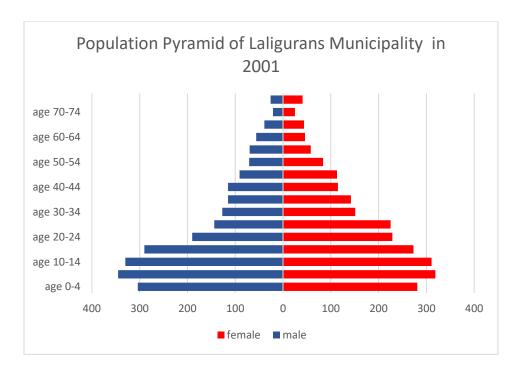


Figure 21: Population pyramid of Laligurans municipality 2001

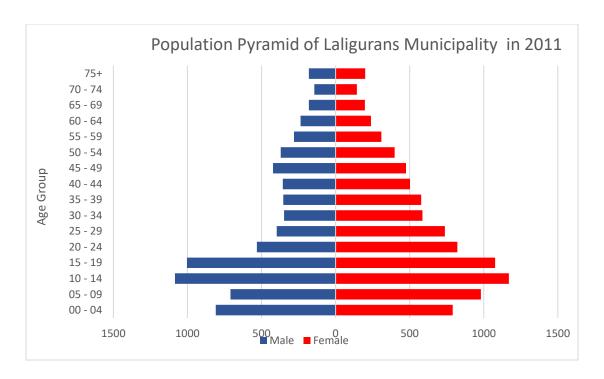


Figure 22: Population pyramid of Laligurans municipality 2011

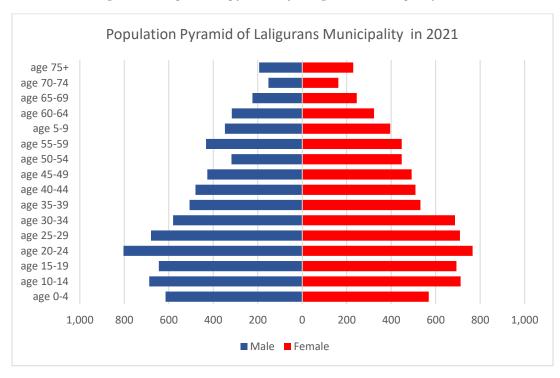


Figure 23: Population pyramid of Laligurans municipality 2021

Source: (CBS N. S., 2023)

Table 11: Population ratios and dependent population

| S.N. | Category | 2011 | 2021 |
|------|---------------------|--------------|-------|
| 1 | Male | 7728 | 7413 |
| 2 | Female | 9206 | 7916 |
| | Total | 16934 | 15329 |
| | Male/female Ratio | 0.83 | 0.94 |
| | Dependen | t population | |
| 1 | Children (0-14 yrs) | 5863 | 3922 |
| 2 | Women (15-49 yrs) | 4778 | 4141 |
| 3 | Elders (>65 yrs) | 1046 | 1206 |
| | Total | 11687 | 9269 |

The male/female ratio in Laligurans Municipality has increased from 0.83 (in 2011) to 0.94 (in 2021) whereas the dependency ratio has decreased slightly from 0.69 (in 2011) to 0.64 (in 2021). The women/child ratio has also increased from 0.81 (in 2011) to 1.05 (in 2021). (Local level statistic profile Terathum, 2017)

4.2.5. Housing and settlement

Table 12: Total households and average household size

| Category | 2011 | 2021 |
|------------------------|------|------|
| Total households | 3677 | 3759 |
| Average household size | 4.6 | 4.08 |

Table 13: Household by ownership of housing unit

| | 2011 | | 202 | 21 |
|---------------|--------|-------|--------|------|
| Category | Number | % | Number | % |
| Owned | 3279 | 89.20 | 3390 | 90.2 |
| Rented | 320 | 8.70 | 309 | 8.2 |
| Institutional | 15 | 0.40 | 22 | 0.6 |
| Other | 63 | 1.70 | 38 | 1.01 |
| Total | 3677 | 100 | 3759 | 100 |

Table 14: Household by type of foundation of housing unit

| Category | 2011 | | 202 | 21 |
|--|----------|-------|--------|------|
| | Number % | | Number | % |
| Mud bonded bricks/ stone | 3351 | 91.13 | 3227 | 85.8 |
| Cement bonded bricks/ stone | 26 | 0.71 | 131 | 3.5 |
| Reinforced cement concrete (RCC) pillars | 40 | 1.09 | 217 | 5.8 |
| Wooden/ bamboo pillars | 222 | 6.04 | 177 | 4.7 |
| Other | 38 | 1.03 | 7 | 0.2 |
| Total | 3677 | 100% | 3759 | 100% |

Table 15: Household by material for outer wall of housing

| Category | 2011 | | 2021 | |
|-----------------------------|--------|------|--------|------|
| | Number | % | Number | % |
| Mud bonded bricks/ stone | 3256 | 88.6 | 3091 | 82.2 |
| Cement bonded bricks/ stone | 82 | 2.2 | 311 | 8.3 |
| Wood / planks | 142 | 3.9 | 74 | 2 |
| Bamboo | 169 | 4.6 | 77 | 2 |
| Unbaked bricks | 0 | 0 | 2 | 0.05 |
| Galvanized sheet | 0 | 0 | 201 | 5.3 |
| Prefabricated sheet | 0 | 0 | 0 | 0 |
| Other | 28 | 0.8 | 3 | 0.1 |
| Total | 3677 | 100% | 3759 | |
| | | | | |

Table 16: Household by material of housing

| Category | 2018 | | 202 | 1 |
|----------------------------|--------|------|--------|------|
| | Number | % | Number | % |
| Galvanized sheet | 85 | 2.5 | 3258 | 86.7 |
| Reinforced Cement Concrete | 102 | 3 | 164 | 4.4 |
| (RCC) | | | | |
| Thatch / straw | 112 | 3.3 | 286 | 7.6 |
| Tile | 2972 | 86.6 | 26 | 0.7 |
| Stone/slate | | | | 0.1 |
| Wood / planks | | | | 0.1 |
| Mud | 174 | 5.1 | | 0 |
| Other | | | 19 | 0.5 |
| Total | 3445 | 100 | 3759 | |

Table 17: Household by roofing material of housing

| | 2011 | | 2018 | | 2021 | |
|-----------------|--------|-------|--------|------|--------|------|
| Types of Roof | Number | % | Number | % | Number | % |
| Thatch/straw | 1394 | 37.91 | 557 | 16.2 | 286 | 7.6 |
| Galvanized Iron | 2087 | 56.76 | 2787 | 80.9 | 3258 | 86.7 |
| Tile/Slate | 13 | 0.35 | 3 | 0.1 | 29 | 0.8 |
| RCC | 57 | 1.55 | 80 | 2.3 | 164 | 4.4 |
| Wood/planks | 20 | 0.54 | 1 | 0.3 | 3 | 0.1 |
| Others | 106 | 2.89 | 17 | 0.6 | 19 | 0.5 |
| Total | 3677 | 100% | 3445 | 100% | 3759 | 100% |

Household with Absentees population living abroad: 21.1% (927) out of which 81 of them are female and 846 are male population.

4.2.6. Demographic data by economic activities

Table 18: Genderwise engagement in Laligurans Municipality

| | 2018 | | 202 | 21 |
|----------|--------|-------|--------|-------|
| Category | Number | % | Number | % |
| Male | 973 | 54.54 | 5073 | 78.73 |
| Female | 811 | 45.46 | 5337 | 51.27 |
| Total | 1784 | 100% | 10410 | 100% |

Table 19: Engagement of people in different economic activities in Laligurans Municipality

| | 201 | .8 | 2 | 021 |
|--------------------------------------|---------|-------|-------|-------|
| | | | Engg. | |
| Category | Engg. % | Estd. | % | Estd. |
| Agriculture, forestry and fishing | 7.79 | 55 | 81.0 | 8.46 |
| Manufacturing | 8.74 | 65 | 1.5 | 10 |
| Mining, electricity, gas, water | | | | |
| supply and construction | 2.07 | 16 | 0.04 | 2.46 |
| Wholesale and retail trade | 27.52 | 273 | 5.6 | 42 |
| Transportation, storage, information | | | | |
| and communication | 1.07 | 6 | 0.9 | 0.92 |
| Accommodation and food | 8.69 | 77 | 0.9 | 11.85 |
| Finance and insurance | 8.30 | 39 | 0.6 | 6 |
| Education | 21.75 | 41 | 2.9 | 6.31 |
| Health and social work | 6.33 | 31 | 1.3 | 4.77 |
| Real estate and others | 7.74 | 47 | 5.26 | 7.23 |
| Total | 1784 | 650 | 10410 | 100% |

4.2.7. Social Institutions

There are total 36 cooperative societies 2011 which increased to 42 number in 2021 according to the record from the Laligurans municipality. The total number of educational and health institutions are 40 and 15 consecutively, which are enlisted as below:

Total number of schools:

| S.N. | Schools | 2018 | 2021 |
|------|------------------|------|------|
| 1 | Primary | 14 | 22 |
| 2 | Lower secondary | 3 | 4 |
| 3 | Secondary | 8 | 7 |
| 4 | Higher secondary | 6 | 5 |
| 5 | College | 2 | 2 |
| _ | Total | 33 | 40 |

Total number of health posts:

| S.N. | Hospitals | 2018 | 2021 |
|-------|-----------------------|------|------|
| 1 | Health post | 4 | 9 |
| 2 | Primary health center | 1 | 1 |
| 3 | Aayurved hospital | 1 | 1 |
| 4 | Private hospital | 3 | 3 |
| 5 | Hospital | 0 | 1 |
| Total | | 9 | 15 |

(Municipality, 2019)

4.3. Climate and rainfall

Laligurans municipality is situated between 587m to 3034m altitude from mean sea level. So, the climatic situation varies according to its altitude. In Laligurans Municipality, we can find subtropical and temperate climatic condition generally. But, in the Tributary of Limbu Khola and Ping Khola also Known as Limbu Dhoban we can find hot climatic condition in the summer season and the average temperature is recorder 30°C. But, the temperature decreases at winter. At the region of sub-tropical zone (middle part of the municipal area) summer season is hot and winter season is very cold. The upper part of the sub-tropical and temperate region the climatic condition is very cold in the winter season. The temperature falls less than 0°C and -10°C. Snow falls has occurred in the winter season.

More than 75% of the rain falls has occurred in the summer season due to the causes of monsoon. The average annual rainfall is recorded 915mm to 1000 mm.

5. THE SELECTION CRITERIA OF NEW TOWN BASANTAPUR

The Migration of population from hill areas to Kathmandu Valley and Terai in search of better opportunities and employment is in increasing rate day by day. The delay in creating road head along northern border has increased dependency on Indian cities for supply of goods. Thus to have a balanced development, Government of Nepal planned for the towns having 100 thousand people having complete infrastructures. These are the towns that attract population from Terai and check migration to Terai. For the same, ten towns are selected from a list of 21 potential urban settlements all over the country. (Thapa & Secretary, 2012)

These new towns are based on nine different qualifying criterias as population, migration, agricultural and non-agricultural activities, literacy rate, electricity, regional location and so on.

Based on the same, the location of 21 major settlements along the midhill highway are studied as shown in the picture. The New Cities are selected based on their location in all development regions of that time: two cities in each development region. The regional and district headquarters are not allocated as New Town as they will behave as a growing city because of already available infrastructures in the area.

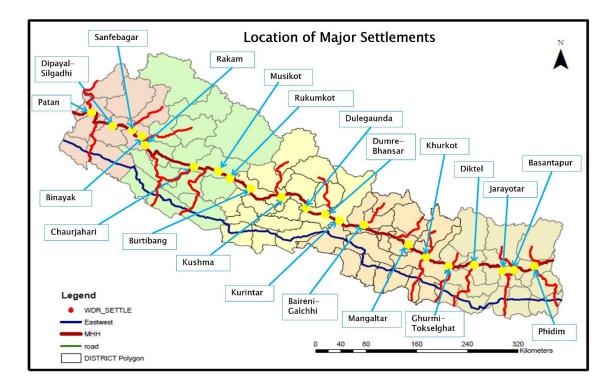


Figure 24: Location of major settlements

In case of province-1 (the then Eastern Development Region), five cities are Phidim, Basantapurr, Ghurmi- Tokselghat, Diktel and Jarayotar selected and studied where the feasibility study is done in the area. Among these, Phidim and Basantapur are selected for futher development as a New Town in Province-1. This study of research will be based on the Basantapur New Town.

The detailed feasibility of water supply, electricity, road network, sewerage and drainage, landfill site are studied and land acquisition for roads, bus park, public park, government offices, schools and colleges town hall, landfill site, sewage treatment, stadium were done. Land pooling was proposed on the private land. The major economic activities planned along these cities are tourism, agro-processing industries, agriculture wholesale markets, educational institutions, hospitals and sports. (Thapa & Secretary, 2012)

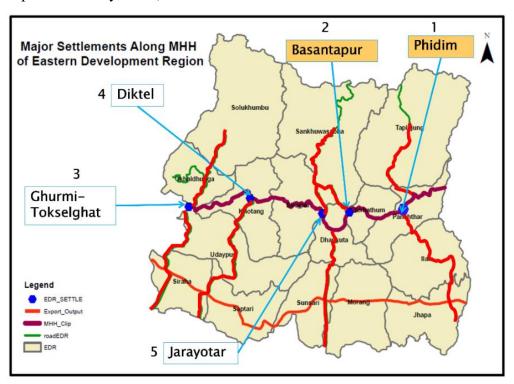


Figure 25: Major settlements along the Mid Hill Highway of Province-1

5.1. Qualifying criteria and scoring

The scoring of Basantapur was done based on the predefined qualifying criteria and the weightage score was calculated. Based on this process, Basantapur scored 84 out of 100.

Table 20: Weightage score of five cities of eastern region

| | | Basanta- | | Ghurmi- | | |
|-----|-----------------------------|----------|--------|------------|--------|-----------|
| S.N | Qualifying Criteria | pur | Phidim | Tokselghat | Diktel | Jarayotar |
| | Availability of developable | | | | | |
| 1 | land | 27.00 | 27 | 20.25 | 20.25 | 27 |
| 2 | Drinking Water | 12 | 12 | 18 | 12 | 18 |
| | Economic/ Development | | | | | |
| 3 | Potential | 20.00 | 20 | 20 | 20 | 10 |
| | Household Operating Small | | | | | |
| | scale Non-agricultural | | | | | |
| 4 | Activities (%) | 3 | 3 | 2 | 3 | 2 |
| 5 | Population (2001) | 2.5 | 5 | 3.75 | 3.75 | 2.5 |
| 6 | In-migration (%) | 5 | 3.75 | 3.75 | 2.5 | 2.5 |
| 7 | Literacy (%) | 1.50 | 2 | 1 | 1.5 | 1.5 |
| 8 | Electricity | 1 | 1 | 0 | 1 | 1 |
| 9 | Accessiblity/ Nodal Point | 12 | 12 | 12 | 12 | 0 |
| | Total | 84.00 | 85.75 | 80.75 | 76.00 | 64.50 |

Among these five cities, Basantapur was scored 84 after 85.75 for Phidim. The other cities were scored 80.75, 76 and 64.50 for Ghurmi-Tokselghat, Diktel and Jarayotar consecutively. (MOUD)

The detailed scoring of Basantapur New Town under different indicators is attached hereby. The space for development available here is more than 2km stretch so the score given is 1. The available source of drinking water is stream only, so the score given is 0.5. The economic or development potential here are tourism and vegetable farming so the score given is 1. The households operating small scale non-agricultural activities is 42.5%, so the score given is 0.75. The population as per Census 2001 is 4791, so the score given is 0.5. The in-migration rate is found to be 20.5%, so the score given is 1. The literacy rate here is 64.5% so the score given is 0.75. There are availability of electricity and accessibility of nodal point, so the score given are 1 each. The weightage score to all these indicators are as shown in the table below.

Table 21: Scoring of various indicators and available facilities in NT Basantapur

| S.N | | | | Weightag |
|-----|----------------------------------|--------------------|-------|----------|
| • | Qualifying Criteria | Definition | Score | e Score |
| 1 | Availability of developable land | Yes (2km) | 1.00 | 27.00 |
| 2 | Drinking Water | Yes (S) | 0.5 | 12 |
| | | Tourism, Vegetable | | |
| 3 | Economic/ Development Potential | Farming | 1 | 20.00 |
| | HH Operating Small scale Non- | | | |
| 4 | agricultural Activities (%) | 42.5 | 0.75 | 3 |
| 5 | Population (2001) | 4791 | 0.5 | 2.5 |
| 6 | In-migration (%) | 20.5 | 1 | 5 |
| 7 | Literacy (%) | 64.50 | 0.75 | 1.50 |
| 8 | Electricity | Yes | 1 | 1 |
| 9 | Accessibility /Nodal Point | Yes | 1 | 12.00 |
| | Total | | | 84.00 |

5.2. Weightage score

The weightage score given to all the above indicators are based on the weightage given to these indicators predefined by the concerned authority.

Table 22: Weightage and weightage score of the indicators

| S.N. | Indicators | Weightage | Weightage score |
|------|------------------------------|-----------|-----------------|
| 1 | Available land | 0.27 | 27 |
| 2 | Water Resource | 0.24 | 24 |
| 3 | Economic Potentialities | 0.2 | 20 |
| 4 | Accessibility or nodal point | 0.12 | 12 |
| 5 | Population | 0.05 | 5 |
| 6 | Migration | 0.05 | 5 |
| 7 | Having Economic activities | 0.04 | 4 |
| 8 | Literacy | 0.02 | 2 |
| 9 | Electricity | 0.01 | 1 |
| | Total | 1 | 100 |

The weightage score is given based on the This scoring is defined as follows based on various indicators and available facilities in the site:

Table 23: Definition for scoring of various indicators and available facilities

| Scoring for Available developable land | | |
|--|-------|--------------|
| Space | Score | Definition |
| More than 2km | 1.00 | V. Good |
| 1-2 km | 0.75 | Good |
| Less than 1 | 0.50 | Satisfactory |

| Available of Water Sources | | |
|----------------------------|-------|--|
| Water Resource | Score | |
| Stream and River | 1 | |
| River | 0.75 | |
| Stream only (S) | 0.5 | |

| Non agriculture | |
|-----------------|-------|
| | Score |
| Less than 15 | 0.5 |
| 16 to 45 | 0.75 |
| More than 45 | 1 |

| Scoring for Household | | | |
|-----------------------|-------|--------------|--|
| Household | Score | Definition | |
| above 2000 | 1.00 | V. Good | |
| 1000-1499 | 0.75 | Good | |
| Below 1000 | 0.50 | Satisfactory | |

| Scoring for Nodal Point | | |
|--------------------------------|-------|--|
| Definition | Score | |
| Yes | 1 | |
| No | 0 | |
| | • | |

| Scoring of Migration | |
|-----------------------------|-------|
| Migration | Score |
| above 15% | 1.00 |
| 7-14% | 0.75 |
| Below 7% | 0.50 |

| Scoring for Literacy | | | |
|----------------------|-------|--------------|--|
| Literacy | Score | Definition | |
| Above 75 | 1.00 | V. Good | |
| 50-75 | 0.75 | Good | |
| Below 50 | 0.50 | Satisfactory | |

| In migration | |
|--------------|-------|
| | Score |
| Less than 10 | 0.5 |
| 11 to 20 | 0.75 |
| More than 20 | 1 |

5.3. Inferences

Through the information presented, we have gained valuable insights into the geographic, demographic, and developmental aspects of this region.

Basantapur, situated at the strategic nodal location of major highways, emerges as a promising candidate for development. New Town Basantapur, as one of the major urban centers in the region, has been designated for comprehensive growth and infrastructure enhancement. The selection of New Towns like Basantapur is rooted in a set of predefined criteria, encompassing factors such as land availability, water resources, economic potential, population, migration trends, literacy rates, electricity access, and regional accessibility.

The process of scoring these criteria, coupled with the allocation of weightages, has enabled the identification of Basantapur's potential for development. This scoring system, while predominantly logical and scientific, raises interesting questions about the relative importance assigned to certain factors, leaving little room for doubt or ambiguity in its execution.

However, it is during the allocation of weightages that a noteworthy observation emerges. The most substantial weightage, accounting for 27%, is assigned to the factor of land, closely trailed by water resources at 24%, and economic potentialities at 20%. Interestingly, the weightage attributed to population stands at a mere 5%, a seemingly modest acknowledgment of its pivotal significance.

Notably, population and migration, which play critical roles in shaping the social and economic dynamics of an area, receive comparatively lower weightages within the framework. A recurring trend of declining population becomes evident. Simultaneously, the rate of migration continues to surge, posing potential long-term challenges. This prompts a contemplation of the significance attributed to migration within the weightage framework, and whether **its current evaluation adequately captures its enduring impact of declining population migration or not**, particularly given the ongoing dynamics of population shifts in these regions.

Even at present, Basantapur relies on Biratnagar (primary Break-of-Bulk point) as its main hub for goods transportation, lacking independent infrastructure to become a key center itself. Its growth hinges on the development of surrounding towns like Dhankuta, Myanglung, Khadbari, and Bhojpur (polarity factor). The tourists coming from south via Biratnagar doesnot move above Dharan and Bhedetar. And those tourists who come via air to Khadbari and Tumlingtar doesnot come below upto Basantapur. Basantapur struggles to attract tourists beyond neighboring areas like Dharan, Bhedetar, or Khadbari due to lack of its distinct offerings. So, does the weightage for economic activities for 20% give justice to the allocation of Basantapur as a New Town???

