

RESEARCH NOTE

FUNCTIONAL BASE ANALYSIS OF TANSEN MUNICIPAL TOWN

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Introduction

Municipal town or urban locality, according to the 1991 population census of Nepal (CBS 1994), is defined as town that contains inhabitants above 9,000¹. By defining it as incorporated town, it acquires a status of an independent administrative unit, and manages all its functions and development activities on its own through raising revenues from various sources, besides central government grant. Besides, municipal town is also a market centre as it performs three functions simultaneously, such as local exchange, internal trade and central place function.

Tansen was recognized as a municipal town in 1961. In 1991, Tansen, the only municipal town of Palpa district, had total inhabitants of 13, 599. This town population accounted for 6 percent of the district total population. Compared to 1981 census, the 1991 population size of the town had increased by less than 0.5 percent, the lowest annual urban growth rate among the municipal towns in the country². It is a district headquarters town as well. Being located on the hill slope, Tansen is an important hill town of the western region. From the very beginning, it has played a role of long distance trading activity the town is also delivering its own peculiar function to the inhabitants living in the surrounding region through a variety of activities it distinctively owns. By this identity, this town has a dominant role in its own geographic region. For this reason, the present study attempts to the functional base analysis of Tansen municipal town in terms of number, type and range of functional establishments. The characteristics of each functional unit are also discussed in this paper.

Geographical Setting of the Study Area

Tansen is located at the southern lap of the Mahabharat range in Palpa district, Lumbini Zone in the Western Development Region of Nepal. The beautiful hill Srinagar towers over Tansen. Though the town is situated on the southern slope of the Mahabharat Lekh, the area covered by Tansen is relatively flat and the slope is gentle. The town is located at an altitude of 4300 ft and the highest peak of the range in the area is 5000 ft. above sea level. The town has covered an area of 3979 hectares. It takes only about two hours by bus to reach the Terai region from Tansen. The climate of the place is moderate and pleasant. The summer temperature hardly exceeds 29°C and it does not fall below 7°C during winter on average. The annual rainfall of Tansen (1996) is 1634 mm. About 90 percent of the total rainfall occurs in summer season while remaining precipitation occurs in winter.

Data and Methods

Data Collection: A structured inventory observation sheet was used for gathering information about the number and type of functional establishments located within Tansen Municipal boundary. The sheet was used to record all functional establishment units.

For this survey, first of all an observational visit was done all around the municipal area and then a sketch map of the street layouts was drawn. Major function speciality areas such as vegetables, fruits, cinemas, bus stops, hotels and restaurants, etc. were plotted on the sketch map. Legends were given to each function supported by index if needed.

The recording of function establishment units was done on the functional inventory observation sheet. The functional units located along both sides of the main commercial thoroughfare and its adjacent streets were mainly considered for recording. The functional units located in the remote localities of the municipality in less than five numbers were omitted for recording. The enumeration was first performed at one of the street corners and then the other side was followed until the first started house reached without leaving a single house. The sketch map provided by the Tansen Municipality was also used to follow the routes. All temporary retail stalls or vending shops were also recorded. The houses used only for residential purposes were not recorded.

Methods of Analysis: This analysis is used to describe the number and type of functional establishments of Tansen town. The total number is

obtained by adding all functional units of the town. The functional establishments are divided into three major groups: Commerce, Industry and Institution. The *commercial function* is divided into five subdivisions, viz. retailing, wholesaling, catering, personal and professional services. The retail and wholesale units comprise basically all household goods. Catering units include tea and snack shops, sweets, restaurants, inns, hotels and lodges. The personal service constitutes hairdressing, radio, cassette, photocopy, rental services, etc. while the professional services comprise clinic, photo studio, law firm, typing institute, language training institute, etc. The *industrial function* is divided into two groups: repairing or retail service and manufacturing activity. The retail service industry includes tailoring or retail service and manufacturing activity. The retail service industry includes tailoring, watch, radio, bicycle and stove repairing, ornament making, farm tools, workshop, shoes making and repairing, iron grill making, furniture, etc. The manufacturing units include farms, agro-based mills, handicrafts, bakery, brick, kilns and cement blocks, cotton textiles, carpet, etc. The *institutional function* is divided into two subgroups, viz., service-oriented (education, health, police station, veterinary, post office) and production oriented (co-operative, godown, electricity, etc.)

Functional Base Analysis

Functional Structure: The word function is commonly used to mean an activity. It is the driving force of a town life, and influences to a very large extent its growth. It comprises all commercial, social, financial, developmental and administrative activities, which are associated with market town as central place and therefore, they are central functions. Functional structure or central function is the outgrowth of the relationship between a central place and customer (Pradhan, 1998). These are thus leading to a close relationship between the residences of the consumers and the location of the services.

