

Emerging Urban Centers in Federal Setting: A Case Study of Province One in Nepal

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Abstract

The federal setting after the restructuring process in Nepal has caused a number of changes politically and administratively. The rearrangement of the country in seven provinces and reshaping the boundary of the local bodies have laid the foundation for new perspective of governance. This has derived many infrastructural and socio-economic changes among which emergence of the new urban centers can be regarded as one of the contributing factors in the evolution of the urban system as a whole. The research paper attempts to identify these urban centers of Province One based on the population changes and development of the market centers. The population of different municipalities were analyzed and emerging urban centers were identified as per the population hierarchy. The planning of the industrial capital and linkage of road transport in the region were studied and the same was considered for detecting the urban centers and its connectivity within the urban system. In addition to the increase in the primacy of the existing centers, few new growth centers were found to be emerging within Province One.

Keywords

Urban System, Urban Centers, Federalism, Province One, Market Centers

1. Background

Nepal has had several attempts in the context of regional planning. The initial division of the nation into the four-development regions in 1972 was one of the first practice of decentralization. It had its own merits and demerits. Moving further ahead into adopting the regional strategy, the country has now introduced planning in the provincial scale. “The main purpose of incorporating a regional approach in national planning is to reduce spatial disparity in development.” [1]

Nepal made a historic move from a unitary form of government to a federal system. Nepal is now a federal democratic republican state as established by the 2015 constitution. In accordance to the concept of federalism, Nepal is divided into 7 provinces, 77 districts and 753 local levels. Now each province has a separate government along with the federal government at the center and the nation seeks to evolve through cooperative federalism.

The objectives of restructured local governments are institutionalizing a democratic and well-functioning

government at the local level; delivering public services to the local communities in an efficient, effective and responsive way; carry out social and economic development activities to uplift the living standards of the people; and developing organic local democratic leadership at the grassroots level. [2]

The restructuring process of the municipalities has hence paved way for exercise of power for the local level development and has caused small and big changes in the economical and functional system in the regions. One such region experiencing the evolution of the urban linkages is the Province One. This paper depicts an attempt to identify the emerging urban centers in Province One.

2. Study Area

Province 1 is the easternmost of the seven provinces created by Nepal’s new constitution, which took effect on September 20, 2015. The province is 25,905 km² in size, accounting for 17.5 percent of the country’s total area. The Government of Nepal finalized the temporary capital of Province One on January 17, 2018. On 6th May, 2019 Biratnagar was announced as

the permanent provincial capital. The province also includes other major urban areas such as Birat Chowk, Damak, Dharan, Itahari, Triyuga, and Mechinagar. Province One is one of the fastest growing regions under the new federal system. The province is bordered on the north by China's Tibet Autonomous Region, on the east by the Indian states of Sikkim and West Bengal, on the south by Bihar, and on the west by Bagmati Province and Madhesh Province. According to the Nepal census of 2021 preliminary report, the province's population is estimated to be 4,972,021 people, with a population density of 190 persons per square kilometer.[3] The main sources of income for the residents of Province One are tourism, natural resources, industries, agriculture, and foreign jobs. Similarly, there are many tourist sites: Sagarmatha National Park, Makalu Barun National Park, Barahachhetra, Damak, Itahari, Dharan, Ilam, etc. In this province, mainly there are four transit points: i.e. Kakarbhitta, Pashupatinagar and Jogbani to India, and Olangchunggola and Kimathanka to China. In Province One, highways connect almost all districts, while some roads at high altitudes are not paved, and their conditions deteriorate during the rainy season. Apart from the East-West Highway, the Mechi Highway, Koshi Highway, and Sagarmatha Highway are the principal roadways connecting Terai to the high altitude regions in Province One.

3. Objective

3.1 Main Objective

To study the evolving urban system in Province One.

3.2 Specific Objectives

To identify the new urban centers among the restructured municipalities through study of their demographics and prominent market areas.

To increase the understanding of the linkages of these urban centers based on the production capacity and road transport.

4. Literature Review

4.1 Urban System

Urban System is basically the connectedness of the cities in the aspects such as economy, transportation, population, culture and information. The scale of the

Urban System can be global, regional or local. The urban hierarchy is often defined by the magnitude of interaction attracted by the urban center.

The urban system has had various interpretations throughout history. The simple concept of growing city and people is now inadequate to testify the different faces of the city that constitutes an urban system. As the modern cities grew in number, the urban system theories have been redefined and attempts to include the various economic activities, urban networks and associated urban environments.

