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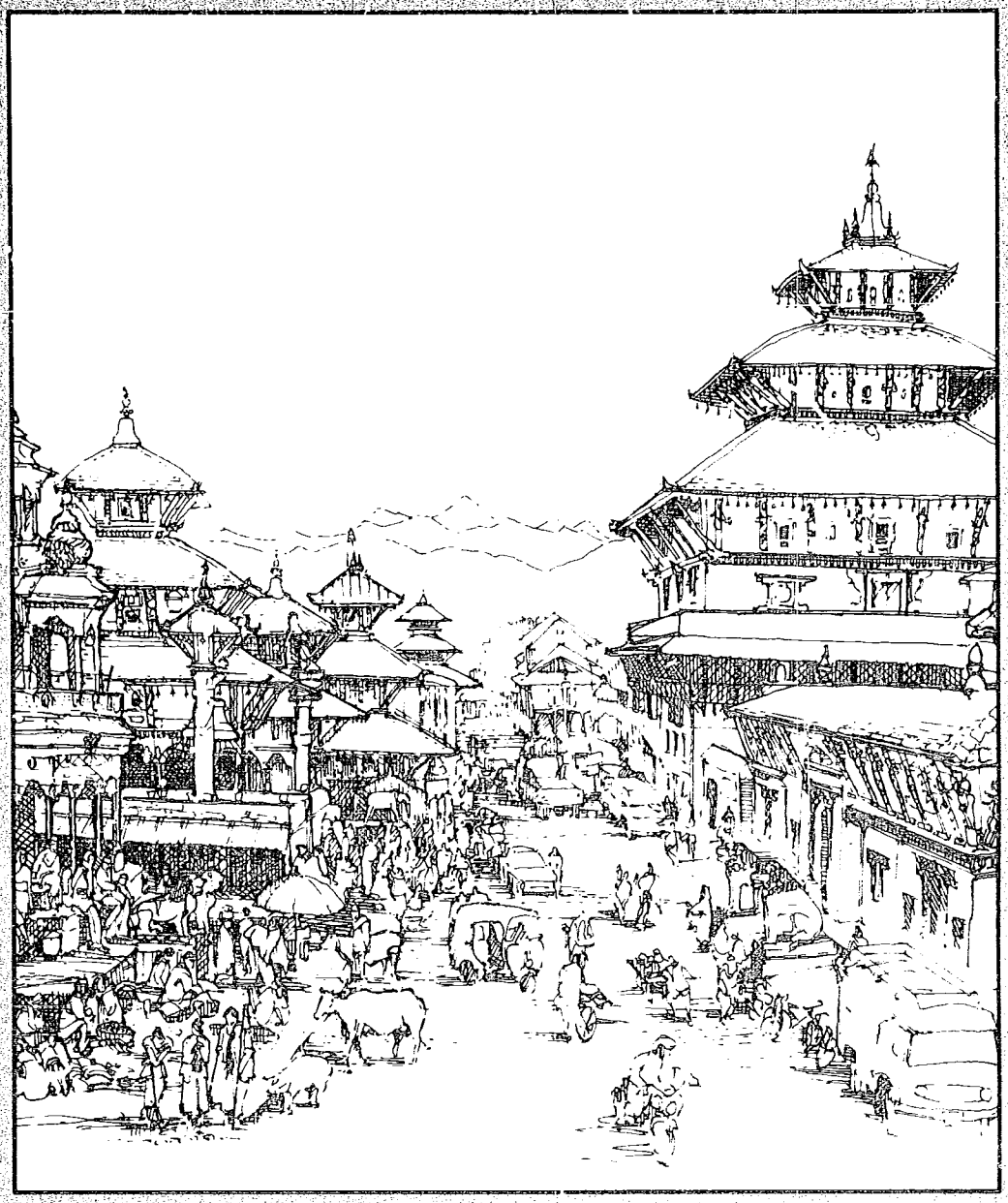

NEPAL

Urban Development Policy Study

His Majesty's Government of Nepal
UNDP, World Bank, US Agency for International Development

January 1990

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NEPAL
Urban Development Policy Study

Prepared for
His Majesty's Government of Nepal

by
PADCO, Inc.

in conjunction with
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ABSTRACT

Nepal Urban Development Policy Study

This study provides a comprehensive review of urbanization and urban policies in Nepal. The demographic and economic trends in Nepal are analyzed and existing urban institutions and government policies evaluated. Recommendations for government policy and urban development strategy are given for a broad range of sectors and issues including urban services, municipal management, land development, the role of the private sector, and employment generation. The document contains an extensive bibliography and numerous table and figures, making this a useful reference tool.

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LIST OF ACRONYMS

BNI	Basic Needs Income
CBS	Central Bureau of Statistics
CDO	Chief District Officer
CEDA	Centre of Economic Development and Administration, Tribhuvan University
CIDB	Cottage Industry Development Board
CPI	Consumer Price Index
CRWR	Center for Research in Water Resources
CSDP	Cluster (Compact) Settlement Development Program
CSI	Cottage and Small Industry Project
DCVI	Department of Cottage and Village Industry
DHBPP	Department of Housing, Building, and Physical Planning (dissolved in 1988)
DHUD	Department of Housing and Urban Development
DOI	Department of Industry
DOL	Department of Labor
DOR	Department of Roads
DTVE	Directorate of Technical and Vocational Education
DWSS	Department of Water Supply and Sewerage
EAARRP	Earthquake Affected Areas Reconstruction and Rehabilitation Project
EEHRC	Earthquake Emergency Housing Reconstruction Component of EAARRP

ESCOR	Economic and Social Committee on Refugees
ESMAP	Energy Sector Management Assistance Program
FAO	United Nations Food and Agriculture Organization
GLD	Guided Land Development
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
HBPP	Department of Housing, Building, and Physical Planning
HDFC	Housing Development Finance Company (India)
HFC	Housing Finance Company
HMC	Housing Management and Construction Co. Ltd.
HMG	His Majesty's Government of Nepal
HSD	Human Settlements Division, Asian Institute of Technology
ICIMOD	International Center for Integrated Mountain Development
IDA	International Development Association (of World Bank)
IFC	International Finance Corporation
ILO	International Labour Organization
KVDA	Kathmandu Valley Development Authority
KVTDC	Kathmandu Valley Town Development Committee
KVTPO	Kathmandu Valley Town Planning Office (abolished)
LCRC	Language Culture Training and Research Centre
LDP	Land Development Program
LSC	Labor Supply Center
MDC	Municipal Development Component of EAARRP

MHPP	Ministry of Housing and Physical Planning
MLSW	Ministry of Labor and Social Welfare
MOEC	Ministry of Education and Culture
MOF	Ministry of Finance
MOH	Ministry of Health
MPLD	Ministry of Panchayat and Local Development
MSTP	Management Support for Town Panchayats Project
MSUD	Management Support for Urban Development Project (successor to MSTP)
MWT	Ministry of Works and Transport
NASC	National Administrative Staff College
NDC	National Development Council
NEA	Nepal Electricity Authority
NGO	Non-Governmental Organization
NLDC	Nepal Land Development Company
NPC	National Planning Commission
NRB	Nepal Rastra Bank
NRC	Nepal Resettlement Company
NTC	Nepal Telecommunication Corporation
NTVEC	National Technical and Vocational Education Committee
NWSC	Nepal Water Supply Corporation
OSR	Own Source Revenue
PDLT	Panchayat Development Land Tax

PUDTC	Pokhara Urban Development Training Center
ROR	Rate of Return
SBPP	Small Business Promotion Project
SCDP	Service Centre Development Programme
SFDP	Small Farmers Development Program
SWMB	Solid Waste Management Board
SWMRMC	Solid Waste Management and Resource Mobilization Center
TDC	Town Development Committee
TDF	Town Development Fund
TDFB	Town Development Fund Board
TP	Town Panchayat
TRUGA	Training for Rural Gainful Employment Activities
UDD	Urban Development Division (of MPLD)
UDLE	Urban Development through Local Efforts project (of GTZ)
UNCHS	United Nations Centre for Human Settlements (Habitat)
UNDP	United Nations Development Programme
USAID	U.S. Agency for International Development
VBDP	Village Block Development Program
WSSB	Water Supply and Sanitation Board
WSSC	Water Supply and Sewerage Corporation
WSSRP	Water Supply and Sanitation Rehabilitation Project
WTC	Women's Training Center

INTRODUCTION

This document was prepared at the request of the Ministry of Housing and Physical Planning, HMG. It is intended to serve as a resource for formulating the urban development component of the Eighth Plan (1990-1995) and as a reference for HMG agencies on urban development policies and strategies. This report does not cover housing. A review of HMG's housing policy will be carried out in 1990 with support from UNCHS (Habitat).

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1. SUMMARY

1.1. Demographic and Economic Context for Urban Development

The 1989 population of Nepal is estimated to be 18.8 million, up from 15 million in 1981. The national population is expected to grow at a rate of 2.4 to 2.5 percent per year over the next two decades, which would yield a population of about 25 million in the year 2001 and 31 million in the year 2010.

In 1961 the Hill and Mountain regions of Nepal had about two thirds of the national population. Before the 1960s the Terai was mainly an inhospitable, malarial jungle. The control of malaria in the early 1960s opened the Terai to large-scale settlement. Since then, migration from the Hills to the Terai has increased the Terai's share of national population to slightly less than one half. The trend of out-migration from the Hills to the Terai is expected to persist, owing to the pressure of natural population growth on limited land resources in the Hills combined with lack of economic opportunities there. The absorptive capacity of both urban and rural areas of the Terai will continue to support in-migration in the foreseeable future. Pressure to settle the largely undeveloped western Terai will increase. However, migrants will also continue to gravitate to the eastern and central Terai, with its well-developed infrastructure, in search of non-farm economic opportunities.

Nepal is consistently ranked among the five poorest of the low-income developing countries. Over the past two decades, growth of per capita GNP has been nearly stagnant. Despite incremental growth in the past several years, Nepal's current (1989) GNP per capita is $170, among the lowest in South Asia.

Agriculture remains the primary (but not the only) source of income and employment for over 90 percent of the country's population. The agricultural sector accounts for 58 percent of GDP and 80 percent of all exports. The contribution of industry to the national economy remains modest at 4 percent, most of which is in small-scale and cottage industry.

Nepal's balance of trade deficit of around $367 million is largely offset by international donor assistance, which has increased by 79 percent in the past three years. Nepal's key foreign exchange earners are tourism and exports of carpets and ready-to-wear garments. HMG has been pursuing a policy of liberalizing its industrial and trade regimes and promoting domestic and foreign private investment. However, it is too early to judge the impact of these measures.

The economically active population (over the age of 10) is estimated to be 71 percent in rural areas and 54 percent in urban areas. Unemployment is relatively low (although it reaches 8 percent in urban areas), while underemployment is high, estimated at 46 percent in rural areas and 34 percent in urban areas.

HMG is in the process of assessing the economic and fiscal consequences of the trade and transit dispute between Nepal and India which began in March 1989.

1.2. Urbanization

Nepal has 33 officially-designated "Town Panchayats" (municipalities), which contained 1.5 million people in 1987, or about 9 percent of the national population. The only criterion for designating Town Panchayats is that they have at least 9,000 people. Four Town Panchayats have been established since 1981. Some Town Panchayats are made up of an extensive rural area surrounding a small urban core of a few thousand. Ten new Town Panchayats have been established since 1981.

The present Town Panchayats are expected to grow as a group, at an average of about 5 percent per year up to 2002. This would produce a total Town Panchayat population of about 3.2 million, or nearly 13 percent of the national population. This does not include population growth due to boundary expansion or designation of new Town Panchayats.

The urban centers of the Kathmandu Valley have been economically and politically important for hundreds of years. Greater Kathmandu (Kathmandu and Lalitpur Town Panchayats), with a population nearing half a million, remains the key economic and administrative center of the country and is expected to grow at about 4 percent per year in the coming 10 to 20 years.

Since the mid-1960s, the focus of urban growth in Nepal has been the Terai, Nepal's food-grain surplus region. Rapid urbanization in the Terai has been due to rural-urban migration, the designation of new Town Panchayats, and the expansion of previous municipal boundaries. The growth of the main "gateway" cities along the Indian border--Biratnagar, Birgunj, Siddharthanagar, and Nepalganj--has been especially striking. Other large Terai and Inner Terai towns--Janakpur Hetauda, Butwal, and Bharatpur--have grown rapidly as a result of the extension of the main highway system and other public investments. Smaller centers in the Terai along all-weather roads have also experienced growth.

The official definition of urban areas in Nepal generates a relatively low estimate of the urban population. However, if one takes smaller, non-Town Panchayat urban centers into account, the picture changes dramatically. Good data are not available, but the 1981 census provides a suggestion. In 1981, there were 1,016 localities with populations of between 5,000 and 10,000. These had a combined population of 6.4 million, or 41 percent of the 1981 national population. As these urban centers have probably been growing faster than the national population, their importance today is likely to be greater. Local-level studies suggest that the inhabitants of these smaller urban centers rely mainly on agriculture, but services and government-related employment are also significant.

Assuming that the non-agriculture segment of national GDP is urban, the "urban component" of the national economy shows a long-term trend of increasing faster than the rural component. If the present trend continues, the urban-based share of GDP will

exceed the rural by the year 2000. This highlights the need for strategies of urban economic development and the positive role of urban centers in the national economy.

Outside of the Kathmandu and Pokhara Valleys, the development of urban centers in the Hills is constrained by several factors: the subsistence economy, the poor natural resource base, rugged topography, the high cost of access, and competition between indigenous (cottage) and Indian manufactured goods. Most Hill towns appear to have declined or remained stable. The few growing Hill towns have been small catering centers along main trails or roads, administrative centers that have experienced an influx of government employees, and a few places at road-heads that serve as distribution centers. The potential for some Hill towns to develop as agro-service centers will depend on the ability of certain Hill areas to develop new cash-crop production and marketing activities.

The recent growth of urban centers in the Terai has been facilitated by highway construction, malaria control, and land clearing, but their economic development is largely influenced by the Nepal-India trade relationship. The major Terai cities are closely linked through trade with small and large Indian cities in the states of Bihar, Uttar Pradhesh, and West Bengal. The towns of the Terai also serve as economic centers for their relatively rich rural hinterlands in the Terai itself.

The incidence of poverty in Nepal is substantially higher in rural areas than in urban areas. The bulk of the poor are rural dwellers in the Hills and Terai who remain dependent on agriculture for subsistence, and yet have tenuous rights to land or no land at all. The median monthly household income is estimated to be NRs. 2,380 in urban areas and NRs. 1,690 in rural areas (January 1989).

Despite significant efforts to improve urban services, serious deficits remain. Urban population coverage (as measured by Town Panchayats only) in 1987/88 was 83 percent for water supply (attributable in part to easy groundwater availability in the Terai), 70 percent for electricity, 47 percent for adequate sanitation (largely septic tanks and pit latrines), 18 percent for solid waste disposal, and virtually no stormwater drainage. There is an absence of facilities specifically for area-wide drainage (as opposed to roadside drainage) in urban centers. Only the Kathmandu Valley Towns have piped sewerage, and these systems are not well utilized due to high operating costs and low maintenance.

The deficit figures obscure the frequent low quality of services provided. Only 23 percent of urban roads are in good condition, for example. Water supplies are often not efficient or safe, and low pressure and short supply hours are common. Electricity is subject to frequent interruptions, and voltage instability is routine.

To eliminate existing deficits of urban services and meet the needs of future urban growth would require many times the current physical amounts of facilities (roads, drains, water systems, etc.). Thus the key problems are making service delivery much more efficient and mobilizing new financing for construction as well as operation and maintenance.

1.3. Institutions, Policies and Programs

Multi-sectoral and administrative institutions involved in urban development are:

Central Level

- National Development Council
- National Planning Commission
- Ministry of Housing and Physical Planning
- Department of Housing and Urban Development (under MHPP)
- Ministry of Panchayat and Local Development - Urban Development Division
- Town Development Fund Board

Local Level

- District Panchayats
- Town Panchayats
- Kathmandu Valley Development Authority
- Town Development Committee
- Zonal Commissioner
- Chief District Officer

Following are the sectoral agencies involved in urban development:

Sectoral Agencies

- Nepal Water Supply Corporation (under MHPP)
- Department of Water Supply and Sewerage (under MHPP)
- Department of Roads (under Ministry of Works and Transport)
- Solid Waste Management and Resource Mobilization Center (Greater Kathmandu only, under MHPP)
- Nepal Electricity Authority
- Nepal Telecommunications Corporation
- Ministry of Education and Culture
- Ministry of Health

There are also two public-private land development companies that have been attempting to undertake projects:

- Housing Management and Construction Company, Ltd.
- Nepal Land Development Company

The Seventh Plan (1985-1990) included Nepal's first explicit policy and strategy statement on urban development and housing. It contains numerous provisions, and efforts have been made to implement most of them during the past five years. Significant progress has been made on two elements: local resource mobilization and institutional reforms. A major program of technical assistance and training has been undertaken, with UNDP/IBRD support, for improving the financial management and revenue-raising capacities of the Town Panchayats. In the area of institutional reforms, several new organizations have been created, including MHPP, DHUD, MPLD/UDD, TDFB, and NWSC. In various other Seventh Plan urban components, some progress has been made but much remains to be done. These include: strengthening the role of Town Panchayats, developing investment programs for urban centers, supporting urban-rural linkages, providing central-level support, land use

and infrastructure planning, urban service standards, urban employment generation, urban environmental problems, and promoting private sector investment for urban development.

Some strategies related to urban development and housing appear in HMG's "Basic Needs Program". These strategies focus on cost recovery, local participation, and the mobilization of private sector efforts and resources.

Both MPLD and MHPP have policy and strategy statements. MPLD's stresses strengthening the financial and technical capacities of Town Panchayats in accordance with HMG's Decentralization Program. MHPP's approach focuses on the fulfillment of the shelter component of the Basic Needs Program and promotion of planned development of urban areas.

HMG has undertaken an array of urban development programs, mainly through MHPP and MPLD but also including other agencies. These are summarized as follows:

Inter-Agency Programs

- Municipal Development Project (World Bank, UNDP, UNCHS)
- Management Support for Urban Development (formerly MSTP, supported by UNDP/IBRD)
- Urban Development through Local Efforts (GTZ)
- GTZ Town Development Projects (three towns)
- Earthquake Affected Areas Reconstruction and Rehabilitation Project (supported by the World Bank, UNDP, and UNCHS)
- Service Centre Development Program (MHPP and MPLD)

MHPP Programs

- Land Development Program (sites and services)
- Guided Land Development
- Land Pooling (to be undertaken)
- Urban Planning for Town Panchayats, District Headquarters, and Newly Emerging Towns (TP component assisted by MSTP/MSUD)
- Cluster Settlement Development
- Village Block Development
- Policy and Technical Support for the Urban [Housing] Sector (project to be initiated in 1990, supported by UNDP/UNCHS)
- Training Task Force for Urban Area Upgrading (supported by Norwegian Institute of Technology)
- Nepal Housing Finance Company (this is at the proposal stage)
- Technical and Financial Assistance to Town Development Committees

In addition to the above, MHPP has undertaken several small pilot programs in urban and rural housing (see Section 4.2.2.2).