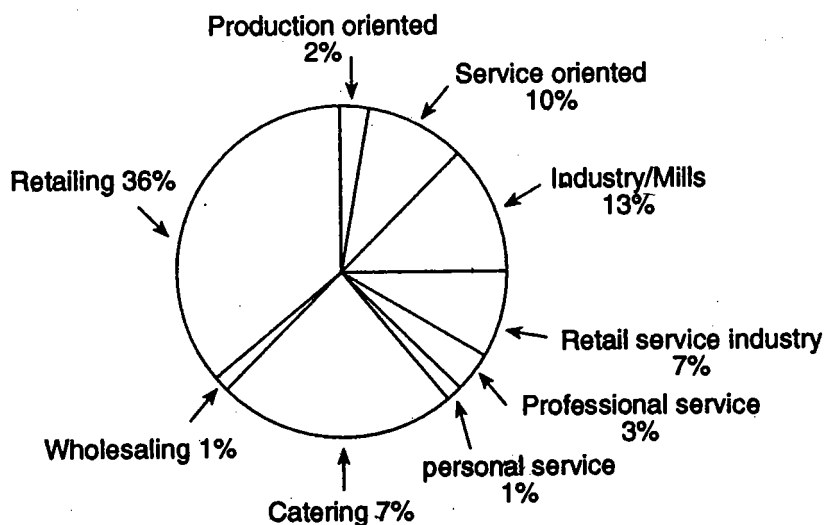
Table 1: Number and Type of Functional Establishments, Tansen Town

S.N.	Type	Number	Percentage	Weight*
1.	Commercial	862	69.2	0.11
1.1	Retailing	456	36.6	0.22
1.2	Wholesaling	15	1.2	6.67
1.3	Catering	335	26.9	0.30
1.4	Personal service	17	1.4	5.88
1.5	Professional service	39	3.1	2.56
2.	Industrial total	242	19.4	0.41
2.1	Retail service industry	84	6.7	1.19
2.2	Industry/Mills	158	12.7	0.63
3.	Institutional total	143	11.4	0.69
3.1	Service oriented	125	10.0	0.8
3.2	Production oriented	18	1.4	5.55
	All Total	1247	100.00	

Source: Field Survey, January 2001

* Weight is obtained as $(1/F_i) 100$, where F_i = total frequency of the given function.

Figure 1: Functional Structure of Tansen Municipal Town (2001)



Type: A scientific study of the function of a town is made convenient by classifying the centre into certain groups formed on the basis of their functional attributes and then analyzing the functional characteristics of each group. The functional establishments of the Tansen municipal town are grouped into three broad categories: Commercial, Industry, and Institution. A further breakdown of these categories of function is made, such as commercial function making up of retailing, wholesaling, catering, personal and professional, and industrial function comprising all local industries and mills, and repairing or retail service industries. Likewise, institutional function is categorised such as service oriented and production. Thus, a total of nine different types of functional areas identified in Table 1 and Figure 1.

Number: Among the three main functional types, a commercial function has provided dominant functional base with almost two-thirds of the total functional units of 1247 and therefore, it can be termed as 'commercial centre'. The relative share of industrial function appears to be 19.4 percent. The institutional function shares the least with only 11.4 percent of the total functional unit.

The centrality of these functions is measured based on the weighted index method, which signifies retailing as the most important function followed by catering (Table 1). By this reckoning wholesaling and personal services have appeared among the least important functions. This reflects the existing scarcity of such establishments in Tansen municipal town. It is an indication of the fact that the functional base of this town is weak to generate wholesaling and personal service activities in their surrounding areas. In general, Tansen provides the consumption, and industry-oriented functions. The higher order functions such as wholesaling, personal and professional services are in limited number.

Range: A total of 68 functional range (FR) have been identified for Tansen. The ratio between functional range and functional unit (FR/FU) is 1:18.4. It signifies that there is a larger number of the same type of functions. In other words, the range of functions is smaller compared to the total units. For instance, groceries alone have a total number of 219 and likewise, hotel plus lodge and cloths store comprise a total of 150 and 67, respectively.

Characteristics of Functional Units

Commercial Function: The relative importance of market centres can be expressed in terms of number of retailing functions and their location and kinds. Retailing has a total of 32 ranges among the five subdivisions of the commercial function in this study. The major of retailing comprise grocery, cloths, drug, stove, book and stationary, provision and so on. In this study, the least weight value of retailing (0.22) signifies that the relative importance of this function is the most important to measure centrality of Tansen town. The domination of retailing by a large number of small establishments is a common characteristic. The nature of retail shops seems to depend on the immediate needs with relatively limited choice of the local people who generally tend to prefer to have multiple shopping in the market. All major commercial functions, including a variety of retail shops, are located along the main thoroughfare of the town.

