

## STRUCTURAL AND FUNCTIONAL GAPS IN THE NETWORK OF SMALL TOWNS AND MARKET CENTRES

### Structural Gaps

There is an obvious structural deficit regarding hierarchically dispersed market centres in the Bagmati Zone, although the local conditions are relatively good within the national context. There are only 187 market centres in the study area at the ratio of one centre per 57 villages, serving on an average a population of about 8,000. Most of these centres are very small. There are only 77 market centres that have more than 10 functional units. The ratio of these larger market centres is one per 138 rural settlements, and one centre serves on an average a rural population of 19,500. Out of these 77 market centres, only 12 are important market towns, and the ratio is one town per 883 rural settlements; one town serves on an average a population of 125,000.

The basic issue is not, however, the limited number but their distribution. Market centres are highly concentrated in a few favoured localities. Out of 77 market centres, 30 are located in the Kathmandu Valley. A similar pattern of concentration is discernible in the case of larger centres. Out of 12 such larger centres, five are located in the Kathmandu Valley and three in the Banepa area. There are extensive areas that do not have any market centre. Such areas are markedly notable in the Lalitpur, Kavrepalanchowk, Sindhupalchowk, and Dhading districts.

The normal limit of the service area, measured in terms of shopping and selling the farm products of the rural people, is five kilometres in the case of a lower order market centre (II and IV). Seemingly, the market area sizes of smaller central places (not covered) may be smaller than the normal size. As noted earlier, there are 187 market centres (including centres with less than 20 functional units) in the Bagmati Zone, and extensive areas lie beyond the limit of five kilometres from these centres. These areas have an estimated population of 188,000. The distribution of this population section is given in Table 10.1.

**Table 10.1: Population of Areas Beyond the Five Kilometre Limit**

District	Location	Estimated Population
Lalitpur	Southern part	14,000
Kavrepalanchowk	Southern & eastern parts	35,000
Sindhupalchowk	Northern & southeastern parts	58,000
Dhading	Northern part	40,000
Nuwakot	Northwestern & southeastern parts	41,000

Source: Survey

Sindhupalchowk district has the largest population size (58,000). The average population of the retail service area of the lower order market centres (III and IV) is about 20,000. The population of 188,000, living in areas beyond the normal limit of the service area, is equivalent



to the average threshold population of nine lower order market centres (III and IV). Thus, there is a deficit of smaller market centres in the local network. This deficit is apparent with regard to both lower order centres and smaller central places.

The deficit is obvious regarding higher order market towns. There are only 12 higher order market centres in the study area. Figure 13 shows that extensive areas do not fall within the service areas of these centres. They serve an estimated rural population of 643,000. There are 1,058,000 rural people who do not live in the service areas of these large centres. Some of these people do not have access to the marketing services of higher order centres at all, and others depend heavily on the valley's cities for higher order goods and services. It appears that these people tend to substitute the valley's cities, particularly Kathmandu, for intermediate and closer centres to obtain higher order goods and services. This is mainly due to the fact that either larger centres are not easily accessible or higher order goods and services provided by the existing larger centres do not compare positively with those offered by Kathmandu city. Banepa appears to be an exception. Similarly, some people in the Dhading district tend to substitute Bharatpur for Kathmandu.

The development of market centres, both large and small, is highly constrained by the scattered population distribution. Most of the rural settlements are very small and they are widely scattered. For instance, there are more than 2,600 rural settlements with a population of less than 250 in Kavrepalanchowk, 2,100 in Sindhupalchowk, 2,400 in Dhading, and 1,400 in Nuwakot. Out of such settlements, several have a population of less than 50. Poor accessibility is another factor limiting the growth of market centres in areas dominated by dispersed, small rural settlements. People from surrounding rural areas cannot visit market centres regularly, and visits are markedly periodic and occasional as a result of inaccessibility.

The difference in price levels of trading commodities is another important factor which limits the development of market centres. Great variations of price index occur between areas with or without motorable road links. The local people very often ignore closer centres and visit distant centres whenever variations in price levels occur.