The sectoral infrastructure agencies have their own policies, strategies, and programs. Overall, they give little explicit attention to urban versus rural areas. The exception is in water supply, where much of the policy dialogue has focused on a series of World Bank financed urban water supply projects which began in 1975. In 1989 HMG initiated a new policy for fostering the creation of independent town water supply boards.

With respect to implicit urban policies of HMG, the most significant ones would appear to be: (1) the maintenance (up to March 1989) of the open border with India, which has fostered the growth of numerous "gateway" cities and towns all along the border: if the border were to be closed and the number of entry/exit points permanently reduced, some border towns would suffer economic decline, and towns along the East-West Highway would gain importance; (2) the predominance of rural representatives in national and local assemblies, which gives most political weight to rural needs in resource allocation; (3) the provision of services without regard to costs and the use of fixed national tariffs, which appears to create an implicit cross-subsidy from urban centers to rural areas, where unit costs are higher; (4) the concentration of decision-making in Kathmandu, which makes physical, political and administrative decentralization difficult; and (5) the failure of land reform to provide rights in land to a sizeable block of the rural population, which, combined with the stagnation of agricultural productivity, has contributed to rural-urban migration.

The "Regional Development Master Plan 1990-2000", approved in November 1989 by the National Development Council, emphasizes the reduction of regional and sub-regional inequalities, the mobilization of local resources, and the more efficient use of existing infrastructure.

Nepal lacks a well-defined and effective industrial location policy. Since 1987, tax concessions have been made available to industries that located in "remote" areas, but this does not appear to have had much impact. In 1989, the Industrial Promotion Committee made a decision to prohibit certain industries from locating in the Kathmandu Valley and in proximity to other urban centers. The main purpose seems to be to limit urban pollution. Specific mechanisms for implementing this decision have not been designed. Loopholes permit existing industries on the prohibited list to continue (and even expand) and they exempt industrial districts, which tend to be in urban areas.

1.4. Urban Development Issues and Problems

Regional Development: Greater "regional balance" is a desirable objective for a country like Nepal. However, strategies for this must reflect real resource constraints in the process of helping each region reach its own development potential and addressing the most critical social issues. Nepal simply cannot ignore the need for high economic payoff in investment, better utilization of its existing administrative and physical infrastructure, and careful allocation of scarce human and financial resources.

Seventh Plan Components: All of the elements of the Seventh Plan's urban development component deserve to be followed up during the Eighth Plan and beyond (see Section 1.3 above).

Local Government Capacity: Major efforts were made during the Seventh Plan to increase the financial and management capacity of Town Panchayats and to provide Towns with sound technical bases for planning and investment programming. Town Panchayats remain, however, technically weak. Despite having a multitude of responsibilities under the law, Towns have little power to act without the support and consent of the central government.

Most HMG agencies, including MHPP, carry out their own agendas with little or no participation of local governments. In most Town Panchayat areas, the central government has set up Town Development Committees, which are separate corporate bodies whose powers in urban planning and land development overlap those of the towns. MPLD's Urban Development Division is unusual in having focused primarily on strengthening Town Panchayats, with appreciable results in financial management. The role of local governments (i.e., District and Village Panchayats) in the planning and development of non-Town Panchayat urban centers has not yet been spelled out.

Urban Economic Development and Employment Generation: Numerous internationally-supported programs have been undertaken in the areas of cottage industry development, small business promotion, and vocational training, mainly under the Ministry of Industry, the Department of Labor, and the Ministry of Education. While many of these programs are successful at a "micro" level, their cumulative impact appears to be quite limited. Roughly two million new urban workers will be added to the labor force between 1987 and 2002. HMG lacks an overall strategy for urban economic development and employment. Responsibilities are scattered among various ministries and agencies. The focus of future strategies will need to be on facilitating private sector investments in non-farm productive activities.

Urban Investment Programming: Neither the sectoral agencies nor the Town Panchayats have introduced multi-year capital investment planning for particular urban areas. At the local level, increased resource mobilization needs to be tied to an improved capital budgeting process.

Urban-Rural Linkages: At present, urban and rural initiatives are perceived as either sectoral or self-contained. No alternate conceptual approach or implementation strategy has been devised. Towns, particularly in the Terai, play an important role in agro-marketing, processing, and distribution. These urban-rural linkages need to be enhanced for general development purposes. While planning and budgeting relationships exist between District, Town, and Village Panchayats, little has been done to build collaborative efforts. The service center development program, which has the potential for being a vehicle for strengthening urban-rural economic linkages, has an overwhelming emphasis on the construction of physical facilities.

Urban Environmental Problems: While initiatives in planning, infrastructure development, and solid waste disposal may have some environmental dimensions, HMG still lacks a direct approach for addressing problems such as industrial waste, water pollution, air pollution, destruction of green spaces, and noise.

Provision of Urban Services:

- The Department of Roads has been responsible for main national roads, while construction and maintenance of urban roads has been largely left to the town Panchayats, which lack needed financial and technical capacity. Responsibilities for distinct categories of roads need to be clearly defined.

- Stormwater drainage is an "orphan" sector, as neither the central government nor the Towns have claimed it. The result is an almost total lack of area-wide urban drainage (except for roadside drains). Drainage is a major, costly problem in the towns and cities of the Terai.

- NWSC has in theory been responsible for sewerage, but the high costs and perceived difficulty of cost recovery have prevented water-borne sewerage systems from being built outside of the three main Kathmandu Valley cities. Sanitation remains largely a matter of private, on-site systems or, for much of the urban population, no facilities at all.

- NWSC is now responsible for water supply systems in the Town Panchayats, but its managerial, financial, and operational performance has left much to be desired. Proposals to form independent water supply boards in Pokhara and Dhulikhel are receiving support in MHPP. Discussions are now underway on phasing in the new boards in line with the Towns' capabilities.

- Electric power supply remains the responsibility of NEA, which needs to improve various management practices. Most of NEA's attention focuses on generation and transmission facilities, but there is a need to improve urban distribution networks. Some Town Panchayats have entered into cost-sharing arrangements with NEA.

In order to facilitate the assumption of additional service provision responsibilities by the Towns, the HMG sectoral agencies need to move beyond pure implementation and begin providing technical support. With regard to externally-funded projects, there is a need to fully integrate projects into HMG's organizational and budgetary systems from the outset, so as to ensure their sustainability after external support is withdrawn.

Financing of Urban Services: Among six major urban infrastructure sectors (not including electricity), water supply and drainage account for 73 percent of estimated investment requirements over the 15-year period between 1987 and 2002. It is unlikely, given available HMG resources, that more than a fraction of the capital needed to meet the basic urban service needs will be forthcoming. Some of the gap may be made up from Town Panchayat resources, but these will also be far below the needs even with the best efforts at local resource mobilization and leveraging (through, for example, the TDFB loan program).

Both NEA and NWSC have had difficulties in cost recovery due to weak billing and collection, low and uniform tariff rates, and inefficient operations. Long-term efforts are needed to improve service delivery in these tariff sectors in order to win public support for higher rates and collections. In the non-tariff urban service sectors (roads, education, health), which are financed from general revenues, HMG and the Towns should use more "earmarking" of specific taxes (such as the fuel tax and vehicle tax for road construction and maintenance).

Town Panchayats have traditionally provided bus and truck parks, fire services, markets, and public water fountains, and they have recently been given responsibility for urban roads,

drainage, and school construction. The trend of increasing Town responsibility is continuing, evidenced by the Towns' cost-sharing arrangements for electricity distribution and the new interest in Town water supply boards. The investment requirements for urban infrastructure could be reduced if it were possible to rectify two problems; inefficient urban expansion due to urban sprawl and the lack of coordination in infrastructure works.

Central-Level Institution-Building: Considerable progress has been made in terms of the formation of new institutions: MHPP, MPLD/UDD, DHUD, TDFB, and NWSC. However, the performance of these entities needs substantial improvement or remains untested. In the case of DHUD, central and regional capacity appears to be over-extended.

District-Town Relations: The attempts of District Panchayats to exercise supervisory or regulatory functions over the larger, better-organized, and self-reliant Town Panchayats have sometimes resulted in conflicts. Difficulties have also arisen in the demarcation of responsibilities between Districts and Towns for development projects and services. District Panchayats tend to be dominated by rural representatives. Governmentally, Town and Village Panchayats have the same status, which may not be realistic given the economic importance and independent capacity of many Towns.

Planning of Existing and Emerging Towns: Good progress has been made in preparing physical plans for Town Panchayats. Problems remain in implementing the plans and integrating them into a budgetary and planning process. In emerging towns and District headquarters, too much emphasis is being placed on preparing detailed plans requiring excessive technical know-how and which rely too much on direct central government intervention for their implementation. For rapidly-growing towns, simple, action-oriented planning guidelines need to be provided.

Cluster/Compact Settlements and Village Blocks: These programs should be evaluated to see if their goals can be accomplished without constraining access of farmers to their cultivated land. Care must be taken to undertake solutions that do not overextend the central government's technical manpower. Clear community initiative, participation, and leadership should be criteria for intervention.

Service Centers: The main issues are (1) to give priority in investment to service centers where physical facilities are truly needed, on the basis of available investment resources, and (2) to ensure that, in addition to physical facilities, service centers are adequately equipped with manpower, supplies, and other inputs to improve service delivery as a first priority.

Manpower for Urban Development: DHUD is expanding its technical staff with the idea that it will be both a planning and an implementing agency. If, in the medium to long term, other specialized agencies and the private sector take over most implementation functions (for land development and housing), DHUD's staffing and training needs will change. All HMG agencies involved in urban development, as well as the Town Panchayats, need to make greater use of local consultants to perform temporary, fixed-term technical tasks.

This is more efficient than maintaining large, permanent, government staffs and encourages the development of a higher level of specialized technical knowledge in the private sector.

Municipal Management: The Town Panchayats have begun to receive technical assistance in management during the past three years. The following key improvements are needed: (1) employment of qualified technical staff (engineers, planners, etc.) on a permanent or contract basis, (2) establishment of efficient organizational structures and job descriptions; and (3) definition of functional responsibilities of other government agencies in relation to each Town. More training is needed for existing Town employees. To help improve conditions of employment and attract qualified personnel to the Towns, HMG should consider creating a special "Town Civil Service".

Municipal Finance: The Town Panchayats have increased their aggregate "own source revenues" substantially in the past three years while restraining the growth of their current expenditures. However, the bulk of recent revenue growth has been from the trade tax (octroi), an indirect tax. The Towns have not improved their collection of direct taxes. The trade tax accounts for about three quarters of the Towns' aggregate own source revenues. The Town Panchayat Act mandates the phase-out of the trade tax by 1998, in response to its negative characteristics. These are mainly its lack of linkage to local taxpayers and its tendency to be improperly administered.

In order to maintain their current income levels, the Town Panchayats will have to make strenuous efforts to raise direct revenues from sources such as the rooftop (house) tax, the professional (business) tax, the vehicle tax, and various non tax revenues and benefit-based fees. One way to do this initially is to tie increased revenue collection directly to the financing and provision of particular services. In addition, legislative changes are needed to give Town Panchayats the power to impose penalties for tax evasion. Another issue is the need for HMG to implement reforms in the grant system for Towns to make grants more predictable and introduce performance incentives; the legal mandate for such reforms already exists.

Urban Land Development: Urban land development in Nepal is mainly carried out by private households and land brokers on a plot-by-plot basis. The key issue is: How to transform the present informal system into a more rational one, so that inefficient land use gives way to planned development. The application of land development regulations (zoning, density standards, subdivision regulations, etc.) is hampered by the public's lack of understanding of their benefits and by the absence of enforcement mechanisms. Despite its involvement in the creation of two public-private joint venture land development companies, HMG has not yet created a policy framework that allows private, organized land development to operate. The government has, however, stepped up its efforts to directly implement land development projects (sites and services) through DHUD and the TDCs. The government's track record in carrying out such projects is poor.

The future prospects for direct HMG management of land development projects look dim, given the lack of financial and organizational capacity. This indicates that the organized

private sector must play a leading role, with HMG acting as facilitator. The guided land development program introduced in 1988 is one good model for government involvement. HMG should remove bottlenecks to the private sector. The main ones are: the ceiling on land ownership (providing a fixed-term suspension for developers would do), the lack of financing, the poor cadastral system, the lack of cooperation by infrastructure agencies, and the double land registration tax.

Urban Planning System: Various legal and institutional changes are needed to create an effective urban planning system in Nepal. The main problems at present are lack of definition for most planning processes, arbitrary decision-making, lack of local control and community participation, overlap between Town Panchayats and Town Development Committees, and antiquated cadastral records.

Planning and Development of the Kathmandu Valley: The main problems of the Kathmandu Valley that concern HMG are: growing conflicts between urban and rural functions within the Valley's finite land resources; unplanned, inefficient urban expansion; air and water pollution; absence of coordination in investment programs; and failure of previous attempts to implement plans and development regulations. In 1988, HMG passed a law creating a new Kathmandu Valley Development Authority. The KVDA, which is in the formation stage, has the authority to make and enforce land use plans, engage in land development, and implement projects. One of the KVDA's highest priorities should be the formulation and adoption of a practical and effective Valley-wide land use plan. This should be followed by the development of more detailed local area plans. Consensus exists on the basic principles for planning and development of the Valley; the problem of translating these into operational strategies and actions remains.

1.5. Recommended Policies and Strategies

1.5.1. General Framework

HMG's regional development policy should be to help each region and sub-region reach its development potential in the long run, but it is important to recognize that not all regions can be brought up to an "equal" level. It is also in the national interest that those places with stronger economic development potential receive sustained support. The Regional Development Master Plan contains guidelines for tapping the comparative advantages of the various regions and sub-regions of the country.

A new effort should be made to identify and support means to strengthen the agricultural production and marketing systems in towns. This does not just mean adding physical facilities. It also includes creating favorable economic environments for private initiative and making institutional and procedural improvements.

The exploitation of marketing opportunities for new cash crops in India and third countries, with an expanded role for the private sector, should provide a focus for new development efforts. Settlements should provide a vital role in this process.

The Decentralization Program provides a vehicle for augmenting development efforts through local initiative and control. The strengthening of District, Town and Village Panchayats should remain a major theme of all government policies and programs.

1.5.2. Specific Urban Policies and Strategies

The following is a summary of urban policy objectives and guidelines for consideration by HMG which are presented in more detail in Chapter 6 -- Recommended Policies and Strategies. These should be considered as broad principles providing a basis for the various components of urban development such as implicit urban policy, employment generation, urban services, institutional development, municipal strengthening, land development, planning systems and private participation. Chapter 6 also provides guidelines for settlement classification and related policy and programmatic concerns.

1.5.2.1. Broad Urban Policy Objectives and Guidelines (Section 6.1.2)

- Strengthen at all levels the planning and management framework with emphasis on local economic development and service provision.
- Increase the productive contribution of the urban sector to national development.
- Facilitate increased opportunities for employment and real income in urban areas.
- Strengthen the urban labor force skills to improve access to productive employment.
- Support development of urban infrastructure and services.
- Increase access to services, land, and shelter for urban residents, particularly the low- and middle-income sectors.
- Increase the resource pool for urban development and render it self-financing.
- Provide for efficient development of urban settlements and solutions to urban environmental problems.
- Encourage removal of bottlenecks to private sector urban development efforts with emphasis on export promotion and marketing, job creation, human resource development, and service and shelter provision.
- Commit public development resources selectively, on the basis of demonstrated effectiveness and public interest.

1.5.2.2. Urban Policy Objectives and Guidelines By Sector

Implicit Urban Policy (Section 6.3)

1. HMG should assess the implicit effects of existing urban policy across sectors.
2. HMG should specify implicit urban policies imbedded in national economic policy across sectors.
3. HMG should strike a balance between urban and other development objectives.

Urban Economic Development and Employment Generation (Section 6.4)

1. While promoting growth of the agriculture sector, HMG should foster development in rapidly growing urban centers by promoting employment opportunities across various sectors.
2. HMG should foster industrial development in such a way as to strike a balance between productive efficiency and labor absorption.
3. HMG should tap the energy and initiative of private investors (foreign and domestic) in order to increase the rate of productive investment in the urban sector.
4. HMG should expand manpower training programs for the urban labor force (in cooperation with donors and private sector).
5. HMG should work with private investors and international organizations to devise programs to absorb urban migrants into the labor force.

Urban Services (Section 6.5)

1. HMG should strive to improve cost recovery for urban service provision from beneficiaries.
2. HMG should differentiate between social and economic objectives and clearly cost-recoverable elements of infrastructure.
3. HMG should, in line with decentralization, link local tariffs to the costs of providing services in particular places to strengthen local accountability and budgetary independence.
4. HMG should continue to promote improved revenue promotion and increased capital surpluses by Town Panchayats to increase the local investment potential for urban services.
5. Line agencies should function as support mechanisms to local government rather than merely as implementation agencies.
6. Line agencies and Town Panchayats should adopt multi-year capital investment planning and budgeting systems.

Institutional Framework (Section 6.6)

1. HMG should re-establish an inter-agency body to coordinate national urban policies and programs.
2. HMG should clarify its central level "contacts" policy for decentralization: MPLD should remain the coordinating agency for local government affairs and have a major role in project formulation for local government, while other HMG agencies and Town Panchayats should maintain contacts with each other as part of the Government's Decentralization program.
3. Town Panchayats should take the lead in planning, management and implementation of local programs with HMG support.
4. Town Development Committees should initiate programs in Town Panchayats only after receiving formal approval of Town Panchayats.

5. HMG should support the creation of independent water supply boards in Town Panchayats. NWSC should provide assistance to these boards.
6. Town Panchayats should take responsibility for urban stormwater drainage and financing.

Municipal Management (Section 6.7.1)

1. Managerial and administrative capacities of Town Panchayats should be improved through creating a "Town Civil Service" independent of HMG's civil service.
2. Town Panchayats should be encouraged to implement new organizational structures to clarify functions and improve management capabilities.
3. HMG should transfer responsibility and authority for specific functions to Town Panchayats and eliminate overlap between central and local functions.

Municipal Finance (Section 6.7.2)

1. HMG should encourage Town Panchayats to improve financial resource mobilization from their own revenue sources.
2. HMG should provide guidance and support for Town Panchayats to increase collection of direct taxes and reduce reliance on indirect taxes.
3. HMG should support measures by Town Panchayats to increase use of direct charges to beneficiaries for Town Panchayat services.
4. HMG should adopt a new grant distribution system to ensure that grants are more predictable and to provide incentives to Towns for improved financial performance.
5. HMG should support provision of credit financing to Town Panchayats.

Land Development (Section 6.8)

1. HMG should reaffirm policies for private sector participation in urban land development and help create private land development companies.
2. HMG should formulate credit and tax policies for land development companies.
3. HMG should provide an appropriate policy framework to give private sector land development companies access to land, financing, and urban services.
4. HMG should assist in the process of land development by establishing an effective urban planning framework.
5. HMG should, to ensure that the needs of low-income groups are met, target government land development programs to the below-median-income population; make sure subsidies benefit the poor; and improve the efficiency and effectiveness of government-executed land development programs.

Urban Planning Systems (Section 6.9)

1. Town Panchayats should be the lead agencies for urban planning within their jurisdictions.
2. Town Development Committees should play a supporting role in TP planning and development.