In summary, the first objective has laid a strong foundation for our study, offering a detailed portrait of Basantapur and its journey toward becoming a New Town. It underscores the need for a holistic evaluation of criteria and weightages to ensure balanced and sustainable development in the region. This foundation sets the stage for the subsequent objectives, which will delve deeper into the challenges, opportunities, and outcomes of this developmental endeavor.

5.4. Critical analysis

Basantapur currently enjoys a low population density of approximately 169.81 persons per square kilometer (1.69 ppha), creating a spacious and serene environment. This sparse settlement pattern allows for a serene and spacious living environment, with ample room for residents to breathe and savor the natural beauty that surrounds them. As present, the forest holds 49.23 sq.km. of total area and agricultural land holds 32.05 sq.km. of total area; where only 0.13 sq.km. of total area is occupied by residential area. However, while this low population density provides a sense of tranquility and open space, it also presents the town with unique challenges in terms of urban development and infrastructure planning as it looks to accommodate a growing population and evolving needs in the future. Balancing the charm of a sparsely settled area with the requirements of a growing city will be a key consideration for Basantapur's future planning and development endeavors.

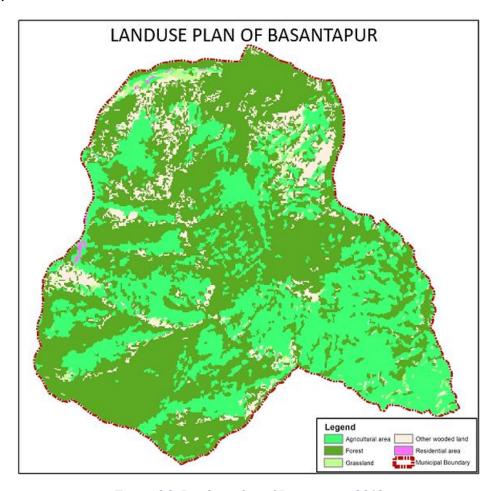


Figure 26: Landuse plan of Basantapur, 2019

A slope map is prepared from DEM with an analysis of area with slope less than 30 degree. A total area of 32.86 sq.km. is calculated with a slope of less than 30 degrees suitable for the built-up purpose i.e. 32.86 sq.km. of developable land and other area are found more than 30 degree; which is unsuitable for built-up purpose. With just 32.86 sq.km of land with a slope of less than 30 degrees, the town is constrained in terms of its expansion possibilities.

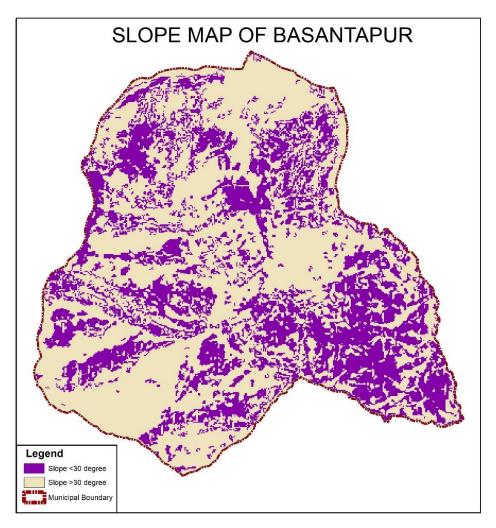


Figure 27: Slope map of Basantapur with a slope <30 degree

According to municipal bylaws and urban planning guidelines, a minimum population density of 20 persons per hectare (200 persons per square kilometer) is typically required for an area to qualify as a city. Applying this criterion, Basantapur can currently house only around 65,724 people within its existing land area. This number falls significantly short of accommodating a population of 100,000; which may be anticipated in the future. For accommodating 100000 population, a gross density of more than 30 person per hectre (30.433) is required.

As this land still occupies agricultural land and not only residential, there is a huge possibility that agricultural land will be decreased rapidly. The limited land availability and capacity for residential development pose significant urban planning and infrastructure challenges for Basantapur. To address this issue, thoughtful and sustainable urban planning strategies, such as vertical development, efficient land use and compact planning may need to be explored to ensure that the town can accommodate its growing population while maintaining its quality of life and environmental sustainability. Long-term planning and innovative solutions will be crucial to meet the evolving needs of Basantapur's residents.

6. IDP: THE DEVELOPMENT MODEL ADOPTED IN BASANTAPUR

Integrated Development Plan (IDP) of new towns is crucial for urban management and infrastructure development. The IDP integrate Physical, Social, Economic, Environmental, Tourism and Cultural, Financial, Institutional development plan and is the basis for investing sectoral line agencies in the New Town. IDP is 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.

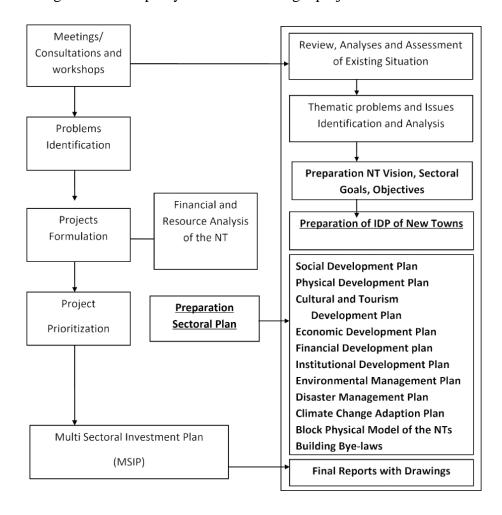


Figure 28: Flow chart of Preparation of Integrated Development Plan (IDP)

Participatory consultation meetings were the basis for contextualizing its existing situation whereas 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.

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. (Integrated Development Plan (IDP), Basantapur, 2014/15)

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)
- Social development plan has focused to develop education, health, social inclusion, participation, gender inclusion, development of needy people and so on.
- 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 mainly highlighted to develop NT's tourism potentialities and investment in tourism focussed development.
- Institutional development plan advocates to the 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. Municipality, TDC and NPCO are recognized directly implementing agencies of the projects in Basantapur. 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. (Integrated Development Plan (IDP), Basantapur, 2014/15)

Following major points were summed up from the literature review as stated in Integrated Development Plan (IDP) as the lessons learnt from literature review: (Integrated Development Plan (IDP), Basantapur, 2014/15)

- 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 considered 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 (urban development and building construction guidelines of MoFALD).
- 9. Actually, problem of most of the plans is lacking implementation rather than its content.

6.1. Lead Sectors of NT

For the better and sustainable development of any town, its lead sectors should be identified. Lead development sectors shows the development direction. As stated in IDP, following sectors has been identified for potential lead sectors after regular interaction among the local stakeholders and formal and informal consultations in the municipality. These sectors are the guiding sectors of development of Basantapur NT. The lead sectors of the Basantapur NT are;

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

a. Tourism

Laligurans municipality is known as the capital of Rhododendron. Total 28 types of Rhododendron are found here among 32 of them found in Nepal. Number of important flora and fauna, religious and spiritual values provides 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.

b. Agriculture

Agriculture including cash crop and unseasonal vegetables are still major economic activity of Basantapur. Since New Town Basantapur is projected in Laligurans Municipality (merging with Basantapur, Dangpa, Phulek, Solma and Sungnam rural municipalities), most of the areas are still rural in 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 vegatables, 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, developme pace of the town is moving its 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 foreward linkages for economic growth and development. Market and service centre as one of the another important leading developent sector for New Town Basantapur.

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

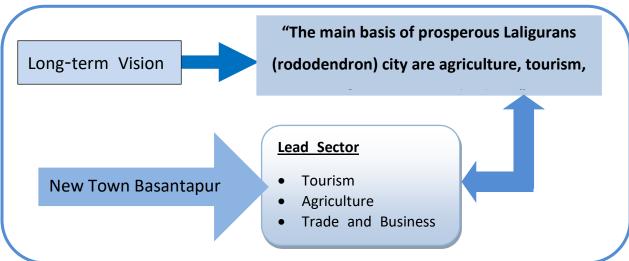


Figure 29: Long-term vision with leading development sectors

Demand analysis was done based on various existing baseline indicators as physical, economic and social infrastructure and the plans and programs are set thereafter.

- 1. Physical infrastructure: road, water supply, sanitation, solid waste management, electricity and tele communication
- 2. Economic Infrastructure: community hall, sports complex, movie hall, vegetable market, parking space, transportation system and helipad
- 3. Social infrastructure: school, hospital, parks, library, fire station, religious institutions, museum, old age home/ orphanage, security and exhibition centres.

6.2. Landuse plans

The various proposed landuse land are prepared by IDP for NT Basantapur where most of the development works are seen in the nodal location and along the mid-hill highway as in the attached images below. This also shows the proposed development areas, that will grow along the highway and in the main market centres.

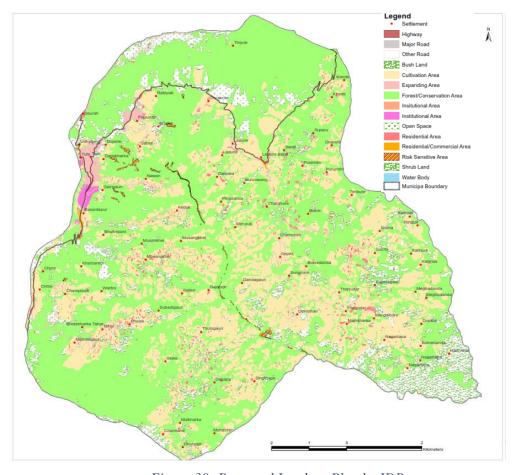


Figure 30: Proposed Landuse Plan by IDP

The infrastructure map and social development plan are attached hereby showing the major development areas in Basantapur. Even all the infrastructures and social development takes place along these highways as shown in the maps.

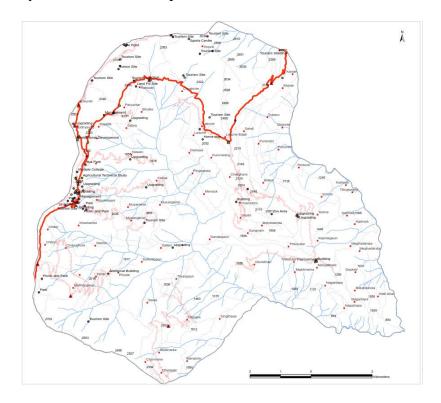


Figure 31: Social Development Map

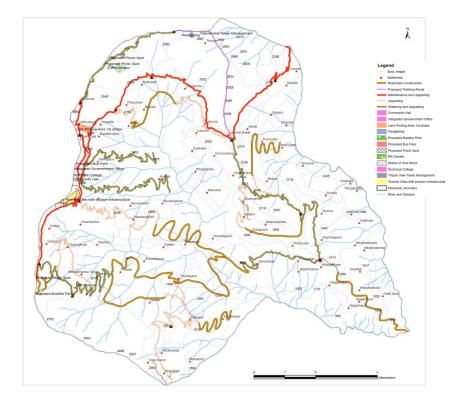


Figure 32: Infrastructure Plan

6.3. Landpooling

Landpooling consolidates small land parcels into larger areas for streamlined development. This optimizes land use, aids urban planning, and supports key infrastructure projects. It's a strategy within the broader IDP vision, which sets goals for various sectors like tourism, agriculture and infrastructure. Land pooling implements these goals by consolidating land efficiently, aligning with the IDP's overall objectives for a well-planned and organized town.

In Basantapur, Tute-dopkile, Ratopati and Kebuk are the three sites selected for landpooling. Landpooling work in Tote-dopkile has been started in the first phase in Basantapur. Block plan for resettlement has also been prepared.

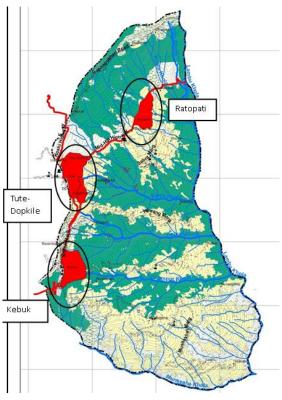


Figure 33: Landpooling sites in NT Basantapur

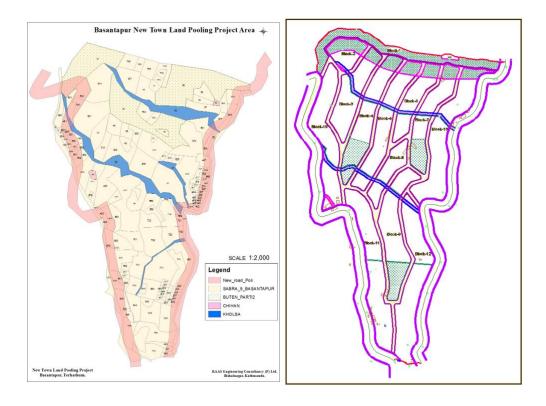


Figure 31: Basantapur NT Landpooling area and its resettlement plan

In an Integrated Development Plan (IDP), land pooling and the overall development strategy should ideally work hand in hand. Land pooling, as a strategy, often falls within the purview of an IDP. The IDP governs the broader vision and goals for development, while land pooling becomes a tool or method employed within that plan to achieve specific objectives, such as efficient land use, infrastructure development, or community engagement.

6.4. Basantapur as a Touristic Hill Town

Basantapur is a hill town known for its natural beauty, including lush forests, rivers, and hills, which make it an attractive destination for trekkers and nature enthusiasts. Basantapur is also home to various ethnic communities, and the culture and traditions of the region are influenced by the diverse ethnic groups that reside there.

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 28 different species of rhododendron, majestic view of mountains and magnificent views of sunrise and sunset. Different of rhododendron species spread from Basantapur to Sankhuwasabha district is suitable for Rhodo trail. The famous Tinjure, 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. So, Basantapur can serve as a gateway to all other nearby hilly towns and settlements.

At present, local initiations have been highly emphasized in tourism development. Tinjure 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:

Table 24: Inventory of Tourism Potential Areas

| S.N. | Name | Major Places and Potentialities | Major Attraction | |
|------|-----------------|--|----------------------------|--|
| 1 | Tinjure Area | Kailash Hill, Pathivara Temple, | Mountain View, Laligurans, | |
| | | Panchpokhari, RR Garden | Snow, Sunset and Sunrise | |
| 2 | Patake Danda | Buddhapark, Picnic Spot, | Mountain view, picnic, | |
| | | Margapokhari | trekking | |
| 3 | Solma Tea State | Tea farm, Tea processing industry Tea garden view, Greenary | | |
| 4 | Gurans Statue | Centrally Located at Basantapur, | 28 types of Rhododendron | |
| | | Different races of Rhododendron | | |
| 5 | Lasun Statue | Lasune | | |
| 6 | Bokre Danda | Greenery, Zoo | | |
| 7 | Basantapur park | Greenery, natural park, Shivalaya | | |
| | | temple, Children park, | | |

While talking about tourists arrival in Basantapur, more than 2 lakhs tourist visit Basantapur particularly Tinjure area. These internal tourists visit Basantapur 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.





Figure 32: Rhododendron of Basantapur and Statue of Yalambar, Yalambar Park





Figure 33: Tiger shaped natural stone, RR Garden and Natural stone

6.5. Regional Importance and Linkage Analysis of NT

Basantapur is 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); due to its strategic location among the three districts Terhathum, Dhankuta and Sankhuwasabha districts.

Basantapur is old market and service center of the Terhathum district. People residing in the surrounding boundaries VDCS used to come here for buy daily consumer goods and household's amenities. People from these VDCS 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; Dhankuta, 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 to its hinterland. 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.

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, Myanglung, 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 (Tehrathum, Dhankuta, 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. (Integrated Development Plan (IDP), Basantapur, 2014/15)

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.

Inter Linkages of Basantapur and other Towns/settlements

The inter linkage of any town to its surrounding 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. The establishment of Mid-hill highway may extend its market region to other hilly cities too.

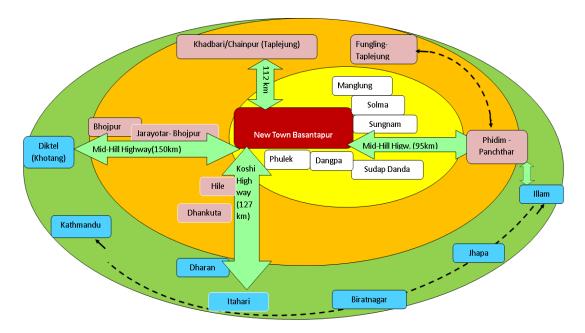


Figure 34: Interlinkage of Basantapur NT

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. The urban-rural linkage of Laligurans Muncipality is getting stronger between its own cities and hinterland.

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

लालीगुराँसको राजधानी बसन्तपुरको समृद्धि"

The reading to the long-term vision statement in English is "the main basis of prosperous Laligurans (rohododendron) 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 for sustainable development catching up of the lead development sectors.

To gain the objectives of NT, various strategies were made and guiding principles were developed as:

- a) Infrastructure development and upgrading
- b) Social development
- c) Improvement of urban environment and diaaster management
- d) Development through participation and coordination
- e) Good governance and transparency
- f) Focus to poor and marginal groups and inclusive development
- g) Conservation of religious and cultural significant heritages
- h) Institutional development for effective coordination and evaluation
- i) Decentralization and capacity development

6.6. Integrated LFA Analysis for Long-term Plan

Logical Framework Analysis is an analytical process and set of tools used to support objectives-oriented project planning, management and implementation of developmental projects. 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. 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. 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 Development Plan (IDP), Basantapur, 2014/15)

Table 25: Integrated LFA for achieving the goal

| | Indicators | | | | |
|-----------------------------|----------------|----------|----------------------|--------------------------------|---|
| Goal | Unit | Baseline | Target (in 20 years) | Measuring indicator | Assumptions |
| Improve | % | 24.5 | 7 | Poverty Line | |
| livelihood of the people of | % | 25.5 | 10 | Human poverty Index | ♣ Sufficient allocation of development budget |
| Basantapur | % | 750 | 1200 | Per capita income | ♣ Planned development |
| NT through | Year | 70 | 80 | Life expectancy | ♣ Coordination of |
| development of tourism, | RS | 60 | 100 | Drinking water | Municipality, TDC and |
| agriculture | Year | 75 | 100 | Primary school enrollment rate | NTPO Creation of investment |
| infrastructure | No per year | 10000 | 200000 | Tourism Sector Employment | guarantee to private sector |

Table 26: Integrated LFA for achieving the objectives

| Description | | Indicators | | | |
|---|---------------------------|--------------|----------------------------|-------------------------|--|
| Objectives: | Unit | Basel ine | Target (in 20 years) | Measuring indicator | Assumption |
| | Metric Ton per day | 1 | 5 | Vegetable Production | Sufficient allocation |
| 1) Agricultural improvement and increase in | Tons per year | 10 | 25 | Cardamom production | of budgetFarmers are interested |
| cash crop farming | Metric Ton per year | 500 | 700 | Ginger Production | to participate Favorable Environment to invest private sector |
| | Liter per day | 3000 | 7000 | Milk production | Security and provision of subsidies |

| 2) Improvement | no | 2000 | 20000 | Annual Tourist arrival | Sufficient allocation |
|---|----------------|-------|--------------------------------|---|---|
| of tourism activities and increase in | no | 0 | Tourism 0 2 information Centre | | of budgetPeace and securityTourism campaign |
| tourist arrival | no | 0 | 200 | Trekking guides | and promotion |
| in Basantapur | no | - | 5 | Standard Hotels | |
| | Percent | 20 | 100 | 15 minute travelling distance | . Implementation of |
| 3) Increase and improve | km | 31 | 200 | Road Black topped | Implementation of PPP model in infrastructure |
| infrastructure | km | - | 100 | Road widening | development |
| development in NT area | percent | 60 | 100 | Accessibility of community facilities | Sufficient Budget allocation |
| | percent | 75 | 100 | Safe drinking water facilities | |
| 4) Improve | percent | 80 | 100 | Literacy Rate | Commitment of |
| education condition of | no | 2 | 15 | Higher College (+2) | District Education Office |
| Laligurans municipality | no | ı | 1 | Technical college | Private Involvement |
| 5) Improve of | no | - | 2 | Hospitals | |
| health condition of Laligurans | no | 4 | 11 (1 in ward level) | Health centre | Involvement of private sectors Rudget allocation |
| Municipality | No per 1000 | 25 | 10 | Child mortality rate | Budget allocation |
| 6) improve and increase of access and | Percent | 20 | 10 | Malnutrition below 5 years of age | Gender balance policy |
| facilities to women, | Indicator s | 0.641 | 0.5 | Human development | Coordination by the male ember in the |
| marginal groups and scheduled caste ethnic groups of Laligurans | percent | 15 | 0 | Poor among scheduled caste groups | society • Public awareness |

| 7) Increase of income level through industrial and | Employ ment no | 5000 500 (estd) | 20000 | People indirectly benefitted by industrial sectors People involved in tourism | • | Active Involvement of private sectors Peace and security for investment |
|---|----------------------|-----------------------|----------------|---|---|--|
| commercial activities | no | 5 | 40 | Medium and large scale industries | | |
| 8) Proper management of | hectare | 2785 | maintaine d | Community forest | | |
| forest and community | no | 4760 | 5000 | Households involved | • | Coordination between |
| forest for landslide risk reduction and sustainable development | Families | ı | 0 | Landslide affected | | community forest user groups |
| | Status | no | mandator y | Implementation of building code | | Condination between |
| 9) Decrease the loss of life and | Status | no | Yes | Implementation of RISLUP | • | Coordination between public and private |
| property through Disaster risk | percent | 10 | Above 80 | Conscious on building construction for earthquake risk reduction | • | Municipal active role in implementation of building code |
| 10) I | no | - | 7 | Trained manpower | | |
| 10) Increase the capacity of Municipality, TDC and NT | no | 2 | 5 | Deployed high skilled manpower | • | Training and capacity |
| | no | - | 3 | Deployed high skilled manpower | • | development Coordination and interaction |
| for service delivery | Status | - | Yes | Coordination between line agencies | | meracuon |

6.7. Inferences

Integrated Development Plan (IDP) for Basantapur New Town is to improve the livelihoods of its residents through the development of tourism, agriculture, and infrastructure. The plan for Basantapur aims to boost tourism by highlighting its natural beauty and cultural richness, aiming to draw visitors from Nepal and beyond; thanks to its unique natural beauty, diverse flora and fauna, and cultural richness. Agriculture holds significance, and the plan seeks to enhance practices for better yields, focusing on crops like cabbage, cauliflower, tea, and cardamom to boost income. Additionally, infrastructure development, including roads and urban facilities, is a priority to support economic activities and improve living conditions for locals

Discussing on the regional perspective, the Break-of-Bulk point still lies in Biratnagar, near the southern border on the country. Though there is a chance of formation of secondary and tertiary Growth Centres (GCs), Basantapur is still not able to offer such function by itself. All the goods are transported either to Dharan Dhankuta by trucks or to Khadbari, Sankhuwasabha by tata vehicles (mini-truck) from Biratnagar directly.