The most common feature of the commercial function is the existence of grocery store (containing both convenience and durable items). The grocery stores are a basic necessity of any market town in Nepal and can be regarded, as a primary function without which there is no true central place. This is also the case for Tansen. Another ubiquitous function is tea with snacks and sweets shop. The existence of high order functions like cloth, drug store, utensils, book and stationary, etc. in retailing; mixed grains, groceries, cloths, dealer/agents in wholesaling; restaurant, hotel plus lodge, etc. in catering and photo studio, lawyer firm, clinic, photo copy service, etc. in professional service signifies their greater centrality. The occurrence of hotels and lodges in Tansen town has a particular importance. They signify the importance of Tansen as administrative, tourism, health and commercial center. Moreover, the occurrence of bookstores, radio, telecommunication and courier services of higher centrality indicates the importance of the communication function.

This typical feature of functional arrangement has some spatio-economic implications. Distance is the vital factor for customers to perform their marketing activities in the town by single visit, as most of them walk a long distance. In this type of strategy, most of the individual shopkeepers diversify the range of services to their customers so as to spread their range of income opportunities or consumer demand. Groceries or other mixed goods thus perform many of the functions of specialist types of goods in one shop unit. Apart from the tendency of the rural people of establishing a long-term

customer loyalty to a shopkeeper in order to facilitate buying on credit is another principal characteristic of customer-shopkeeper relation.

Industrial Function: There are two components of industrial function. One is retail service industry, which comprises tailoring, repairing, jewellery shop, workshop, and so on. These are family based activities, acting as complement to other market functions. They provide services according to customer's demand, and the transactions between them occur in piecemeal basis. Of these, tailoring with varying number is found the most common in the town while others are basically selective in location. Their occurrences in the town signify the role and demand of the people in surrounding areas.

The other component is the manufacturing industry. It can be divided into three broad groups: market oriented (cotton textile, carpet, handloom, cement blocks, Power loom, metallic crafts, etc.), raw material oriented (bricks, kilns, bamboo items, etc.) and agrobased (rice, flour and oil pressing mills). The main characteristic of these industries is that except agroprocessing mills, which serve basically, farm household besides supplying their produce to urban market, all other are primarily related to urban demand oriented. Another feature is that *dhākā* (hand-loom cloth) industries employ relatively a larger number of labours in Tansen town.

The weight value assigned to industry or mills signifies that there is a satisfactory number of such functions in relation to other functional units. It has got a little more weight than the retailing (i.e. 0.41), which signifies better condition in the town after retailing.

Institutional Function: The institutional function that the Tansen possesses can be classified into two groups: productive (bank, co-operative, godown, electricity, etc.) and community oriented. (education, health, police station, veterinary, post office, clubs, temples, and so on). The occurrence of temples in a large number after schools and government offices in the town signifies the socio-religious characteristics of the place.

There are mainly seven banks (commercial bank 3, agriculture bank 1, village development bank 1, and co-operative 2). They provide loans besides other activities. There are a wide variety of health institutions including United Mission Hospital. The level and type of services of these institutions are quite different. For instance, the Mission hospital has been providing better quality services compared to the government hospital and health posts. The weight value assigned to institution is highest (i.e. 0.69) compared to

commercial and industrial function. It signifies their scarcity in Tansen compared to others.

Conclusion

The functional structure (number, type and range of functional units) of Tansen town indicates the three broad functional types, such as commerce, industry and institution. The dominant activity is the commercial function in which the most important function presence the retailing followed by catering. The retailing function is characterized by the large number of general stores, which contains both convenience goods and durable products common to all market centres. They are the basic necessity of any market centre and can be regarded as a primary function without which there is no true central place. This is also the case for Tansen. Wholesaling and personal services have appeared among the least important functions. This reflects the existing scarcity of such establishments in Tansen municipal town. Industry is second important function of Tansen town after commercial function while the relative share of institutional function appeared to be the least.

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Notes

1. Officially, municipal towns are of three hierarchical categories or order, such as metropolis, submetropolis and municipality. There are at present, altogether 58 municipal towns, comprising 1 metropolitan city (Kathmandu), 3 sub-metropolitan cities (Biratnagar, Pokhara and Lalitpur) and 54 municipalities.
2. The average annual urban growth rate during the decade of 1981-91 was 5.8 percent for the country as a whole while Pokhara town had the highest annual urban growth rate of 7.4 percent.

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