3. HMG should enact a single, comprehensive urban planning law.
4. Town plans should be prepared from the bottom up, originating from the local level according to the Government's Decentralization policy.
5. Community consultation and participation should be an integral part of the urban planning process.

Kathmandu Valley (Section 6.10)

1. The Kathmandu Valley should be developed and maintained as the primary governmental center and a major cultural, tourism, and historic preservation area. It should not be developed as an industrial center.
2. Agricultural land in low-lying areas of the Valley should be preserved for food production as well as cultural, environmental, and aesthetic purposes.
3. Urban growth on elevated lands should be encouraged.
4. Environmental pollution and degradation in the Valley should be minimized.
5. Orderly development and densification of urban fringe areas should be promoted through a mixture of investments and regulations.
6. New and effective mechanisms for land use planning and development control should be developed and implemented.
7. Acquisition of public land should be made consistent with development plans and processes in the Valley.
8. The Kathmandu Valley Development Authority should be developed as a strong coordinating, planning, and enforcement agency; it should be vested with the authority to implement projects while not duplicating functions of sectoral agencies and Town Panchayats; KVDA should have the authority to coordinate investment programs of other HMG agencies in furthering Valley land use and development plans.

Private Sector Urban Economic Development and Employment Generation (Section 6.11.1)

1. HMG should continue to work toward establishing the proper environment for private sector initiatives which foster overall urban economic development and employment generation.
2. HMG should remove impediments to private sector initiative in urban areas (particularly involving employment generation).

Private Sector Land Development (Section 6.11.2)

1. HMG should facilitate the formation of private land development companies.
2. HMG should formulate credit and tax policies for private land development companies.
3. HMG should provide the necessary policy framework to enable the private sector to obtain land, financing, and infrastructure for land development.

Private Sector Urban Services (Section 6.11.3)

1. HMG should mobilize private capital to supplement the public sector contribution to infrastructure service provision.
2. Town Panchayats should privatize the operation and maintenance of public sector facilities where possible.

2. DEMOGRAPHIC AND ECONOMIC CONTEXT FOR URBAN DEVELOPMENT

2.1. Demographic Trends

The national census of 1952/54 placed the population of Nepal at an estimated 8.3 million people (See Table 2.1). Over the course of the next 27 years, total population increased two-fold, reaching 15.0 million in 1981. The 1989 World Bank population estimate for Nepal is 18.8 million. If the present annual growth rate of 2.7 percent prevails (exceeded in South Asia by Pakistan alone), Nepal's population will reach 24.5 million by the year 2001 (IBRD, *Social Sector Strategy Review*, 1989; CBS, *Statistical Yearbook of Nepal*, 1989).

The World Bank and the Central Bureau of Statistics have made population growth projections to the year 2001 and 2010, based on varying scenarios. The CBS projections (See Table 2.2) cover high, plausible and low growth scenarios, which yield 2001 populations of between 21 and 26 million. The World Bank's three scenarios (Table 2.3) include an "expected" middle projection of 31.4 million population by the year 2010.

National population is distributed rather evenly between the Hills and the Terai, each containing roughly 7.7 and 7.3 million inhabitants respectively in 1981 (Table 2.4). The Mountain region comprised 1.5 million people. In 1981 only 957,000 people were classified as urban dwellers, some 6.4 percent of the total population. As of 1987, approximately 1.6 million people were estimated to live in Nepal's urban centers (Town Panchayats), a 30 percent increase the over the 1981 level (Management Support for Town Panchayats Project, 1989).

Regional population trends have in great part been determined by migrational patterns established in the 1960s, when the effective control of malaria in the Terai opened the region to settlement by migrants from the Mountains and Hills. Migration out of the Hills was (and continues to be) a response to population pressures on the land combined with a general stagnation of farming opportunities at a subsistence level. In the Terai an increase in land productivity and a lower man-land ratio, the development of modern facilities and infrastructure, and the availability of seasonally-oriented employment all served to reinforce migration from the Hills and Mountains.

Census figures of 1981 confirm this pattern. Out of all migrants, 61 percent were observed to originate in the Hills and 75 percent claimed the Terai as their final point of destination (see Table 2.5). Recent data indicate that 85 to 90 percent of Terai migrants come from the Hill and Mountain Districts (IBRD, *Nepal Social Sector Strategy Review*, Volume I, 1989; Environmental Resources Limited, 1988).

By all accounts these trends are continuing. In the Hills, the pressure of natural population growth upon the land remains acute. The Hills have an average density of six persons per

TABLE 2.1

HISTORICAL AND PROJECTED POPULATION GROWTH 1986-2001 (in millions)

YEAR	POPULATION
1952/54	8.3
1961	9.4
1971	11.5
1981	15.0
1986	17.1
1991	19.5
1996	22.0
2001	24.6

Source: *CBS Statistical Yearbook of Nepal*, 1989; Pitamber Sharma, *Urbanization in Nepal*, 1989.

TABLE 2.2

CBS PROJECTED POPULATION GROWTH RATES, 1986-2001 (in percent)

YEAR	HIGH	PLAUSIBLE	LOW
1986-1991	12.76	2.57	1.92
1991-1996	2.76	2.39	1.28
1996-2001	2.85	2.25	1.00
Est. 2001 Pop.	26.1 million	24.5 million	21.0 million

Source: *CRS Statistical Yearbook of Nepal*, 1989.

TABLE 2.3

IBRD PROJECT POPULATION GROWTH RATES, 1985-2010

YEAR	PESSIMISTIC	EXPECTED	OPTIMISTIC
1985-1990	2.44	2.44	2.44
1990-1995	2.63	2.59	2.48
1995-2000	2.72	2.59	2.45
2000-2005	2.75	2.53	2.29
2005-2010	2.73	2.49	2.11
2010 Population	34.3 million	31.4 million	25.9 million

Source: Environmental Resources Limited, 1988.

TABLE 2.4

POPULATION DISTRIBUTION BY GEOGRAPHIC REGION
(In millions)

YEAR	MOUNTAIN/ HILLS	INNER TERAI	TERAI	TOTAL
1952/54	5.4	0.5	2.4	8.3
1961	6.0	0.5	2.9	9.4
1971	6.7	0.9	4.0	11.6
1981	7.7	1.3	6.0	15.0

Source: Pitamber Sharma, *Urbanization in Nepal*, 1989.

TABLE 2.5 MIGRANTS BY ORIGIN AND DESTINATION				
	ORIGIN		DESTINATION	
Mountain	315,000	31%	53,600	5%
Hills	636,660	61%	211,900	20%
Terai	87,100	8%	773,300	75%
Source: CBS, 1981 Population Census.				

hectare of cultivated land (as compared to 4.5 in the Terai), among the highest in South Asia (CBS, *Population Monograph of Nepal*, 1987).

Such developments have had a dramatic impact on the regional distribution of population in Nepal over the last two decades. In 1961 the Hill and Mountain regions accounted for some 67 percent of the national population. By 1981 this proportion had been reduced to 56 percent (Sharma, *Urbanization in Nepal*, 1989). The extent of out-migration was sufficient to reduce the average annual rate of population growth in the Mountains and the Hills to 1.14 and 1.43 percent respectively, as compared to 2.66 percent nationally, between 1971 and 1981 (McNeil, ERL Draft Report, 1989). It is generally believed that by the year 2001, the Terai will contain more than 50 percent of the total population of Nepal (with 12.3 million inhabitants). The Hills and Mountains are projected to decline to 44 percent (10.8 million) and 6 percent (1.4 million) by the same year (CBS, *Population Monograph of Nepal*, 1987).

While urbanization in the Terai and the Inner Terai is expected to proceed at unprecedented levels, pressure to develop existing forested land for agriculture throughout the region as a whole is increasing. Though HMG as early as 1964 tried to counteract encroachment on Terai forest land, in reality it did little more than monitor spontaneous settlement patterns well underway in the eastern and central Terai and grant title to already developed land. The absorptive capacity of both urban and rural areas of the Terai will continue to support in-migration in the near term. However, pressure to settle the largely undeveloped western Terai (currently the most forested region of the Terai) is mounting. With the imminent completion of the East-West Highway and the inception of the Mahakali-Karnali irrigation project, prospects for the development of the western Terai (particularly the more arable southern territories of the Far Western Development Region) have greatly increased. The fact that much of the forested land is currently under government ownership implies that HMG involvement in the development process is likely to be substantive.

The cumulative impact of these factors over the next 25 years will be to increase the Terai population by some 10 to 15 million, nearly doubling its current population and placing

a severe burden on land capacities in a region which comprises just 23 percent of Nepal's total land area.

2.2. Economic Trends

2.2.1. Macroeconomic Overview

Nepal is consistently ranked among the five poorest of the low-income developing countries. Over the last two decades, growth of per capita GNP has been nearly stagnant, increasing at an average rate of 0.1 percent per annum. Comparable rates for low-income countries as a group over this period average 0.4 percent. In 1986 GNP per capita was estimated at $150 (next to Ethiopia the lowest in the developing world). Despite incremental increases in the last several years, Nepal's current GNP per capita ($170) is among the lowest in South Asia (Table 2.6).

TABLE 2.6

POPULATION AND PER CAPITA GNP IN SAARC COUNTRIES, 1989

Country	Population (in millions)	Per Capita GNP (US$)
Nepal	18.3	170
Bangladesh	109.6	175
Sri Lanka	16.8	420
Pakistan	107.9	365
India	816.6	320
Bhutan	1.4	160
Maldives	0.2	470

Source: New Era, *Dynamics of Poverty in Nepal*, 1989.

During the Sixth Plan (1980/81-1984/85), rising public expenditures to finance accelerated development initiatives resulted in a near doubling of the national budget deficit from 6.1 percent of GDP in 1980/81 to 11.7 percent in 1982/83. Efforts by HMG to finance this debt by borrowing heavily from the Central Bank exerted upward pressure on domestic prices which in turn doubled the current account deficit (IBRD, *Nepal, Social Sector Strategy Review* Vol. II, 1989).

Recent trends in the macroeconomy have been more encouraging. Aggregate GDP between 1986 and 1988 increased at a rate of 4 percent per annum, despite mitigating factors such

as erratic weather which decreased agricultural yields. (Recent data show a decrease of 3 percent in the agricultural share of GDP between 1987/88 and 1989). Agriculture remains the primary source of income and employment for over 90 percent of the country's population. Though characterized by small-scale subsistence farming, agriculture currently comprises 58 percent of total GDP and the sector accounts for roughly 80 percent of all exports. The non-agricultural share of GDP decreased slightly in 1989, though the index of industrial production, which has expanded by nearly 70 percent in the last three years, continued to rise. The overall contribution of the industrial sector to national GDP remains rather modest at 4 percent, and it generates limited employment by comparison to agriculture.

Real GDP per capita (in 1974-75 constant value) declined slightly from $72 in 1987/88 to $67 in 1989. Inflation was 11 percent in 1987/88 and 9.6 percent in 1988/89.

2.2.2. Balance of Trade and Foreign Reserves

Though Nepal's international reserves have remained stable at about six months of import coverage between 1988 and 1989, the country's balance of trade position currently shows a deficit of $367 million (Table 2.7). This figure does not account for the significant level of capital investment in the form of donor assisted aid, which over the past three years has increased by some 79 percent and if factored into the balance of trade would to a large extent offset the current deficit. Total capital inflow has thus far amounted to $330 million in 1988/89 (IBRD "Second Structural Adjustment Credit Report", 1989; *Nepal, Social Sector Strategy Review*, Volume II, 1989; CBS, *Statistical Yearbook of Nepal*, 1989).

Despite the operative balance of trade deficit, sustained levels of direct foreign assistance have allowed for a modicum of stability in the macroeconomy in recent years. A contributing factor has been the strong growth in exports of key commodities such as carpets and ready-to-wear garments, which in the last three years have expanded by some 146 percent. These two commodities alone accounted for 50 percent of merchandise exports in 1987/88. Such marked growth can be traced to trade liberalization measures by HMG, which have eased the flow of import and export commodities and increased the supply of raw materials from overseas used in the production process. A doubling of tourism receipts during this period has also greatly added to the relative economic stability.

2.2.3. Structure of Foreign Trade

Nepal's foreign trade regime is unique. The Nepali rupee has traditionally been fully convertible against that of India yet inconvertible against other currencies. Prior to the trade and transit dispute (which started in March 1989) both goods and people moved quite freely across the border with India. The government adopted a trade policy in which tariffs between India and Nepal were kept at fairly low levels, but those between Nepal and third countries varied widely. Raw imported materials, essential to Nepali industry (particularly carpets and garments) were for the most part tariff free, while tariffs on many third country goods were well below those in India. Many such goods were subsequently re-exported to India. Payment for these goods was generally received in Indian rupees so as to provide an indirect source of financing for the current account deficit of the balance of payments

TABLE 2.7
KEY MACROECONOMIC INDICATORS, NEPAL *

Indicator	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89
Per Capita GDP ($) (constant 74/75 value)	94.5	91.9	81.4	74.7	68.7	72.0	67.0
Proportion GDP (%)							
- Agriculture	56.5	57.3	54.0	53.0	52.3	52.1	58.0
- Non-Agriculture	43.0	41.0	47.0	46.0	47.0	48.0	44.0
Real GDP Growth (%)	(5.7)	7.0	0.3	1.4	-0-	4.5	1.8
- Agriculture	(1.1)	9.5	2.4	4.3	1.0	8.7	6.2
- Non-Agriculture	(5.8)	9.9	16.6	3.5	4.4	5.0	4.0
Inflation Rate (%)	9.3	8.6	4.2	12.5	10.4	11.0	9.6
Exports (millions of $)	82.0	111.5	153.2	156.0	138.9	227.8	142.0
Imports (millions of $)	457.2	426.0	433.5	474.0	506.5	705.3	509.0
Overall Trade Balance (millions of $)	(375.2)	(314.5)	(280.3)	(318.0)	(367.5)	(477.5)	(367.0)
Foreign Exchange Reserves (in millions of $)	232.6	163.1	77.2	100.9	128.1	336.4	294.0
Foreign Exchange Reserves in Months of Imports	6.1	4.6	2.1	2.6	5.2	5.7	6.1
Government Budget Balance/GDP (%)	(11.7)	(9.4)	(9.7)	(9.1)	(8.9)	(8.4)	(9.1)
Long-Term Capital Inflows	160	162	129	214	198	375	330
Current Account Balance (in millions of $)	(217)	(182)	(183)	(198)	(202)	(278)	(302)

Note: All absolute figures in current prices except per capita GDP, which is in constant 1974/75 value.

Sources: IBRD, *Policies for Improving Growth and Alleviating Poverty*, 1988; *IBRD Nepal Social Sector Strategy Review*, 1989; IBRD, *Second Structural Adjustment Credit Report*, 1989; CBS, *Statistical Yearbook of Nepal*, 1989.

* Calculated in current prices. All other categories have been calculated using constant prices to the year 1974/75.

with India. The remaining deficit with India was financed by way of hard currency conversion to the Indian rupee. To guarantee a surplus of hard currency, Nepal's hard currency budget has been managed to yield a surplus through such vehicles as industrial and trade licensing and foreign exchange controls. This system proved biased toward rent-seeking enterprises with limited value added, created to take advantage of the Indian market. This has been a restraint to industrial growth in Nepal. Though HMG has attempted to redress some of these constraints by various measures such as liberalizing industrial and trade regimes and privatizing public enterprises, it is too early to assess the relative impact of such initiatives (IBRD, *Nepal, Policies for Improving Growth and Alleviating Poverty*, 1988).

According to official trade statistics, Nepal's traditional share of trade with India has over the last decade been reduced greatly. In 1974/75, 83.9 percent of all exports and 81.3 percent of imports were accounted for by the Nepal-India trade relationship. By 1989 the percentage share of trade with India had declined dramatically to 24.4 percent of exports and 18.7 percent of imports.

It is important to note that these figures reflect officially recorded trade transactions and do not account for undocumented transactions. Such informal trade may have in the past accounted for at least as much volume as officially recorded trade. Since the beginning of the trade and transit crisis, the volume of undocumented trade has undoubtedly increased dramatically.

2.2.4. Employment

Based on the findings of the Nepal Rastra Bank Survey of 1984/85, for the country as a whole the economically active population as a proportion of total population above the age of 10 was 71.1 percent. In rural Nepal 73.0 percent of the total population was found to be economically active, while the comparable figure for the urban sector was 54.3 percent.

According to the Survey, 3.1 percent of Nepal's total labor force was unemployed, a considerable increase over 1981 census estimates of 1.62 percent. Urban unemployment was by far the most pronounced at 8.2 percent, and rural unemployment was estimated at 2.7 percent.

Underemployment appears most acute in rural Nepal, where 46.4 percent of the work force was estimated to be underemployed. Despite a higher unemployment rate, urban underemployment (33.6 percent) was lower than in the rural sector.

3. URBANIZATION

3.1. Urban Population Growth

3.1.1. Overview of Urban Settlement Classification

Although data on urban population have been available since the census of 1952/54, a formal classification of "urban areas" was not officially forthcoming until the census of 1961, when localities of 5,000 or more inhabitants were defined as "urban" (CBS Population Monograph of Nepal, 1987). While that year 16 towns throughout Nepal were categorized accordingly, settlement patterns remained predominantly rural as nearly 85 percent of all localities contained populations of 500 or less (Sharma, *Urbanization in Nepal*, 1989).

With the passage of the Town Panchayat Act of 1962, urban areas with populations of 10,000 or more were designated as "Town Panchayats". This classification, albeit inconsistently applied (some areas with populations less than 10,000 were designated as Town Panchayats while others in excess of 10,000 were not), remained operative throughout the intercensal period of 1961-1971. In an attempt to alleviate further inconsistency, the population criterion for Town Panchayats was revised in 1976 to 9,000. By 1981, 23 Town Panchayats had been created, only two of which (Ilam and Bhadrapur) had populations of less than 10,000. Thus over time a national standard has evolved in the classification of urban areas. Since 1981, 10 new Town Panchayats have been established, bringing the number of officially designated municipalities to 33.

3.1.2. Growth of Urban Settlements

At the time of the 1952/54 census, Nepal had only ten urban centers as such, five of which were located in the Kathmandu Valley and five in the Terai. The various towns of the Valley comprised 83 percent of the urban population of the country and 90 percent of urban places with over 10,000 inhabitants. The remaining urban centers were commercial, industrial and administrative centers along the Indian border. The Terai towns of Nepalgunj, Birganj, Biratnagar and Janakpur were the primary growth centers in this area.

In the 1961-71 period, with the designation of three new urban centers in the eastern Terai and three in the Hills, the number of official urban localities throughout Nepal increased to 16. By 1971 the number of urban centers in the Kathmandu Valley had actually declined (Kirtipur and Thimi were declassified as urban centers), but as in the previous decade the Valley maintained its position as Nepal's primary urban area (See Table 3.1). This can be attributed to major developments in infrastructure throughout the Valley as well as the reorganization of both Kathmandu and Lalitpur Districts (Sharma, 1989).