Urban systems research aspires to make the complexity of the city and inter-city interactions understandable by isolating some of its constituent social processes, and then relating these processes to others occurring both inside the city and between cities and the outside world [4].

In context of spatial/regional planning the infrastructures and other community facilities can be considered as functions which are not only used by the people of the region but also by the residents of adjoining areas. Since all the facilities cannot be located in the same urban center, one urban center become dependent on the other. Thus there is an interdependence (functional interdependence) between the urban centers. The sets of complex relationships are functional linkages-physical, economic, social, administrative and political and these functional linkages are reciprocal linkages. The linkages between urban centers bind them into an Urban System. Characteristics of an urban system may be discussed in terms of the interrelationship between the elements of an urban system i.e. population distribution, patterns of migration, occupational distribution, accessibility pattern, role of urban center, infrastructure development etc.

An urban system consists of nodes and links. The nodes represent the various urban centers and the links represent the interlinkage. Since each urban center has its own system of central functions, the volume of such central functions creates different hierarchies of urban centers. Such hierarchies lead to backward and forward linkage system; linkages with lower order centers are backward and those with higher order centers are forward linkages. Transportation and communication are effective means of linkages.

Thick tangles of inter-city relationships all of a sudden begin to make sense by connecting movements of information, goods, and money between cities.

The other important factor is the movement of the people. The internal migration plays a vital role in shaping the urban system of a region. The usual trend of southward movement of the people of hilly region towards the terai in search of various pull factors is prominent in the context of Nepal.

Migrants are made up of those in search of better living standards—the “pull” migrants—and those who have been forced out of their birthplace by a lack of job opportunities, poor public services, and natural disasters—the “push” migrants. Push factors are the predominant force driving internal migration in Nepal, accounting for as much as 88 percent of lifetime migration [5].

4.2 Urban Center

There can be various ambiguous claims of attaining a region as urban center. The governing institutions themselves have not defined ‘urban’ perfectly. The ambiguous classification of an area as urban based on its declaration, as municipality is not the best practice. Gross population density is also low in most municipalities. With addition of new municipalities and sub-metro cities, 32 out of 58 municipalities and 139 out of 159 municipalities have population densities less than 10 ppha, a minimum criterion for declaration of urban center as proposed in the National Urban Policy [6].

However, two analytically separate dimensions—morphology and function can be utilized to identify Urban Centers/Sub centers (UCSs). The size and spatial distribution of UCSs with large spatial densifications of human activity are referred to as morphology. The connections made by various UCSs show function. UCS function is concerned in the relationships among centers, as opposed to UCS morphology, which is based on nodal features.

Urban centers are places where people congregate in close proximity to conduct certain activities and meet particular requirements that cannot be met without such proximity. These could be of the commercial, industrial, administrative, or other kinds that help urban communities. Studying the economic and functional foundations of towns is just as important as studying other facets of the urban environment.

4.3 Production Capacity

The province plans to forfeit its economic needs by 25% through industries alone by the year 2030.

Meanwhile, it aims to meet at least 13% of total employment need while doing so. The provision to increase the industrial capital is the major objective of the province. The province plans to utilize the local resources, skills and means and hence create more employment opportunities to the people.

First Provincial Periodic Plan 2076/77-2080/81: Strategies

The province has been exercising the various strategies and plans to reach their goals and objectives. The industrial sector in province has greatly been a concern for the province among other socio-cultural aspects in order to enhance the standard of living as the final goal.

The First Provincial Periodic Plan 2076/77-2080/81 has enlisted the following strategies to meet their agendas:

- Developing financial and infrastructural facilities to enhance export oriented and minimize import-dependent industries.
- Attracting local and foreign aid for the development of industries operational with available local resources.
- Creating scope of increasing the export of agricultural goods by generating healthy competition in the market.
- Developing skilled work force and enhancing industrial performance.
- Cultivating good ethics in industrial sectors [7]

These strategies have been further elaborated in the periodic plan with specific work plans that corresponds to each strategy. The province aims to facilitate the population with two lakhs jobs with a target of adding five more industrial zones and corridors.

Province Planning Commission 2077: Annual Progress Report and Projections

The annual progress report of fiscal year 2075/76 suggests a good progress in comparison to the federal context. The industrial sector has contributed 9,131 crores in the province 1 economy. This has resulted in 101,279 jobs being created in official and unofficial industrial sectors in the province, which has been expected to rise to 121,023 in 2076/77 and was aimed at 140,767 by the year 2077/78.

