# Rural- Urban Linkages of Dipayal-Silgadhi, Doti Municipality

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# Abstract

This paper reports the findings of the study that examined the urban-rural relationship between Dipayal-Silgadhi, Doti Bazaar and the hinterland areas. Both primary and secondary sources of data were used and primary data were collected from a purposive sampling of 40 consumers and 30 service providers through structured questionnaire, field observation, and focus group discussion. Secondary data were collected from district and municipality profiles, journals, and e-resources. The study revealed that the highway connects Dipayal-Silgadhi, Doti with the hills and Tarai districts. It lies at a break-up point between the Tarai and Mountains areas of *Sudurpaschim* Province. The local traders have increased their functional magnitude with the coordination of Dhangadhi, Aateriya, and Mahendranagar. It provides functional services to the hinterlands of the northern, western, and eastern parts of Silgadhi. The opening of Samuhagad-Uditola, Shantinagar-Dang, Khaptad-Sadak, Kalena-Sadak, and Mallo-Kalena-Sadak has supported to access and expand the business, educational, and medical services in its hinterlands. However, with further extensions of highways, the buffering of hinterlands is shrinking to perform a variety of functions.

*Keywords:* Urban-rural linkage, market centers, hinterlands, non-farm activities, spatial pattern

#### Introduction

This paper examines the urban-rural relationship between Dipayal-Silgadhi, Doti Bazaar with its surrounding area. It is also known hinterlands of Dipayal-Silgadhi, Doti

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that depends on the marketing and other service facilities. Rural-urban linkage includes three major aspects: urban centers and their structure and function and spatial distribution, resource-use system of the rural (hinterland) area and services and institutions that facilitate linkage between urban and rural areas (Pradhan, 2003). However, due to the lack of linkage and infrastructure services such as roads, communications, and educations etc. In Nepal the functional linkage between small towns and their surrounding rural areas is generally weaker. Since the early 1990s, the government of Nepal has focused on small towns for urban and regional development. Since then, the spatial development policy has been emphasizing the role of small town for rural development.

Tamasker (1985) and Ratcliffe (1974) have discussed on the three perspectives of linkage of town with rural areas: spatial pattern of human interactions, physical space related to activities, and location of activities in terms of economic functions, social roles and other activities. However, Rondinielli (1985) classified seven types of linkage, such as physical, economic, population movement, technological, social interaction, service delivery and political or administrative perspectives.

Urban rural areas are interrelated, interdependent and complementary. Therefore, a town cannot exist simply by serving its population. In order to flourish and expend a proportion of goods and services must be sold beyond its limits. However, the role of communication, transportation and good public transport facilities are quite determining in shaping the extent of serving rural areas and intensity of rural-urban linkage. To a certain extent, there exists overlap in changing goods and services between them. The flow of commodities, people's ideas, skills, technology and articulation of social relation are visible manifestation of the mutual linkage between urban rural areas.

Market town having concentrations of different services and facilities and the hinterland area are combined together from the urban region. There is reciprocal relationship between town and hinterland area. They are functionally interwoven and therefore have cause and effect relationships. One causes other for existence, development, expansion or declining over time. So, the nature of urban –rural linkage is dynamic, which is due to a host of factors. Historical basis, road network, functions of market towns, flow of goods and services, etc. are some of the factors to describe the nature of relationship between urban centers and hinterland areas (Pradhan 2003).

Since there is dynamic relationship between urban and rural areas in terms of many respects, the study on the nature and functions of the linkages is scarce in the related field. Therefore, to fill the research gap and contribute to the field of knowledge, this paper attempts to analyze the urban —rural linkage between Dipayal-Silgadhi, Sudurpaschim western Nepal and its surrounding rural areas in terms of functions, service visiting pattern and frequency of the customers to the business establishments to find out the real situation.

## Theoretical basis to rural- urban linkage

After 1990 AD, there is growing interest among the development planners as well as policy makers and development workers particularly in developing countries in the study of contribution of market towns to their hinterland areas development. This interest stems basically from two major issues:

- Theoretical basis in explaining rural –urban relation and
- Development models towards developing market town in regional context.

The central place theory provides the main basis to understand the market town and hinterland relation. There are mainly two basic components of the central place system- range and threshold, which are used to describe the spatial movement of goods and services. These two concepts are the bases for describing the linkage pattern between center and their rural hinterland. These concepts also provide the bases in determining the functional magnitude and level of market towns, which in turn determine the number and size of market towns, their spatial distribution pattern and hinterland system in a concern region.