The following decade (1971-1981) was characterized by sustained and rapid urbanization throughout the Terai. Though the Inner Terai experienced the highest rate of urban growth,

TABLE 3.1 URBAN POPULATION GROWTH, 1952-87				
YEAR	MOUNTAIN/ HILLS	INNER TERAI	TERAI	TOTAL
1952/54	196,777	NA	41,498	238,275
1961	234,329	NA	101,893	336,222
1971	283,907	16,194	161,837	461,938
1981	446,883	96,861	412,977	956,721
1987	632,936	142,371	792,316	1,567,623

Sources: Pitamber Sharma, *Urbanization in Nepal*, 1989; Management Support for Town Panchayats Project, *Planning and Land Use Data for Town Panchayats*, 1989.

this was due primarily to the designation of three new urban centers over the period. In addition to in-migration, the high rates of growth in the Terai can be attributed to the designation of new Town Panchayats and boundary expansion in existing municipalities (See Table 3.2).

Contributing to the growth of the Terai after 1960 was the effective control of malaria throughout the region, which set in motion a major exodus of Hill and Mountain residents to the Terai in search of more arable land and economic opportunity. By 1981 approximately 700,000 migrants had settled permanently in the twenty contiguous districts of the Terai. With this appreciable increase in population came the designation as Town Panchayats of Mahendranagar and Dhangadhi in the Far Western Terai and Lahan in the Eastern Terai. Birendranagar and Tribhuvanagar in the Mid Western Inner Terai also achieved Town Panchayat status. The Eastern Terai, with its large agricultural base and high concentration of infrastructure investment, has experienced the greatest cumulative urban growth in recent years. Between 1971 and 1981 four Eastern Terai towns (Birganj, Janakpur, Biratnagar and Dharan) accounted for nearly 50 percent of the urban growth in the Terai.

Thus since 1971 The Terai has witnessed the most pronounced and rapid urbanization of any region in the country. By comparison the urban centers of the Kathmandu Valley have grown at a much slower pace over the 1971-1981 period. By 1981 over 50 percent of Nepal's urban population was concentrated in the Terai and the Inner Terai, while the Valley's share of national urban population had declined to 38 percent.

TABLE 3.2

POPULATION DATA FOR TOWN PANCHAYATS

Town Panchayat	Total Population			Urban Population 6/		Annual Population Growth Rates				Projected Population 2002	
								Projected 1987-2002 7/			
	1971 Census 1/	1981 Census 1/	1987 2/	1987	Percent	1971-1981	1981-1987	Total	Urban	Total	Urban
1. Banepa *	7636	10446	12607	10716	85.0	3.18	3.18	3.50	3.50	21121	17953
2. Bhadrapur +	7499	9761	14510	14510	100.0	2.67	6.83	4.00	4.00	26132	26132
3. Bhaktapur	40112	48472	56741	53751	94.7	1.91	2.66	2.66	2.66	84123	79690
4. Bharatpur	15108	27602	38494	25584	66.5	6.21	5.70	5.70	5.70	88413	58762
5. Bidur *	10615	13369 3/	15354 4/	7324	47.7	2.33	2.33	2.40	2.40	21914	10453
6. Biratnagar +	45100	93544	148855	141993	95.4	7.57	8.05	5.50	5.50	332315	316996
7. Birendranagar	NA	13859	22054	12358	56.0	NA	8.05	5.12	7.27	46641	35410
8. Birganj	12999	43642	98858	84444	85.4	12.88	14.60	8.00	8.00	313594	267871
9. Butwal	12815	22583	38910 4/	38910	100.0	5.83	9.49	5.80	5.80	90645	90645
10. Damak * +	13993	20285	30344	9985	32.9	3.78	6.94	4.56	7.00	59232	27549
11. Dhangadhi	11757	20542 3/	29140 3/	10502	36.0	5.74	6.00	6.00	7.14	69836	29549
12. Dhankuta	9150	13231	14949 3/	8107	54.2	3.76	2.06	2.05	3.00	20268	12630
13. Dharan	20503	42146	67832	67832	100.0	7.47	8.25	5.00	5.00	141018	141018
14. Dhulikhel *	8442	9761 3/	10650 4/	5132	48.2	1.46	1.46	2.66	2.66	15790	7600
15. Dipayal *	7213	9694	11794 3/	4889	41.5	3.00	3.32	3.32	4.00	19250	8805
16. Hetauda	16194	34792	52507	36973	70.4	7.95	7.10	5.00	5.00	109158	76864
17. Ilam	7299	9773	12118	2968	24.5	2.96	3.65	2.94	3.62	18726	5060
18. Inaruwa *	8312	16453 3/	24809 4/	12508	50.4	7.07	7.07	4.00	4.00	44680	22526
19. Jaleswor *	11231	12210 3/	15843 3/	10132	64.0	0.84	4.44	3.50	3.50	26543	16975
20. Janakpur	14294	34840	62059	54761	88.2	9.32	10.10	6.50	6.50	159606	140837
21. Kalaiya *	9987	15006 3/	19159	16850	87.9	4.16	4.16	4.00	4.00	34504	30446

Town Panchayat	Total Population			Urban Population 6/		Annual Population Growth Rates				Projected Population 2002	
	1971 Census 1/	1981 Census 1/	1987 2/	1987	Percent	1971-1981	1981-1987	Projected 1987-2002 7/ Total	Projected 1987-2002 7/ Urban	Total	Urban
22. Kathmandu +	150402	235160	308000	305853	99.3	4.57	4.60	4.08	4.08	561125	557214
23. Lahan	9114	12923	16630 3/	7116	42.8	3.55	4.29	4.50	4.50	32184	13771
24. Lalitpur +	59049	79875	97336	96280	98.9	3.07	3.35	4.00	4.00	175297	173395
25. Mahendranagar	23088	43834	55464 3/	8224	14.8	6.62	4.00	4.00	5.50	99888	18360
26. Malangawa *	8241	14642 3/	20672 4/	19181	92.8	5.92	5.92	4.00	4.00	37229	34554
27. Nepalgunj	23523	34015	42916	42916	100.0	3.76	3.95	6.00	6.00	102851	102851
28. Pokhara	20611	46642	70984	58545	82.5	8.51	7.25	5.50	5.50	158470	130700
29. Rajbiraj +	24272 4/	33255 4/	43334 5/	35065	80.9	3.20	4.51	4.72	5.00	86551	72898
30. Siddharthanagar	17272	31119	48429	41104	84.9	6.06	7.65	5.00	5.00	100680	85452
31. Tansen	8434	13125	22403 4/	17670	78.9	7.39	9.32	3.00	3.00	34903	27529
32. Taulihawa *	9352	12374 3/	14552 4/	9589	65.9	2.84	2.74	3.50	3.50	24380	16065
33. Tribhuvannagar +	8680	20608	29316	7353	25.1	9.03	6.05	3.98	6.00	52644	17622
TOTAL	650297	1099593	1567623	1279125	81.6	5.39	6.09	4.89	5.04	3209710	2674079

1/ For Town Panchayats created after 1971 or after 1981, the population is estimated from census data on the previous Village Panchayats making up the present Town Panchayat.
2/ Unless otherwise noted, the 1987 population figures are from estimates prepared for the World Bank Water Supply and Sanitation Sector Study, based on data from the Central Bureau of Statistics.
3/ MSTP estimate based on data from Town Panchayat
4/ Figure from Town Panchayat
5/ Figure from Town Panchayat, including some contiguous built-up areas outside the Town Panchayat boundary.
6/ All urban population estimates are based on MSTP project field surveys. Criteria for designating urban population were (a) density, (b) proximity and road access to the town center, (c) housing type.
7/ All projected growth rates are from MSTP analysis and used in Structure Plans.

NA = Not Available
* = Towns not classified as urban in 1971 and 1981
+ = Towns experiencing boundary expansion since 1971

Source: Management Support for Town Panchayats Project, 1989

3.1.3. Current and Projected Urban Population

Nepal's urban population, as defined by the population living in Town Panchayats, was estimated to be about 1.6 million in 1987 (MSTP Project, 1989). This was roughly equivalent to 9 percent of national population. Though little information exists on urban centers not yet classified as Town Panchayats, the 1981 Census provides data on urban agglomerations with populations of between five and ten thousand. As of 1981, 1,016 localities with a cumulative population of 6.4 million could be categorized as such. Collectively these accounted for nearly 41 percent of total national population (15.0 million) at the time.

If it is assumed that these smaller urban centers grew collectively at the same rate as Town Panchayats over the 1981-1987 period (6.08 percent as estimated by MSTP), their 1987 population would be 9.1 million, 52 percent of the national population. This should be taken as an extreme upper boundary, since it is likely that such smaller urban centers have been growing more slowly than the Town Panchayats. Nonetheless, the importance of the small urban centers in terms of population share is clearly very significant and increasing.

Table 3.2 gives figures on the proportion of "urban" population in each Town Panchayat. This reflects the fact that most Town Panchayats consist of an urban core area surrounded by a rural zone. In some cases these rural zones are extensive. Nine Town Panchayats have populations that are less than 50 percent urban.

3.2. Urban Economic and Spatial Structure

3.2.1. Urban Component of the National Economy

Nepal remains mainly a country of villages. As recently as 1981, 93 percent of the economically active population was engaged in agriculture. Until quite recently, the conditions have not existed for agglomerations of population into units classified as "urban areas." Indeed, the very notion of functional urban areas is not easily applied to Nepal. Most urban settlement patterns retain rural structural features. Moreover, many settlement areas that perform urban functions escape formal classification as urban areas because Nepalese censuses define urban areas in accordance with administrative and political, rather than functional, criteria.

Because there are intrinsic problems associated with defining urban areas, there are corresponding problems associated with specifying the sectoral share distribution of economically active persons in urban areas. The numbers of economically active persons in urban areas can be deflated or inflated in accordance with the elasticity of the definition of urban areas used.

To avoid such conceptual problems, data on the agricultural and non-agricultural sectoral shares of GDP can be used to trace the changing nature of these sector's contributions to the national economy over time. In the process, it is assumed that the GDP share of the non-agricultural sector is the rough equivalent of the urban sector's GDP share.

The urban (non-agriculture) share of GDP (in constant prices) was estimated to be 30 percent in 1987/88. This represents an annual compound growth rate of 6.5 percent in the

urban sector's share of GDP over a 13-year period, beginning in 1974/75 and ending in 1987/88.

Agriculture's share of GDP grew at the annual compound growth rate of 3.9 percent over the 13 years from 1974/75 to 1987/88. Projecting the same rate of growth in that sector over the next 13 years until 2000, agriculture's share of GDP in that year will be roughly 46 percent.

By these estimates, agriculture will remain an important sector of the national economy in the years ahead. Growth in that sector will be vital to future economic growth, including industrial growth. And, agriculture will for some time to come no doubt employ the majority of the nation's economically active population. However, the trend line of GDP growth is one that confirms that the urban (non-agriculture) sector's share of GDP will soon exceed that of agriculture. This suggests that increasing attention must be given in the days ahead to the development of effective strategies of urban economic development: strategies that seek, simultaneously, to establish a positive relationship between the goals of long-term economic growth in urban areas and of employment generation for a growing urban labor force.

3.2.2. The Settlement System in its Regional Context

Regional and sub-regional characteristics are determining factors in the development of the settlement system in Nepal. Perhaps the best reference in this regard is the "Regional Development Master Plan" prepared for the Eighth Five Year Plan. It includes a table of socioeconomic development indicators by sub-region.

On the basis of the sub-regional development evaluation conducted by the NPC, it is clear that the sub-regions in the eastern Terai and central Hills (especially the Kathmandu Valley) are the most highly developed areas in Nepal. This is due to their resource endowments, their high agricultural productivity, and the concentration of secondary and tertiary economic activities in these two areas.

According to the NPC, the second level of sub-regional development corresponds to the remaining Terai sub-regions, the Hill sub-region of the Eastern Development Region and all sub-regions of the Western Development Region. This reflects the high agricultural productivity of the Terai and the relatively higher productivity of the eastern Hill area versus other Hill areas. Pokhara has developed as an important regional and tourism center, which, coupled with a low density population in the Mountains, has helped make development efforts in the Western Region more successful.

The third tier of development is composed of the Hills sub-region of the Far Western Region and the Mountain sub-region of the Eastern Region.

The fourth, least-developed group consists of the Mountain sub-region of the Central Development Region, the Mountain and Hills sub-regions of the Mid Western Development Region and the Mountain sub-region of the Central Development Region.

As the eastern and central part of the country receives higher rainfall than the western part, higher agricultural productivity and settlement growth have occurred there. Agricultural productivity is also a function of better soil and cultivating conditions. This is evident in Figures 3.1 and 3.2 illustrating foodgrain sufficiency by district in 1984/85 (note that any foodgrain self-sufficiency in the Mountain region is partly due to the very low population base in the area). As is, furthermore, graphically illustrated, the Terai generally produces a foodgrain surplus to support a generally large deficit throughout the Hills.

Inter and intra-regional migration in Nepal was discussed in an earlier section of this report. These trends are also indicative of regional resource and development potential. The Terai has been experiencing very rapid population growth as a result of Hill migrants seeking land and economic opportunity.

Industrial development in Nepal is largely agro-based. Industrial location is therefore tied to the resource base and market. As illustrated in Figure 3.3, industrial employment is primarily found in the Kathmandu Valley and the Terai with the highest concentrations of the latter being in Biratnagar. Higher industrial employment levels are also found in other key Terai and Inner Terai Districts around such urban centers as Nepalgunj, Butwal, Bhairawa, Birganj, Hetauda, and Janakpur.

Figure 3.4, showing main import and export trade flows, clearly displays the dominance of Birganj with respect to imports and the relative importance of Bhairawa as the key point of exports. The level of trade through Nepalganj is surprisingly low and needs to be checked against data for other years. The level of trade through Biratnagar is also relatively low compared to that of Bhairawa.

Nepal's road system and its transport linkages with India and Bangladesh are shown in Figures 3.5 and 3.6. It is evident that Nepal's settlement system is largely an outgrowth of the general sub-regional development potentials within Nepal and the internal and external transportation network. This notion is further supported by the map (Figure 3.7) illustrating the sizes of the key settlements, an indicator of economic growth and demographic attraction.

Maps of each Development Region showing the locations of 60 urban centers (33 Town Panchayats and 27 others) are found in Figures 3.8 through 3.12.

3.2.3. Spatial Structure of the Settlement System

The spatial structure of the settlement system in Nepal must first be viewed in an historical perspective. The reason for this is that the current settlement system is both a product of historical development factors and of more recent trends brought on by modern influences such as the introduction of roads. At times, these are at odds with one another, particularly in the Hills. Much of the material in this sub-section is taken from *Urbanization in Nepal*, by Pitamber Sharma (East-West Center, Hawaii, 1989).

