The Need for a National Urbanization Policy in Nepal

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Without a well-designed and well-financed urbanization strategy, the regional and rural development potentials of an agricultural country such as Nepal may not be fully realized

Nepal, with a per capita gross national product (GNP) of US\$180 per annum, is one of 13 "least developed countries" in the ESCAP region. Its predominantly agricultural economy employs more than 80 per cent of the economically active population. The total population of the country is about 21.6 million (ESCAP, 1994). Nepal's population density has increased from 56 persons per sq. km in 1952 to more than 130 persons per sq. km in 1991. Even though Nepal is one of the least urbanized (9 per cent) countries in South Asia, its urban growth rate is the highest among the SAARC (South Asian Association for Regional Cooperation) countries. For instance, the level of urbanization in Bangladesh (17 per cent), India (27 per cent), Pakistan (33 per cent) and Sri Lanka (22 per cent) is much higher than that of Nepal, but the average annual urbanization rate in Nepal (7.3 per cent) far exceeds the rates in Bangladesh (6.1 per cent), India (3.7 per cent), Pakistan (4.6 per cent) and Sri Lanka (1.5 per cent) (Pudasaini, 1993:65; World Bank, 1993).

The country is characterized by rural settlements with rapidly urbanizing rural markets and towns. Urban development in Nepal is perceived as a by-product of existing development trends. The potential of urbanization as a necessary contemporary force in national socio-economic development has been ignored or dismissed by national planners (Ministry of Housing, 1991:5). In view of the high disparity in income levels, physical facilities and employment opportunities between the rural and urban areas, the pace of urbanization is inevitably going to be high in Nepal in the foreseeable future. While planned urbanization would be beneficial for development initiatives, rapid and haphazard urbanization, as is taking place in Nepal, is a matter of great concern.

Urban areas and towns lack basic infrastructure services. Safe drinking water supplies and electricity are inadequate in urban areas and towns, a situation that is endemic nationwide. There is virtually no sanitary waste disposal system, and solid waste systems are extremely inadequate. Urban road conditions are dilapidated. None of the urban areas has a functioning storm-water drainage system.

"... [In Nepal] there are indications of an increasing trend towards urbanization. The number of emerging urban centers and smaller towns (market towns, district headquarters) are evidence of this. The problems of urban unemployment, shortages of infrastructure, declining environmental quality (water pollution, presence of solid wastes, air and noise pollution, congestion), urban sprawl, slums, squatters, the increase in the price of land and buildings, and a scarcity of financial resources for investment constitute formidable policy challenges" (ADB, 1991:444).

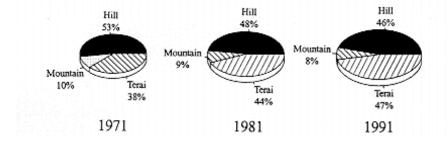
A national development policy which does not adequately consider current trends and factors influencing human resettlement, urban growth and urbanization cannot be implemented successfully (Malla, 1990:110-117). The intent of this article is to review the process of urbanization in Nepal and formulate a rationale for the establishment of a national urbanization policy for the country. In view of the seriousness of concern over the high level of internal migration and rapid urbanization, the critical issue that needs to be addressed is the establishment of a formidable rationale through which the National Planning Authority should gain political support to formulate a national urbanization policy for an immediate and measurable development impact.

Urbanization

Within the development context of Nepal, the concept of "urbanization" is a misunderstood, as well as misinterpreted, process. Most public documents on development in Nepal make token references to the importance of spatial change, which includes regional development and urbanization. Furthermore, most of these token references to urbanization are framed within misguided assumptions about the continuation of rural economic predominance. Most of these assumptions are misguided because they completely ignore the spatial reality of rural-urban interdependence.

Regionalization and urbanization are essential elements of overall development. Both processes are human resettlement responses to the changing physical and socio-economic realities of Nepal. The human resettlement process (sometimes referred to as migration) is a survival and/or economic opportunity-based choice mechanism which results (in Nepal, as elsewhere) in the spatial re-allocation of productive activities. This fact is illustrated by the demographic data in which the share of those living in the Terai (lowlands) out of the total population increased from 37 per cent in 1971 to 47 per cent in 1991. As indicated in figure 1, between 1971 and 1991, relative populations in both the mountain areas and the hills have decreased.

Figure 1: Population distribution by ecological zone, Nepal: 1971, 1981 and 1991



Source: Professor Bal Kumar K.C. (1993).