According to Christaller (1933) and August Losch (1939), the two most important theories of central place system, spatial distribution of central places occur in a triangular lattice, consisting of one higher order Centre with its two dependent lower order centers, resulting into a form of hexagonal hinterland. In a situation of perfect market competition, a homogeneous region with equal transportation in all directions becomes filled up with central places of different hierarchical order together with their hexagonal hinterland regions. They serve people living in the region in an equal opportunity basis regardless of overlapping of the service areas and un-served areas. The theory provides a perfect rural-urban linkage system in a region. However, the linkage does not remain constant it depends upon the size and centrality of market towns, which itself is unstable.

Along with the central place theory, many spatial development strategies such as growth pole, diffusion model, gateway model, core-periphery model, urban functions in rural development etc. have been developed in different timeframe. These models are generally concerned with the identification of a set of dynamic focal points, which can generate development at the centers themselves as well as their hinterland areas. A focal point within the predominant rural region may be the location of the main traditional community rural or both. Though the approaches are different, these different models mainly assume that urban centers will be able to perform positive impacts on the development of their rural hinterlands.

#### Methodology

This study is based on primary as well as secondary data and information sources. The primary data were collected by using different methods, such as structured questionnaire, field observation, focus group and informal discussion. Altogether 40 customers and 30 owners of different functional establishments such as commercial, professional industrial and institutional were selected purposively.

A structured inventory sheet was used for gathering information about the number and types of functional units located within Dipayal-Silgadhi ward no.6 Municipal

boundary. The sheet was used to record all functional establishment units. The data and information at household level were acquired by means of administering structured questionnaire sheets to each of the selected households to seek the information on places of origin, distance (time and cost) travelled, models of transport used, occupation, frequency of visits, seasonal visiting centers, purpose of visit, preferred market town and reasons, problems and prospects for market town development. The same process was followed to obtain information regarding the owners and managers of different functional establishments such as commercials (retailing, wholesaling and catering) personal (laundry, hair dressing etc.), professional (lawyer, photo studio, teacher etc.), industrial (retail service, workshop, manufacturing etc.) and institutional (INGO's, NGO's, government and non-government etc.). The structured questionnaire sought information on the source names of the clients or customers, frequency of visits, reasons of visits, problems and prospects. The data obtained from questionnaire survey was supplemented by information obtained from checklist. The focus group and informal discussions were held to acquire information regarding problems, prospects, planning and further improvement.

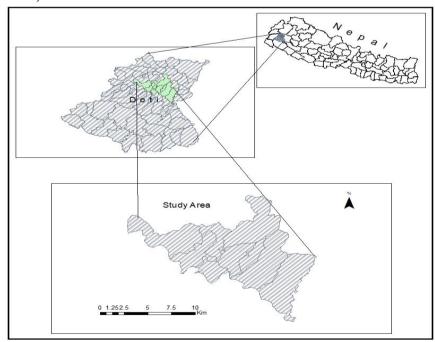
#### The study area

Dipayal-Silgadhiis the municipal headquarter of Doti District. Doti, also known as Doti region, Dotigarh as used in the Jagar in the Far-western region of Nepal (Sudurpashchim Province), is a region situated between River Kali bordering Kumaon division of Uttarakhand in the west and the Karnali river on the east. Doti was one of eight different princely states of the Katyuri Kingdom.

Doti was captured by Gorkha forces, and the Gorkha rulers went on to destroy several historical sites in Doti, attempting to cover its legendary bravery and tenacity. The Dotyali people were also subject to ethnic prejudice, and were frequently excluded from government jobs and offices of state. Somehow in 1950, a few Dotyalis established their identities as national heroes based solely on their courage, daring, and contribution

to their country. Noted among them are Martyr Dashrath Chand Ministry of Home Affairs, Martyr Bhimdutta Panta Ministry of Home Affairs, and K.I. Singh, a revolutionary leader who later became prime minister (Dipayal-Silgadhi municipality, 2078).

Annual average rain remains 135 mm and occurs from June to September. Although the climate is mostly affected by altitude, mountain slope also affects due to its Northern and Southern inclination. There is the effect of filching, landslide and soil erosion Most of the landscape is located in Mahabharat range is divided in two parts i.e., East and West by the Seti River. The Seti River flows in the divided portion of Mahabharat range. There are fertile alluvial soil and basins and tars in both edges of the Seti River. These locations are recognized as granary of the place. The sub-tributaries of Seti River emerge from North-South and South-North Politically Doti district has only one election constituency, seven Gaunpalika and two Municipalities (D.D. Profile Report 2075).