Polarity also plays an important role in the development of Basantapur. All of its surrounding hilly cities like Dhankuta, Myanglung, Khadbari and Bhojpur on Southern, Eastern, Northern and Western direction are not much developed. If these cities grows and develops, Basantapur would automatically develop to many extents. Those tourists who come from Biratagar by air or road goes upto Dharan and Bhedetar to the North; and those tourists who comes from Tumlingtar by air or road goes only upto Khadbari to the south. Basantapur is not able to offer any specialities to these tourists and drag them upto the area.

To achieve these objectives successfully, it will be crucial to address challenges such as budget allocation, coordination among relevant agencies, and the active participation of the community. As stated in IDP, planning is a participatory process. If there is no public participation, there becomes very hard for implementation of the plans. As per the assumptions of LFA, Sufficient allocation of development budget and Coordination of Municipality, TDC, NTPO and other stakeholders are required for successful implementation of the project. Nonetheless, with a clear vision and strategic planning, Basantapur has the potential to thrive and contribute to the region's economic development.

7. DEVELOPMENT DYNAMICS OF BASANTAPUR

Development is itself a dynamics process. This section of research will focus on the urban development dynamics of Basantapur in different time frame and the current stage of development in New Town Basantapur.

7.1. The dynamism of city development in different time frame

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

Table 27: Indicators of urbanization trend in different time frame

| | | | | Year | | |
|------|---|----------------|---------|----------------|-----------|----------------|
| S.No | Indicators | CENSUS 2001 | 2010/11 | CENSUS 2011 | 2015/16 | CENSUS 2021 |
| 1 | Buit-up Area (Sq km) | 2.1 | 3.2 | 90.27 | 4.6 | 90.27 |
| 2 | Population (no) | 18205 | 19936 | 16934 | 22000* | 15329 |
| 3 | Households (no) | 3598 | 3677 | 3677 | 3800* | 3759 |
| 4 | Population Density | 212 | 220.27 | 187.59 | - | 169.81 |
| 5 | Economically Active Population (percentage) | 56.5 | 57.75 | | - | 71.5 |
| 6 | Major Industries (no) | 2 | 3 | | 3 | 3 |
| 7 | Blacktopped Road (km) | 25.6 | 30.58 | | 32.58 | - |
| 8 | Concrete Road (km) | - | - | | 0.5 | 4.28 |
| 9 | Drinking Water Supply (hh coverage percentage) | 73% | 84% | 81.73% | 81.51 | 96.35% |
| 10 | Uses of Fuel for Cooking (LP Gas user percentage) | 10.1% | 14.31% | 4.53% | 15.0* | 18.25% |
| 11 | Cable Television, | 120, 44 | 231, 57 | 314, 80, | 400, 120, | 2147, |
| | Computer and Internet | and none | and 24 | 42 | 65 | 301, |
| - 10 | User Househlds (no) | 0.000 | | | | 1464 |
| 12 | Non agricultural Occupation | 0.29% | 2.5% | | - | 0.1% |
| 13 | Types of Concrete Houses (no) | - | 40 | 57 | 75 | 217 |

Source: CBS 2002, 2011 and Fieldwork, 2071, (Integrated Development Plan (IDP), Basantapur, 2014/15)

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

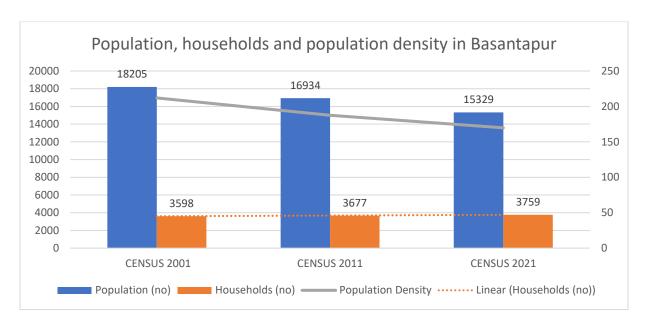


Figure 35: Population, households and population density in Basantapur

The presented table showcases a chronological progression of data spanning various periods. A discernible pattern emerges, with indicators such as population, households, and population density within the municipality demonstrating a subtle upward trajectory in recent years. This suggests a measured and gradual pace of urbanization unfolding within the municipality.

Complementing this observation, the periodic satellite images provide visual evidence of an expanding urban area in Basantapur, as evidenced by the attached settlement pattern and urban form documentation. This spatial transformation aligns with the data trends, reinforcing the notion of a deliberate urbanization process.

Adding further nuance, a recent surge in building construction activity has come to the forefront within the municipality. This surge serves as an additional layer of evidence substantiating the municipality's evolving urban landscape and growth dynamics.

7.2. 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. Settlement pattern of Basantapur area is found linear in the Bazar area and scattered in the rural areas. Basantapur has linear type of settlement along market area such as Basantapur, Tute 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.

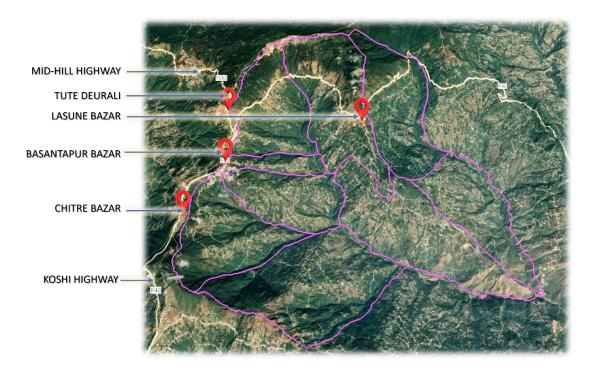


Figure 34: Major market centres and highways in NT Basantapur

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. This provides a good forward and backward linkages in the settlement system within the municipality area.

The urban growth pattern of four market areas is depicted in the images of different time frame in the interval of 5 years as below, where urbanization is seen at a very slow pace. But, few newer constructions can also be seen. All of these market centre shows linear settlement or ribbon development along the major highways.

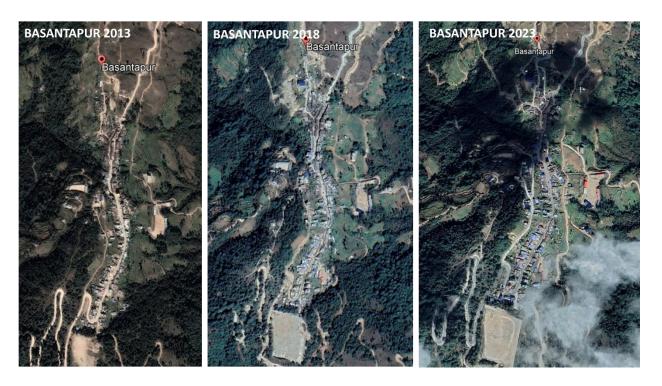


Figure 35: Linear Settlement, Basantapur Bazar in different time frame



Figure 36: Linear Settlement of Lasune Bazar in different time frame

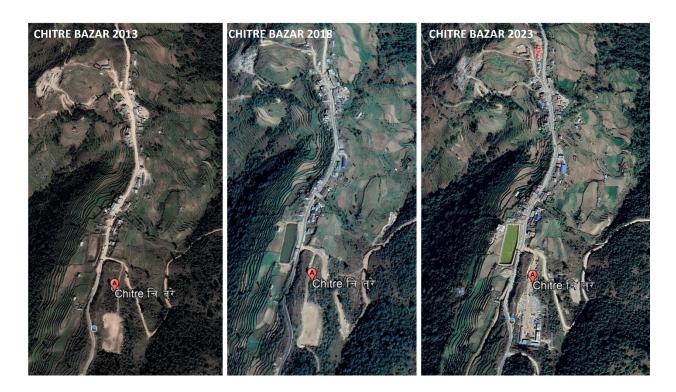


Figure 37: Linear Settlement of Chitre Bazar in different time frame



Figure 38: Linear Settlement of Tute Deurali Bazar in different time frame

The amalgamation of these insights paints a comprehensive picture of the current state of Laligurans municipality. Notably, the municipality exhibits distinct characteristics in terms of its settlement patterns. Within its boundaries, there exist pocket areas characterized by cluster settlements, particularly prominent around major market centers. This clustering follows a linear arrangement, indicative of a deliberate organization and spatial layout.

In contrast, a significant portion of the municipality portrays a different facet of settlement distribution. These areas are marked by scattered settlements, evoking a rural essence. This dispersion of settlements contributes to an unmistakably rural character that permeates many parts of the municipality.

This mosaic of settlement patterns underscores the intricate blend of urban and rural dynamics within Laligurans municipality, where pockets of vibrant clustering coexist alongside expanses that retain a more traditional and scattered arrangement, capturing the multifaceted nature of its landscape.

7.3. Landuse map: existing and proposed

The existing landuse map was prepared in 2015 by DUDBC (Department of Urban Development and Building Construction), MOUD (Ministry of Urban Development) on the basis of which Integrated Development Plan of NT Basantapur was planned and prepared.

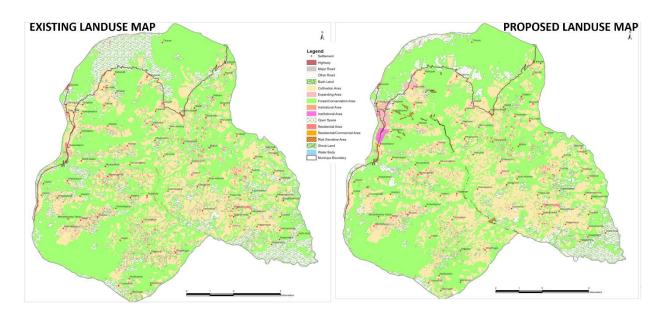


Figure 39: Existing (then) and proposed landuse plan of NT Basantapur

The landuse data at 2021 is published by the Department of forest research and survey where total forest area of Laligurans municipality is stated to be 48.4sq.km, covering 53% of the total land area.

The area of different landuse types are calculated in sq.km. and presented in the table as below.

Table 28: Existing and proposed Land Use of Basantapur

| | Existing (2015) | | Propo | osed |
|------------------------------------|-----------------|---------|----------|---------|
| | | | Area (Sq | |
| Land Use Type | Area (Sq Km) | Percent | Km) | Percent |
| Agricultural Land | 24.4 | 27.1 | 17.40 | 19.29 |
| Built-up Area | 4.6 | 5.1 | 17.20 | 19.07 |
| Barren Land | 10.4 | 11.5 | 4.60 | 5.10 |
| Forest Cover | 44.7 | 49.5 | 42.30 | 46.90 |
| Other (Road, Water body, Cliff etc | 6.1 | 6.8 | 8.70 | 9.64 |
| Total | 90.2 | 100.0 | 93.3 | 100 |

Source: Field Study, 2072; (Integrated Development Plan (IDP), Basantapur, 2014/15)

This data is presented in the chart where the agricultural land, barren land and forest cover are decreased for various development projects whereas built-up area and other areas like roads and other infrastructures are proposed to be increased. This is a must for the physical development of any area.

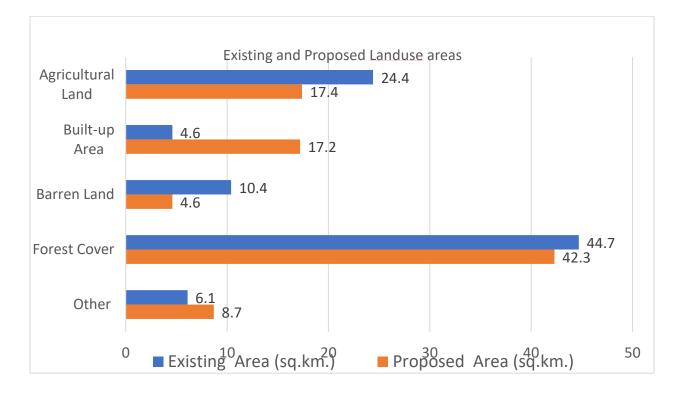


Figure 40: A bar chart showing existing and proposed landuse datas

7.4. The current stage of development of Basantapur as a New-town

After Basantapur has been chosen for New Town, some development works can be seen in the area. But as per the Integrated development plan, works cannot increase its pace rapidly due to many reasons. These are the gaps in this study of research, which will help to draw conclusions and recommendations in further.

7.4.1. Budget expenditure till now

The total budget of New Town Basantapur is around 11.33 billion. Till now, only 839.97 million of the total budget is spent under different heads; which is only 7.5% of the total budget. Only around 8.5% of the total budget is released till now. The line graph below shows the allocated budget and expenditure from fiscal year 2070/71 till now at present. This shows that the highest amount of budget expenditure was in the fiscal year 2075/76.

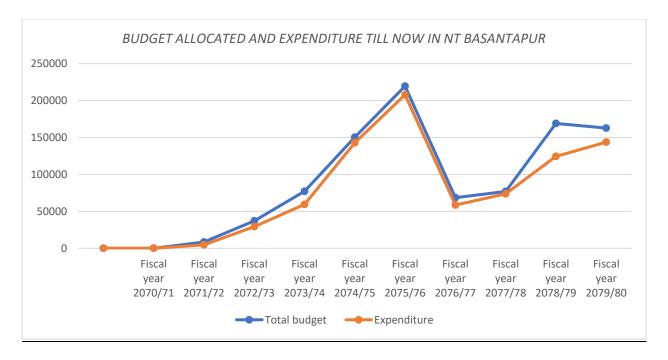


Figure 41: Budget allocated and expenditure till now in NT Basantapur

The enclosed table provides a comprehensive overview of the total budget allocation and corresponding expenditures across fiscal years since the inception of the Basantapur project. Examining this data reveals a noteworthy trend in the financial management of the project.

During the project's initial phase in fiscal year 2070/71, a modest 54.12% of the allocated budget was expended by the New Town authorities. Subsequently, a discernible pattern emerges, showcasing a gradual and consistent upsurge in the rate of expenditure in successive fiscal years, culminating in its peak during 2075/76. This upward trajectory signifies a commendable improvement in financial execution.

However, a critical aspect comes to light upon closer scrutiny. The allocated budget for each fiscal year is conspicuously inadequate, exhibiting an exceptionally low level. This inherent financial constraint casts a shadow on the project's ambitious objectives. As we stand at the midpoint of the project's stipulated timeline, it becomes apparent that the project's financial aspect mirrors the same shortfall. This situation raises pertinent concerns about the feasibility of the government's ambitious goal to complete this prestigious undertaking by the targeted year of 2090.

The symbiotic relationship between budget allocation and expenditure presents a complex challenge. While the expenditure rate showcases an encouraging trajectory, the dearth of adequate annual budget allocation presents a formidable obstacle, jeopardizing the project's ability to achieve its envisioned completion by the predetermined date.

Table 29: Budget allocated and expenditure till now in NT Basantapur

| | Total budget allocated (in thousands) | Expenditure (in thousands) | % of expenditure |
|---------------------|---------------------------------------|----------------------------|------------------|
| Fiscal year 2070/71 | 0 | 0 | 0 |
| Fiscal year 2071/72 | 8474.5 | 4586.06 | 54.12% |
| Fiscal year 2072/73 | 37085.5 | 29250.75 | 78.87% |
| Fiscal year 2073/74 | 77231.6 | 59524.15 | 77.07% |
| Fiscal year 2074/75 | 150348 | 142828.52 | 94.99% |
| Fiscal year 2075/76 | 219508 | 207831.11 | 94.68% |
| Fiscal year 2076/77 | 68547 | 58681.96 | 85.61% |
| Fiscal year 2077/78 | 76989.9 | 73633.8 | 95.64% |
| Fiscal year 2078/79 | 169103.98 | 124465.59 | 73.60% |
| Fiscal year 2079/80 | 162733.21 | 143756.46 | 88.34% |
| Total | 961547.19 | 839972.35 | 87.36% |

Source: New Town Office, Basantapur

7.4.2. Development works till now

Analysing the development works completed till now by New Town Basantapur, there are some works accomplished in physical development sector. As per the data by New Town Office, Basantapur; the major physical development works accomplished are presented below:

Table 30: Major development works accomplished till now

| | | Unit | Target | Completed | Completed |
|------|--|------|--------|------------|-----------|
| S.N. | Development works | | by IDP | in 2079/80 | till now |
| 1 | New tracks/ upgrading/ gravelled roads | Km | - | 6.4 | 51.7 |
| 2 | Black topped roads | Km | 80 | 0 | 0 |
| 3 | Concrete roads | Km | 50 | 0.56 | 4.28 |
| 4 | Sewerage line and canals | Km | 60 | 2.89 | 32.54 |
| 5 | Government building | Nos. | - | 2 | 10 |
| 6 | Solar lighting | Nos. | - | - | 44 |
| 7 | Vegetable/ fruit market | Nos. | - | - | 1 |
| 8 | Buspark | Nos. | 2 | 1 | 2 |
| 9 | Playground | Nos. | 1 | 0 | 1 |
| 10 | Parks | Nos. | - | - | 6 |
| 11 | Water supply | Nos. | - | 1 | 2 |
| 12 | Land development program (127.3 | Nos. | 1 | 0 | 0 |
| | ropani) | | | | |
| 13 | Landfill site | Nos. | 1 | 0 | 0 |
| 14 | Land acquisition | Nos. | | 0 | 0 |

Major development works are seen in road, a physical development sector. Total of 92km roads construction (soling- 22km, new cutting- 12km, upgrading- 51km, track- 7km) is completed by the municipality and New Town in Basantapur.

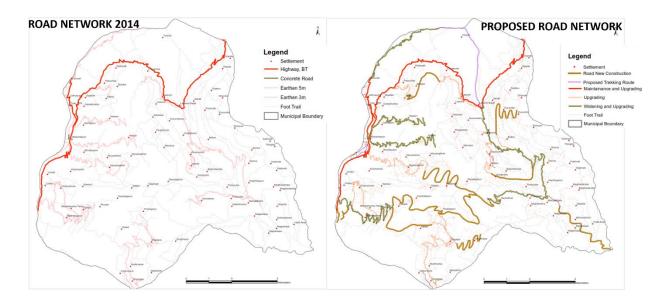


Figure 42: Road network development (in 2014 and proposed)

Other physical development works completed are shown in the pictures attached by:

Highways:



Figure 39: Mid-hill highway

Market areas and buildings along the highway:





Figure 43: Market area and buildings along highway

Main market centers:





Figure 44: Basantapur and Lasune Bazar

Sanitatation and drainage in the market area:





Figure 45: Sanitation and drainage in the market area

Parks:



Figure 46: Cholung park and other parks nearby

7.5. Inferences

The development dynamics of Basantapur provides valuable insights into the transformation of this municipality over time, particularly since its designation as a New Town. This research has examined various facets of urban development, settlement patterns, land use, and the current stage of development in Basantapur. Here are the key findings and takeaways from the study:

- O Urbanization Trends: Basantapur, an old hub and market center, has witnessed a subtle but measured increase in urbanization, especially after being declared a New Town by the Government of Nepal. Indicators such as built-up area, population, and household numbers have shown gradual growth, reflecting the evolving urban landscape.
- Settlement Patterns: The municipality's settlement pattern exhibits a blend of linear and scattered settlements. While linear settlements are concentrated around major market areas, scattered settlements retain a rural character in other parts of the municipality. The emergence of cluster settlements around market centers highlights the interconnectedness of goods and services within the region.
- o Land Use Planning: The study highlights the importance of land use planning, with a focus on existing and proposed land use in Basantapur. Efforts to increase built-up areas and infrastructure, while conserving forested areas, align with the municipality's development goals.
- Current Development Stage: Basantapur, as a New Town, has made progress in various development sectors, with an emphasis on road network expansion, sewerage systems, government buildings, and infrastructure development. However, the pace of development is constrained by budgetary limitations, with only a fraction of the allocated budget being utilized thus far.

From the list of development works completed by New Town Basantapur, many such works are seen to be done that are not stated by the Integrated Development Plan. So, there is gap in implementation between the predefined projects and projects done too. Here comes either the personal interest of some power holders or something else. As many large scale projects are found cancelled by the power holders at present; there arise a question whether the powerholders themselves are aware of IDP or not. And are they really interested in making Basantapur a planned New Town or just spend its budget as per their wish? Or a huge political clash is born somewhere in between.

O **Budgetary Challenges**: While the expenditure rate for development projects has improved over the years, the allocated budget remains inadequate to meet the ambitious goals of the New Town Basantapur project. This discrepancy raises concerns about the feasibility of completing the project within the targeted timeframe.