FIGURE 3.1
FOODGRAIN SUFFICIENCY BY DISTRICT 1984/85

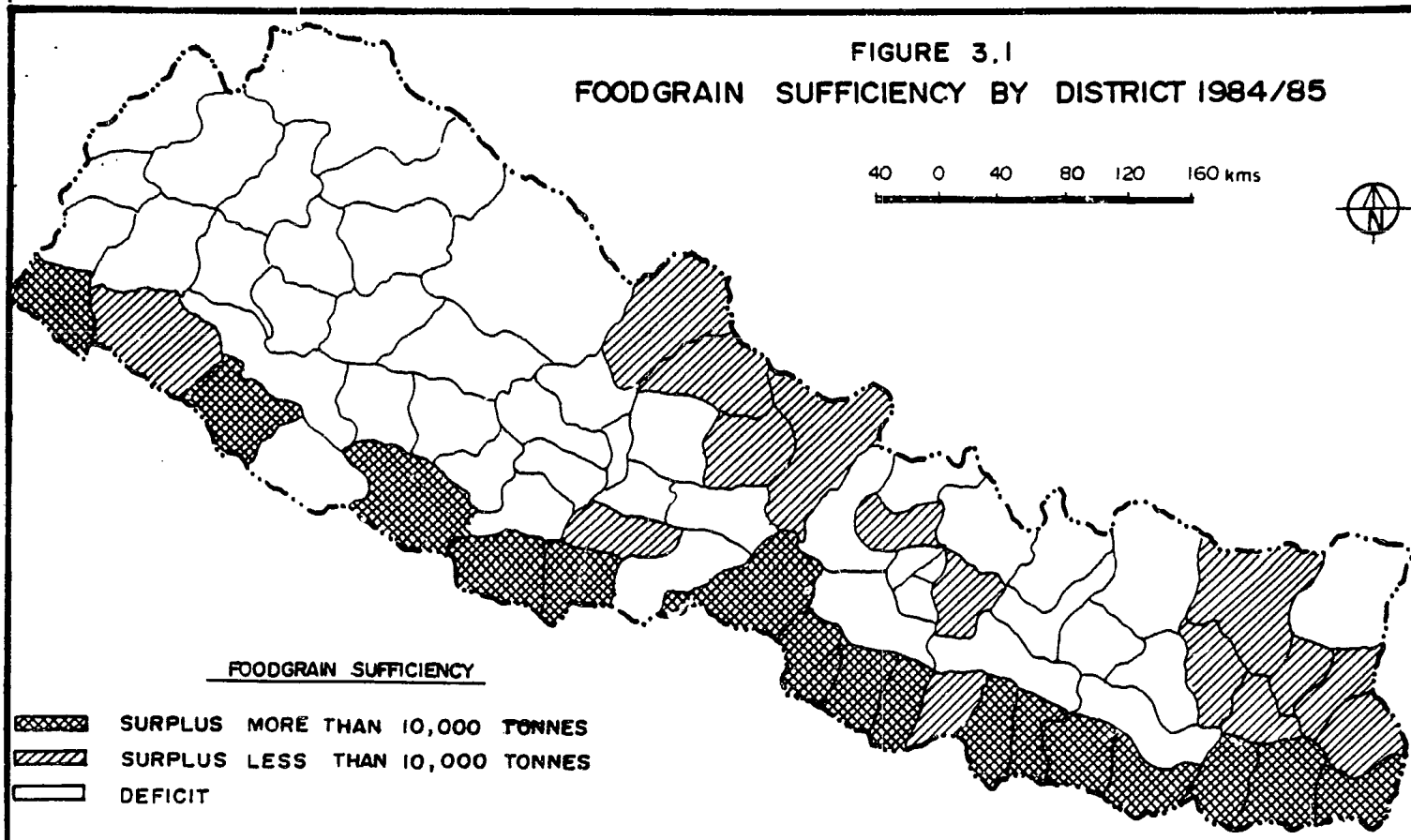


FIGURE 3.2
FOODGRAIN DISTRIBUTION BY NATIONAL FOOD CORPORATION 1984/85

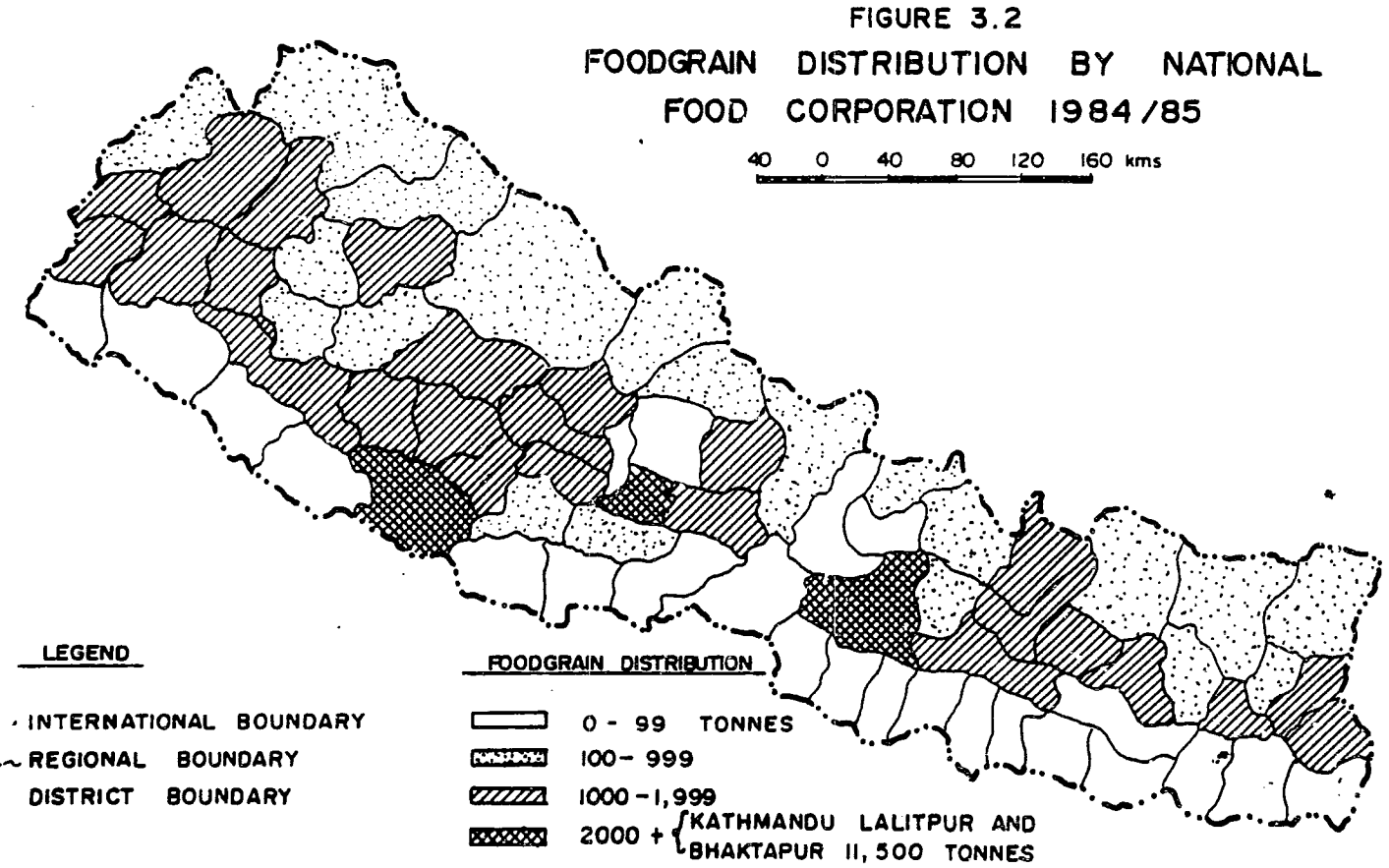


FIGURE 3.3

INDUSTRIAL EMPLOYMENT BY DISTRICT 1981

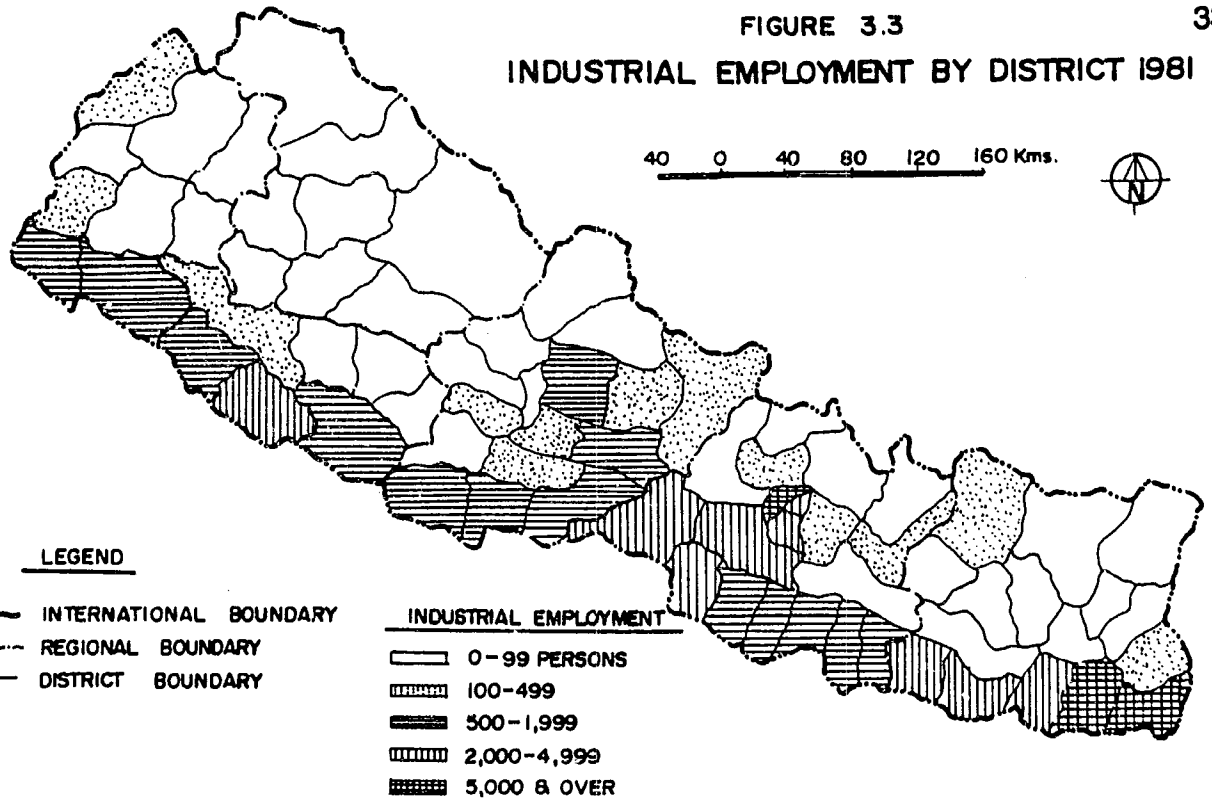
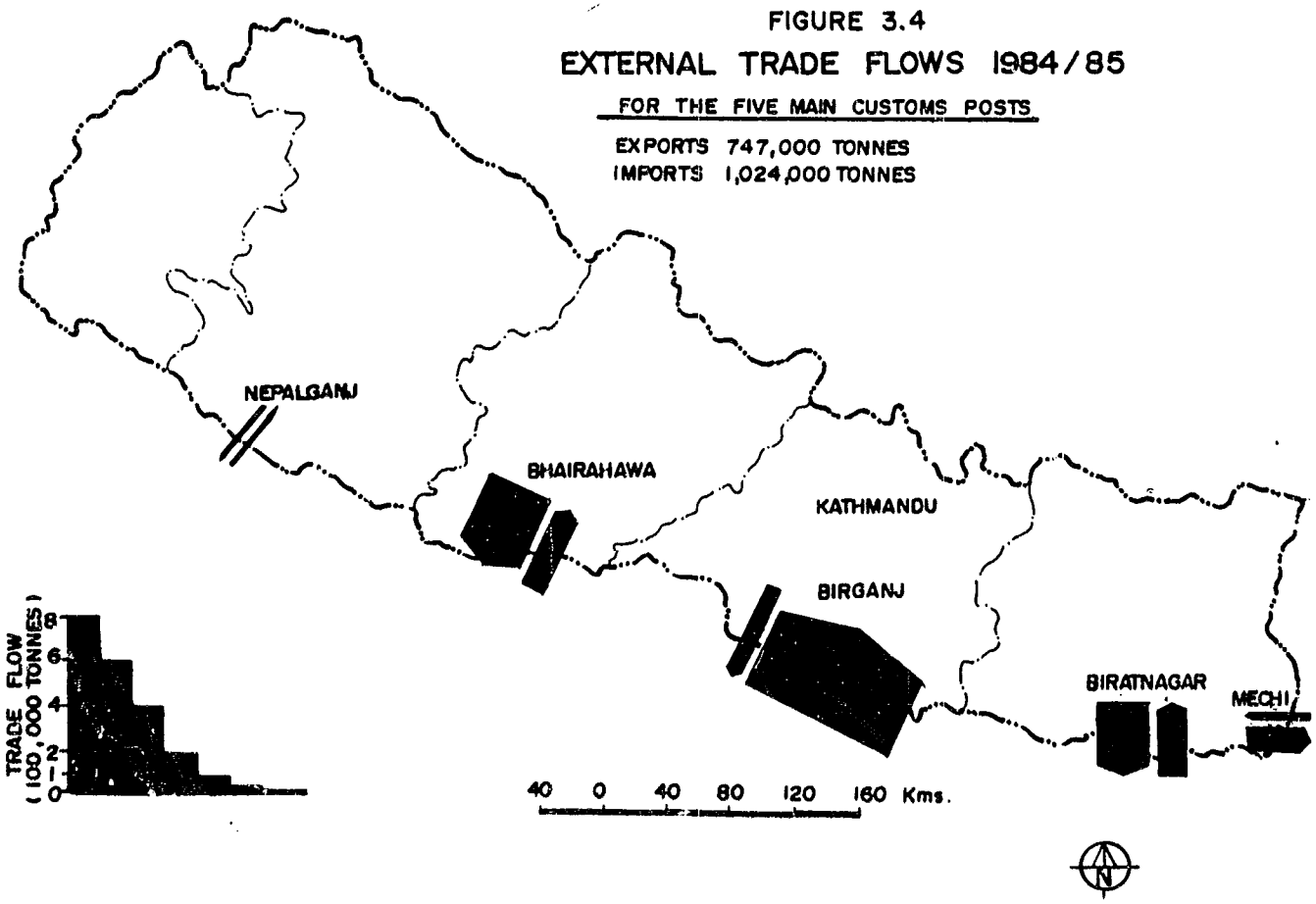


FIGURE 3.4

EXTERNAL TRADE FLOWS 1984/85

FOR THE FIVE MAIN CUSTOMS POSTS

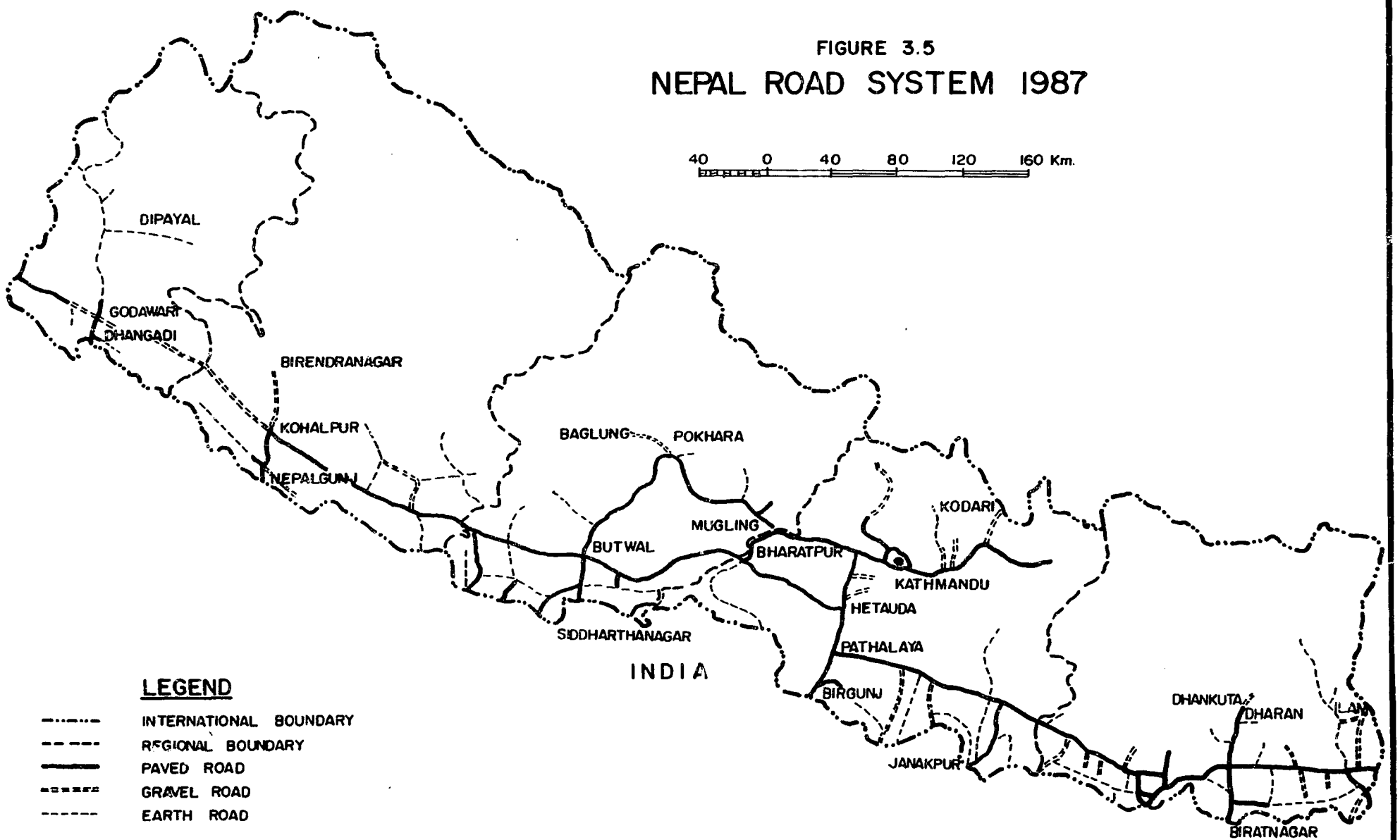
EXPORTS 747,000 TONNES
IMPORTS 1,024,000 TONNES



SOURCE : ADB, TRANSPORT SECTOR PROFILE STUDY, 1988

FIGURE 3.5

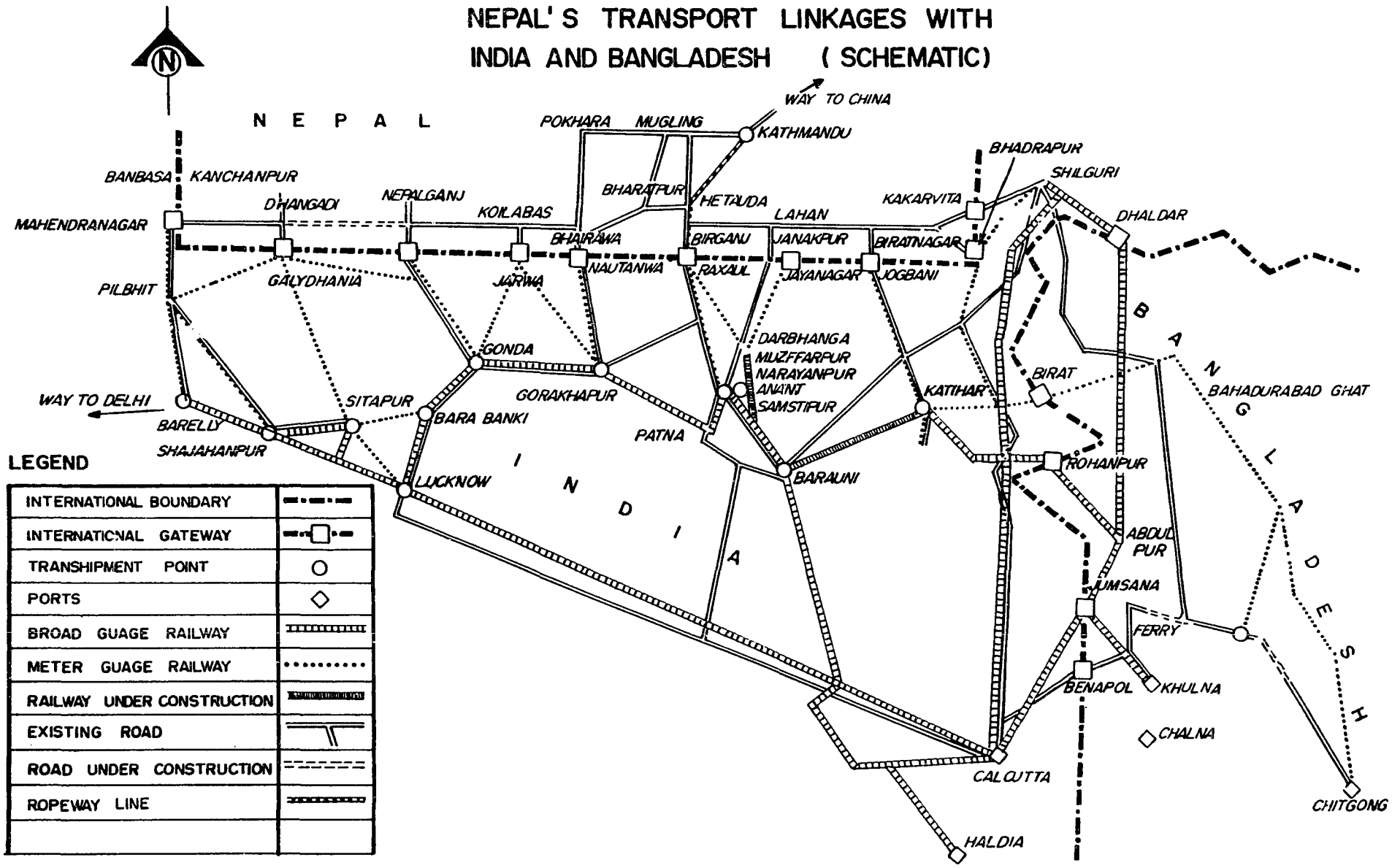
NEPAL ROAD SYSTEM 1987



SOURCE : ADB, TRANSPORT SECTOR PROFILE STUDY, 1988

FIGURE 3.6

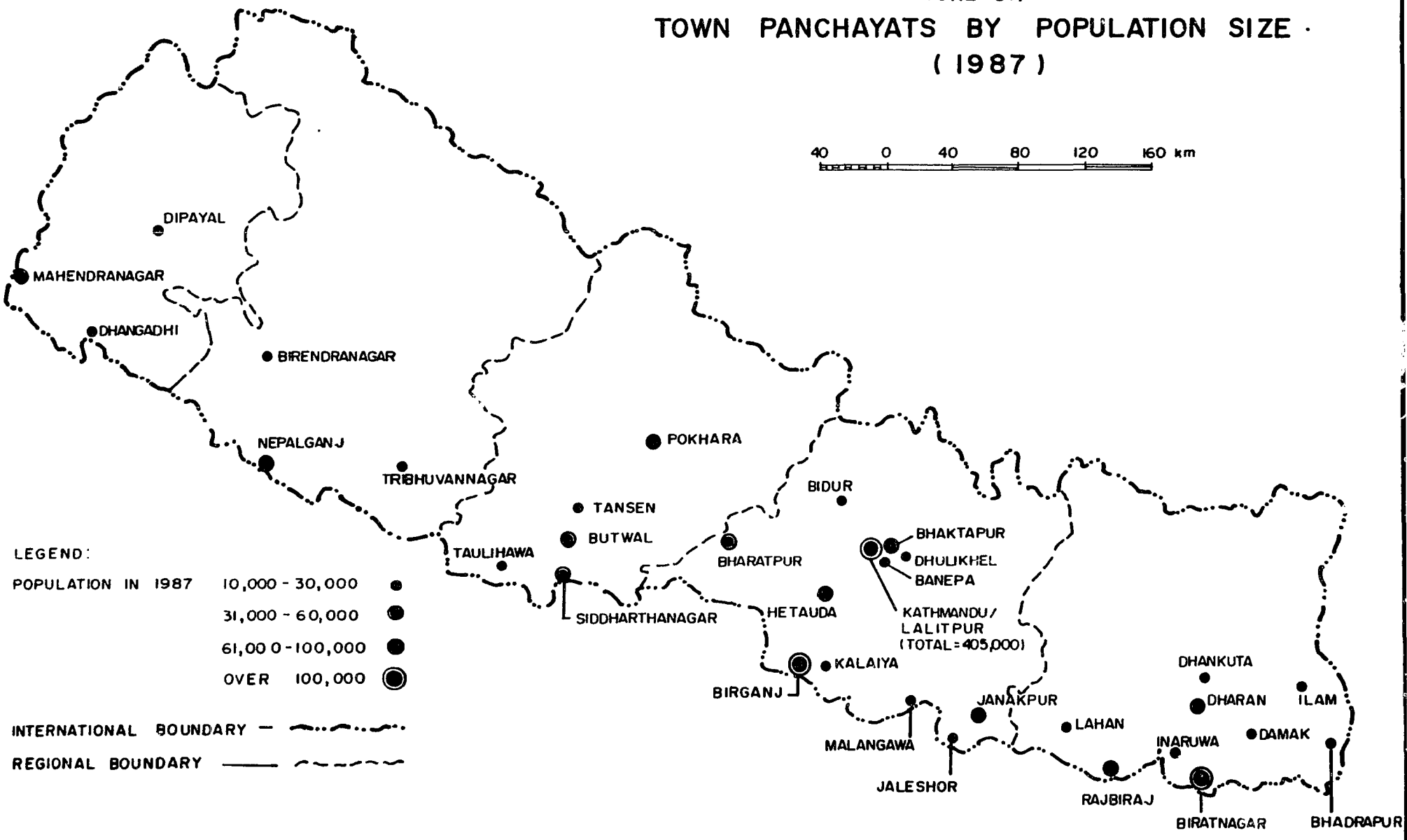
NEPAL'S TRANSPORT LINKAGES WITH INDIA AND BANGLADESH (SCHEMATIC)