In terms of population density, table 1 indicates increases between 1981 and 1991 for all three geographical zones. While population density increases from 1981 to 1991 were negligible in the mountain and hill regions, density increased more than 31 per cent in the Terai. However, this substantial increase in population density in the Terai did not result in an increase in cultivation; there was actually a slight reduction in the area of land under cultivation. This situation may be interpreted as an indication that available agricultural land has been saturated, as well as over-utilization and over-cultivation of existing productive land (table 1).

Table 1: Population density of geographical regions in Nepal, by total and cultivated area: 1981 and 1991

Region	Population size	Percen- tage	Area (km2)	Percen- tage	Population density	Cultivated_* area (km2)	Percen- tage	Cultivated area as percentage of total area	Agricultura density
1981		•							
Mountains	1,302,896	8.70	51,817	35.21	25.14	1,165.45	5.03	2.25	1,117.93
Hills	7,1663,115	47.70	61,345	41.68	116.77	8,650.05	37.34	14.10	828.10
Terai	6,556,828	43.60	34,019	23.11	192.74	12,251.00	52.88	36.01	535.21
Whole country	15,022,839	100	147,181	100	102.07	23,166.50	100	15.74	648.47
1991									
Mountains	1,444,481	7.80	51,817	35.21	27.88	1,630.80	6.93	3.15	885.75
Hills	8,411,309	45.54	61,345	41.68	137.11	8,780.60	37.32	14.31	957.94
Terai	8,606,291	46.66	34,019	23.11	252.98	12,117.20	51.50	35.62	710.25
Whole country	18,462,081	100	147,181	100	125.44	23,528.60	100	15.99	784.67

^{*} Source: National Sample Census of Agriculture for Nepal: 1981 and 1991, Central Bureau of Statistics.

There are three major reasons for the on-going resettlement of population in Nepal:

- Availability of agricultural employment in the Terai (a pull factor);
- Employment opportunities in emerging urban centres (a pull factor); and
- Harsh physical conditions coupled with lack of cultivable land to meet the needs of the growing population in the mountain regions (push factors).

The eradication of malaria in the lowlands has resulted in substantial movements of people from the mountains and hills to the lowlands to seek economic opportunities in the agriculturally fertile lands of the Terai region.1 Currently, the Terai accounts for over 65 per cent of cultivated land (see table 1), over 35 per cent of roads and 63 per cent of industry (Gurung, 1989:41-43). Furthermore, the urban population of the Terai region has increased from 17 per cent of the national urban population in 1952 to over 53 per cent in 1991. Between 1952 and 1991, the urban population of the Terai region grew more than 8 per cent annually (K.C., 1993:18).

Based on these and possibly other push-pull factors, it may be said that the people of Nepal are "voting with their feet". For example, they move to rural locations, which offer them greater economic opportunities and greater social amenities. For the same reasons, some people move to emerging rural market centres and, later on, to larger established regional urban centres, finally ending up in Kathmandu, the national capital. Some people move from rural settlements directly to regional urban centres, or to the national capital. These are very dynamic and forceful rural-to-rural, rural-to-urban and urban-to-urban migratory trends which will continue to change the socio-economic fabric of Nepal in the future.

The recording of urbanization data began with the 1952 census. That census defined what is urban, not in terms of population or settlement characteristics, but rather in terms of towns which have traditionally been considered cities. Based on this traditional urban city concept, the 1952 census recognized 10 towns as urban settlements. These towns, with a total population of 238,000 persons, comprised approximately 3 per cent of Nepal's total population in 1952 (see table 2).

Table 2: Urban population of Nepal: 1952 and 1991

Municipalities	Total popula	tion
	1952	1991
Kathmandu	105,247	421,258
Biratnagar	8,060	129,388
Lalitpur	41,334	115,865
Pokhara	-	95,286
Birganj	10,037	69,005
Dharan	-	66,457
Mahendra Nagar	-	62,050
Bhaktapur	32,118	61,405
Janakpur	7,037	54,710
Bharatpur	-	54,670
Hetauda	-	53,836
Nepalganj	10,813	47,819
Dhangadi	-	44,753
Butwal	-	44,272
Damak	-	41,321
Sidhartha Nagar	-	39,473
Tribhuvan Nagar	-	29,050
Rajbiraj	-	24,227
Birendra Nagar	-	22,973
Tulsipur	-	22,654
Gaur	-	20,434
Byas	-	20,124
Lahan	-	19,018
Bidur	-	18,694
Inaruwa	-	18,547
Kalaiya	-	18,498
Jaleswor	-	18,088
Toulihawa	-	17,126
Dhankuta	-	17,073
Bhadrapur	-	15,210
Malangwa	7,674	14,142
Tansen	-	13,599
llam	-	13,197
Banepa	-	12,537
Dipayal	-	12,360
Dhulikhel	-	9,812
Kirtipur	7,038 <u>*</u>	-
Thimi	8,657**	-
Total	238,015	1,758,931

Source: Population censuses of 1951/52 and 1991, Central Bureau of Statistics.