8. SITE ANALYSIS AND FINDINGS

After the literature review and case study, a site analysis was done and the key informant interviews were taken in the way that aids in accessing the 3rd objective of this research. The city dynamism was accessed through KII with the various stakeholders of the community as ward chairperson, journalist, local businessman, teacher, residents, political party representatives, community group and advocacy organizations. Also, a group discussion was conducted in the municipality. So, basically two methods of information collection are conducted in the site as:

- 1. Group discussion (GD)
- 2. Key Informant Interview (KII)

8.1. Group discussion with the municipality

A group discussion was conducted with Arjun Mabohang, the Mayor of Laligurans Municipality, Deputy Mayor, ward chairpersons and other municipal officials regarding the New Town project in Basantapur. The discussion mainly focused on how this project can be succeeded in the future and the weakness till now. There is no sufficient fund with New Town for all the programs lined up, neither our government is able to provide sufficient fund as per IDP. Due to this, there is lack of assurance whether New Town project will succeed or not in the near future. The single authority for all the assigned projects is with the New Town office and all budget is with it. So neither it calls for coordination to accomplish the implementation process, nor gives any recognition.



Figure 47: Group discussion with the municipality

Talking about landpooling, the total site area is to be processed as per cake land transformation which is not possible. There is major awareness problem to local people regarding landpooling why people have to contribute 30% of the land for the landpooling project.

Also, there is no sufficient amount of infrastructures required for a happy living in Basantapur. If there was a provision for technical education, good schools, hospitals and industries that would create enough job opportunities, people may reside here. This may control out migration from the area but this scenario is not found at present. Most of the works are done on road infrastructures-urban roads but there is no assurance regarding water supply, electricity and other infrastructures. The main problem here is regarding sufficient budget and its long term expenditure.

There is a park named Cholung park which even helps in internal revenue generation but the sources are very few in number. So local government is not in the stage of any contribution at present. The loan process with Town Development Fund is being finalized, which may solve the budget problem in near future.

But as this project should bring excitement and positive energy, this is not seen among the people of Basantapur. If all the plans are accessed with proper coordination and participation among stakeholders, New Town may run to a better stage of development in the future."

8.2. Key Informant Interview with New Town head: Udaya Dip Chaudhary

"With the aim of attaining a balanced urban development in the country, New Town project gets introduced as a prioritized plan. The major objectives of this project was to control migration to Terai and other cities from the hilly region. The cities were allocated on the basis of integration of major roads and cities those are already in existence. A detailed action plan was prepared by the government including the composition, possibilities and strength of these cities which was known as IDP- Integrated Development Plan.

In case of Basantapur, the core area of development is mainly considered as the area of Basantapur rural municipality at past (present Laligurans Municipality, ward number 1,2,3). The major areas of development considered in this New Town are:

- 1. Tourism (28 different types of Rhododendron are found in this area)
- 2. Sports tourism (to prepare provincial level playground or stadium)
- 3. Unseasonal vegetables (cabbage, cauliflower, potato, radish, etc)

When comes to the implementation phase, the prepared plans are in danger now and implementation becomes very hapahazard. The stakeholders are always in the intention of divergence from prepared plans and programs as per their personal interest (far from the communal

benefit). The political conflict and personal interest are the major problems in actual implementation of the prepared Integrated Development Plan.

Most of the projects for which construction site are already allocated are also stranded due to insufficient resources. Example: municipal building, coldstore, etc. There is a problem in implementation of plans as per their budget allocation as there is lack of own resources of all three tiers of government. There are many problems in the local level both in terms of coordination and land area for the assigned projects. Example: the area for covered hall was assigned in the forest area which is not permitted by the laws.

Talking about landpooling project, works are being done in one of the site at present which is also not satisfactory. The block plan are already passed by the stakeholders and readjustment plan needs to be prepared. But, pegging remained obstructed by the locals. This is a serious issue.

There is problem of land acquisition, intensive capital and budget allocation. Due to the increase in site area of New Town, the budget gets scattered and no projects can be completed in time. The municipal ring road is prepared by New Town. There is a huge divergence of plan which leads the New Town project to almost impossible. As per Kantipur news, only 1% of the plan is being implemented by the New Town project at present.

The process of development should be in the form of pyramid, but in this case the process is seen as inverted pyramid- top to bottom approach. First, the city is made ready and then people are to be resided there. But in our context, we search for people before the city gains its shape and size. The plan to prepare self-sustainable city is seen difficult at present without the intensive micro level plan and action of the municipality."



Figure 48: Key Informant Interview with the NT head, Udaya Dip Chaudhary

8.3. Key Informant Interview with various stakeholders' analysis

A Key Informant Interview was done with various stakeholders of the municipality, that are actively taking part in developing Basantapur as a New Town in one or other way. Various stakeholders are analysed and interviews were taken with 10 of them including all sectors of the community. The result of KII is explain hereafter.



Figure 49: Key Informant Interview with various stakeholders

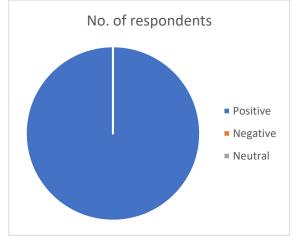
I. Perception of Basantapur as a new town

Most of the interviewers were involved from initial selection phase of Basantapur and development of city as a New Town.

a. All of the respondents gave positive feedback on the perception of the new town's potential

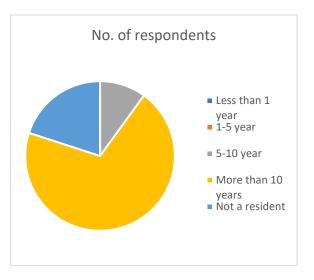
impact on the region.

| | No. of respondents |
|----------|--------------------|
| Positive | 10 |
| Negative | 0 |
| Neutral | 0 |



b. Among 10 respondents, 7 of them were residing here for more than 10 years, one reside here for 5-10 years duration and 2 of them were not a resident of the area.

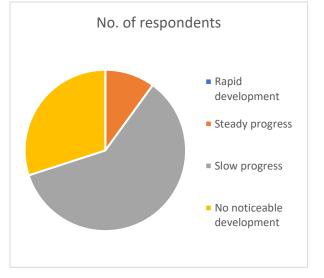
| | No. of respondents |
|--------------------|--------------------|
| Less than 1 year | 0 |
| 1-5 year | 0 |
| 5-10 year | 1 |
| More than 10 years | 7 |
| Not a resident | 2 |



c. The development progress of Basantapur over the past few years was asked to the key

informants where 6 of them stated the slow progress, 3 of them stated no noticeable development and one respond as steady progress.

| | No. of respondents |
|---------------------------|--------------------|
| Rapid development | 0 |
| Steady progress | 1 |
| Slow progress | 6 |
| No noticeable development | 3 |



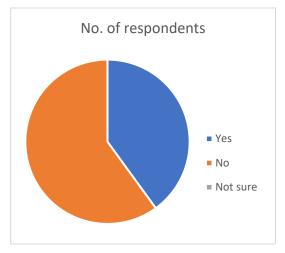
d. The respondents are asked to prioritize the primary factors driving the development of Basantapur as a new town where they prioritized as:

| | Priority order | |
|----------------------------|----------------|---|
| Tourism | 1 | |
| Others: Agriculture | 2 | |
| Economic opportunities | 3 | |
| Natural resources | 4 | |
| Government initiatives | 5 | |
| Infrastructure development | 6 | 7 |

So, tourism is regarded as the main factor for development of NT Basantapur aas per the lead sector by Integrated Development Plan.

e. A question was asked to the key informants whether they have observed any changes in the local economy due to the development of the new town or not. Four of them respond positive and 6 of the denied.

| | No. of respondents |
|----------|--------------------|
| Yes | 4 |
| No | 6 |
| Not sure | 0 |



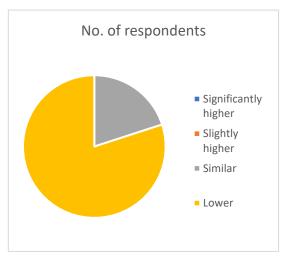
f. The respondents were asked to prioritize the key challenges or obstacles to the development of Basantapur as a new town where they prioritize the given indicators as:

| | Priority order | |
|---|----------------|--|
| Other (please specify)- personal interest comes before public interest; political conflict and lack of coordination between the | 1 | |
| tiers of government | | |
| Inadequate government support/ budget | 2 | |
| Lack of infrastructure | 3 | |
| Limited job opportunities | 4 | |
| Environmental concerns | 5 | |

g. The respondents were asked to rate the overall development of Basantapur compared to nearby

towns in the Midhill Highway corridor where 8 of them responded as lower rate and only 2 of them responded as similar to other New Towns.

| | No. of respondents |
|----------------------|--------------------|
| Significantly higher | 0 |
| Slightly higher | 0 |
| Similar | 2 |
| Lower | 8 |



II. Economic development

As per the Key Informants, very few economic opportunities are created by the New Town till now at Basantapur. There are some positive changes seen in the market and tourism sector at the area. The changes observed are due to the construction of municipal ring road, which marketized the local agricultural products of the villages in the market area. Also, The change in price of land due to this New-Town project was initial phase was introduced. In 2074/75, the price of land was 0.5 to 1 lakh per katha; but after the NT project was introduced, the price of same land became 8-10 lakh per katha in no time. At present time, the trade of land is completely stopped. People donot buy and sell land at present, this real estate sector is just freezed.

The status of different economic infrastructures at present is also analysed from the reviews given by Key Informants. As per their information, 3 Community hall are constructed by the New Town project. The sports complex/ Stadiumis under construction. The budget for covered hall was freezed due to its unappropriate site (planned in the forest area). There are no any shopping malls and theatres constructed in Basantapur. One Vegetable market is constructed by the New Town but this seems not in use at present.

The major production found in the Basantapur area are:

- Primary production: Fruits (kiwi, orange, pears); Vegetables (Potato, cabbage, cauliflower, cucumber, akabare, ginger, eskus, spinach)
- Secondary production: rice, millet, etc

The major industries (2 large and 9 small scale industries) in the Basantapur area are:

- 2 Wine industries (one running, one closed), tea factory, etc
- Cottage industries (paper, dhaka, dairy products), etc

As Basantapur is considered as the **entry point for TMJ area** (Terhathum, Sankhuwasabha, Taplejung), there are many touristic destinations in the Basantapur area. Some major touristic sites are:

- Hill sites: Parek dada, Kailash hill, Tinjure foot trail, Tinjure hill (3034m), milke dada, etc
- Lakes: Marga pokhari, Sabha pokhari, Raatpokhari, Gufa pokhari, Jor pokhari, lam pokhari, etc
- Parks: Basantapur public park, Cholung park, RR garden, Dhanrupa smriti park, Cholung park, etc

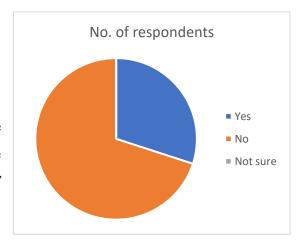
• Temples: Pathivara temple, Manakamana temple, etc

• Homestay: Tute homestay and Deurali homestay

a. The respondents were asked a question whether they have noticed an increase in economic activities in Basantapur since its establishment as a new town or not. The seven of them denied and only three of them agreed to the increase in economic activities at the site.

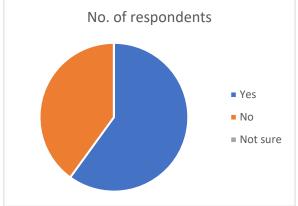
| | No. of respondents |
|----------|--------------------|
| Yes | 3 |
| No | 7 |
| Not sure | 0 |

Here, the government should introduce more attractive projects for economic enhancement of the residents and attract more population to NT Basantapur.



b. The respondents were asked whether they have observed any changes in the living standards of the local population due to the new town development or not. On a respond, six of them agrees and four of them denied.

| | No. of respondents |
|----------|--------------------|
| Yes | 6 |
| No | 4 |
| Not sure | 0 |



c. The progress seen in generating economy in last 10yrs is explained as follows:

| S.N. | | Before New Town | After New Town |
|------|----------------|-----------------------------------|---------------------------------|
| 1 | Market centers | Basantapur, Dadakharkha, | Upgrading of the market |
| | | Chitre, Lasune, Deurali, Ratopati | conditions, no any new market |
| | | | center introduced |
| 2 | Production | Tourism, Agriculture, Timber, | Dairy products |
| | | Elaichi, Chiraito | Unseasonal vegetables |
| 3 | Linkage | Mid-hill Highway | Urban link roads |
| | | Koshi Highway | Feder roads development cause |
| | | Municipal ringroad | segregated development in lower |
| | | | areas in the city |
| 4 | Schemes | Chathar: 5 lakhs to the incoming | - |
| | | residents | |
| 5 | Policies and | - | - |
| | regulations | | |

d. From where do people import goods and who are the consumers? Any export of goods and services? Production and supply?

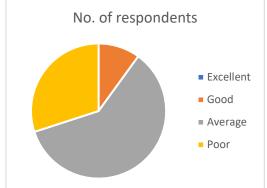
| | G 1 | | Prod | lucer | Cons | umer |
|--------|--|---|---------------------|------------------|--|------------------------------|
| | Goods | Transport by: | Before NT | After NT | Before NT | After NT |
| Import | Rice and edibles | Koshi | From Biratnagar, | From Biratnagar, | Basantapur | Basantapur |
| | * | highway Itahari, I | Itahari, Dharan | | | |
| Export | Agricultural products, Dhaka, Timber, Bamboo, Amliso Medicinal herbs (Chiraito, majito) Dairy products | Koshi highway Puspalal highway | Basantapur | Basantapur | India, Dharan, Itahari, Biratnagar, Birjung, Birtamode | India, Bangladesh |
| | Dogchew | | | | US & other foreign countries | US & other foreign countries |

III. Infrastructure development

Among all the types of infrastructural development in Basantapur, only visible development is seen in road infrastructure at present. Many urban roads are constructed which helps to improve and upgrade the tourism infrastructures. A 15 bed hospital is under construction by the government which is expected to improve the health facility in the area. Landpooling project in Tute- dopkile site is stopped due to the public' disagreement and conflict.

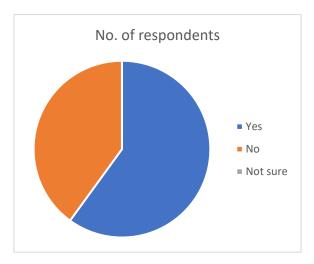
a. The respondents were asked to rate the current state of infrastructure in Basantapur (e.g., roads, electricity, water supply, healthcare, education) where six of them stated as average, one of them as good and 3 of them said poor state.

| | No. of respondents |
|-----------|--------------------|
| Excellent | 0 |
| Good | 1 |
| Average | 6 |
| Poor | 3 |



b. The respondents were asked whether there have been any notable infrastructure improvements in Basantapur since its establishment as a new town or not. Six of them agrees and four of them denied.

| | No. of respondents |
|----------|--------------------|
| Yes | 6 |
| No | 4 |
| Not sure | 0 |



c. The quality of the various infrastructure in Basantapur is stated as follows by the respondents:

| S.N. | Infrastructure | Excellent | Good | Average | Poor | Not sure |
|------|------------------|-----------|------|---------|------|----------|
| 1 | Road | - | 5 | 3 | 1 | - |
| 2 | Electricity | - | 2 | 1 | 5 | 2 |
| 3 | Water supply | - | - | 1 | 9 | - |
| 4 | Health care | - | - | 2 | 8 | - |
| 5 | Education | - | - | 1 | 9 | - |
| 6 | Public transport | - | 4 | | 6 | - |
| 7 | Communication | - | 2 | 4 | 4 | - |

d. The impact of various infrastructure on daily life is recorded by the respondents as:

| S.N | Infrastructure | Convenient | No significant | Limited and | Not |
|-----|------------------|--------------|----------------|--------------|------------|
| • | | and reliable | impact | inconvenient | applicable |
| 1 | Road | 8 | 2 | - | - |
| 2 | Electricity | - | 8 | 1 | 1 |
| 3 | Water supply | - | - | 7 | 3 |
| 4 | Health care | - | 9 | 1 | - |
| 5 | Education | - | 9 | 1 | - |
| 6 | Public transport | 8 | 2 | - | - |
| 7 | Communication | - | 3 | - | 7 |

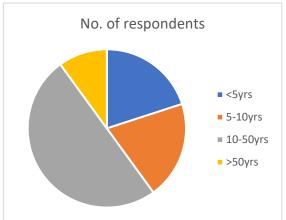
Many suggestions are given by the Key Informants for the improvement of Infrastructures in new Town, Basantapur. They envision to construct road infrastructure to connect tourism with agriculture so that local products gets branding among the tourists. Provision of street lighting and alternative energy sources are also expected from the community. A large scale water supply project was cancelled by the concerned authority, due to which there will be scarcity of water in the coming future. So, appropriate water supply project should be introduced in time. Only primary schools and very few secondary school and campus are present in Basantapur. As one of the main reason for out-migration is education, more colleges for higher and technical education should be constructed in the site. They say, no any works are done in the communication infrastructure sector. Landpooling works are being delayed by the local government and New Town. As per the informants, there is huge negligence of officials in implementation phase (timely implementation), which hamper the overall pace of development of New Town. This may be due to lack of political assurance and coordination among the various stakeholders in the society.

IV. Physical infrastructure development

Most of the buildings are made of brick and cement i.e. Reinforced Cement Concrete (RCC) building construction are found in more amount than load bearing structure of the buildings. Other building material used are wood and stone. As per our survey: among the 10 respondents, 6 houses were made up of brick and cement using RCC construction and 4 of the houses are of load bearing construction. 2 houses were made up of wood and 2 of them were made up of stone.

a. The respondents were asked about the age of their building where they responded as:

| Age of their building | No. of |
|-----------------------|-------------|
| | respondents |
| <5yrs | 2 |
| 5-10yrs | 2 |
| 10-50yrs | 5 |
| >50yrs | 1 |

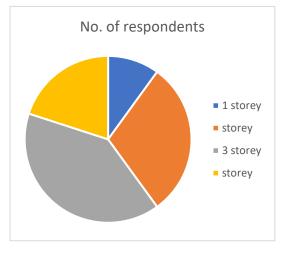


b. The respondents were asked about the total number of floors of buildings where they responded

as:

| No. of storeys | No. of respondents |
|----------------|--------------------|
| 1 storey | 1 |
| 2 storey | 3 |
| 3 storey | 4 |
| 4 storey | 2 |

There are very few higher storey buildings more than 4 storey in Basantapur at present.



V. Connectivity and transportation

The major highways in Basantapur are Mid-hill (Puspalal) highway and Koshi highway. They connect various larger cities in all directions. The nearby airport from Basantapur is Biratnagar airport, which is at 3.5 hours drive from the New Town.

The different cities nearby Basantapur and market center in all directions are:

| S.N | Direction | Nearby local market | Market center (regional) |
|-----|-----------|---------------------|-------------------------------|
| • | | | |
| 1 | East | Myanglung bazar | Fungling, Taplejung - 84km |
| 2 | West | Leguwaghat | Bhojpur - 113km |
| 3 | North | Mude- Sanischare | Khadbari, Sankhuwasabha- 85km |
| 4 | South | Siduwa bazar | Dharan, Sunsari - 84km |

VI. Social analysis

The social dimension of Basantapur comprises of mixed structure as:

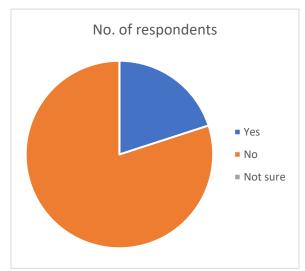
- Caste: Limbu, Brahmin, Chhetris, Gurung, Newari, Magar, Rai, Dalits, Tamang, Yakha,
 etc.
- Religion: Hinduism, Muslim, Kirat, Yuma, Buddhists, Christian, etc
- Culture: Lhosar, Udauli- uvauli, Rake mela (yearly), maghi magheni mela, New year mela (Baisakh 1)

There are various parks, temples and religious areas present here. The Manghim is also present here which is known as the religious area of Limbus. Due to these social dimensions, the homestay culture has started as Tute and basantapur homestays.

a. The respondents were asked whether they have you observed any changes in social and cultural

dynamics in Basantapur due to its development as a new town where only two of them said yes and eight of them denied.

| | No. of respondents |
|----------|--------------------|
| Yes | 2 |
| No | 8 |
| Not sure | 0 |



b. Also, the causes of migration was asked with the respondents where they stated as:

| | Cause of migration | From/ To- | |
|--------------------------------------|--------------------|-----------------------------------|--|
| In-migration business, tourism | | TMJ area(Tinjure, Milke, Jaljale) | |
| Out-migration health, education, job | | Dharan, Biratnagar, Kathmandu | |
| | opportunities | | |

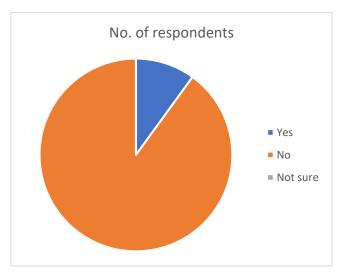
Other dimensions that helps in social progress of Basantapur are the presence of various social organizations like 42 number of co-operative societies, farmers' group, forest users' committee, youth clubs, aama samuha and so on.

VII. Environmental impact

There is no any serious environmental impacts seen in Basantapur due to newer construction and development. Only few deforestation is seen due to the construction of roads and highways. No air and water pollution is found at the New Town till now. Regarding waste management, a landfill site is under construction far from the core residential area. There was a drought felt before 3 years in Basantapur. A small fire during summer burnt 4 to 5 houses almost every year. No record of any huge natural or manmade hazards and calamities are present here.