SOURCE: UNCTAD/ESCAP ADVISORY GROUP, KATHMANDU

FIGURE 3.7

TOWN PANCHAYATS BY POPULATION SIZE (1987)



SOURCE: MSTP PROJECT

URBAN CENTERS EASTERN REGION

(SCALE APPROX. 1:2,820,000)

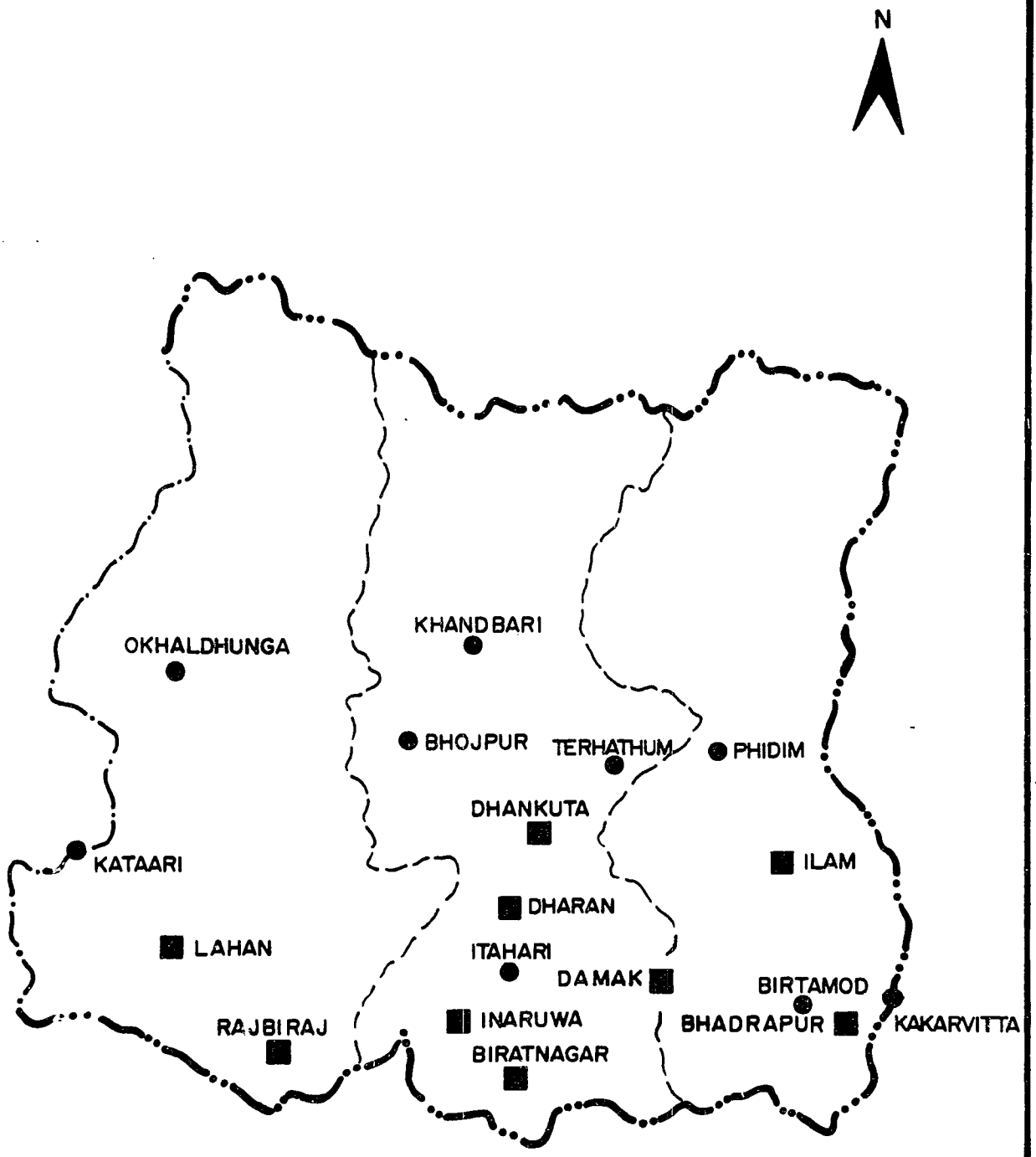


FIGURE 3.8

■ – Town Panchayat

● – Non Town Panchayat

National Boundary

Zonal Boundary

Source: MSUD Project.

URBAN CENTERS
CENTRAL REGION

(SCALE APPROX 1:2,820,000)

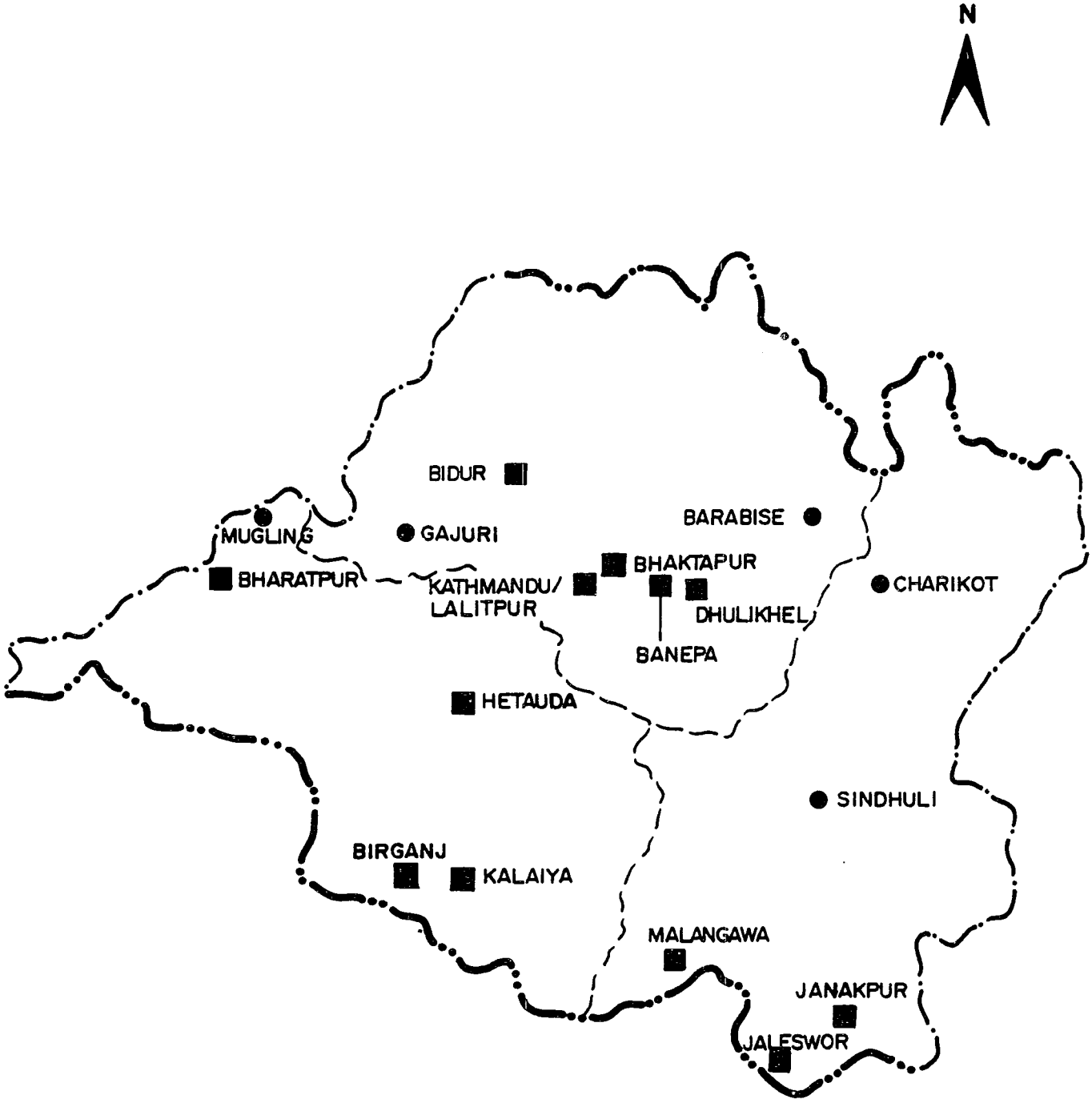


FIGURE 3.9

■ – Town Panchayat

● – Non Town Panchayat

National Boundary

Zonal Boundary

Source : MSUD Project .

URBAN CENTERS
WESTERN REGION

(SCALE APPROX. 1:2,820,000)

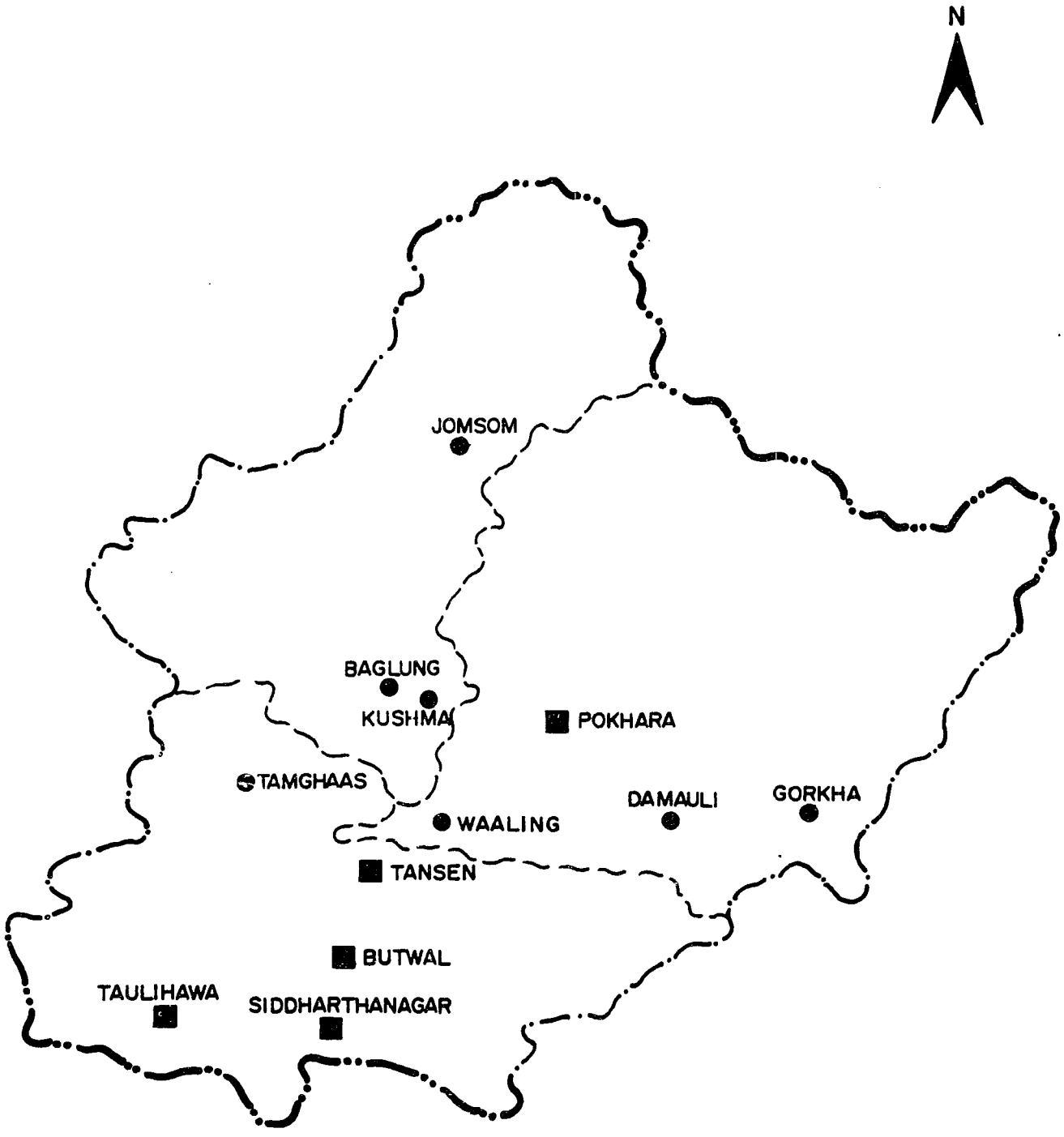


FIGURE 3.10

— Town Panchayat

— Non Town Panchayat

National Boundary

Zonal Boundary

Source : M S U D Project .

URBAN CENTERS
MID WESTERN REGION

(SCALE APPROX 1:2,820,000)

FIGURE 3.11

■ – Town Panchayat

● – Non Town Panchayat

National Boundary

Zonal Boundary

Source: MSUD Project .

URBAN CENTERS
FAR WESTERN REGION

(SCALE APPROX 1: 2,820,000)

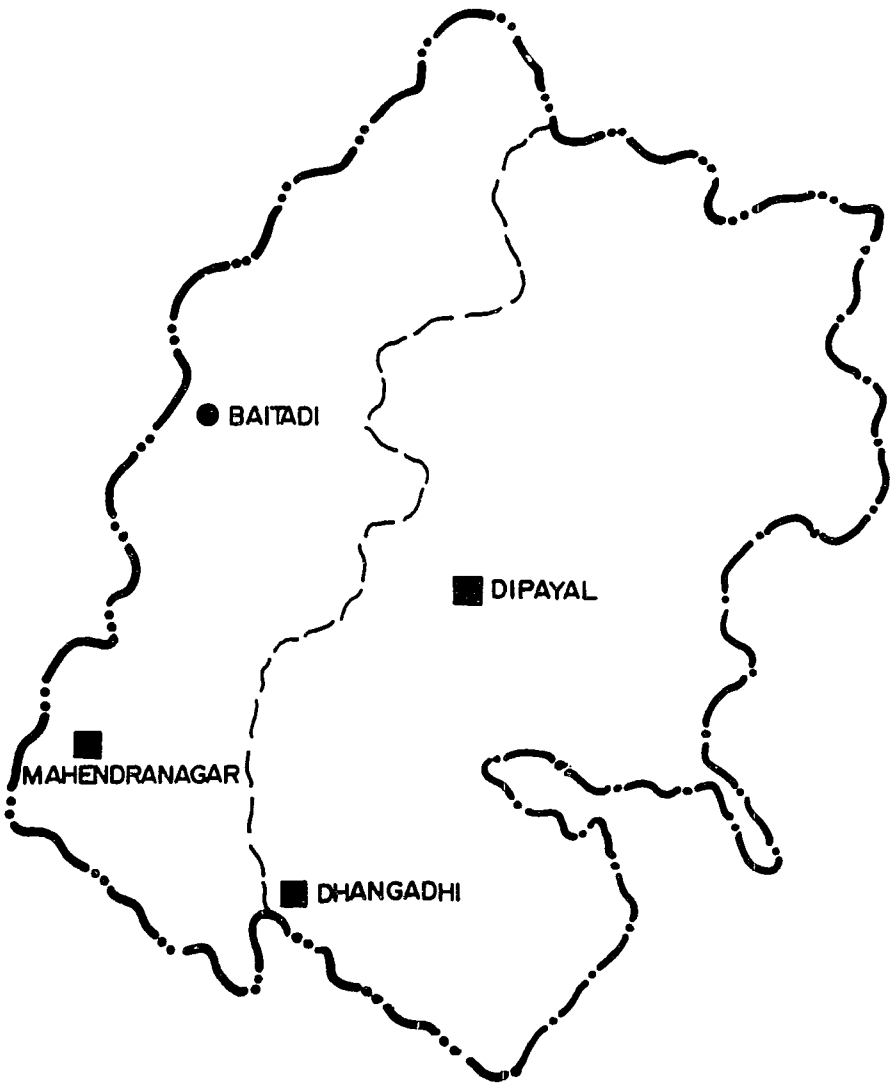


FIGURE 3.12

■ – Town Panchayat

● – Non Town Panchayat

National Boundary

Zonal Boundary

Source: MSUD Project.

3.2.3.1. Historical Settlement Patterns

Urban Growth in the Hills

For the most part, households in the Hills have tended to group together in clusters of houses rather than disperse in the countryside. The locations of these settlements are tied to cultivable land and access to water. Historically, these settlements tended to locate on hills and ridges since many valleys (including Pokhara) were malarial and not suited to permanent settlement.

Hill settlements have remained primarily rural in nature. The Kathmandu Valley cities of Kathmandu, Lalitpur, and Bhaktapur, however, became distinctly urbanized by the 18th century. These "entrepot" settlements derived their strength and importance from their strategic location on the major route of long distance trade between Tibet and India. This strength was reinforced by the agricultural richness of the Kathmandu Valley. As a result, the Valley settlements evolved into important centers of trade and of commerce, crafts and petty manufacturing, as well as foremost political, cultural, and agricultural centers.