** = Part of Bhaktapur by 1991.

In contrast to the 1952 census, the 1961 census classified towns with populations of 5,000 or more as "urban". Thus, 16 towns were qualified as urban settlements, their total population being 336,000, or 3.6 per cent of the country's population. The 1971 census changed the requirement for an urban classification, increasing it from 5,000 or more population to a minimum population of 10,000. In addition to increasing the magnitude of population for qualification, the 1971 census added another criterion: the presence of permanent structures, such as schools, administration buildings and commercial facilities. Under the Town Panchayat Act of 1962 an urban settlement was defined as a town with permanent structures and a population size of more than 10,000. Based on the Panchayat Act of 1962 (a municipalities act), the 1971 census enumerated five new towns that qualified as urban. Five of the towns considered urban by the 1961 census were not classified as urban by the 1971 census. Accordingly, the 1971 census resulted in 16 towns being considered urban, with a population of 462,000 people, or 4 per cent of the total population. Furthermore, 12 towns with populations of more than 10,000 people were not considered urban because they did not contain permanent structures. Also, three towns with recognizable permanent structures did not qualify as urban because they did not meet the minimum population requirement of 10,000.

In 1976, an amendment to the 1962 Panchayat Act reduced the population requirement for an urban classification to 9,000 persons. Based on that adjustment, the 1981 census reported 23 towns qualifying as urban settlements. These towns accounted for a total urban population of 957,000, or 6.4 per cent of Nepal's population. By 1987, the total number of towns considered urban increased to 33. The 1991 census indicated a total urban population of 1,696,000, comprising approximately 9.2 per cent of the total population of the country.

Within the Central Bureau of Statistics definition of an "urban" population being a settlement with 5,000 or more people, the number of urban settlements increased from 10 in 1951 to 33 in 1987. In 1952, there were exactly five urban centres in the Terai; by 1987 there were 21 urban centres in the Terai (see figures 2 and 3 on following pages). This is a substantial increase in the number of urban centres, particularly in the Terai. The formation of agro-based economic regions and sub-regions created multiplicities of rural market centres which, through time, became urban service delivery points in the Terai.

A review of figure 2 indicates that in 1952 there were only 10 urban centres in Nepal. Of these, eight were located in the Central Region of the country. Of these eight urban centres, four were located in the Kathmandu Valley. The remaining four urban centres in the Central Region were located in the Terai. Only two other regions, namely the Mid-western and Eastern Regions, were home to the remaining two urban areas in the country.

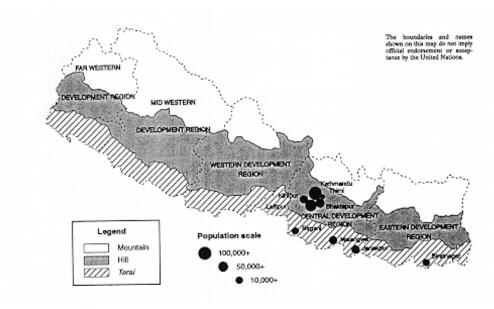
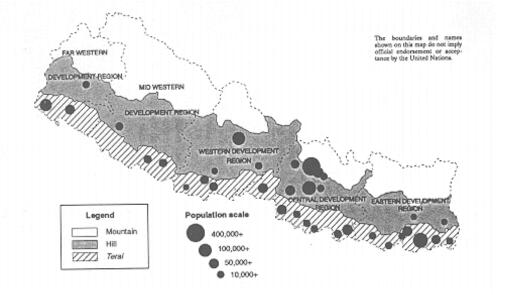


Figure 2: Distribution of urban centres in Nepal: 1952

Source: Bal Kumar K.C., and others, 1991.

Figure 3: Distribution of urban centres in Nepal: 1991



Source: Bal Kumar K.C., and others, 1991.