Here, the respondents are asked about their concern in potential environmental impact of the new town's development where only one of them was concerned and nine of them were not concerned about the environmental impact.

| | No. of respondents |
|----------|--------------------|
| Yes | 1 |
| No | 9 |
| Not sure | 0 |

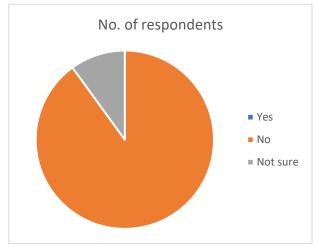


VIII. Institution and governance

The major problem stated by the Key Informants regarding New Town is lack of public participation in decision making process and implementation phase. People were involved in planning phase of New Town but now, no any public participation is seen.

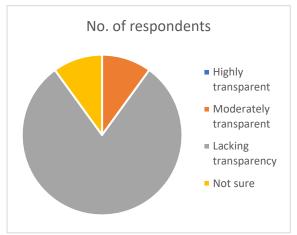
a. The respondents were asked whether they have any idea about the effective specific institutions or governing bodies in Basantapur promoting the town's development where nine of them said there are no such institutions and one of them had no idea about it.

| | No. of respondents | |
|----------|--------------------|--|
| Yes | 0 | |
| No | 9 | |
| Not sure | 1 | |



b. The respondents were asked to rate the transparency of decision-making processes within the local institutions in Basantapur. Its very interesting that maximum of the respondents had a complain about lacking transparency in the process.

| | No. of |
|------------------------|-------------|
| | respondents |
| Highly transparent | 0 |
| Moderately transparent | 1 |
| Lacking transparency | 8 |
| Not sure | 1 |



c. The respondents were also asked about public participation and engagement in decision-making processes within the local stakeholders where all of them said that there is no any opportunities for public participation at present. But, this opportunity was present in the initial phase of New-Town development.

| | No. of respondents |
|---|--------------------|
| Yes, regular opportunities are provided | 0 |
| Yes, but limited opportunities are available | 0 |
| No, there are no opportunities for public participation (only at initial phase, but not at present) | 10 |
| Not sure | 0 |

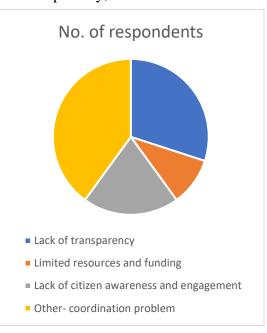
d. The respondents were asked whether they have you personally participated or engaged in any activities or discussions related to the governance and development of Basantapur or not where all of them were engaged in such activities.

| | No. of respondents | |
|----------|--------------------|--|
| Yes | 10 | |
| No | 0 | |
| Not sure | 0 | |

e. The respondents were asked about the main challenges or obstacles that the institutions and governance of Basantapur are facing as a new town where four of them said its due to the coordination problem, three of them said due to lack of transparency, two of them said due to

lack of citizen awareness and only one of them stated as limited resource and funding.

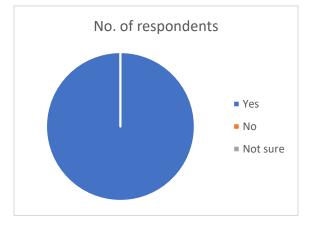
| | No. of respondents |
|--|--------------------|
| Lack of transparency | 3 |
| Limited resources and funding | 1 |
| Lack of citizen awareness and engagement | 2 |
| Other- coordination problem | 4 |



IX. Future development

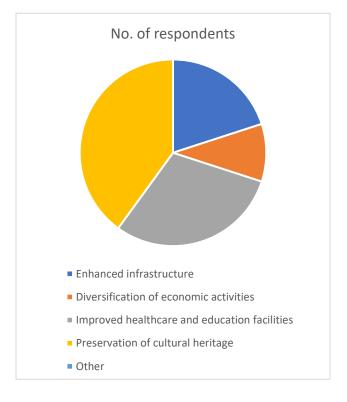
a. The respondents were asked if they think the government should play a more active role in the new town's development and all of them said Yes.

| | No. of respondents |
|----------|--------------------|
| Yes | 10 |
| No | 0 |
| Not sure | 0 |



b. The envision for the future development of Basantapur as a new town given by the key informants of this research are:

| | No. of respondents |
|--------------------------|--------------------|
| Enhanced infrastructure | 2 |
| Diversification of | 1 |
| economic activities | |
| Improved healthcare and | 3 |
| education facilities | |
| Preservation of cultural | 4 |
| heritage | |
| Other | 0 |



8.4. Findings

- Scattered projects due to the increase in area of New Town project: Before, Basantapur rural municipality holds the small area of then Basantapur Municipality (only present Laligurans municipality ward number 1,2,3). But not, the present Laligurans municipality holds larger in area with 9 wards as other 4 rural municipalities gets merged. This increases the area of project site to 90.27 sq.km. at present. There exists no any procedure of identification and allocation of core area and influence zone of New Town. Due to this, the plans and programs gets scattered to the nooks and corners of the project area and same is the case with budget.
- Landpooling project (tute-dopkile site): The landpooling project has been started in one of the three sites of Basantapur i.e. in Tute- Dopkile site. Another landpooling site: Kebuk landpooling site is located in the landslide area. The preliminary works are all completed in Tute- Dopkile and resettlement plan was also prepared by the New Town. But during the time of pegging, there arises a massive public disagreement in the site. There arises a situation of even physical clash due to which first phase of landpooling works cannot be completed. Regular meetings and awareness programs were conducted by New Town to the local people but this seems insufficient. As per the information by public; lack of awareness and insufficient meetings and discussions with p.the land owners are the major reasons of disagreement. Also, large chunk of land belongs to the powerholder who mislead the concept of landpooling to public; which again leads to the same conclusion as lack of awareness.
 - If the same condition persists in Landpooling, there is no any chance of success and the same case of Baijanti, Birjung may repeat here also.
- ♣ Many projects are cancelled by the local government stating they are of no use for Basantapur like buspark terminal building, water supply project, integrated New Town building, etc. And those projects under construction are also in very slow rate.
- Unmanaged manpowers, uncoordinated experts, Immature officials: As per the key informants and group discussions, the officials of New Town cannot maintain coordination among various stakeholders of Basantapur. They arugued about their immaturity and also about their expertise. Like, it was the responsibility and expertise of an Urban Planner to lead such a development project of New Town, whose dimension cannot be completely understood by a Civil Engineer. This problem will certainly be addressed by the New Town after its vacancy of assigning Urban Planners as experts in every New Towns.

- ♣ Plans and programs in one direction; powerholder tends to implement project in other which cause the conflict. Also, budget expenditure are seen as per personal interest, not as per the prepared plans and programs.
- ♣ When Dhankuta used to be the regional headquarter of Eastern Development Region, the major development of Basantapur also gained its momentum. After federalism, the capital of Koshi Province shifted to Biratnagar and with the same, the momentum of development inclined downwards. The location of airport (Tumlingtar and Biratnagar) can also be considered as the reason for this decline.
- As per the situation of increasing land value and freezing land transactions, the financial tools are not applicable in our context. Large amount of vacant land are available in Basantapur. government is not able to impose vacant land tax on those lands which would behave as a control tool for vacant land. This would solve the problem of unavailability of land in the site.
- ♣ Lack of sufficient budget: only 7.5% of the total budget is allocated and spent till now, where 10 years time period is already spent among the 20 years time frame of New Town.
- ♣ There doesnot seems any prioritization of economic linkage. No rational economic activities are enhanced and encouraged by the government, where there is neither any plan for investment nor any expectation of return.

8.5. Inferences

From detailed site analysis and findings, this data is crucial for understanding the current state and challenges of the development project. Based on the same information, here are some key takeaways:

- ➤ Funding and Budget Constraints: The lack of sufficient funding and budget allocation for the New Town project appears to be a significant challenge. This shortage of funds affects various aspects of development, including infrastructure, education, healthcare, and economic opportunities.
- ➤ Coordination and Governance Issues: There seems to be a lack of coordination among different stakeholders and tiers of government. This lack of coordination has led to delays and challenges in implementing the Integrated Development Plan (IDP). Transparency and public participation in decision-making also appear to be areas in need of improvement. Above all, there should be a feeling of ownership by the local government, which directly helps in solving the problems in coordination.
- Economic Development: While there have been some positive changes in the local economy, including improvements in the market sector and tourism, there is still a need for more diverse economic opportunities to attract and retain residents. The freeze in the real estate sector is noteworthy and may require intervention to stimulate economic activities.
- ➤ Infrastructure Development: Road infrastructure has seen progress, which is beneficial for tourism. However, other infrastructure aspects, such as electricity, water supply, healthcare, and education, still need substantial improvement. The quality of infrastructure is rated as average to poor in some cases.
- ➤ Social and Cultural Dynamics: The development of Basantapur as a new town has had limited observable impacts on social and cultural dynamics so far. Understanding these dynamics can be essential for planning and community engagement in the future.
- Environmental Impact: The current development does not seem to have caused significant environmental issues, but awareness of potential environmental impacts and proactive measures should be part of future planning.
- ➤ Future Development Vision: Stakeholders envision a future with enhanced infrastructure, diversified economic activities, improved healthcare and education facilities, and the preservation of cultural heritage. These are important aspects to consider when planning for the continued development of Basantapur.

9. RECOMMENDATIONS

We got to know that half of the allocated time period has been completed for auspicious New Town project, a Transformative project (by GoN) in the country; while development progress are found to be very slow. Here are the specific recommendations for New Town as:

- 1. It's a high time to conduct a mid-term assessment of all the New Town projects running in the country and take a bold decision for all those cities on which ones to continue with the same project and which ones to stop/ plan otherwise.
- 2. Also, a plan can be made regarding New Towns for their speed implementation in 3 phases or even more. New Towns which are functioning better among these 12 cities can be accessed and development works can be carried out in three phases with sufficient budget and more implementation strategies.
- 3. Until and unless these cities cannot offer something distinct to its people, it's very tough to hold the existing population here in the city. So, government should plan to construct a larger scale industry; or this can even be in health and education sector; which will be capable of providing job opportunities to many people in their own city with all services and facilities.

Based on the findings and challenges identified, the following recommendations are proposed to guide the future development of Basantapur as a new town:

✓ **Secure Additional Funding:** Explore options to secure additional funding or resources to address the budget constraints and expedite the development process.

All the three tiers of government can be engaged in budget allocation of every programs planned in New Town. For example; central government, provincial government and local government can be assigned their contribution as 75%, 15% and 5% budget in each programs. (Note: *this value is just a number for elaborating the example*). This not only helps in managing the budget constraints, but also helps in creating ownership for all tiers of government in the New Town.

Seek partnerships with government agencies, international organizations, and private investors to support key projects. For self sustainable projects, New Town and local level can also take loan from the Town Development Fund (TDF) for their development projects.

Public private partnership model can also be adopted to pace the rate of development of Basantapur as a New Town.

- ✓ Introduce newer and attractive plans and programs: It seems very difficult to hold the existing population in Basantapur in coming years, if no one initiates for the planned development. The city exists and grows when there are people or when people are coming to reside in that place. Government should introduce newer programs and incentives to NT Basantapur to encourage more individuals to choose Basantapur as their place of residence. These measures could encompass a range of benefits designed to make residing in Basantapur an appealing prospect for both current and prospective residents as:
 - 1. <u>Low-Interest Loans</u>: One effective strategy could involve offering low-interest loans to individuals interested in purchasing or building homes in Basantapur. These loans could come with favorable terms, such as extended repayment periods and minimal interest rates, thereby reducing the financial burden on aspiring homeowners.
 - 2. <u>Housing Discounts</u>: Another incentive could involve providing housing discounts to those who decide to settle in Basantapur. These discounts could be in the form of reduced property taxes, subsidized housing costs, or even grants to support the initial down payment on a home. By lowering the overall cost of living in Basantapur, this would make the town an even more attractive destination.
 - 3. <u>Streamlined Construction Processes:</u> Simplifying and expediting the construction and permitting processes would significantly contribute to making Basantapur a more appealing place to live. By reducing bureaucratic red tape and expediting approvals, the government can make it easier for individuals to build or renovate their homes, fostering a sense of ownership and investment in the community.
- ✓ **Diversify Economic Opportunities:** Develop strategies to diversify economic activities beyond tourism and agriculture. Encourage the growth of new industries and businesses that can provide sustainable livelihoods for the local population. Address the issues causing the freeze in the real estate sector. Encourage businesses to set up operations in the new town, creating job opportunities for both newcomers and existing residents. Economic incentives for businesses can be used to attract them to the area.

Additionally, investing in infrastructure, promoting local economic opportunities, and developing cultural and recreational amenities can enhance the town's appeal. Theme for main market centers like Rhododendron theme as its main identity as the capital of Rhododendron. Organic restaurants with local organic products like millet, potato, timbur, etc. can be introduced to the market. These measures would make Basantapur a more attractive and vibrant place to live.

- ✓ Enhance Public Participation: Strengthen governance structures and practices, increase transparency in decision-making processes, and reintroduce meaningful public participation mechanisms. Ensure that residents' voices are heard and their concerns addressed in all stages of development. For a better coordination and awareness, there should be the feeling of ownership from all sectors; especially from the local government. This is only possible when the local stakeholders, mainly political leaders take a step forward and initiate for public consent rather than private interest.
- ✓ Improve Infrastructure: Till now, noticeable improvement are seen only in road infrastructures. It's a high time now to allocate resources to improve other essential public infrastructures, including electricity, water supply, healthcare, and education facilities. Prioritize projects that have a direct impact on the well-being of residents and promote economic growth.
- ✓ Long-Term Planning: Adopt a long-term perspective for the development of Basantapur. Encourage coordination and collaboration among all stakeholders, including government bodies, community organizations, and development partners, to ensure the town's continued growth and prosperity. The integration of municipal development process and Basantapur New Town planning is a must for its smooth implementation and progress of New Town.

Incorporating these recommendations into the development strategy for Basantapur will contribute to its transformation into a vibrant and sustainable new town, attracting residents and visitors while preserving its cultural heritage and natural surroundings. It is crucial to prioritize effective governance, transparent decision-making, and community engagement to ensure the success of this endeavor. So, only better implementation plans for these types of projects will only leads them to success or the massive prestigious projects like New Town will just be in documents and papers.

10. CONCLUSION

The study's primary aim was to thoroughly examine Basantapur, Koshi province, specifically focusing on New Town Basantapur and the criteria guiding its selection and growth. Basantapur emerges as a promising development candidate due to its strategic location and New Town Basantapur's designation for comprehensive growth and infrastructure enhancement. The study highlights predefined criteria such as land availability, economic potential, and accessibility that guided Basantapur's identification for development. It questions the weightage assigned to factors like population, migration and economic potentialities, crucial in shaping an area's dynamics, yet receiving lower importance in the evaluation framework. Understanding these weightage implications becomes vital for the region's balanced and sustainable development, setting the groundwork for exploring further challenges, opportunities, and outcomes in Basantapur's developmental journey.

The Integrated Development Plan (IDP) for New Town Basantapur focuses on three key lead sectors: enhancing livelihoods through tourism, agriculture, and infrastructure development. Recognizing Basantapur's potential as a tourist hotspot due to its natural beauty and cultural richness, the plan aims to invest in tourism-related infrastructure to attract visitors and bolster the local economy. Additionally, by improving agricultural practices and crop yields while emphasizing key crops, the plan aims to boost income generation. Infrastructure development, crucial for economic activities and better living conditions, is also highlighted. However, challenges like budget allocation and community participation need addressing for successful implementation, as outlined in the IDP. The plan underscores the need for strategic planning to harness Basantapur's potential and contribute to the region's economic growth

Basantapur's development journey sheds light on its evolution since becoming a New Town. Examining a gradual urbanization trends, settlement patterns, land use, and current development stages revealed crucial findings. Basantapur has experienced measured urban growth post its New Town status, showcasing increased built-up areas and population, while settlement patterns blend rural and market-centric areas. The emphasis on land use planning and ongoing development projects aligns with the municipality's goals. However, discrepancies between predefined projects and actual implementations, budget constraints, and governance issues challenge the town's envisioned progress, raising questions about effective coordination and resource utilization.

Detailed site analysis unveils essential takeaways: insufficiency in funding affects diverse development facets, while governance issues and coordination gaps hamper IDP execution. Though some economic improvements are evident, a diversified economy is needed. Infrastructure progress, especially in roads, requires attention, while broader sectors like education and healthcare need substantial enhancements. Social and cultural dynamics, environmental impacts, and a vision for future development are pivotal factors requiring consideration for Basantapur's continued growth and planning.

In brief, this study illuminates Basantapur's potential as a New Town in the Koshi province, driven by its strategic location i.e. in the nodal location of Koshi Highway and Mid-Hill Highway. While the Integrated Development Plan outlines ambitious goals for tourism, agriculture, and infrastructure, their challenges hinder full implementation. Examining Basantapur's development dynamics reveals progress, yet limitations impede achieving all objectives. To overcome all these obstacles, the presented recommendations are a must. Only the success of this prestigious New Town project is possible by incorporating the recommendations in implementation plans. Its implementation plays a crucial role in Basantapur's transformation into a sustainable and vibrant New Town, hinging on effective governance and community engagement for success.

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ANNEX I: KEY INFORMANT SURVEY' QUESTIONNAIRE

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Tribhuvwan University

Institute of Engineering

Masters in Urban Planning

Department of Architecture



RESEARCH QUESTIONNAIRE

Title of Thesis: 'Development dynamics of New Towns in midhill highway corridor:

A case of Basantapur'

Introduction: This is an academic research of Masters of Science in Urban Planning and oriented towards the study of development dynamics of New Town in Mid-Hill highway corridor. Its aim is to identify and document the findings, which shall further aid in formulation of strategies for balanced urban development in the country.

Objective of research: The overarching objective of this study is to assess the development dynamics of new-towns in Mid-Hill highway corridor: Basantapur in delivering balanced regional development in the country.

Consent from the interviewer: This survey will be conducted anonymously. All the information will be gathered and analyzed to reach a conclusion for my study of research. I will be using the information and publish it in my research thesis and paper.

Date: 2080/03/

Name of the interviewer: Ar. Alisha Gautam (078MSUrP001)

1. GENERAL INFORMATION

- ✓ Name:
- ✓ Address: Laliguras Municipality Ward:
- ✓ Contact number:
- ✓ Gender: Male Female Others
- ✓ Age group: <30yrs 31-40yrs 41-50yrs 51-60yrs >60yrs
- ✓ Occupation:
- ✓ Educational Background:

2. PERCEPTION OF BASANTAPUR AS A NEW TOWN

2.1. How did you first learn about the new town development?

- Media (TV, radio, newspapers)
- Social media (Facebook, Twitter, etc.)
- Word of mouth
- Other (please specify)

2.2. What is your perception of the new town's potential impact on the region?

- Positive
- Negative
- Neutral

2.3. How long have you been residing in Basantapur?

- Less than 1 year
- 1-5 years
- 5-10 years
- More than 10 years
- Not a resident

2.4. How would you describe the development progress of Basantapur over the past few years?

- Rapid development
- Steady progress
- Slow progress
- No noticeable development

2.5. What are the primary factors driving the development of Basantapur as a new town?

- Economic opportunities
- Government initiatives
- Infrastructure development
- Natural resources
- Other (please specify)

| 2.6. Have | you observed any change | es in the local ec | onomy due to | the development of the |
|-------------|--|--------------------|-----------------|-----------------------------|
| new | town? | | | |
| | • Yes | • No | • | Not sure |
| 2.7. In yo | our opinion, what are the k | key challenges o | r obstacles to | the development of |
| Basa | ntapur as a new town? | | | |
| • | Lack of infrastructure | | | |
| • | Limited job opportunities | | | |
| • | Environmental concerns | | | |
| • | Inadequate government su | ipport/ budget | | |
| • | Other (please specify) | | | |
| 2 9 How | would way note the averal | Il davalanment | of Dagantanuum | a compared to peoply toying |
| | would you rate the overal e Midhill Highway corrido | _ | n basamapur | compared to nearby towns |
| | Ç • | <i>9</i> 1 • | | |
| • | Significantly higher | | | |
| • | Slightly higher | | | |
| • | Similar | | | |
| • | Lower | | | |
| 3. ECO | NOMIC DEVELOPM | IENT | | |
| 3.1. Wha | t is the annual income of t | he residents in | Basantapur? | |
| • | • Before 10yrs: | | | |
| • | • Before 5yrs: | | | |
| • | • At present: | | | |
| | • Yes | • No | • | Not sure |
| 3.2. Have | you noticed an increase i | n economic acti | vities in Basaı | ntapur since its |
| estab | olishment as a new town? | | | |
| 3.3. If yes | s, please specify the types | of job opportun | ities created? | |
| Answer: | | | | |
| | | | | |

| 3.4. | In your opinion, | what are the main | economic sectors | contributing to B | asantapur's |
|------|------------------|-------------------|------------------|-------------------|-------------|
| | development? | | | | |

| | Agriculture | | |
|-----------|--------------------------------------|----------------------------------|----------------------------|
| | Tourism | | |
| | Manufacturing | | |
| | Service industry | | |
| | Transportation (yataya | t) | |
| | • Other (please specify) | | |
| | | | |
| | | ges in the living standards of t | he local population due to |
| th | e new town development? | | |
| | • Yes | • No • | Not sure |
| 3.6. If | yes, please describe the cha | | Not suit |
| Answe | · · - | | |
| 7 KHS W C | | | |
| 3.7. W | hat is the change in price of | f land due to this New-Town p | project introduced? |
| | • Before 10 yrs: | | |
| | • Before 5yrs: | | |
| | • At present: | | |
| | | | |
| 3.8. W | hat are the progress seen ir | generating economy in last 1 | 0yrs? |
| S.N. | | Before New town | After New town |
| 1 | Market centers | | |
| 1 | Warket centers | | |
| 2 | Production | | |
| | | | |
| 3 | Linkage | | |
| 4 | Schemes | | |
| 5 | Policies and regulations | | |

| 3.9. What is the status of different economic infrastructures at present? |
|--|
| • Community hall: |
| • Sports complex/ Stadium: |
| • Shopping malls: |
| • Theatres: |
| Vegetable market: |
| 4.10. What are the major production in the area? |
| • primary production: |
| • secondary production: |
| 4.11. What are the major tourism products? |
| Answer: |
| 4.12. What are the major industries in the area? Location? |
| Answer: |
| 4.13. What are the major touristic destinations in the site? |
| Answer: |
| 4.14. What are the major trend of movement of people in the city for economic activity |
| (please specify different production here) |
| Answer: |
| |
| 4.14. What are the major roads providing transportation of goods for both import and |

export?