5. Methodology

The research is focused on the Interpretivism research approach in which aerial maps and photographs along with official spatial maps are interpreted to study the transformation of the urban areas mainly emerging cities/market centers of Province One. The aim was to investigate the occurrence of a new or an enlarging market center that holds potential to be interpreted in terms of a component of the urban system. The available demographic data and the trend of growth after establishment of federalism was taken into consideration. Triangulation was used to ensure the validity of evolving results by using multiple investigators, multiple data sources, or multiple approaches.

The research attempts to identify the new or growing urban centers among the restructured municipalities. The population size, composition and density are few of the parameters to be borne in mind for the selection of UCS. Similarly the market center size and its economic functions are also essential for the proper entitlement of the places as urban centers.

Key Informant Interview and focused group discussions was conducted to interpret the interdependence of the urban centers. Study of production capacity and location of industries was studied through secondary sources such as Economic Survey to establish the economic functions of the centers. A close analysis and picturization of the finding was done with the help of GIS software to overlay on the existing maps of Nepal, particularly Province One

6. Findings & Analysis

The country has witnessed immense reforms in the political and socio-economic scenarios. The effect of the same can be seen in the formation of the various administrative bodies over the years. One such perspective is the formation and growth of municipalities. In context of Nepal, the categorization of places into municipalities is the closest classification of urban spaces. Hence, an overview of the formation and trend of these municipalities becomes essential to analyze the urban centers of the present state.

A brief history of the municipalities guides us towards the initiation of the formation of the urban centers. In the past, there were 58 officially recognized

municipalities. A total of eleven of these local bodies were situated in the eastern region. The location of these traditional municipalities are as shown in the Figure 1.

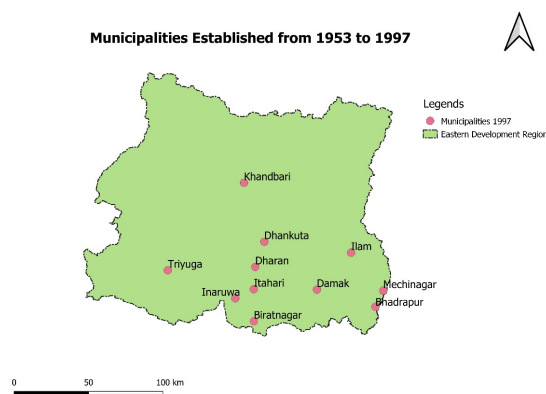


Figure 1: Municipalities established until 1997

Trends towards the development of urban centers have not been uniform for the country as a whole. The pattern of development by mid-2005 showed that the eastern Tarai and Kathmandu Valley were highly prominent with a large number of urban centers followed by the central Tarai [8].

In the preliminary days, Dhankuta was observed as the strategic and economic center of the eastern region and was classified as special growth center. However, the purpose of classification was to develop a system of financial and technical assistance for urban development to towns of different categories. But this classification could not remain functional in later years as the number of municipalities kept on growing and the criteria for delineation of urban areas i.e. municipalities remained mainly political rather functional.

The year of establishment and their population as per 2011 census of these urban centers are as follows:

Table 1: Municipalities established until 1997

Year of Establishment	Municipality in the Eastern Region	Population (2011)
1953	Biratnagar	201,125
1953	Bhadrapur	18,164
1958	Dharan	133,082
1962	Ilam	18,633
1978	Dhankuta	26,440
1982	Damak	75,102
1986	Inaruwa	28,454
1997	Itahari	74,501
1997	Khandbari	26,301
1997	Mechinagar	57,545
1997	Triyuga	70,000

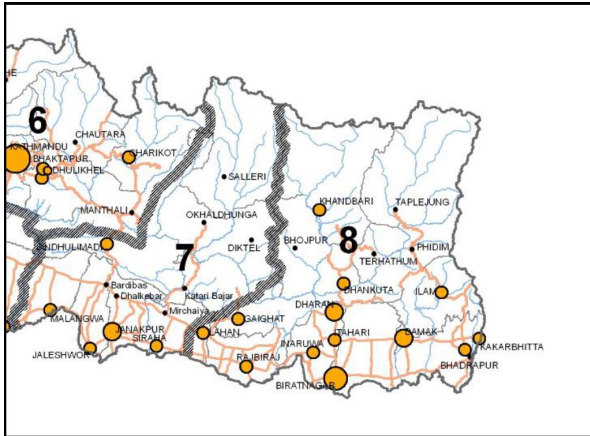


Figure 2: Urban Centers in 2007 (Regional Development Strategy, NPC)