Note: This map shows the increase in cities. No attempt is made to name each of the cities depicted by the black dots, because of the small space available. Refer to table 2 for the list of cities concerned.

As indicated in figure 3, by 1991 the number of urban centres increased to 36. Two regions, the Central and the Eastern, exhibited the greatest increases in the number of urban areas. These two regions may be considered to be urbanizing much faster than the other three regions. However, the urbanization trends of the other three regions between 1952 and 1991 still illustrate a substantive increase in the number of urban areas, particularly in the Western Region where there were no urban settlements in 1952; however, by 1991, seven urban areas had been established. This substantial increase in the level of urbanization in Nepal is a result of many factors. Two of these factors, namely conversion from a subsistence to a cash economy and the expansion of transport and communications systems, played a major role in stimulating greater urbanization. Conversion of extra supplies of agricultural products to cash and the availability of goods and services which can be purchased by cash raised by selling the agricultural products, have created an influx of various commercial activities into these rapidly urbanizing rural market nodes. Consequently, increased commercial and service delivery activities resulted in an increased demand for labour, which converted, through time, these small rural market centres into growing urban settlements.

In order to comprehend the ramifications of on-going human resettlement activities, one would have to synchronize analytically the rural and regional development with the overall changes occurring in the urban structures of Nepal. Figures 2 and 3 illustrate the magnitude of urbanization which occurred between 1952 and 1991.

The emerging cash-based agricultural production system naturally created its own marketing locations, which also acquired the presence of commercial establishments and public service infrastructure. By 1991, Nepal had 36 urban centres, the majority of which were recently urbanized rural market centres. As the commercialization of Nepal's agro-economic structure continues, new rural market centres, with the potential of becoming future urban nodes, are being formed.

In 1952 only the Central Region, the most heavily populated and most developed region in Nepal (in terms of transportation and communications infrastructure), had substantial urban systems in operation. In the Central Region, in addition to greater Kathmandu, there were only three other urban settlements of any substance located on the major transport arteries on the Nepal-India border. The remaining two other urban settlements in Nepal, Nepalganj in the West and Biratnagar in the East, were similarly located on the major commercial arteries entering Nepal from India. This is a clear indication of the existence of a subsistence-based and highly isolated rural economic system. However, during the 1970s and 1980s, as a result of the socio-economic changes which occurred through the opening of the country to the outside world, the subsistence-based economic nature of the rural areas started to change to a commercialized agro-economic system. It is expected that, during the 1990s, Nepal's agricultural system will be substantially commercialized, and will be coupled with agro-industrial activities in urban market locations where agro-product and agro-labour oversupply may create economic advantages for processing.

Primacy and urbanization

As indicated in figure 3, there were 36 urban settlements in 1991. A population size ranking of the urban settlements in 1991 is presented in table 3. The Kathmandu Metropolitan Area, with almost 600,000 people in 1991, is the most heavily populated urban area in Nepal. The second-ranked city is Biratnagar, with a 1991 population of 129,388 people; the third and fourth ranked cities are Pokhara (95,286 people) and Birganj (69,005 people), respectively.

Table 3: Urban primacy

Urban area	Population (1991)	Rank	Primacy	Primacy index
Kathmandu_*	598,528	1	598,528	
Biratnagar	129,388	2		2.04
Pokhara	95,286	3	293,679	
Birganj	69,005	4		

Source: Central Bureau of Statistics, 1991.

In terms of primacy, it is clear that Kathmandu is Nepal's primate city. Comparing the population of Kathmandu with the combined total population of the next three cities in rank, one realizes the magnitude of Kathmandu's status as primate city -- 600,000 persons in Kathmandu versus a total of 294,000 people combined in the three cities, Biratnagar, Pokhara and Birganj. A primacy index of 2.04, as illustrated in table 3, is a clear indication of the presence of a strong primate city;2 its primacy index is among the highest in the SAARC subregion.3

The urban primacy analysis strongly indicates a lack of urbanization policy for strengthening the development capacities of middle-size cities in Nepal. The development of middle-size cities (populations of 50,000 or more) may substantially slow down the ongoing migration to Kathmandu by creating economic opportunities and employment. Furthermore, the development of middle-size cities such as Biratnagar, Pokhara, Birganj and others may result in the formation of urban agro-industrial centres stimulating the overall development of the surrounding rural areas as well as peripheral market towns.