Answer:

4.15. From where do people import goods and who are the consumers? Any export of goods and services? Production and supply?

| | | | Producer | | Consumer | |
|--------|-------|------------------|-----------|----------|-----------|----------|
| | Goods | Transport by: | Before NT | After NT | Before NT | After NT |
| Import | | | | | | |
| Import | | | | | | |
| Evnort | | | | | | |
| Export | | | | | | |

4. INFRASTRUCTURE DEVELOPMENT

| 4.1. | How would you rate the current state of infrastructure in Basantapur (| e.g., | roads, |
|------|--|-------|--------|
| | electricity, water supply, healthcare, education)? | | |

| • | Excellent |
|---|-----------|
| • | Excellent |
| | |

- Good
- Average
- Poor

| 4.2. | Have there been any notable infrastructure improvements in Basantapur since its |
|------|---|
| | establishment as a new town? |

| • | Yes | • | No | • | Not sure |
|---|-----|---|----|---|----------|
| | | | | | |

4.3. If yes, please describe the infrastructure improvements you have observed:

Answer:

4.4. Rate the quality of the various infrastructure in Basantapur:

| S.N | Infrastructure | Excellent | Good | Averag | Poor | Not sure |
|-----|------------------|-----------|------|--------|------|----------|
| | | | | e | | |
| 1 | Road | | | | | |
| 2 | Electricity | | | | | |
| 3 | Water supply | | | | | |
| 4 | Health care | | | | | |
| 5 | Education | | | | | |
| 6 | Public transport | | | | | |
| 7 | Communication | | | | | |

4.5. Rate the impact of various infrastructure on daily life:

| S.N. | Infrastructure | Convenient | No | Limited and | Not |
|------|------------------|--------------|-------------|--------------|------------|
| | | and reliable | significant | inconvenient | applicable |
| | | | impact | | |
| 1 | Road | | | | |
| 2 | Electricity | | | | |
| 3 | Water supply | | | | |
| 4 | Health care | | | | |
| 5 | Education | | | | |
| 6 | Public transport | | | | |
| 7 | Communication | | | | |

4.6. Suggestions for Infrastructure Improvement:

- Road infrastructure -
- Electricity infrastructure -
- Water supply infrastructure -
- Healthcare infrastructure -
- Educational infrastructure -
- Public transportation infrastructure -
- Communication infrastructure -
- Other (please specify)

4A. PHYSICAL INFRASTRUCTURE DEVELOPMENT:

4.7. What is the age of the building?

- <5yrs
- 5-10yrs
- 10-50yrs
- >50yrs

4.8. What is the building material used and structure of construction?

- a. Building material:
- b. Building construction:

4.9. What are the total number of buildings in different time frame?

- Before 10yrs:
- Before 5yrs:
- At present:

5.10. What are the total number of floors of buildings in different time frame?

- Before 10yrs:
- Before 5yrs:
- At present:

5.11. What is the status of different physical infrastructures at present?

a. Nos. of School

| | Before 10yrs: |
|--------|--|
| | • Before 5yrs: |
| | • At present: |
| b. | List of schools: |
| | o Primary: |
| | o Secondary: |
| | o Graduate/ Post-graduate: |
| | o Technical institution: |
| c. | Nos. of Health post/ hospital |
| | • Before 10yrs: |
| | • Before 5yrs: |
| | • At present: |
| d. | List of hospitals: |
| | What is the status regarding accessibility of the roads in the city? (please specify east-rest and north-south connection; and different connecting cities nearby) |
| | answer: |
| | Cast: |
| E | åst. |
| V | |
| N | Vest: |
| | Vest: North: |
| S | |
| | Jorth: |
| R | Jorth: outh: |
| 5.13.V | Jorth: outh: degional context: |

| 5.14. What is the nearby airport | and the time of travel | ? | |
|-------------------------------------|-------------------------|--------------------------------|-------|
| Answer: | | | |
| 5.15. What are the major trend of | of movement of people | in the city? | |
| Answer: | | | |
| 5. SOCIAL ANALYSIS | | | |
| 5.1. What types of residents are | found in Basantapur? | • | |
| • Caste: | | | |
| • Religion: | | | |
| • Culture: | | | |
| 5.2. Have you observed any char | nges in social and cult | ural dynamics in Basantapur du | ie to |
| its development as a new to | wn? | | |
| • Yes | • No | Not sure | |
| 5.3. If yes, please describe the ch | anges you have observ | ved in terms of: | |
| Origin of migration: | | | |
| Cause of migration: | | | |
| Social structure (caste, reli | gion): | | |
| Cultural identity: | | | |
| 5.4. What are the causes of: | | | |
| In-migration: | | | |
| Out-migration: | | | |
| 5.5. What is the status of differen | nt social infrastructur | res at present? | |
| • Parks: | | | |
| • Religious areas: | | | |
| • Others: | | | |

| 5.6. Please specify: |
|--|
| ✓ Cooperative society: |
| ✓ Farmers' group: |
| ✓ Forest users' committee: |
| ✓ Youth clubs: |
| ✓ Aama samuha: |
| ✓ Users committee: |
| ✓ Others: |
| 6. ENVIRONMENTAL IMPACT |
| 6.1. Are you concerned about the potential environmental impact of the new town's |
| development? |
| Yes No Not sure |
| 6.2. What are the major environmental issues you believe the new town's development |
| should address? |
| Deforestation |
| Water pollution |
| Air pollution |
| Waste management |
| • Other (please specify) |
| 6.3. Please specify the change in amount of: |
| Rainfall |
| Water sprouts |
| • Wind/ storm |
| 6.4. Have you experienced any of the huge flood, landslides, fire, earthquake or major |
| natural hazards in Basantapur? |
| Answer: |
| 6.5. Have you experienced any environmental impacts due to the newer construction? |

Answer:

7. INSTITUTION AND GOVERNANCE

| 7.1. Are | there specific institution | ons or governing bodies in | Basantapur that you believe are |
|-----------|----------------------------|-------------------------------|--------------------------------------|
| par | ticularly effective in pro | omoting the town's develo | opment? |
| | • Yes | • No | Not sure |
| 7.2. If y | es, please specify the ins | stitutions or governing bo | dies and explain why you consider |
| ther | n effective: | | |
| Ansv | ver: | | |
| 7.3. Hov | w would you rate the tra | ansparency of decision-ma | aking processes within the local |
| inst | itutions in Basantapur? | ? | |
| • | Highly transparent | | |
| • | Moderately transparer | nt | |
| • | Lacking transparency | | |
| • | Not sure | | |
| 7.4. Are | there opportunities for | · public participation and | engagement in decision-making |
| pro | cesses within the local i | nstitutions of Basantapur | ? |
| • | Yes, regular opportun | ities are provided | |
| • | Yes, but limited oppo | rtunities are available | |
| • | No, there are no oppo | rtunities for public particip | ation |
| • | Not sure | | |
| 7.5. Hav | ve you personally partic | cipated or engaged in any | activities or discussions related to |
| the | governance and develo | pment of Basantapur? | |
| | • Yes | • No | Not sure |
| 7.6. If y | es, please describe your | participation or engagen | nent activities and share your |
| exp | erience: | | |
| Ansv | ver: | | |

- 7.7. In your opinion, what are the main challenges or obstacles facing the institutions and governance of Basantapur as a new town?
 - Lack of transparency
 - Limited resources and funding
 - Corruption
 - Lack of citizen awareness and engagement
 - Other (please specify)
- 7.8. What specific improvements or changes would you recommend to enhance the effectiveness and transparency of the institutions and governance in Basantapur?

Answer:

8. FUTURE DEVELOPMENT

- 8.1. What do you envision for the future development of Basantapur as a new town?
 - Enhanced infrastructure
 - Diversification of economic activities
 - Improved healthcare and education facilities
 - Preservation of cultural heritage
 - Other (please specify)
- 8.2. Do you think the government should play a more active role in the new town's development?
 - YesNoNot sure
- 8.3. If yes, what specific steps should the government take to support the new town's development?

Answer:

Thank you for taking the time to participate in this questionnaire! Your insights will be invaluable for our research on the development dynamics of Basantapur, a new town in the Midhill Highway corridor of Nepal, specifically in the Koshi Province.

ANNEX II:

CONFERENCE PAPER: IOE GRADUATE CONFERENCE



त्रिभुवन विश्वविद्यालय Tribhuvan University इन्जिनियरिङ अध्ययन संस्थान Institute of Engineering

डीनको कार्यालय OFFICE OF THE DEAN

GPO box- 1915, Pulchowk, Lalitpur Tel: 977-5-521531, Fax: 977-5-525830 dean@ioe.edu.np, www.ioe.edu.np गोश्वारा पो व. न- १९१४, पुल्नोक, ललितपुर फोन- ४४२९४३१, फ्याक्स- ४४२४८३०

Date: November 26, 2023

To Whom It May Concern:

This is to certify that the paper titled "Development Dynamics of New Towns in Mid Hill Highway Corridor: A Case of Basantapur" (Submission# 738) submitted by Alisha Gautam as the first author has been accepted after the peer-review process for presentation in the 14th IOE Graduate Conference being held during Nov 29 to Dec 1, 2023. Kindly note that the publication of the conference proceedings is still underway and hence inclusion of the accepted manuscript in the conference proceedings is contingent upon the author's presence for presentation during the conference and timely response to further edits during the publication process.

Marked.

Bhim Kumar Dahal, PhD Convener, 14th IOE Graduate Conference



DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE OF BASANTAPUR

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Abstract

The Nepal adopted the federal system of government as directed by the Constitution of Nepal 2015 as federal, provincial and local level of government. The urban growth trend of the cities in nodal location with Mahendra highway and north-south corridor are very intense. All of these cities are now recognized as metropolitan (Bharatpur) and sub-metropolitan city (Itahari, Hetauda, Kohalpur (Nepalgunj) and Attariya (Dhangadi)). The allocation of these 10 new cities in mid-hill highway may show the same character in near future and can grow as an important urban centers in the hilly region. The development dynamics in Basantapur from different time frame till now will persue a detail knowledge about how these cities will behave in the nearer future. Various study like the selection criteria, development model and pattern adopted in the case and political committement has played an important role in this justification. As discussed, the proposed new towns in hilly areas plays an important role in serving the balanced regional development in the country if they were allocated scientifically. Or if they were just allocated as per the political pressure and popularity, huge amount of national budget, human resource and plans would go waste. Here, only around 3% of the total estimated budget is seen in expenditure in this prestigious project and a very few development works are seen carried out till present. This research tends to find out the gap in reality between the planning and actions in the field such as political committement, coordination between stakeholders and a sense of responsibility too.

Keywords

Basantapur, Development, New Town, Urban, Settlement

1. Introduction

A region is spatial concept with an uninterrupted area with some kind of homogeneity/ similarity in its core, with or without a clear limit. And, Regional planning is "concerned with the ordering of human activities in supra-urban space - that is, in any area which is larger than a single city." [1]. Also, "Under the multi-level planning system for development, regional planning is defined as the ordering of human activities in supra-urban space in relation to other spatial units of the national territory with a view to attain social and economic integration in space and facilitate national development [2].

1.1 Regional Planning in Nepal

For the first time in the country, Harka Gurung made an effort in developing a spatial strategy for development in Nepal. He carried out an intensive exercise for developing a regional development strategy which he formulated for the Fourth Plan of the country. It was really the first formal exercise for regional planning in Nepal. The regional development strategy developed by Gurung for the Fourth Plan tried to establish three pioneering concepts in national development efforts as the need of inception of spatial dimension in sectoral planning, Regional strategy for development, and Development of backward areas [3].

This regional development strategy envisaged a series of north-south axes or development corridors linking diverse regions in both east-west and north-south directions. In 2007, the Government of Nepal enacted and has been implementing National Urban Policy for balanced urban development in Nepal

[4]. In this context 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 and attract the population in the hilly cities, the Government of Nepal has started to develop 10 new towns in Mid-Hill Highway corridor of Nepal since 2068 B.S. It was one of the turning points of the government to develop planned cities in Hilly areas of Nepal.

1.2 New towns in the mid-hill highway corridor

The Mid-hill Highway, also called Pushpalal connects 24 hilly districts directly affecting about 7 million people from Chiyo Bhanjyang of Panchathar District in the East to Jhulaghat of Baitadi District in the Far-west [5]. It is envisaged to provide easy access to many of the less accessible and often stagnant communities in the Mid-hill area of Nepal. Marked by low income and increasing out-migration of unemployed youth as well as poor access to public services, these hilly communities are expected to benefit from the easier access to markets in Terai and other higher level market centres of the Region. The government brought this ambitious project of developing cities to reduce growing human pressure in the big cities including the Capital City, Kathmandu [5]. It is believed that with the completion of the project, migrations to the new cities would grow and population would be hold in these towns by providing services and creating marketing opportunities there. Newly developed towns would create ample of opportunities within the new town and thereby it reduces out migration. It was one of the main strategies of balance urban development in the Hilly Region as per objectives stated in the National Urban Policy. The Government of Nepal has started to develop 10 new towns in Mid-Hill Highway corridor of Nepal since 2068 B.S. to develop planned cities in hilly areas of Nepal with an objective of:

- 1. reducing migration to Kathmandu and other larger cities,
- 2. encouraging planned development of potential hill cities and
- 3. building infrastructure that can facilitate and attract the population in the hilly cities.

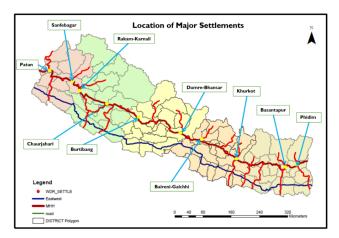


Figure 1: Distribution of 10 New Towns along the Midhill Highway

At present, the government has been investing in its infrastructure projects specially road improvement, land development, drainage construction, construction of sanitary land fill site, water supply and construction of other urban infrastructure projects in the new towns. However, as being hilly towns and increasing tendency of pre-occupancy of land by the elites, land availability for construction of public infrastructures has been one of the growing challenges in most of the these towns. Therefore, new town project office is increasingly facing challenges to acquire land for construction of urban infrastructures in these towns. In addition to this, due to the lack of political commitments, cooperation and low capacity of implementing agencies, implementation of plans have been quite challengeable. Allocated budget expenditure pattern in most of the towns seems very low.

1.3 Case Area

For this study, the case of Basantapur, Koshi province is taken. It is a beautiful city located in the Therathum district of Koshi Province, Nepal. It lies in the nodal location of mid-hill highway and north-south highway (koshi highway). It is mainly served by Biratnagar following Itahari, the nodal city in the south (along the intersection of mahendra and koshi highway). The total area of the Laligurans is 90.27 sq. Km. According to population census 2011, the number of household is recorded as 3677 and total population is 16936 where male population is 45.63 Basantapur lies between latitudes 27° 4' 33" and 27°10' 59 North and longitudes 87° 23' 44" and 87° 30' 59" East. It is located at 587m (Tributary of Limbu Khola and Ping Khola also Known as Limbu Dhoban) to 3034 metre (Tinjure View Tower) altitude from mean sea level. The municipality is surrounded by Murtidhunga and Marek Khatera VDC of Dhankuta District and



Figure 2: Location of Basantapur in the map of Koshi province

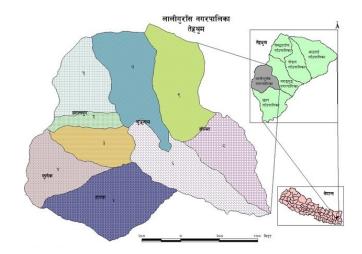


Figure 3: Map of Laligurans municipality with division of wards

Tamafok VDC of Sankhuwasava in the West and Maglung Municipality in the East, Likewise Tamafok VDC of Sankhuwasava in the North and Angdim, Sudap and Okhre VDC in the south [6].

2. Objectives

2.1 Main Objective

To assess the development dynamics of new-towns in mid-hill highway corridor: Basantapur in delivering balanced regional development in the country.

2.2 Specific objectives

- 1. To analyze the selection criteria of new towns in midhill highway corridor city: Basantapur (its connectivity, production and regional and sub-regional role).
- 2. To explore the dynamism of city development in different time frame and the development model adopted.
- 3. To access the current stage of development of Basantapur as a New-town and find out gap between planning and reality in the field.

3. Literature Review

3.1 Development Dynamics

Development dynamics refers to the patterns, processes, and factors that influence the overall progress, changes, and transformations within a particular area or context. encompasses various aspects such as social, economic, political, environmental, and cultural dynamics that shape the development trajectory of a region. On the other hand, urban development dynamics specifically focus on the patterns, processes, and factors that shape the growth, transformation, and management of urban areas. Urban development dynamics take into account the unique characteristics and challenges of urban environments, including aspects such as population growth, land planning, infrastructure development, transportation, environmental sustainability, social dynamics, and economic activities. They can be assessed through various indicators that measure progress, changes, and transformations as economic development, infrastructure development, social development, environmental development and Institutional and governance factors. These indicators help policymakers, researchers, and stakeholders assess the progress and effectiveness of development efforts, as well as identify areas that require attention or improvement in both general development and urban development contexts.

3.2 Regional planning theories

Under the multilevel planning system for development, regional planning is defined as the ordering of human activities in supra urban space in relation to other spatial units of national territory with a view to attain social and economic integration in space and facilitate national development. The main aim of regional planning may be said as to explore the development potential alternatives of the regions, which are usually bypassed under the sectoral plan, and to give focus to promote development process of depressed region for attaining balanced development [7].

3.2.1 Growth pole and axis

The French economist Perroux outlined in the 1950s that economic development, or growth, is not uniform over an entire region but takes place around a specific pole (or cluster). This pole is often characterized by core industries around which linked industries develop, mainly through direct and indirect effects [8].

3.2.2 Gateway model

Gateway model is a framework for explaining the evolution of market centers and their hinterland areas. It refers to centers locating at a strategic entrance to (and exit out of) an extended hinterland region. Locationally, GCs tend to develop at break-of-bulk points or nodes of transport lines in response to long distance trade or the setting of sparsely populated frontier areas. This theory fits well into Nepal's context in Koshi Province stating Biratnagar as primary GCs, Dharan as secondary GCs and Dhankuta as tertiary GCs [9].

3.2.3 Central Place Theory

Central place theory is concerned with the size, number, functional characteristics, and spacing of settlements, which are nodal points for the distribution of goods and services to surrounding market areas. Central place theories are put forward to understand service location in a network of market towns and cities [10].

3.3 Regional planning: Documents reviewed

3.3.1 NUDS

For the urban system sector, the national objective is to strengthen the national and sub-national urban system. Strategies include – strengthening urban-rural linkages; upgrading inter and intra-provincial/regional road connectivity standards; facilitating higher level functions in major provincial/regional urban centres; improving connectivity infrastructure in key Tarai urban centres; facilitating small towns in realizing their comparative advantages; creating infrastructure for "smart" cities in priority locations; promoting environment, heritage and tourism friendly economic functions in the Kathmandu valley; and integrating future provincial capitals in the national and sub-national (provincial and regional) urban system [5].

"Vision 2030: Balanced and Prosperous National Urban System" is a singular—consolidated milestone for the urban development sector.

Table 1: Major economic centers: Locational advantages, economic base and regional potential

| Economic center/ region | Locational advantage | Economic base | Regional potential |
|-------------------------|--|-----------------------------------|--|
| Biratnagar | Traditional industrial region, nearness to the railhead in the Indian border; agriculturally productive hinterland, air connection to Kathmandu and eastern hills | Trade/ services and manufacturing | Industrial and trading center, bulk manufacturing, high value crops (tea, herbs, etc) |

3.3.2 HABITAT III

Some of the key supporting activities in managing urbanization as states in Habitat III report include Implementation of "Secondary Cities" development programs/ projects such as the Urban Environment Improvement Project (UEIP), Secondary Towns Urban Environment Improvement Project (STUEIP), Integrated Urban Development Project (IUDP), and Urban Governance and Development Program (UGDP), and New Town Projects in order to de-concentrate economic activities outside Kathmandu Valley [5]. For the major challenges experienced and lessons learnt in Managing rapid urbanization, the plan of action as stated in HABITAT III report for new towns are:

- 1. Speed up the establishment of New Towns through priority investment and by resolving issues related to land within a time frame of ¿5 years
- 2. Promote PPP and private sector investment in overall urban development sector (including social housing,

infrastructure development, new towns development) within a time frame of ¡2 years.

3.4 Regional Development Strategy: National Planning Commission

Economic Regions and Sub-Regions: Due to variations, most divide into sub-regions which generally conform to the ecological zones, mountains, hills and Terai. Among the 8 economic regions, this area falls under Biratnagar region. Biratnagar region – includes areas to the east of Sankhuwasabha, Bhojpur, parts of Khotang, Udayapur and Saptari. The core economic area comprises the economic centres of Biratnagar-Dharan including Itahari and Inaruwa. The eastwest highway and the Biratnagar-Dharan and Dharan-Dhankuta highways are the major transport spines of this region at present [4].