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#### Result and Discussion

In the past, Dipayal-Silgadhi municipality was the regional headquarters of the Far- western development region, was known as Doti province and Doti state during the *Baise* and *Chaubise* kingdoms. During the Rana period, an administrative Centre was established in Silgadhi under the name of Doti gouwda and the administrative work up to Aacham, Bajhang, Bajura, Jumla and Baitadi was conducted from gouwda located in Siligadhi. This municipality is a meeting place of various civilizations with historical significance. According to the recommendation of the local level restructuring commission, in accordance with the federal democratic republication governance system, the area of the Dipayal silgadi Municipality was expanded to include the entire wards of Ladagada VDC, Kalena VDC and wards No 4,5 and 6 of Chativada VDC and 9 of Baglek VDC and now this municipality is spread within a total of 9 wards.

## Factors affecting to the growth of urban-rural linkages

## Access to road facilities

Seti highway, Samuhagad to Uditola, Shantinagar-Dang, Khaptad-Sadak, Kalena-Sadak, MalloKalena-Sadak, Khaptad-adakroad, and etc. and different link roads have provided transport facility in Dipayal-Silgadhi, Doti. The seti highway is the most important and first highway, which connects Doti with other hilly and Terai districts. The total length and nature of road network in the municipality are given in table 1.

**Table 1**Status of roads in Dipayal-SilgadhiDoti

	S.N.	Road Class	Total length	Percent
	1	Black top	42.13	25.37
	2	Gravel	39.7	23.90
	3	Village roads	84.26	50.73
,	Γotal		166.09	100.00

Source: DISINAPA profile, 2077.

#### **Trade and Commerce**

Location of Silgadhi at a node of transportation lines qualifies it as 3<sup>rd</sup> higher order gateway town of the country and it is economically dependent on the primary and secondary gateway town such as Dhangadhi, Pokhara, Kathmandu and others. The relation of Dipayal-Silgadhi with surrounding rural area is highly dependent and independent. Improved and managed transport and communication facilities have allowed it to extend services further and have made possible for town workers to the live beyond the city limit and to travel to work each day. Prior to the construction of different road radiating from Doti, it was a matter beyond imagination. Therefore, urban- rural linkage is subject to constant change in response to infrastructural and socio-economic development.

From the rural goods like foodstuff, fruits, milk and milk related product, forest product, handicraft product (baskets, ropes, brooms, bamboos items etc.), and poultry or meat supply, flow to the towns. Similarly, the goods like foodstuff, clothing, different industrial products, medicine, food wears, ornaments, cosmetic items etc. flow to rural areas from the towns. Therefore, an attempt is made to here to study rural- urban linkage by analyzing customers travel time by classifying different types of urban functions as retail, service industry and professional and wholesale.

As the travel time from the municipality to rural settlement increase the linkage of urban function decreases or vice versa. The more is repletion of visit to the town, the higher the intensity of functional linkage. It differs by the nature of function. For instance, a rural settlement with good linkage for professional services may fall under fair or marginal influence for *kirana* function.

## Functional growth in Dipayal-Silgadhi Doti

The rural urban linkage is the outcome of the towns. The relative importance of number, type and range of central functions has become the effective measures for identifying the functional base of market centers (Pradhan, 1998). The larger the

functional base of the town, the extensive in the linkage (Table 1).

 Table 2

 Number and types of functional establishments, Dipayal-Silgadhi, Doti

S.N.	Types	Number	Percentage
1	Retailing and mix shop	185	27.37
2	Hotel/Lodge/Restaurant	152	22.49
3	Construction/Furniture/Mill and other services	121	17.90
4	poultry-farm	14	2.10
5	Tailoring	15	2.22
6	Fancy	65	9.61
7	cosmetic shop	15	2.22
8	Gold and silver shop	25	3.69
9	Stationary	17	2.51
10	Medicine	11	1.62
	Total	676	100.00

Source: Doti Chamber of Commerce and Industry, 2077.

The functions of the municipality are not easy to classify in to limited groups. Furthermore, breakdown of the first two categories of function is made, i.e., commercial function making up of relating, wholesaling, Tailoring, personal and professional and industrial function comprising all local industries and mills and repairing or retail service industries.

## **Retail services**

Retail activities display a close relationship of interaction pattern between urban and rural areas. Therefore, the analysis of rural- urban interaction of retail function could be most relevant and effective measures for the study of urban linkage of Silgadhi and Dipayal city.

Table 2 shows the linkage of retail function of Silgadhi bazzar with the

surrounding rural areas. The total sample Kirana function (12persons), the majority (30 %) draws their customers from the rural village lying within two hours travel time distance but goods from grocery shops are frequently and regularly purchased by the customers lying within short time distance for travel.