Biratnagar region including the areas to the east of Sankhuwasabha, Bhojpur, parts of Khotang, Udayapur and Saptari became more functional and economical region over the years. 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. In addition, due to the rise of federalism and the urge to concentrate on local development, the identification of more municipalities started to occur. A total of 133 municipalities were established in 2014 in two segments and an additional of 26 municipalities were added to the list by 2015. Many settlements in the eastern region made it to the list such as Taplejung, Phidim, Uurlabari, Myanglung, Bhojpur, Diktel, Katari, Suryodaya, Arjundhara, Kankai, Chainpur, Belbari, Pathari Shanischare, Rangeli, Duhabi, Siddhicharan, Chaudandigadhi, Birtamod, Deumai, Shivasatakshi, Ramdhuni-Bhasi, Pakhribas, Shadananda, Solududhkunda, Gauradaha, Laligurans.

On 10 March 2017, Government of Nepal reconstructed old local level bodies into 753 new local level units as per the new constitution of Nepal 2015. The few of the additional municipalities that were added within the Province One were Mai, Ratuwamai, Sunawarshi, Barakhshetra, Mahalaxmi, Dharmadevi, Panchkhapan, Halesi Tuwachung, Belaka, Surunga and Sundarharaicha.

The increase in the local governance has triggered the development of physical infrastructures resulting in creation of more economic centers than before. In this regards, various sections such as the Mechi highway has defined a sub-region centering around

Mechinagar-Bhadrapur more sharply with market centers like Fikkal in the north and Birtamod & Damak in the west complementing to the network.

Numerous market areas have transformed into nodes where passengers can stop for meals, lodging, or to board or change buses to reach other locations as a result of the improved transportation infrastructure. Consequently, these market areas also developed as centers of tea shops, restaurants and hotels. These phenomena are principally responsible for the development of the settlements such as Fikkal, Charali, Okhaldhunga, etc. According to the trend, small, new urban centers along the route are growing at a rate that is noticeably higher than those off the road such as Itahari, Biratchowk, Uurlabari, Damak, Surunga, Birtamod etc.

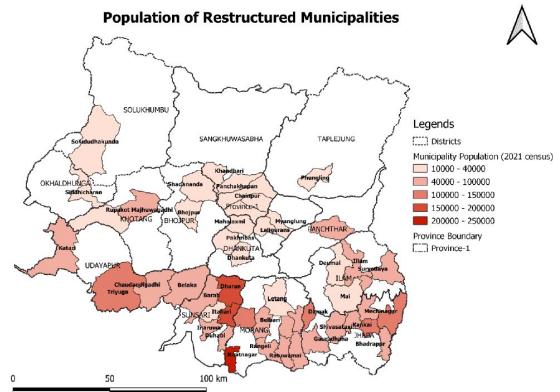


Figure 3: Population of restructured municipalities as per 2021 census

For essentially three reasons, the country’s federal restructuring will have an impact on the national and sub-national (provincial and regional) urban structure. First, infrastructure and urban development in general will receive preferential investments in the urban centers designated as provincial capitals. Based on the mobilization of provincial/regional resources, the political and administrative functions of these centers will most likely encourage economic purposes, including the location of small and medium-sized firms. Second, by redefining the geographic advantages of small towns and market hubs, the provincial strategy for developing and prioritizing basic intra-province road infrastructure may have an impact on the current urban hierarchy. Third, the province government’s plans for the growth of the agricultural, industrial, biodiversity, and hydropower sectors will also influence the functional role of provincial urban centers and as a whole shape the

regional urban system.

Hence, the current urban system of the province is more reliant on the specific market centers, trade points, major transport routes, transit points and to some extent tourism & traditional cities.

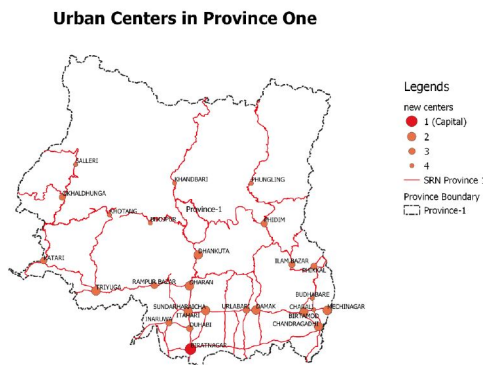


Figure 4: Urban Centers in Province One

The above figure depicts the current situation of the location of the market centers both predominant and emerging in the region. These market centers have been identified through primary observation and are irrespective of the administrative divisions. This is because despite restructuring due to federalism, economy flows only in its most profitable way and the administrative divisions alone may not necessarily restrict the flow of economy.