Table 2: Major economic centers: Locational advantages, economic base and regional potential

| Economic centers | Region 8: Biratnagar | | |
|-------------------------------|----------------------|--|--|
| Major economic centers | Biratnagar, | | |
| | Kakarbhitta | | |
| Cross-road towns and corridor | Dharan, Itahari, | | |
| of economic core areas | Birtamod, Lahan | | |
| including foothill towns, and | | | |
| towns of the inner Terai | | | |
| Hill towns with road links | Illam, Terhathum, | | |
| | Phidim | | |
| Hill/mountain market towns | Khandbari | | |
| without road links | | | |

4. RESEARCH DESIGN AND METHODOLOGY

This research belongs to the pragmatist's paradigm. This research on studying the development dynamics of new towns in mid-hill corridors is mostly qualitative in nature involving the reviews of documents and interviews with key informant interviews, but also integrates quantitative data derived from collecting, analyzing, and integrating the findings of those surveys. This research will be approached through both qualitative and quantitative methodological approach. The methodologies namely literature review, case study and consultations with various stakeholders will be carried out in this study of research. For this particular research, the review of literature begins with the observation that are specific and proceeds to a generalized conclusion. Likewise, a case study will be conducted being based on the generalized conclusions and facts and those findings needs to be consulted with the experts in personal interviews and consultations. Here, the core ideas and findings are required to reach the conclusion which suggests that the abductive logic will be used in the analysis and findings sessions. For the different methodologies mentioned, the following methods of information designated in the table below will be used:

Table 3: Major economic centers: Locational advantages, economic base and regional potential

| Methodo- logies | Methods/ Source | e of information | | | |
|--------------------|-------------------------------|------------------|--|--|--|
| Literature | Secondary da | ta from the | | | |
| review | websites and | d documents, | | | |
| | journals and articles. | | | | |
| Case study | Primary data f | rom case study, | | | |
| | KIIs and GDs, | secondary data | | | |
| | from the published literature | | | | |
| Consultation | Consultative | meetings, | | | |
| sessions | brainstorming | (KIIs, GDs) | | | |
| | sessions with the experts | | | | |

5. FINDINGS AND ANALYSIS

5.1 The selection criteria of New Town Basantapur

To have a balanced development, Government of Nepal planned for the towns having 100 thousand people having complete infrastructures. These are the towns that attract population from Terai and check migration to Terai. For the same, ten towns are selected from a list of 21 potential urban settlements all over the country [11].

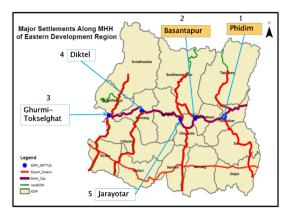


Figure 4: Major settlements along the Mid Hill Highway of Province-1

These new towns are based on nine different qualifying criterias as population, migration, agricultural and non-agricultural activities, literacy rate, electricity, regional location and so on. Based on the same, the location of 21 major settlements along the midhill highway are studied and the New Cities are selected based on their location in all development regions of that time: two cities in each development region. The regional and district headquarters are not allocated as New Town as they will behave as a growing city because of already available infrastructures in the area.

In case of province-1 (the then Eastern Development Region), five cities are Phidim, Basantapurr, Ghurmi-Tokselghat, Diktel and Jarayotar selected and studied where the feasibility study is done in the area. Among these, Phidim and Basantapur are selected for futher development as a New Town in Province-1. This study of research will be based on the Basanatapur New Town [11].

The scoring of Basantapur was done based on the predefined qualifying criteria and the weightage score was calculated. Among these five cities, Basantapur was scored 84 after 85.75 for Phidim. The other cities were scored 80.75, 76 and 64.50 for Ghurmi-Tokselghat, Diktel and Jarayotar consecutively. The entire process of scoring appears to be rooted in scientific principles and logical reasoning, leaving little room for doubt or ambiguity in its execution. However, it is during the allocation of weightages that a noteworthy observation emerges. The most substantial weightage, accounting for 27%, is assigned to the factor of land, closely trailed by water resources at 24%, and economic potentialities at 20%. Interestingly, the weightage attributed to population stands at a mere 5%, a seemingly modest acknowledgment of its pivotal significance.

The same trend carries over to migration, a factor with potentially far-reaching consequences. In the context of New Towns situated in mid-hill areas, a recurring trend of declining population becomes evident. Simultaneously, the rate of migration continues to surge, posing potential long-term challenges. This prompts a contemplation of the significance attributed to migration within the weightage framework, and whether its current evaluation adequately captures its enduring impact, particularly given the ongoing dynamics of population shifts in these regions.

5.2 IDP: The development model adopted in Basantapur

Integrated Development Plan (IDP) of new towns is crucial for urban management and infrastructure development. IDP is the guiding document for sectoral development to develop sustainable and liveable city in the future. This IDP focuses primarily Basantapur New town but also covers entire Laligurans municipality area for its strategic projects. Participatory consultation meetings were the basis for contextualizing its existing situation whereas base maps and stakeholder's consultation meetings were the basis for proposing the infrastructure projects [12].

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. 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.

5.2.1 Lead Sectors of NT

For the better and sustainable development of any town, its lead sectors should be identified. Lead development sectors shows the development direction. As stated in IDP, following sectors has been identified for potential lead sectors after regular interaction among the local stakeholders and formal and informal consultations in the municipality,. These sectors are the guiding sectors of development of Basantapur NT. The lead sectors of the Basantapur NT are Tourism, Agriculture and Market and Service

Centre.

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 28 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 Tinjure, 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. Basantapur can serve as a gateway to all other nearby hilly towns and settlements due to its strategic location at the nodal intersection of Koshi highway and Mid-hill highway.

5.2.2 Integrated LFA Analysis for Long-term Plan

Logical Framework Analysis is an analytical process and set of tools used to support objectives-oriented project planning, management and implementation of developmental projects. Its main objective is to present major indicators, baseline and desired direction of planning for New Town. To achieve the goal of improving livelihood of the people of Basantapur NT through development of tourism, agriculture and infrastructure, certain assumptions like Sufficient allocation of development budget, Planned development, Coordination of Municipality, TDC and NTPO and Creation of investment guarantee to private sector are made for the future [12].

5.3 Development dynamics of Basantapur

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

The presented graph indicates a subtle upward trajectory in recent years. This suggests a measured and gradual pace of urbanization unfolding within the municipality. This spatial transformation aligns with the data trends, reinforcing the notion of a deliberate urbanization process. Adding further nuance, a recent surge in building construction activity has come to the forefront within the municipality. This surge serves as an additional layer of evidence substantiating the municipality's evolving urban landscape and growth dynamics.

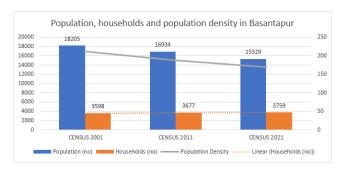


Figure 5: Population, households and population density in Basantapur

Table 4: Indicators of urbanization trend in different time frame

| S. | Indicators | YEAR | | | | |
|----|---|---------------------|----------------|-----------------------|--|--|
| N | | CENSUS 2001 | CENSUS 2011 | CENSUS 2021 | | |
| 1 | Buit-up Area (Sq km) | 2.1 | 90.27 | 90.27 | | |
| 2 | Population (no) | 18205 | 16934 | 15329 | | |
| 3 | Households (no) | 3598 | 3677 | 3759 | | |
| 4 | Population Density | 212 | 187.59 | 169.81 | | |
| 5 | Economically Active Population (percentage) | 56.5 | | 71.5 | | |
| 6 | Major Industries (no) | 2 | | 3 | | |
| 7 | Blacktopped Road (km) | 25.6 | | - | | |
| 8 | Concrete Road (km) | - | | 4.28 | | |
| 9 | Drinking Water Supply (hh coverage percentage) | 73% | 81.73% | 96.35% | | |
| 10 | Uses of Fuel for Cooking (LP Gas user percentage) | 10.1% | 4.53% | 18.25% | | |
| 11 | Cable Television, Computer and Internet User Househlds (no) | 120, 44 and none | 314, 80, 42 | 2147, 301, 1464 | | |
| 12 | Non agricultural Occupation | 0.29% | | 0.1% | | |
| 13 | Types of Concrete Houses (no) | - | 57 | 217 | | |

5.3.1 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. Basantapur has linear type of settlement along market area such as Basantapur, Tute 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. 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. This provides a good forward and backward linkages in the settlement system within the municipality area. The urban growth pattern of four market areas is depicted in the images of different time frame in the interval of 5 years as below, where urbanization is seen at a very slow pace. The amalgamation of these insights paints a comprehensive picture of the current state of Laligurans municipality in terms of its settlement patterns. Within its boundaries, there exist pocket areas characterized by cluster

settlements, particularly prominent around major market centers. This clustering follows a linear arrangement, indicative of a deliberate organization and spatial layout.



Figure 6: Linear Settlement, Basantapur Bazar in different time frame

In contrast, a significant portion of the municipality portrays a different facet of settlement distribution. These areas are marked by scattered settlements, evoking a rural essence. This mosaic of settlement patterns underscores the intricate blend of urban and rural dynamics within Laligurans municipality, where pockets of vibrant clustering coexist alongside expanses that retain a more traditional and scattered arrangement, capturing the multifaceted nature of its landscape.

5.3.2 Landuse: existing and proposed

The existing landuse map was prepared in 2015 by DUDBC (Department of Urban Development and Building Construction), MOUD (Ministry of Urban Development) on the basis of which Integrated Development Plan of NT Basantapur was planned and prepared. The landuse data at 2021 is published by the Department of forest research and survey where total forest area of Laligurans municipality is stated to be 48.4sq.km, covering 53% of the total land area. The area of different landuse types are calculated in sq.km. and presented in the table as below.

Table 5: Indicators of urbanization trend in different time frame

| | Existing | (2015) | Proposed | | |
|------------------------------------|-----------------|--------|-----------------|-------|--|
| Land Use Type | Area (Sq Km) | % | Area (Sq Km) | % | |
| Agricultural Land | 24.4 | 27.1 | 17.40 | 19.29 | |
| Built-up Area | 4.6 | 5.1 | 17.20 | 19.07 | |
| Barren Land | 10.4 | 11.5 | 4.60 | 5.10 | |
| Forest Cover | 44.7 | 49.5 | 42.30 | 46.90 | |
| Other (Road, Water body, Cliff etc | 6.1 | 6.8 | 8.70 | 9.64 | |
| Total | 90.2 | 100% | 93.3 | 100% | |

This data is presented in the chart where the agricultural land, barren land and forest cover are decreased for various development projects whereas built-up area and other areas like roads and other infrastructures are proposed to be increased. This is a must for the physical development of any area.

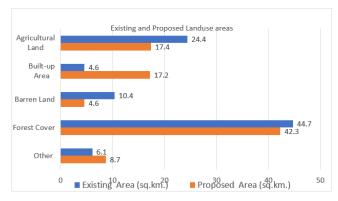


Figure 7: A bar chart showing existing and proposed landuse datas

5.4 The current stage of development of Basantapur as a New-town

After Basantapur has been chosen for New Town, some development works can be seen in the area. But as per the Integrated development plan, works cannot increase its pace rapidly due to many reasons. These are the gaps in this study of research, which will help to draw conclusions and recommendations in further.

5.4.1 Budget expenditure till now

The total budget of New Town Basantapur is around 32 billion. Till now, only 839.97 million of the total budget is spent under different heads; which is only % of the total budget. Only around 3% of the total budget is released till now. The line graph below shows the allocated budget and expenditure from fiscal year 2070/71 till now at present. This shows that the highest amount of budget expenditure was in the fiscal year 2075/76.

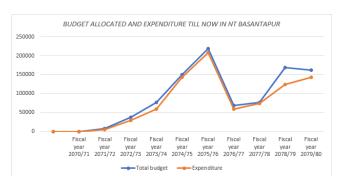


Figure 8: Budget allocated and expenditure till now in NT Basantapur

The enclosed table provides a comprehensive overview of the total budget allocation and corresponding expenditures across fiscal years since the inception of the Basantapur project. Examining this data reveals a noteworthy trend in the financial management of the project. During the project's initial phase in fiscal year 2070/71, a modest 54.12% of the allocated budget was expended by the New Town authorities. Subsequently, a discernible pattern emerges, showcasing a gradual and consistent upsurge in the rate of expenditure in successive fiscal years, culminating in its peak during 2075/76. This upward trajectory signifies a commendable improvement in financial execution. However, a critical aspect comes to light upon closer scrutiny. The allocated budget for each fiscal year is

conspicuously inadequate, exhibiting an exceptionally low level. This inherent financial constraint casts a shadow on the project's ambitious objectives. As we stand at the midpoint of the project's stipulated timeline, it becomes apparent that the project's financial aspect mirrors the same shortfall. This situation raises pertinent concerns about the feasibility of the government's ambitious goal to complete this prestigious undertaking by the targeted year of 2090. The symbiotic relationship between budget allocation and expenditure presents a complex challenge. While the expenditure rate showcases an encouraging trajectory, the dearth of adequate annual budget allocation presents a formidable obstacle, jeopardizing the project's ability to achieve its envisioned completion by the predetermined date.

5.4.2 Development works till now

Analysing the development works completed till now by New Town Basantapur, there are some works accomplished in physical development sector. As per the data by New Town Office, Basantapur; the major physical development works accomplished are presented below:

Table 6: Major development works accomplished till now

| S.N. | Development works | Unit | Target by IDP | Completed in 2079/80 | Completed till now |
|------|---|------|------------------|----------------------|--------------------|
| 1 | New tracks/ upgrading/ gravelled roads | Km | - | 6.4 | 51.7 |
| 2 | Black topped roads | Km | 80 | 0 | 0 |
| 3 | Concrete roads | Km | 50 | 0.56 | 4.28 |
| 4 | Sewerage line and canals | Km | 60 | 2.89 | 32.54 |
| 5 | Government building | Nos. | - | 2 | 10 |
| 6 | Solar lighting | Nos. | - | - | 44 |
| 7 | Vegetable/ fruit market | Nos. | - | - | 1 |
| 8 | Buspark | Nos. | 2 | 1 | 2 |
| 9 | Playground | Nos. | 1 | 0 | 1 |
| 10 | Parks | Nos. | - | - | 6 |
| 11 | Water supply | Nos. | - | 1 | 2 |
| 12 | Land development program (127.3 ropani) | Nos. | 1 | 0 | 0 |
| 13 | Landfill site | Nos. | 1 | 0 | 0 |
| 14 | Land acquisition | Nos. | | 0 | 0 |

Major development works are seen in road, a physical development sector. Total of 92km roads construction (soling-22km, new cutting- 12km, upgrading- 51km, track- 7km) is completed by the municipality and New Town in Basantapur.

5.5 Site analysis and findings

The key informant interviews were taken with the various stakeholders of the community as ward chairperson, journalist, local businessman, teacher, residents, political party representatives, community group and advocacy organizations. Also, a group discussion was conducted in the municipality. So, basically two methods of information collection are conducted in the site as Group discussion (GD) and Key Informant Interview (KII).

A Key Informant Interview was done with various stakeholders of the municipality, that are actively taking part in developing Basantapur as a New Town in one or other way. Various stakeholders are analysed and interviews were taken with 10 of them including all sectors of the community.

The local people had positive perception towards New Town though development is not in rapid pace at Basantapur. All of them prioritize tourism as a major occupation for the development of their city followed by agriculture. No identifiable changes is seen in the local economy due to this prestigious project. From the questionnaire survey, coordination problem and personal interest of powerholders are the problems in successful implementation of the project. Also, insufficient budget is also the major problem of success of New town.

Many suggestions are given by the Key Informants for the improvement of Infrastructures in new Town, Basantapur. They envision to construct road infrastructure to connect tourism with agriculture so that local products gets branding among the tourists. Provision of street lighting and alternative energy sources are also expected from the community. A large scale water supply project was cancelled by the concerned authority, due to which there will be scarcity of water in the coming future. So, appropriate water supply project should be introduced in time. Only primary schools and very few secondary school and campus are present in Basantapur. As one of the main reason for out-migration is education, more colleges for higher and technical education should be constructed in the site. They say, no any works are done in the communication infrastructure sector. Landpooling works are being delayed by the local government and New Town. As per the informants, there is huge negligence of officials in implementation phase (timely implementation), which hamper the overall pace of development of New Town. This may be due to lack of political assurance and coordination among the various stakeholders in the society.

6. Conclusion

As stated in IDP, planning is a participatory process. If there is no public participation, there becomes very hard for implementation of the plans. As per the assumptions of LFA, Sufficient allocation of development budget and Coordination of Municipality, TDC, NTPO and other stakeholders are the gaps in implementation of New Town Basantapur.

All the scoring process while selection of New Towns in Mid-Hill highway corridor seems scientific and justifiable, so there doesnot seem any gap in the scoring process. But during weightage assignation, the weightage given to land is highest i.e. 27% followed by water resource- 24% and economic potentialities as 20%. The weightage for population is only given 5% which is very low for such an important indicator. The same is with the case with migration, which has an adverse impact in the very long run as the population of these New Towns are in decreasing rate in almost all mid-hill cities and the rate of migration is also increasing day by day.

From the list of development works completed by New Town Basantapur, many such works are seen to be done that are not stated by the Integrated Development Plan. So, there is gap in implementation between the predefined projects and projects done too. Here comes either the personal interest of some power holders or something else.

As many large scale projects are found cancelled by the power holders at present; there arise a question whether the powerholders themselves are aware of IDP or not. And are they really interested in making Basantapur a planned New Town or just spend its budget as per their wish? Or a huge political clash is born somewhere in between.

As per the demographic data, there is a huge question about population projection in coming years. It may not be justifiable to the demographic data to say population is growing in near future in Basantapur.

For a better coordination and awareness, there should be the feeling of ownership from all sectors. This is only possible when the local stakeholders, mainly political leaders take a step forward and initiate for public consent rather than private interest. It seems very difficult to hold the existing population in Basantapur in coming years, if no one initiates for the planned development. The city exists and grows when there are people or when people are coming to reside in that place. So, either make better implementation plans or the massive prestigious projects like New Town will just be in documents and papers.

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ANNEX III: PLAGARISM CHECK REPORT

ANNEX III: PLAGARISM CHECK REPORT

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| ORIGINALITY REPORT | |
|-----------------------------------|------------------------------|
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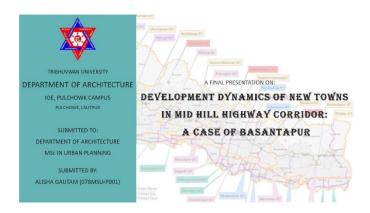
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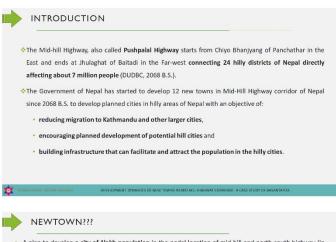
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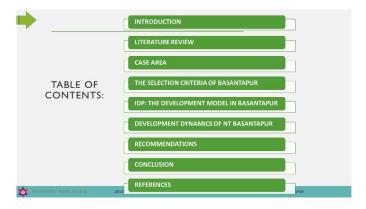
ANNEX IV: FINAL DEFENSE SLIDES





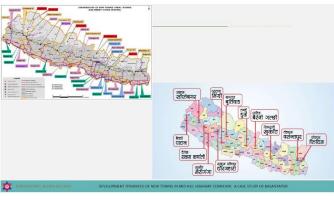






INTRODUCTION The Government of Nepal enacted National Urban Policy for balance urban development in Nepal (DUDBC, 2007) to develop balance urban growth in the country by prioritizing investment to the lagging regions for development of regional cities and intermediate towns. But, Cities and town are growing in size and numbers along the East-West Highway and border areas in the south. Under the MOUD, DUDBC; NTPCO is preparing intervening plans and programmes to 40 towns for planned urban development:

- 15 new towns are located in Tarai-Madhesh Region,
- 10 new towns are located in Mid-Hill Highway corridor of Hilly region,
- 2 more new towns are also located in Hilly region- one each in Pyuthan (Bhingri) and Surkhet district (Bheriganga).
- Similarly, 13 smart cities are located both in Terai and Hilly districts.



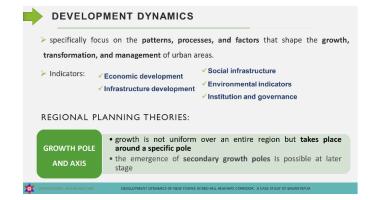


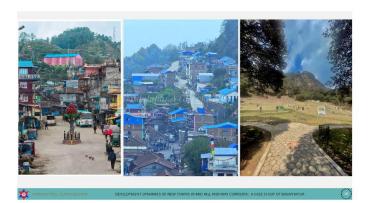


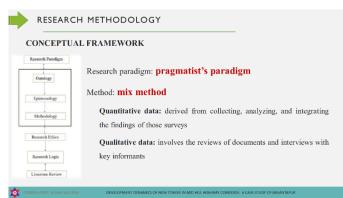


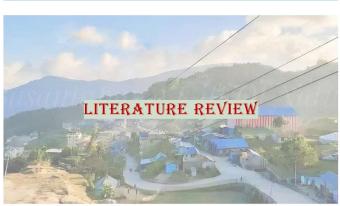
3. To access the current stage of development of Basantapur as a New-town and find out gap between planning and reality in the field.