 Table 3

 Linkage of retail functions

S.N.	Function	Within 2 hrs. travel	Over 2 hrs. travel	Total
1	Kirana	12	2	14
2	Fancy and Readymade garments	7	5	12
3	Books and stationery	3	5	8
4	Hardware and electrical goods	5	5	10
5	Utensils	6	2	8
6	Agricultural goods	3	4	7
7	Others	5	2	7
	Total	40	25	65

Source: Field survey, 2022 AD.

#### **Professional services**

Professional functions thrive mainly in town and they are normally non-existent in the rural areas. Therefore, a large number of customers who are in need of these functions have no other option but to visit a town. Out of total sample (40) of the professional functions of Siligadhi town the majority (60%) establishment responded that they receive their clienteles from the lying within two hours travel distance from Silgadhi. Compared to printing press, photocopy, paintings the number of customers is less in medical service and photo studio.

Table 4

Linkage of professional function

S.N.	Function	Within 2 hrs. travel	Over 2 hrs. travel	Total
1	Health and medical services	14	11	25
2	Photo studio and photocopy	9	6	15
3	Legal services	6	5	11
4	Paintings and arts	4	5	9
5	Printing press	3	2	5
	Total	36	29	65

Source: Field survey, 2022.

# **Customer travel patterns**

The pattern of frequency of visits of the household shows different magnitudes and frequency. It is quite impossible to find out with any certainty the home addresses of people buying from town shops (Hudson, 1976). Therefore, information from the customers was collected from the main points entering to Silgadhi town. To obtain a few information regarding their place of origin, mode of transport and frequency of visit questions were put to the customers, since they were in rush and had limited square time to listens to the researcher. The home address of the customers helped further to confirm the place name given by the business establishment (Table 4).

Table 5

Frequency of visit of the customers

frequency of visit	No. of customer	Percentage
Daily	10	10
Once a week	25	25
Twice a week	17	17
Once a month	10	10
Need based	24	24
Only for special occasion	20	20
Total	100	100

Source: Field survey, 2022

Among the entire 100 samples customers, 25 percent responded that they visit

Dipayal-Silgadhi bazaar once a week and need arises. Similarly, 20 percent of customers visit others (Special occasion). The number and percentage of customers visiting daily is only 10 percent.

There are basically two types of travelling of the sample households to Dipayal-Silgadhi bazaar: 1) Occasionally people use jeep, van, truck, tractor, motorcycle and bus and 2) on foot. It is obvious, for those who live in settlements lacking from direct road connection. They travel on foot first to reach the nearer road head points and then catch the vein, bus, truck tractor etc. or whatever vehicle is available.

#### Conclusion

Most of the urban centers can play an important role in linking hinterland areas by providing various kinds of functions and services. Different levels of town are dynamic center of exchange and commerce where population density is comparatively higher, people are socially and culturally heterogeneous and majority of them depend on non-agricultural activities. This paper attempts to analyze urban rural relation between Dipayal-Silgadhi bazaar and its hinterland areas in terms of functions, service, industry, travelling pattern and frequency of customers. The primary data were collected though structure questionnaire, field observation, focus group discussion and in the case of data collection, 40 customers and 30 owners of different functional were selected randomly and Books, Reports, District and municipality profile, journal etc. were used as secondary source for betterment.

It was found that the opening of Seti highway connects Doti with other hilly and Terai districts. It is the first and the most important road linkage of the region. The people of these places have begun to perform their trade activities directly with Dhangadhi, Aateriya and Mahendranagar using this highway. Likewise, after opening of Samuhagad - Uditola, Shantinagar- Dang, Khaptad- Sadak, Kalena- Sadak, MalloKalena- Sadak, Khaptad- adak road, has lost their major hinterland areas of northern, western and Eastern parts of Silgadhi. The people of these places come to Silgadhi mostly for official

purposes, educational activities and health checkup. In this way, Doti Silgadhi has undergone great transformation over time with a change in the place of socio-economic development. It is stated that town depends upon the diversified function; because of growing new market centers in its hinterland are competing with it.

Dipayal-Silgadhi has a wide market center and urban linkage. However, varieties of opportunities and challenges have to be accepted for healthy and sustainable development of Dipayal airport, planned development of integrated and local settlement pattern and clean and pure environment to live healthy, dust to care on the conservation of natural and socio-cultural heritage resources, maintenance of law and order and good management of facilities like drinking water, sewerage. Planned attempt to address these problems may notably help Dipayal-Silgadhi to maintain balance between demand-supply and sustainability.

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