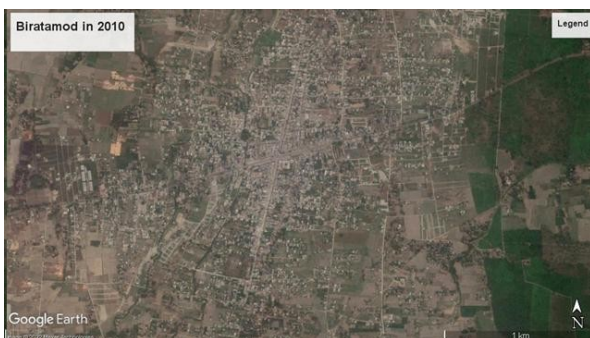


Figure 5: Satellite Image, 2010

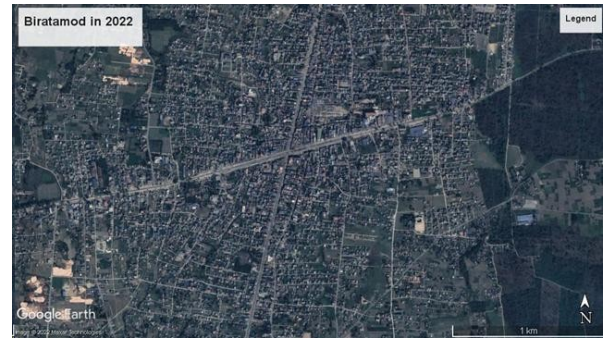


Figure 6: Satellite Image, 2020

Perhaps what shall drive the economy of these urban centers is the services it caters, economic infrastructures and production capacity; the primary characteristics of which is the transportation facilities, distribution network and industries.

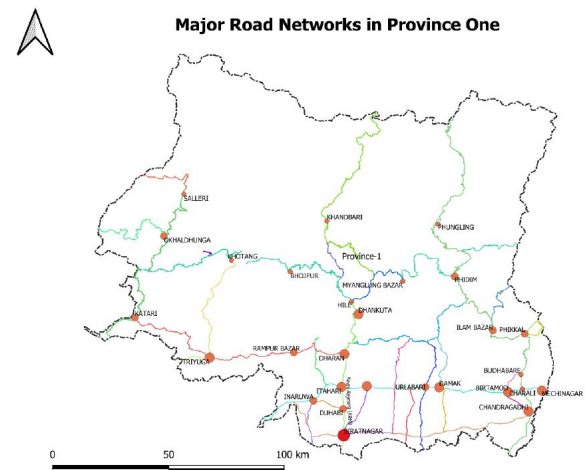


Figure 7: Major Road Networks

7. Conclusion

The development in the urban context has been catalyzed by the restructuring of the municipalities through development of the various local markets. These local markets serve as the nodes that link the services of the region, attract population, and hence form an urban center. These have been possible, to some extent, due to the local governance system and looks to enhance further in due time. The development of local roads as well as major linkage roads to the highways from different urban centers has helped in the rise of the various urban pockets with a potential to be a major urban center. The nurturing of the same through strengthening of the economic infrastructure and good governance can help in the sustainable development of the urban area.

Meanwhile the prioritization of the economic development of the less accessible hilly and Himalayan region can contribute to a balance urban development. The generation of employment and establishment of the industries can help in the retention of the people in such regions and help in the development of the settlement.

The emerging urban centers were identified through population parameters. Few urbanizing areas are currently basically sub-urban areas and towns which are dependent on neighbouring urban areas through sales of agricultural and other primary products. The various linkages are more dependent on the proximity of the facilitation creating regional clustering and shall not necessarily be limited within the province. The major growth can be seen in Urlabari, Birtamod whereas the municipalities such as Sundar Haraicha, Fikkal, Duhabi, Pathari Sanischare, Inaruwa, Bhadrapur, Belbari, Shivasataxi, Ilam, phidim, etc have remained fairly populated and with potential to grow. However, employment opportunities play a vital role in movement of the people.

The federal system with the implementation of the restructured local bodies have created a decentralized system of governance and such change have triggered the growth of market centers aiding in cluster formations. However, the lack of growth of urban centers in the hilly area and the stagnant situation of

the traditional cities such as Okhaldhunga, Dhankuta and Ilam suggests that there has been a major labor force drain southwards towards the terai. The potential of various towns has to be exploited and strategies should be developed with diverse perspective for the economic growth. Utilization of the empowerment of the local bodies to create self-reliant economy and sustain the workability within the municipality should be the way forward.

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