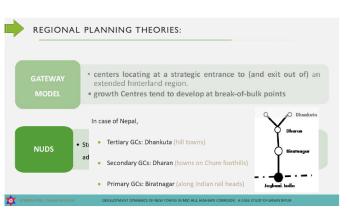


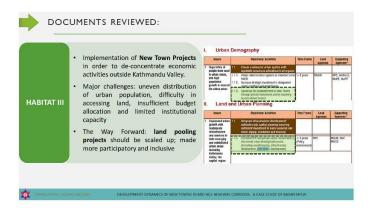


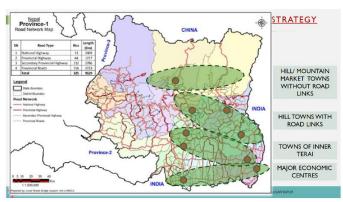




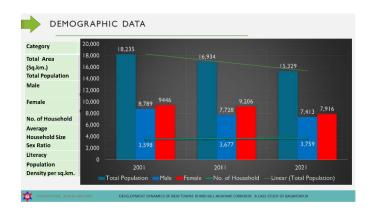






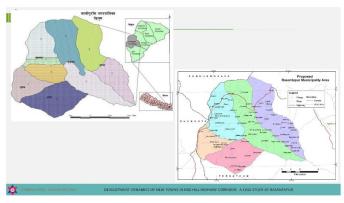


New Town Basantapur is the one major urban centre situated in Mid Hill Lokmarga in Terhathum District of Koshi Zone of Eastern Nepal. It is situated in the node point of Dhankuta, and Sankhusavha and Terhathum District and Koshi Highway and Mid Hill Highway. It is also ranked as top five major tourism destination of eastern development region. It was declared as a Laligurans Municipality merging with five VDCs. The total area of the Laligurans is 90.27 sq. Km. According to population census 2021, the number of household is recorded as 3759 and total population is 15329 where male population is 48.36% and female population is 51.64%.

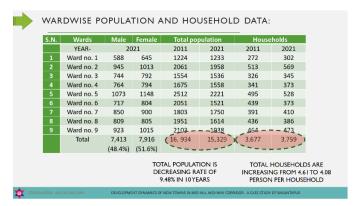


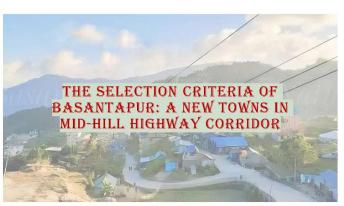




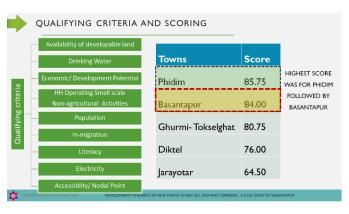


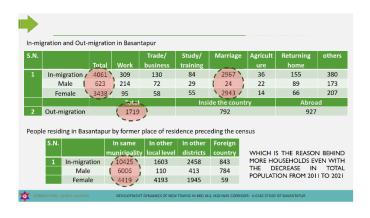










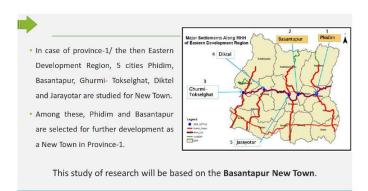


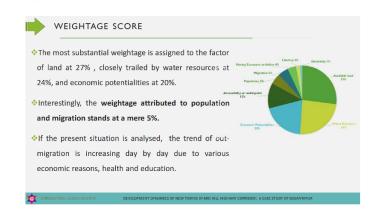
THE SELECTION CRITERIA OF NEW TOWN IN MID-HILL HIGHWAY CORRIDOR * To have a balanced development, Government of Nepal planned for towns having 1 lakh people having complete infrastructures; the towns that attract population from

Terai and check migration to Terai.

• For the same, ten towns are selected from a list of 21 potential urban settlements all

- over the country; two cities in each development region.
- The regional and district headquarters are not allocated as New Town as they will behave as a growing city because of already available infrastructures in the area.







- The entire process of scoring appears to be rooted in scientific principles and logical reasoning, leaving little room for doubt or ambiguity in its execution.
- Evaluation of migration's significance prompts contemplation within the weightage framework with recurring trend of declining population becomes evident.
- Although there are more economic potentials found in Basantapur, its itself the major reason of out-migration due to polarity reason between the connecting cities.
- This arises a question: Does the selection criteria clearly captures the future affect of economic activities?? And even migration and populaton??

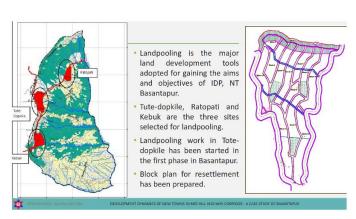
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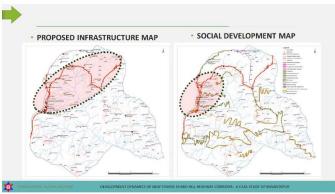


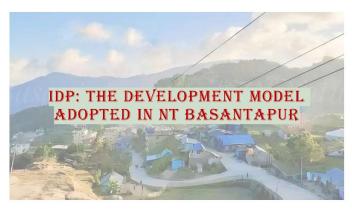
INTEGRATED DEVELOPMENT PLAN

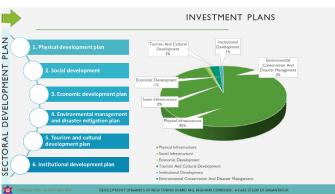
- IDP (for urban management and infrastructure development) is the guiding document for sectoral development to develop sustainable and liveable city in the future.
- It covers entire Laligurans municipality area for its strategic projects.
- The sectoral plans have been formulated through the participatory planning methods.
- Participatory consultation meetings were the basis for contextualizing its existing situation and stakeholder's consultation meetings were the basis for examining/assessing the existing physical condition, and proposing the infrastructure projects.

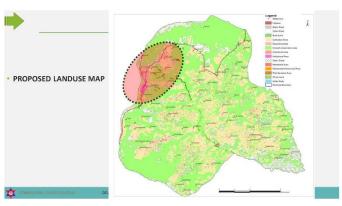
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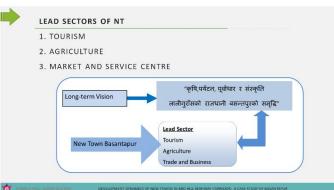












Basantapur as a touristic hill town:

- The town has potentiality for Trekking tourism, Recreational tourism, Cultural tourism and Adventure tourism as a New Town.
- The town will appear as 'Scattered Pocket Town' having sufficient greenery along the highway corridor in number of pockets.
- The famous Tinjure, Milke and Jaljale (TMJ) Rhodo trail can attract tourist and may prolong their stay at Basantapur.
- If tourism infrastructures are developed in Basantapur, it would be a popular hill station and holiday destinations for people of eastern hills and Terai (summer to avoid scorching sun; and winter for snow fun).



REGIONAL IMPORTANCE AND LINKAGE ANALYSIS OF NT

Till date more than 60% VDC of Terhathum district are connected with road access either graveled or earthen road to Basantapur; and is serving as a touristic and business center of district.

After the construction of these Highways, access and service provided by Basantapur has been expanded its hinterland.

Linkage of Basantapur to other rural parts of the municipality

- * Linkage to other large cities of Eastern Nepal namely; Dhankuta, Dharan, Itahari, Biratnagar, and Damak.
- Also, people used to take their agriculture products to Siliguri and Kolkota (Indian Market).
- So with extending road access & coverage, Laligurans will increase its economic and social linkage broadly.
- As a new town, Basantapur will definitely establish as strategic regional city.

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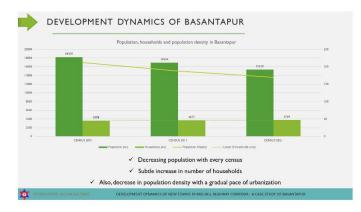
DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE STUDY OF BASANTAPUR

INFERENCES

- BUT, ✓Basantapur relies on Biratnagar (primary Break-of-Bulk point) as its main hub for goods transportation, lacking independent infrastructure to become a key center itself.
 - ✓ Its growth hinges on the development of surrounding towns like Dhankuta,

 Myanglung, Khadbari, and Bhojpur (polarity factor).
 - ✓ Presently, Basantapur struggles to attract tourists beyond neighboring areas like Dharan, Bhedetar, or Khadbari due to lack of distinctive attractions/ something distinct to offer.

OZBASCIPOSE: AUSHA GAUTAM DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE STUDY OF BA



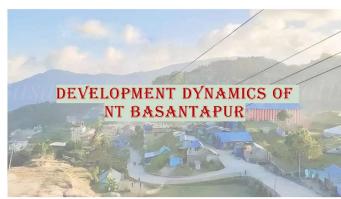


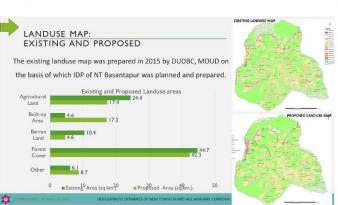
INFERENCES

- √The IDP recognizes the potential for Basantapur to become a prominent tourist
 destination, with its unique natural beauty, diverse flora and fauna, and cultural richness.
- √ The participatory planning methods are widely adopted in planning phase of New Town
 Basantapur and IDP also suggests for the same in implementation phase.
- ✓ Due to its strategic location at a triple junction of three districts and nodal point of two major highways, Basantapur should function as a major regional center of these areas.
- ✓ <u>Sufficient allocation of development budget, Planned development, Institutional development, Coordination of Municipality, TDC and NTPO, and Municipal active role in <u>ownership, awareness and implementation</u> are the major considerations for success of New Town Basantapur.</u>

TOT.

EVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE STUDY OF BASANTAPUR







SETTLEMENT PATTERN AND URBAN FORM

- The Settlement pattern of Basantapur area is found linear in the Bazar area such as Basantapur, Tute Deurali, Lasune, Chitre.
- 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.
- 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. This provides a good forward and backward linkages in the settlement system within the municipality area.



DEVELOPMENT DYNAMICS OF NEW TOWNS IN AND HILL HIGHWAY CORRIDOR: A CASE STUDY OF RASANTAPUR



- The urban growth pattern of four market areas in the interval of 5 years as below, where urbanization is seen at a very slow pace.
- But, few newer constructions can also be seen.
- All of these market centre shows linear settlement or ribbon development along the major highways.
- Within its boundaries, there exist pocket areas characterized by cluster settlements, particularly prominent around major market centers; following a linear arrangement.
- In contrast, a significant portion portrays scattered settlements, evoking a rural essence.
- This mosaic of settlement patterns presents the intricate blend of urban and rural dynamics within Laligurans municipality.



DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE STUDY OF BASANTAPUR



SITE ANALYSIS

- The key informant interviews were taken with the various stakeholders of the community as ward chairperson, journalist, local businessman, teacher, residents, political party representatives, community group and advocacy organizations. Also, a group discussion was conducted in the municipality.
- *Based on the indicators of development dynamics, questionnaire survey was conducted.
- ${\ensuremath{\diamondsuit}}{\text{So,}}$ basically two methods of information collection are conducted in the site as:
 - 1. Group discussion (GD)
 - 2. Key Informant Interview (KII)



DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE STUDY OF RASANTAPUR



ECONOMIC DEVELOPMENT

FROM SITE
ANALYSIS AND KI

- \nearrow Very few economic opportunities are created by the New Town till now at Basantapur.
- >There are some positive changes seen in the market and tourism sector at the area due to the construction of municipal ring road, which marketized the local agricultural products of the villages in
- > Also, rise in price of land due to this New-Town project at initial phase was seen. But the trade of land is completely stopped at present.
- >As per their information, 3 Community hall are constructed by the New Town project. The sports complex/ Stadium is under construction.
- The budget for covered hall was freezed due to its unappropriate site (planned in the forest area).
- > One Vegetable market is constructed by the New Town but this seems not in use at present.



DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE STUDY OF BASANTAPUR





INFRASTRUCTURE DEVELOPMENT

FROM SITE

- Only visible development is seen in road infrastructure (urban roads) at present.
- A 15 bed hospital is under construction by the government
- $\bullet \ \ Landpooling\ project\ in\ Tute-\ dopkile\ site\ is\ stopped\ due\ to\ the\ public'\ disagreement\ and\ conflict.$
- They envision to construct road infrastructure to connect tourism with agriculture so that local products gets branding among the tourists.
- A large scale water supply project: cancelled by the concerned authority
- Only primary schools and very few secondary school and campus are present in Basantapur. As one of the main reason for out-migration is education, more colleges for higher and technical education should be constructed in the site.



DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE STUDY OF RASANTAPUR



ECONOMIC DEVELOPMENT

FROM SITE
ANALYSIS AND KI

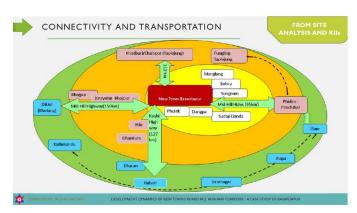
- The major production found in the Basantapur area are:
 - Primary production: Fruits (kiwi, orange, pears); Vegetables (Potato, cabbage, cauliflower, cucumber, akabare, ginger, eskus, spinach)
 - Secondary production: rice, millet, etc.
- $\ensuremath{^{\diamond}}$ The major industries (2 large and 9 small scale industries) in the Basantapur area are:
 - 2 Wine industries (one running, one closed), tea factory, etc
 - Cottage industries (paper, dhaka, dairy products), etc
- ${\color{red} \bullet} \ \, \text{There are many hill stations, parks, ponds, gardens as the touristic denstinations in Basantapur.}$



JTAM DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID H

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ENVIRONMENTAL IMPACT

- · No any serious environmental impacts seen due to newer construction and development.
- a landfill site is under construction far from the core residential area.
- There was a drought before 3 years in Basantapur. A small fire during summer burnt 4 to 5 houses almost every year. No record of any huge natural or manmade hazards and calamities are present here.
- The climatic situation varies upto 30°C in lower altitude and less than 0°C and -10°C in winter in higher altitude. Snow falls has occurred in the winter season.

TO SUM UP: From detailed site analysis and findings, 1. Funding and Budget Constraints 2. Coordination and Governance Issues 3. Economic Diversity: Though there's progress in markets and tourism, diversified economic opportunities are needed. Real estate stagnation may require intervention. 4. Infrastructure Progress: Advancements in road infrastructure benefit tourism, but electricity, water, healthcare, and education infrastructures need substantial enhancem 5.Socio-Cultural Dynamics: Basantapur's new town development hasn't notably affected social or cultural dynamics, warranting future community engagement strategies. 6. Environmental Impacts: proactive measures for future planning are vital. 7. Future Development Vision: Stakeholders envision improved infrastructure, diverse economic activities, enhanced healthcare and education, and cultural preservation for Basantapur's continued growth.

CONNECTIVITY AND TRANSPORTATION

- The major highways in Basantapur are Mid-hill (Puspalal) highway and Koshi highway. They connect various larger cities in all directions.
- The nearby airport from Basantapur is Biratnagar airport, which is at 3.5 hours drive

| S.N. | Direction | Nearby local market | Market center (regional) |
|------|-----------|---------------------|-------------------------------|
| 1 | East | Myanglung bazar | Fungling, Taplejung - 84km |
| 2 | West | Leguwaghat | Bhojpur - 113km |
| 3 | North | Mude- Sanischare | Khadbari, Sankhuwasabha- 85km |
| 4 | South | Siduwa bazar | Dharan, Sunsari - 84km |

SOCIAL ANALYSIS

- The social dimension of Basantapur comprises of mixed structure as:
- · Caste: Limbu, Brahmin, Chhetris, Gurung, Newari, Magar, Rai, Dalits, Tamang, Yakha, etc.
- Religion: Hinduism, Muslim, Kirat, Yuma, Buddhists, Christian, etc
- Culture: Lhosar, Udauli- uvauli, Rake mela (yearly), maghi magheni mela, New year mela (Baisakh 1)
- The homestay culture has started as Tute and basantapur homestays.
- Other dimensions that helps in social progress of Basantapur are the presence of various social organizations like 42 number of co-operative societies, farmers' group, forest users' committee, youth clubs, aama samuha and so on.

INSTITUTION AND GOVERNANCE

- The major problem stated is lack of public participation in decision making process and implementation phase, though it was during planning phase.
- This may be due to lack of political assurance, coordination and ownership among the various stakeholders in the society.
- · Most of them stated the main challenges for NT as lack of sufficient budget, awareness, transparency and coordination.

THE CURRENT STAGE OF DEVELOPMENT OF NT BASANTAPUR

1. Budget expenditure till now

- The total budget of NT Basantapur is around 11.33 billion.
- Till now, only 839.97 million of the total budget is spent under different heads; which is only 7.5% of the total budget. Only around 8.5% of the total budget is released till now

BUDGET ALLOCATED AND EXPENDITURE TILL NOW IN NT BASANTAPUR 200000 150000 100000 Fiscal year 2070/71 2071/72 2072/73 2073/74 2074/75 2075/76 2076/77 2077/78 2078/79 2079/80 → Total budget → Exper



- The allocated budget for each fiscal year is conspicuously inadequate, exhibiting an
 exceptionally low level.
- This inherent financial constraint casts a shadow on the project's ambitious objectives.
- * As we stand at the **midpoint of the project's stipulated timeline**, it becomes apparent that the project's **financial aspect mirrors the same shortfall**.
- This situation raises pertinent concerns about the feasibility of the government's ambitious goal to complete this prestigious project by the targeted year of 2090.
- While the expenditure rate showcases an encouraging trajectory, the dearth of adequate annual budget allocation presents a formidable obstacle, jeopardizing the project's ability to achieve its envisioned completion by the predetermined date.

OTRASSLIPOOL ALISHA GAUTAM DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL





INFERENCES

- •The development of Basantapur as a New Town has shown a bare evolving urbanization, with gradual growth in built-up areas.
- Settlements vary between linear and scattered patterns, emphasizing regional interconnectedness.
- Progress in infrastructure, like roads and government buildings, has been notable. However, budget constraints hamper development.
- Implementation gaps between planned and completed projects raise questions about the execution process.







Major development works are seen in road, a physical development sector. Total of 92km roads construction (soling-22km, new cutting-12km, upgrading-51km, track-7km) is completed in Basantapur.



INFERENCES

- *Budget limitations hinder municipality's ambitious goals and project completion within set timelines.
- In essence, Basantapur's development grapples with the balance between urbanization, rural preservation, and limited budgets.
- To overcome these challenges, managing budgets prudently, exploring new funding methods, and monitoring urbanization trends are crucial for a sustainable and balanced development path.



DEVELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE STUDY OF BASANTAPUR



RECOMMENDATION

- √Conduct a mid-term review of New Town projects, deciding their continuation or alterations for cities.
- √ Implement phased development based on successful models among 12 cities, allocating budgets and strategies.
 - Also, a plan can be made regarding New Towns for their speed implementation in 3 phases or even more. New Towns which are functioning better among these 12 cities can be accessed and development works can be carried out in three phases with sufficient budget and more implementation strategies.
- ✓ Until and unless these cities cannot offer something distinct to its people, it's very tough to hold the existing population here in the city.
- So, government should plan to construct a larger scale industry; or this can even be in health and education sector; which will be capable of providing job opportunities to many people in their own city with all services and facilities.



VELOPMENT DYNAMICS OF NEW TOWNS IN MID HILL HIGHWAY CORRIDOR: A CASE STUDY OF BASANTAPUR



RECOMMENDATION

Secure Additional Funding: Seek partnerships with government agencies, international organizations, and private investors to support key projects. Public private partnership model can also be adopted.

All the three tiers of government can be engaged in budget allocation of every programs planned in New Town. For example; central government, provincial government and local government can be assigned their contribution as 75%, 15% and 5% budget in each programs. (Note: this value is just a number)

For self sustainable projects, New Town and local level can also take loan from the Town Development Fund (TDF) for their development projects

- ✓ Introduce newer and attractive plans and programs:
- 1. Low-Interest Loans: offering low-interest loans to individuals interested in business or building homes: with favorable terms, such as extended repayment periods and minimal interest rates
- 2. Housing Discounts: to those who decide to settle in Basantapur (in the form of reduced property taxes, subsidized housing costs, or even grants to support the initial down payment on a home)
- 3. Streamlined Construction Processes: Simplifying and expediting construction and pe





RECOMMENDATION

- ✓ Improve Infrastructure: Prioritize projects and allocate resources to improve essential infrastructure, including electricity, water supply, healthcare, and education facilities.
- ✓ Preserve Cultural Heritage: Invest in initiatives that celebrate local traditions, festivals, and historical sites to tract cultural tourism and bolster community identity.
- ✓ Environmental Sustainability: Implement waste management systems, promote green practices, and monitor potential environmental impacts.
- ✓ Long-Term Planning: Encourage coordination and collaboration among all stakeholders, including government bodies, community organizations, and development partners, to ensure the town's continued growth and prosperity. The integration of municipal development process and Basantapur New Town planning is a must for its smooth implementation and progress of New Town





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RECOMMENDATION

- ✓ Diversify Economic Opportunities:
- o Develop strategies to diversify economic activities within and beyond tourism and agriculture.
- o Encourage the growth of new industries and businesses that can provide sustainable livelihoods for the local population.
- Address the issues causing the freeze in real estate sector.
- o Encourage businesses to set up operations in the new town, creating job opportunities for both newcomers and existing residents.
- Like Rhododendron themed exterior or market centres as its main identity as the capital of Rhododendron.
- Organic restaurants with local products like millet, potato, timbur, etc. can be introduced to the market.
- Additionally, investing in infrastructure, promoting local economic opportunities, and developing cultural and recreational amenities can enhance the town's appeal.





CONCLUSION

- 4 This study illuminates Basantapur's potential as a New Town in the Koshi province, driven by its strategic location.
- ♣ While the Integrated Development Plan outlines ambitious goals for tourism, agriculture, and infrastructure, their challenges hinder full implementation.
- Limitations impede Examining Basantapur's development dynamics reveals progress, yet limitations impede achieving all objectives.
- To overcome these obstacles, the presented recommendations are a must.
- ♣ Its implementation is crucial for Basantapur's transformation into a sustainable and vibrant NEW TOWN, hinging on effective governance and community engagement for success.