Outside the Kathmandu Valley, conditions for sizable settlements were absent as these places lacked the locational advantages, agricultural base, and social organization of the principal Valley settlements. Settlements that did evolve were localized political, trading , military, and commercial centers along secondary and tertiary trade routes. Settlements of some significance included Tansen, Pokhara, Bandipur, Dhulikhel, Dhankuta, Chainpur, Dolakha, Pyuthan, and Salyan among others. Historically the growth of trade that did occur between Hill settlements was mainly due to the migration of Newar traders and petty manufacturers.

Hill settlements like Nuwakot, Dolakha, Banepa, and Panauti may have been strategic military outposts around the Kathmandu Valley. The majority of western Nepal was made up of petty feudal states with a large number of capitals and forts located on ridges such as Salyan, Pyuthan, Musikot, and Rukumkot in the Rapti Zone.

In feudal times, there was little incentive for local Hill economies and agriculture to develop, as the state was concerned with extracting economic surpluses from the peasantry and the mobilization of compulsory labor. At the same time, the most productive agricultural lands were appropriated and distributed to members of the elite. As a result, the economic growth of Hill settlements was limited.

Hill settlement growth outside the Kathmandu Valley is still stymied by poor local resource bases and poverty. Growth that has occurred can be largely attributed to the deconcentrated bureaucracy, malaria eradication and better access in places like Pokhara.

The increase in the volume of trade with India since the 1920s has led to the introduction of cheap Indian manufactured goods which, in turn, has led to a decline of petty manufacturing in the Hills. Hence, Hill settlements have tended to become localized centers for the distribution of imported goods. However, commercial/services growth in Hill

settlements for these goods is adversely affected by significant price differentials between the Hills and Terai. This is caused by Nepal's rugged topography, difficulty in access, and increasing elevation from the Terai. Other factors include a very poor resource base, and poor purchasing power among the local populace.

While the number of small settlements has been increasing rapidly over the past 20 years in the Terai, small Hill settlements appear to have declined or remained stable. Furthermore, while some small transit/catering settlements have sprung up on the Arniko, Prithivi, Siddhartha, and Trisuli roads, the construction of roads has also caused the decline of some traditional centers such as Sankhu, Panauti, and Dapcha located along ancient trade routes.

Urban Growth in the Terai

The eastern Terai has long been considered the richest territory in the country. In the 18th century, efforts were made to populate this area in the interest of increasing revenues through timber production and agriculture. However, these efforts met with limited success because of malaria and the Terai's inhospitable nature.

Nevertheless, over time seasonal trading centers began to emerge. The growth potential of these settlements was reinforced by the extension of the Indian rail lines in the late 1800s up to the border of Nepal, largely for the export of timber and grain. Nearby places benefitting from the rail heads and trade included:

- East: Biratnagar, Hairacha, Janakpur, Jaleswor, Semroungarh
- Center: Raxaul-Hetauda, (Bhimphedi-Hills)
- Midwest: Bhairawa, Taulihawa, Butwal, Bahadurganj, Captainganj
- West: Nepalgunj

Settlement development in the Terai was further reinforced by the 1923 Trade Treaty with Great Britain which improved and stabilized commercial ties. While Hill-Terai migration and some agro-industrialization began to occur in the 1920s and 1930s, it was not until the malaria eradication program in the 1950s that a solid foundation for agro-commercial development and urban growth was established. This was further enhanced by increases in trade, the establishment of administrative functions in key settlements, continued Hill-Terai migration, and the introduction of roads.

As the Terai has increasingly realized its agricultural potential, the number of small towns, market centers, and bazaars in proximity to roads has increased substantially between 1961 and 1981. The largest growth in the number of small urban centers has taken place primarily along the main roads of the eastern and central Terai. Development of small centers in the western Terai has lagged due to the later introduction of roads and the poorer agricultural resource base. However, as the East-West Highway moves westward and the Terai is increasingly deforested, this situation is changing. New settlement growth has also occurred in the inner Terai as well in such places as Bharatpur and Tulsipur, for example.

3.2.3.2. The Changing Nature of the Settlement System

The economic forces in motion today, and the changes brought about by malaria eradication, greater Indian imports and the introduction of roads servicing places like Kathmandu, Pokhara, Birendranagar, and settlements along the East-West Highway, have greatly affected the traditional settlement pattern and regional trade flows.

In the Hills, for the most part, historic ridge settlements are in decline as well-used trails now show preference for valley locations where small settlements are emerging (especially catering centers). In fact, if it were not for the location of administrative headquarters in many of the older ridge settlements, further decline inevitably would have taken place.

Places in the Terai and Inner Terai, on the other hand, are booming because of their locational advantages with respect to Indian roads and railways, marketing mechanisms, infrastructure, and the Terai's richer resource base. A case study of the dynamics of Hill and Terai settlements appears in the *Rapti Zone Regional Development Assessment* (PADCO/USAID, 1985).

Annex A of this report presents in tabular form the characteristics of the main urban settlements in Nepal (33 Town Panchayats and 23 others) by development region. It indicates settlement administrative functions, economic activities, imports and exports, and locational characteristics. The purpose of these charts is to give a quick overview of the roles of these settlements and their inter-relationships.

Direction of Trade

The economic orientation of Nepal has been traditionally focused on a north-south, Nepal-India basis rather than an east-west or inter-regional basis. Thus, directionality of trade has tended to consist of outward bound agricultural commodities and inward bound manufactured goods. This relationship, and the distribution of entry/exit points of trade or gateways along Nepal's southern border, has clearly had a significant impact on the nature of the settlement system in Nepal. The outcome of ongoing negotiations on Nepal/India trade and transit issues may further affect the settlement system.

Gateways to India

The Terai border towns have come to serve as land ports or gateways in the Nepal/India marketing and distribution system. The evolution of these gateways has been heavily influenced by the volume of trade that has occurred through these points (see the graphic on the volume of trade). In recent times, the key entry points have been Biratnagar, Birganj, and Bhairawa, which are in proximity to the points of origin of these goods (i.e., the port of Calcutta). The gateways have served as break of bulk points located at strategic Indian railheads and trade routes (see Figure 3.6).

The border gateway towns, in addition to having strong ties to lower order settlements across the Indian border, are also closely linked with major Indian cities in the states of Bihar, Uttar Pradesh and West Bengal, which serve in a broad geographical sense as both

destinations for Nepalese commodities and origins of the many manufactured goods and other commodities distributed in Nepal.

Over time, several key gateway towns have evolved into primary regional economic centers in their own right, partly due to their relatively rich agricultural hinterland in the Terai. The most important of these are Biratnagar, Birganj, Bhairawa, and Nepalganj. These have become important places for commerce and services, marketing and distribution, agro and other industry, product collection, sorting, processing, packing and shipping, etc.

The economic bases which have evolved in these primary gateway towns have also been enhanced in recent decades by higher level administrative, educational, health, and other service functions which serve their broader hinterlands in the Terai and Hills. Furthermore, they now provide important regional services with respect to finance, input sales, and communications which serve both urban and rural purposes.

Less important gateway settlements have evolved in places like Rajbiraj, Bhadrapur and Dhangadhi. These share some of the characteristics of the more important gateway towns. Dhangadhi (in the Far West) at present remains part of a loosely bounded settlement area. However, its role as a gateway has been enhanced by the Dhangadhi-Dandeldhura highway linking it with the Far Western Hill hinterland. Its importance is expected to increase with the completion of the East-West Highway.

An emerging gateway is Kakarvitta to the extreme east of the E-W Highway on the Indian border (a settlement draining certain gateway functions from Bhadrapur). Baitadi, a Hill settlement in proximity to the western border with India, also serves as a minor gateway.

Agro-Settlements

Janakpur, in the central Terai, has become a significant settlement because of its rich agricultural resource base and role as an important Hindu pilgrimage site, rather than as a main gateway for trade. It is not well integrated into the functional system of reception and distribution of commodities. It is also the site of an important cigarette factory.

Agro-settlements have evolved throughout the Terai as it became increasingly populated and farmed. This includes places like Mahendranagar, Kalaiya, Jaleswor, Malangawa, and Taulihawa

Due to low levels of interregional trade within Nepal, the East-West Highway remains largely "uneconomical". One school of thought suggests that if there were fewer entry/exit points in the dominant India/Nepal trade, the costs of transport/transit would be borne within Nepal along the East/West corridor--costs which at present are being primarily expended within the Indian transport network.

Terai Highway Settlements

While inter-regional Nepalese trade remains limited, the East-West Highway is having an important impact on the settlement system. Both Terai and Inner Terai settlement growth

has been stimulated by its construction and transport flows. Growth is particularly rapid at intersections with north-south roads at places like Bharatpur, Itahari (near Biratnagar), Lamahi (near Gorahi), Kohalpur (near Nepalganj) and Attariya (near Dhangadhi). Growth in other places along the E-W highway has also been significant in places like Birtamod, Damak, and Lahan. "Catering" centers of some importance have also evolved along the highway but are yet to take on major economic importance.

As the E-W highway has stimulated settlement growth along its corridor, it has also caused growth to decline somewhat in the border settlements. This trend has been reinforced by policies which prohibit industrial location in proximity to the border.

Hill Gateway Settlements

Secondary gateway or break-of-bulk towns evolved on north-south trade routes at the base of the foothills where goods were traditionally transported into the Hills by porters and animals. Traditional secondary gateways have included Hetauda, Dharan, Butwal and Ghorahi. The introduction of roads into the interior over the past three decades has affected the roles of these settlements. Interior roads to Kathmandu and Pokhara, particularly the Bharatpur-Mugling connection, have diminished the importance of Hetauda. The route beyond Dhankuta and Dharan has diminished the importance of both, and the link between Tulsipur, Ghorahi, and the East/West highway has diminished the importance of Ghorahi.

Former gateways are bypassed as motorable roads are introduced and distribution and collection points are extended further into the Hills either at the end point of the road or along its corridor. This has been the case with Tansen and Dharan, and this trend may affect Ilam as well. Interior Hill destinations that have benefitted significantly from the introduction of motorable roads include: Surkhet, Pokhara and Greater Kathmandu. These places also serve as regional service centers or gateways into the interior.

Other settlements that have benefitted from their location on roads include Banepa, Waling-Syangja, Damouli, Mugling, Gajuri, and Charikot. These places, much like their counterparts in the Terai, benefit from transport flows and catering opportunities but may be commercial centers in their own right.

As was noted earlier, many Hill settlements suffer from a poor resource base, limited purchasing power among the local population, and high costs of consumer goods compared to Inner Terai and Terai settlements. These factors combine to inhibit development of commercial, service, marketing and distribution functions in these places. Nevertheless, many Hill settlements, often reinforced by District administrative offices, remain important sub-regional centers. These include places like Khandbari, Bhojpur, Barabise, Kushma, Baglung, Jomsom, and Jumla. Charikot, Phidim, and Terathum were such places, but access to motorable roads have changed or may change their nature.

Special Hill Settlements

Greater Kathmandu (Kathmandu and Lalitpur) and Pokhara are special cases as Hill settlements. For all practical purposes, Kathmandu and Lalitpur have become a unified

city though they remain separate Town Panchayats. Greater Kathmandu derives its dominance primarily because of its role as the national capital and seat of power (a factor in the investment in housing and land by well-to-do parties). As such, it has developed into the main market for consumer goods and related commerce, services, and industries. However, Greater Kathmandu serves as the key cultural and touristic center of Nepal as well. Furthermore, the Kathmandu Valley is an important agricultural area in its own right.

There are many historic agro-based and catering settlements within the Kathmandu Valley, many of which are located on ancient trails and trade routes. These include Kirtipur, Thimi, and Sankhu. The ring road and other paved roads introduced radially from Kathmandu throughout the Valley have caused many nearby places to become worker suburbs for commuters.

Pokhara and Surkhet have benefitted from significant public investment to make them Regional Development Centers. Other factors which have influenced their growth include the expansion of the regional bureaucracy and road and air linkages.

3.3. Urban Incomes and Poverty

3.3.1. Poverty Lines Used in Nepal

An individual (or a household) is in poverty if his (or its) income is less than some amount that the society deems "adequate". Those below this level of income are referred to as people below the poverty line.

In Nepal, the incidence of absolute poverty has been estimated using two types of poverty lines. One poverty line, as suggested by the United Nations Food and Agriculture Organization (FAO), has somewhat arbitrarily used one caloric norm, and the relative proportions of calories drawn from cereals and pulses, for the entire country. Recently, the Nepal Rastra Bank has used the concept of basic needs income, as defined by the NPC, to specify the need for higher caloric intakes in the Hills region and lower intakes in the Terai.

Based on the FAO norm of 2,256 calories per capita, the poverty lines estimated by an NPC Survey for the year 1977 are shown in Table 3.3. Updating these using the urban Consumer Price Index, the current estimates according to the NPC survey data would be NRs. 6.23 and NRs. 5.24 as the minimum per capita daily expenditure required (at 1988/89 prices) for subsistence for all Nepal and urban Nepal respectively. In other words, the monthly minimum expenditure per person for subsistence at 1988/89 prices comes to about NRs. 187 for all Nepal and NRs. 157 for urban Nepal.

The Nepal Rastra Bank Survey of 1984/85 (*Multi-Purpose Household Budget Survey*, 1988), fixes the minimum daily caloric intake for the Hills/Mountains and the Terai at 2,340 and 2,140 respectively (the national average being fixed at 2,250 calories). For the year 1984/85 the survey estimates basic needs income (BNI) at NRs. 160.80, NRs. 125.64, and NRs. 143.23 respectively for the Hills/Mountains, the Terai, and the country as a whole. If one adjusts

TABLE 3.3

MINIMUM SUBSISTENCE LEVEL OF PER CAPITA EXPENDITURE FOR NEPAL, 1977
(in rupees)

	Average Daily Expenditure required on cereals and pulses for 2256 calories	Actual Daily Expenditure on other food items, clothing, education, health, fuel, and light	Total Daily Expenditure required for subsistence level of expenditure
Rural Nepal	1.32	0.70	2.02
Urban Nepal	1.32	0.36	1.68
All Nepal	1.32	0.68 a/	2.00

a/ Estimated from the description given in NPC survey report.

Note:
1. 1977 Prices.
2. Actual minimum expenditure, especially on food items, is higher in rural areas, since some important items like milk, ghee, oil, spices, vegetables, meat, eggs, etc. are mostly home-produced, while in urban areas they are supplied by commercial producers. Further, expenses on non-food necessary items too have been reported slightly lower in urban areas.

Source: NPC, *A Survey of Employment, Income Distribution and Consumption Patterns in Nepal*, pp. 110-111.

the national average by using the urban CPI, then the per capita basic needs monthly income for 1988/89 for the country comes to NRs. 223.6, which is about 20 percent higher than the figure arrived at by using NPC survey results for 1977. Assuming the same proportional relations between the NPC survey and NRB survey results for urban Nepal, the BNI per capita per month for urban Nepal comes to NRs. 188 for 1988/89.

These national level surveys are structured in a fashion which sets the poverty line at a level that some institutions consider to be too low. For example, the World Bank (*Nepal Social Sector Strategy Review*, 1989) has made plain that it considers the NRB and NPC survey figures to be too low and estimates the incidence of poverty using a per capita annual income of US$200 in 1987/88 prices; this is 92 percent higher than the NRB survey estimate.

3.3.2. Incidence of Poverty

In measuring the incidence of poverty in Nepal, one must rely on data that raises questions concerning the reliability of estimates. This is made evident in Table 3.4.

This table, giving data for 1977 and 1984/85, shows conflicting and apparently paradoxical results. For example the percentage of households below the poverty line appears to have dropped considerably, yet the percentage of the total population below the poverty line is essentially unchanged. Because the NRB established a higher poverty line, one should expect to see an increase reported in the incidence of poverty, if income levels were the same. Therefore the observed decline in the incidence of poverty among households and the constancy of the incidence of poverty in terms of population can only be explained by an improvement in per capita and per household income levels, which is not realistic.

Notwithstanding the illustrated differences, the NPC and NRB surveys agree in emphasizing that the incidence of poverty is significantly less in Nepal's urban areas as compared with rural areas. Poverty in Nepal is mainly a rural phenomenon, the absolutely poor being those in the Hills and the Terai who remain dependent on agriculture for subsistence, yet have tenuous rights in land or no land at all. Beyond this, micro-level studies suggest that the incidence of poverty in the country as a whole has probably been underestimated by national surveys (New ERA, "The Dynamics of Poverty, Nepal, Review of Studies on Poverty", 1989).

3.3.3. Previous and Current Estimates of Income Distribution

Even if Nepal could create an egalitarian distribution of income and assets, it would remain one of the poorest countries in the world. This is not to suggest that there is no relationship between income distribution in Nepal and the problem of poverty. However, most of the data available on income distribution are not very satisfactory. This is because the common unit of analysis is the household, and the data have not been adjusted for differences in the size of households. (See, for example, NPC Survey, 1983, and ARTEP mission report, "Employment and Basic Needs in Nepal: A Preliminary Analysis of Problems and Policies", 1982.) In Nepal it is found that household size increases monotonically with total household income, with households ranging in size from four members at the lowest levels of income to more than 13 at the highest (World Bank, *Nepal, Social Sector Strategy Review*, 1989). Clearly, the use of household income data to study inequality will be

TABLE 3.4

HOUSEHOLDS AND POPULATION BELOW POVERTY LINE (in percent)

(Year)	Percentage of HHs Below Poverty Line			Percentage of Population Below Poverty Line		
	Rural	Urban	National	Rural	Urban	National
NPC (1977)	41.22	22.08	40.30	37.23	16.97	36.20
NRB (1984/85)	40.70	16.10	33.01	43.10	19.20	36.21

Sources: 1977 data from NPC survey (1983), Table 14.1; 1984/85 data from NRB survey (1988), Tables I, II, and III

misleading unless the data are adjusted for family size. It would be preferable for the data on inequality to be based on per capita income measures (instead of household income aggregates). However, inequalities in the distribution of income in Nepal have been measured in per capita income terms in only one study, the NRB survey (1988).

Table 3.5 provides estimated monthly household income distributions for rural and urban areas by geographic region, as compiled in January 1989.

3.3.4. Income Concentration in Urban Areas

Economic theory does not give a good explanation of the relationship, in a region or locality, between socioeconomic characteristics and income inequality. Nor is there much contextual understanding of the main factors affecting the distribution of income in the urban areas of Nepal.

A study by Bohara and Thapa based on the Nepal Rastra Bank's Household Budget Survey for 1973-75 produced Gini Concentration Ratios (computed on a per capita income basis) for 18 urban centers. The figures ranged from 0.31 to 0.42, with an average of 0.36.

The data and analysis of Bohara and Thapa suggest, as one might expect, that higher levels of income inequality can be found in the urban centers inhabited by substantial numbers of highly literate persons. They show that income concentration is positively correlated with the numbers of persons in an urban center who are, for example, civil servants and technicians.