Urban institutional structures

In 1989, the Government of Nepal formed the Ministry of Housing and Physical Planning to manage the development of urban areas. The Government also established the Division of Urban Development in the Ministry of Local Development, focusing particularly on the effective and efficient financial and administrative operations of municipalities. In order to accomplish administrative and financial improvements in municipal operations, the Government created the Urban Development Training Centre at Pokhara.

All three of the above-mentioned institutions and to some extent various sectoral agencies, such as the Nepal Water Supply Corporation, Department of Roads, Nepal Electric Authority and Nepal Telecommunications Corporation, contribute to the solution of urban problems. However, none of these institutions has the technical capacity and manpower capabilities to analyze the on-going process of urbanization relative to overall development within a spatial context. Neither do these institutions have the authority to formulate policies to activate programmes to strengthen the rural economic development potentials of regional entities through systemic and guided urbanization. Such authority to formulate and activate a national urbanization policy belongs to the National Planning Commission directly under the political jurisdiction of the Prime Minister. Currently, the National Planning Commission does not contain a division or a special unit which focuses on the spatial components of Nepal's development efforts. Thus, it would seem to be imperative that the National Planning Commission form a division or a special unit to compile spatial data to be analyzed for the formulation of urbanization and regional development policies.

Urban-rural interdependencies

Neither the goals of increased agricultural productivity and income expansion nor those of greater equity in income distribution can be attained without increasing the interaction among villages, market towns, intermediate cities and metropolitan areas (Ertur, 1984:63), (see figure 4).

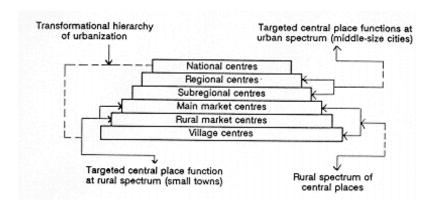


Figure 4: The hierarchy of central places

Source: Ertur, 1984:64

"[The] evolution of subsistence into commercial farming, of simple handicrafts into more specialized processing and

^{*} Note: Includes the municipalities of Kathmandu, Lalitpur and Bhaktapur.

manufacturing, of scattered and isolated economic activities into concentrated nodes of production integrated into a national system of exchange requires a well-articulated spatial structure. Settlements of various sizes, specializing in different economic and social functions, must be linked to each other through a network of physical, economic, technological, social and administrative interaction. The linkages -- patterns of transaction among groups and organizations located in spatially dispersed communities with sufficient threshold sizes of population to support their own specialized activities -- are the primary means of expanding the system of exchange and transforming underdeveloped societies" (Rondinelli, 1978:160).

As indicated in figure 4, the rural market town is the basic economic activity node in which rural people exchange their agricultural products for the goods and services they need (INFRAS, 1993:146). In the Terai, because the level of agro-economic activities increased substantially since the 1950s, so did the number of urban market centres. These newly formed urban market centres are the human settlement points at which the upward flow of agricultural products and craft items are introduced into the higher levels of the agricultural marketing system. Similarly, these urban market centres are the final effective destination of the downward movement of goods and services.

"Small scale urban development in the hill regions, an intentional as well as unintentional product of the country's overall spatial development strategy, places new demands on rural resource systems and promotes new spatial relationships between rural populations and national development" (Zurick, 1993:42).

(Click here for photo) Father listens while daughter recites her lessons. Making gilded earrings, this resident of Kathmandu is one of many people involved in the manufacture of handicrafts that are introduced into the higher levels of the agricultural marketing system in Nepal. (UNICEF photo by Satyan)

There is overwhelming evidence that a considerable number of people in Nepal are moving by choice and will continue to move to locations which offer them greater opportunities and better amenities in life. These movements of people change the development profiles and potentials of the various regions of Nepal. As was indicated by the data presented in figure 1, there is a substantial movement of people from the mountain and hilly regions to the Terai. On the one hand, de-population of various parts of the hills and the mountain regions may release the pressure on land and result in greater agricultural opportunities for the remaining population. However, greater population concentrations in the Terai may result in over-utilization of arable land, unless the incoming populations are diverted into non-landbased productive activities in the agro-industrial and agro-commercial sectors. Through various public policy instruments, such as national urbanization and regional development strategies and properly enforced land-use policies and human resettlement programmes, increased population concentrations in the Terai may substantially expand agricultural production and agro-commercial activities, resulting in the formation of additional market centres and service delivery nodes. These newly formed market centres and service delivery nodes in time will become small- and medium-size urban centres, further stimulating the on-going agro-commercialization and agro-industrialization processes in Nepal.