## Functional Gaps

The local market centres, excluding a few, do not have a strong commercial base. As a result, the relative importance of market centres fluctuates quite often. Only 26 market centres conduct wholesale trade, out of which only seven are of some importance. Out of the 77 market centres, 11 centres even do not have shop units dealing exclusively in non-convenience goods. Most of the centres do not have specialised shops dealing in common shopping goods, e.g., domestic metal goods and footwear. The majority of the rural population has to commute long distances to larger centres for services, e.g., goldsmiths, as the local centres do not provide such services.

Secondary school education is a service component which does not show an apparent gap. There is one lower/upper secondary school per 7,600 in the Bagmati Zone. There are 293 dispersed central places which provide this service. The average population size of the service area of secondary schools is 7,500. Thus, the school population ratio confirms the threshold population size. Central places providing secondary school educational services are well



distributed with reference to population clusters. There are only a few localities that do not have easy access to existing schools. Such places exist in the northern part of Sindhupalchowk district, the southern part of Kavrepalanchowk district, and the northern part of Dhading district. However, the network is generally good, and no service gap exists regarding this service provision.

One apparent spatial issue regarding secondary school educational services is related to school locations. In a number of places, local people do not have easy access to schools due to unsuitable locations. There are eight market centres (out of 77) that do not have lower/upper secondary schools. This is an indication of how nodality points are ignored in selecting school locations. Another issue with spatial implications is related to facilities available at schools. The provision of qualified and trained teachers is absolutely necessary and it is due to the absence of such that the use of available educational facilities is limited. In several places, the local people ignore local facilities and use facilities available elsewhere at long distances away in the valley's cities - Dhulikhel, Bidur, and Dhading Besi.

Health services provided by health posts, health centres, and hospitals are adequate in terms of the physical network. The number of locally available establishments is not so numerous compared to secondary schools. However, the network is of reasonably acceptable standards. There are two defects regarding health services. One is the locational issue (of the same nature seen in the case of secondary schools). In a number of places, health establishments do not have nodal locations. The most serious issue is related to the quality and extent of services provided by the local health establishments. The physical network exists, but services in terms of health personnel and adequate medicines are at a very low level. It is for this reason that many local people do not use the locally available health services. This situation exists in a large number of centres. The knowledge gap regarding health service facilities is also responsible for under-use of locally available facilities in several cases.

Unlike educational and health service facilities, extension services are not adequately available in the study area. Out of the 77 market centres, only seven have extension services related to cottage industries. In the case of agricultural extension services, 45 centres provide fertiliser supply services and 38, technical extension services. The existing network of extension services is poor and available services are provided in a very inefficient manner. The existing market centres should be fully used for expansion of such services. In a number of places, the locational arrangement of such service units should be changed so that available services are more accessible for the local rural people. Increasing service efficiency is equally important.

### **Infrastructural Gaps**

Infrastructural gaps are obvious in most of the local market centres. Figure 8 clearly shows the infrastructural gaps in the case of four services; viz., all-weather road links, tap water, electricity, and telephones. Only 32 centres have all four facilities. Out of 77, 40 centres do not have telephone facilities. There are 15 centres without electrical facilities. Tap water supply is not available in 12 market centres. All-weather-roads do not link 19 centres, and some of them do not have any road links. There are three centres that do not have any of these four facilities (Annex B).



In most cases, available services are not sufficient to meet the local needs. This situation exists particularly with regard to telephone and tap water supply facilities. Electricity supplies are relatively better, excluding Devighat and Dharke which have limited service provisions. Road conditions are very poor in most areas. However, within the market centre areas, urban road links are relatively well maintained in most cases.

Other infrastructural facilities, such as surface drainage, sewage disposal, and sanitation, are underdeveloped. Even in larger centres, such infrastructural facilities are either very poor, or not available. In some of the new centres, e.g., Dhading Besi and Gajuri, and in some newly expanded areas of old centres like Barahbise and Banepa, the conditions of surface drainage and urban roads are reasonably good but in general, the gap is apparent.