This dynamic rural economic development process necessitates the formation of new urban nodes and the expansion of existing middle-size urban centres. The newly formed urban nodes and the expanding urban centres are essential for the continued expansion of agricultural productivity and diversification. These urban centres are also essential for meeting the increased demand for goods and services of the agricultural labour force.

The combined effects of the expansion of agro-commercialization (via formation of market centres) and the availability of goods and services (via formation of urban services nodes) will be the industrialization of the agricultural sector through increases in technological agro-product innovations.

"The locational and functional aspects of service [and market] centers -- and the non-spatial policies necessary to complement their efficacy -- are topics demanding research as well as policy attention in Nepal. [There is a] need to clarify the implications of service [and market] center concepts for the mobilization of existing resources, for development parameters, and for contingent migration processes" (Sharma, 1989:143).

Policy implications

The rationale for the establishment of a national urbanization policy in Nepal rests on the premise that urbanization is the catalyst for the formation of a graduated hierarchy of human settlements networked within an agro-industrial resource base.

"[This] premise is tied to the policy objective of reducing inter-regional disparities in development (between the hills, the Kathmandu Valley and the Terai on the one hand, and between the rural and urban areas on the other) and the deliberate creation of an integrated settlement system that is oriented inward rather than outward. The assumption is that the creation of such a settlement system will enhance the complementarity of urban and rural development efforts, on the one hand, and aid in reducing the dependency of the Nepalese state and the urban system on India, on the other. In this sense spatial policies are seen as precursors or even alternatives to structural policies" (Sharma, 1989:139).

A systemic and guided urbanization policy, in principle, will include a development investment strategy (public and private) to strengthen and expand the territorially defined urban-rural entities existing in Nepal, particularly in the Terai. Such an urbanization policy should be based on the following:

• Levels and spatial differentiation of agricultural and agro-industrial productivity and diversification;

- Location-specific labour participation levels;
- Spatial analysis of the increased demand for goods and services;
- Location-specific exponents of expanded capacity to export; and
- Physical and territorial advantages for agro-products marketing (Friedman, 1980:200).

A regional development investment package in these areas with recognizable agro-surplus capabilities and appropriate crop diversification will have substantial developmental effects via commercialization and the industrialization of agriculture. Such expansions in agricultural industrialization and commercialization should be linked to the demand functions of the higher level urban settlements. Concurrently, a regional and/or rural development investment strategy will not be a sufficient development force without a strategy to invest aggressively in the newly formed and expanding urban entities as well as in the existing towns and cities. This necessitates the formulation of a national urbanization policy for Nepal.

A comprehensive and enforeable national urbanization policy should clearly articulate the following main initiatives, which have been presented repeatedly in various public documents during the past 10 years:

Development of market towns and service centres to form effective urban-rural linkages;

Strengthening of urban nodes around main transportation nodes;

Integrating basic infrastructure development with urban land-use plans;

Promoting non-farm employment opportunities by identifying location-specific economic growth potentials of market towns and urban service centres;

Establishing and strengthening financial and technical institutions in middle-size cities for urban development activities; and Strengthening the role of municipalities for mobilization of local resources and self-financing of urban development activities (ADB, 1991:444-447).

A national urbanization policy with a strong strategy component to strengthen existing urban-rural interdependencies should result in the provision of appropriate urban public services, improvements in the transport and communication infrastructure, and expansion of industrial and commercial functions of the urban nodes. Without a well-designed and well-financed urbanization strategy, the regional and rural development potentials of an agricultural country such as Nepal may not be fully realized. Therefore, it is strongly suggested that the Government of Nepal give serious consideration to formulating a national urbanization policy, particularly for the formation of an urban management framework for small towns and middle-size cities to maximize the country's rural development potential.

Footnotes

Because of the open border with India, there appears to be movement of labour from India to the Terai during times when crop yields are good, and from the Terai to India when crop yields are poor.

Four-city primacy index: if the population of the largest city in a country is greater than the combined populations of the three next largest cities, then the four-city index is greater than 1 (one) and primacy can be said to exist in that country (United Nations, 1993:21).

Pakistan, with a 1.1 primacy index, is considerably less primate than Nepal and Bangladesh. India, with an index of 0.5, exhibits no primacy (United Nations, 1992:25).

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