This kind of evidence suggests that as Nepal's urban centers grow in the years ahead, attracting literate and highly skilled persons into new industries and receiving illiterate,

TABLE 3.5

ESTIMATED 1988 MONTHLY HOUSEHOLD INCOME DISTRIBUTION BY RURAL/URBAN DIVISION AND REGION*

Income Percentile	Urban Areas				Rural Areas			
	Total Urban	Terai	Hills	Kathmandu	Total Rural	Terai	Hills	Mountain
10	1,430	1,240	1,580	1,900	930	980	800	1,210
20	1,650	1,420	2,020	2,420	1,190	1,250	1,020	1,510
30	1,820	1,670	2,410	2,890	1,390	1,420	1,240	1,670
40	2,130	1,730	2,550	3,060	1,540	1,490	1,390	1,710
50	2,380	1,830	3,020	3,620	1,690	1,730	1,510	1,700
60	2,720	2,120	3,540	4,250	1,830	1,970	1,730	1,660
70	3,220	2,330	3,780	4,540	2,030	2,180	2,030	1,830
80	3,710	2,660	4,150	4,980	2,430	2,550	2,420	2,070
90	4,970	3,830	5,540	6,650	3,180	3,640	3,130	2,230
Mean	2,670	2,092	3,177	3,812	1,801	1,912	1,697	1,732
Median	2,380	1,830	3,020	3,620	1,690	1,730	1,510	1,700

*Represents Total Income (Money + In-Kind)

Source: Burkhard von Rabenau, *Nepal Land Development Issues*, Urban Development Through Local Efforts Project, January 1989.

unskilled and semi-skilled in-migrants from rural areas in search of opportunity, income inequality in those centers will also increase.

3.4. Levels of Urban Services

3.4.1. Urban Service Subsectors

Urban services in Nepal can be grouped into two main categories, infrastructure services and social services:

Infrastructure Services

Electricity (including street lighting)
Water Supply
Sanitation (human waste disposal)
Stormwater Drainage
Roads (including bridges)
Telecommunications (primarily telephones)
Solid Waste Disposal

Social Services

Education (schools)
Health (hospitals and clinics)
Police/Fire
Miscellaneous: public markets, bus and truck parks, green areas, slaughter houses, crematoriums, ponds, and public transport

Responsibilities for these urban services in Nepal are divided between central line agencies and local administrations, as is shown in Figure 3.13.

3.4.2. Past HMG Efforts to Provide Urban Services

HMG has made significant efforts to provide urban services to the Kingdom's cities and towns. Efforts in the subsectors of potable water, electricity, telephones, schools and hospitals have been notable, as the following indicators show:

- Consumption of electricity for domestic, commercial, and industrial purposes (most of which were located in cities) increased by a factor of 2.7 between 1976 and 1984.

- The urban population receiving drinking water increased by 38 percent during the Sixth Five Year Plan (1981-85). As of 1987, all but two of the 33 Town Panchayats had some form of piped water system.

- During the Sixth Plan (1981-85) the number of town telephone exchanges increased from 11 to 37, and the number of telephone connections more than doubled, from 13,880 lines to 27,780 lines.

- In 1981-85 451 beds were added to existing hospitals and nine new hospitals were completed with a total of 675 beds.

- Over the period 1979/80 - 1984/85 the number of primary schools in the country (both urban and rural) increased by 12.5 percent. At the same time the number of lower secondary schools increased by 57 percent and upper secondary schools by 63 percent, most of this increase occurring in urban areas.

3.4.3. Current Deficiencies in Urban Services

Towns in Nepal, experiencing rapid population growth, currently suffer from serious deficits in spite of HMG's efforts. Assessments of infrastructure services in 32 Town Panchayats undertaken by MSTP/MHPP allow a fairly detailed picture to be drawn of current service levels as well as future urban service needs, and these are the main sources of data provided in the following paragraphs.

URBAN SERVICE PROVISION-DISTRIBUTION OF RESPONSIBILITIES

INFRASTRUCTURE SERVICES	STANDARDS & PLANNING (WITH NPC)	CAPITAL FINANCING	IMPLEMENTATION	CAPITAL COST RECOVERY BY / FROM	MAINTENANCE	MAINTENANCE COST RECOVERY BY / FROM
ELECTRICITY	NEA	NEA	NEA	NEA/TARIFF	NEA	NEA/TARIFF
WATER SUPPLY	NWSC/DWSS	NWSC/TP*	NWSC/TP	NWSC/TARIFF	NWSC/DWSS/TP	NWSC/TARIFF TP
TELECOMMUNICATIONS	NTC	NTC	NTC	NTC/TARIFF	NTC	NTC/TARIFF
URBAN ROADS	DOR/MHPP	DOR *TP/TDC	DOR/TDC/TP	TP/GENERAL REVENUES	DOR/TP	TP/GENERAL REVENUES
STORM WATER DRAINAGE	MHPP	TP*	TP	TP/GENERAL REVENUES	TP	TP/GENERAL REVENUES
SANITATION - SEWERS	NWSC	NWSC/TP*	NWSC/TP	NWSC/TARIFF	NWSC/TP	NWSC/TARIFF
SANITATION - ON-SITE	SWMRMC/MOH/DWSS	←	INDIVIDUAL	HOMEOWNERS		→
SOLID WASTE	SWMRMC/TP	TDC/TP*	SWMRMC/TP	TARIFF OR TP/GEN. REVENUES	SWMRMC/TP	TP/GENERAL REVENUES

SOCIAL SERVICES						
EDUCATION	MOEC	MOEC TDC/TP	MOEC/SC	SC/FEES TP/GEN. REV.	MOEC/SC	SC/FEES
HEALTH	MOH	MOH	MOH	NONE	MOH	NONE
POLICE	MHA	MHA	MHA	NONE	MHA	NONE
FIRE	MHA	TP	MHA/TP	TP/GENERAL REVENUES	TP	TP/GENERAL REVENUES
MISCELLANEOUS	MHPP TP	TP	TP	TP/GENERAL REVENUES RENTS	TP	TP/GENERAL REVENUES RENTS

Local level Responsibility

Shared local/ Central Responsibility

CENTRAL ORGANIZATIONS

NPC - National Planning Commission

NEA - Nepal Electricity Authority

NWSC - Nepal Water Suppl, Corp.

NTC - Nepal Telecommunications Corp

MWT - Ministry of Works And Transport

MHPP - Ministry of Housing And Physical Planning.

DOR - Dept. of Roads

SWMRMC - Solid Waste Management & Resource Mobilization Center.

MOEC - Ministry of Education & Culture

MOH - Ministry of Health

MHA - Ministry of Home Affairs

LOCAL ORGANIZATIONS

TP - Town Panchayat

TDC - Town Development Committee

SC - School Committees

* With Financial Assistance From The Town Development Fund Board (TDFB) Among other sources.

FIGURE 3.13

As shown in Figure 3.14, coverage of the 1987/88 urban population, in terms of percentages served, is below 50 percent for the infrastructure subsectors of sanitation, stormwater drainage, and solid waste, while coverage is above 70 percent for water supply and electricity.

Stormwater drainage is shown as zero percent coverage because, as of 1987, no town had drainage works specifically for this purpose. In some towns, roadside drainage channels do exist, primarily for protection of the roads themselves, but these do not generally connect with planned works for area wide stormwater drainage. Drainage is the primary urban service problem in the Terai towns. Low terrain slopes in the Terai dictate that roadside channels must be carefully designed with close attention to culvert invert elevations and backwater effects.

The low percentage of population served in solid waste collection (an estimated 18 percent of solid waste is collected by volume) reflects the inadequate facilities mobilized for this purpose within the Town Panchayats. Only within the Kathmandu Valley has a modern solid waste collection system been implemented; elsewhere, towns rely upon traditional hand sweeping methods to clean the streets, utilizing little equipment and *ad hoc* disposal arrangements. Because of the inadequate collection of refuse in most towns, roadside drainage channels are often clogged and inoperative in urban areas.

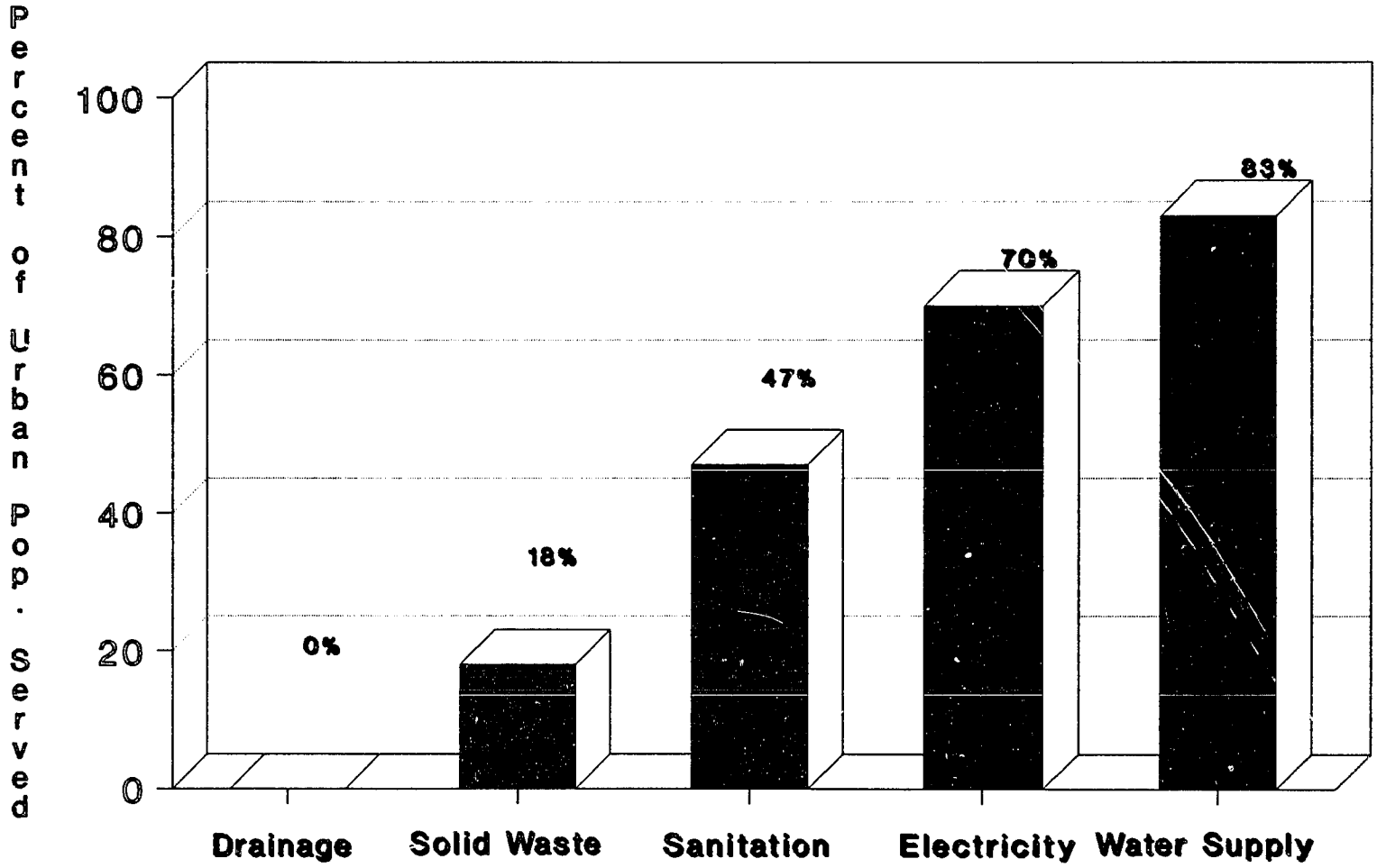
Within urban areas a low percentage of coverage prevails with regard to sanitary facilities for human waste disposal. Only within the Kathmandu Valley is piped sewerage available to a limited core service area, while elsewhere individual on-plot septic tanks and leach pits serve a portion of the population. Where sewerage facilities exist, treatment facilities are often not utilized properly because of high operation costs and the limited maintenance which they receive.

Hill towns, Terai towns, Inner Terai towns and towns of the Kathmandu Valley exhibit different service levels, as do smaller, medium size, and large towns. These variations are shown in Figure 3.15.

In water supply, population covered through piped connections is higher in the Kathmandu Valley and in the larger towns, as might be expected. Sanitation coverage is generally lower in the Terai than elsewhere. In the Kathmandu Valley, the percent coverage for household electric connections is high, roughly twice that of Terai and Inner Terai towns. Outside the Kathmandu Valley, less than one fourth of the solid waste generated is collected, while in the Kathmandu Valley only about one third is collected in spite of organized collection efforts.

The urban population is generally better provided with health and primary education facilities than with infrastructure services. National programs in primary education and basic health care have provided adequate numbers of schools, hospitals, and health units in most towns and cities. However, these high service levels may be misleading since such facilities must also serve the surrounding rural hinterlands.

PERCENTAGE OF URBAN POPULATION SERVED BY INFRASTRUCTURE (1987)

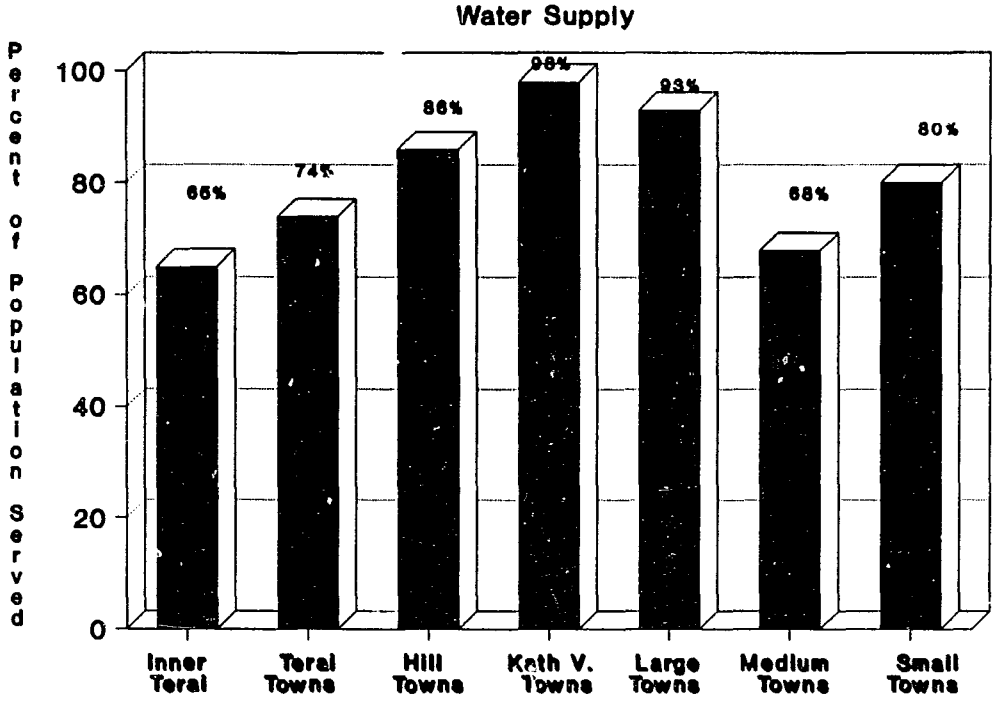


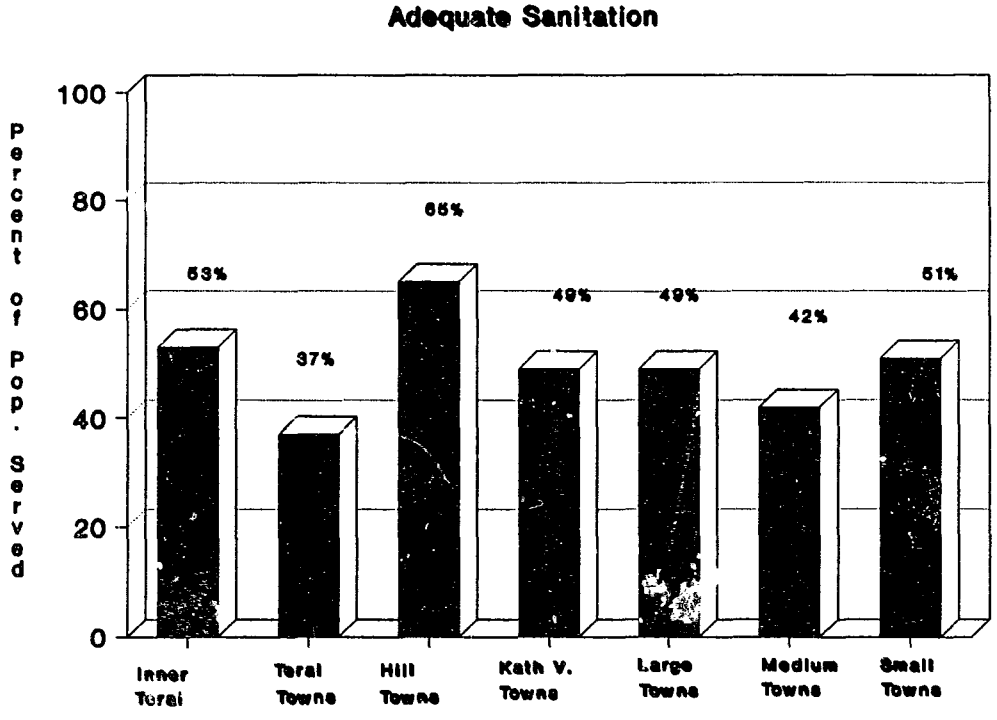
Note: Data cover all Town Panchayats except Bhaktapur.

Source: Management Support for Urban Development Project.

Figure 3.14

VARIABILITY OF URBAN SERVICE LEVELS (1987)





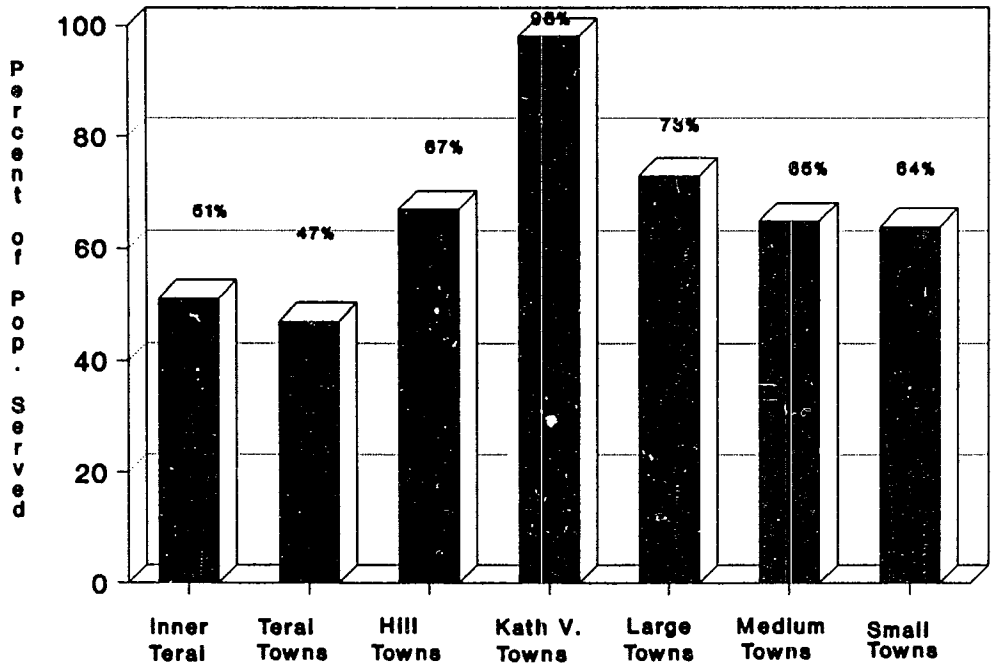
Note: Data cover all Town Panchayats except Bhaktapur.

Source: Management Support for Urban Development Project.

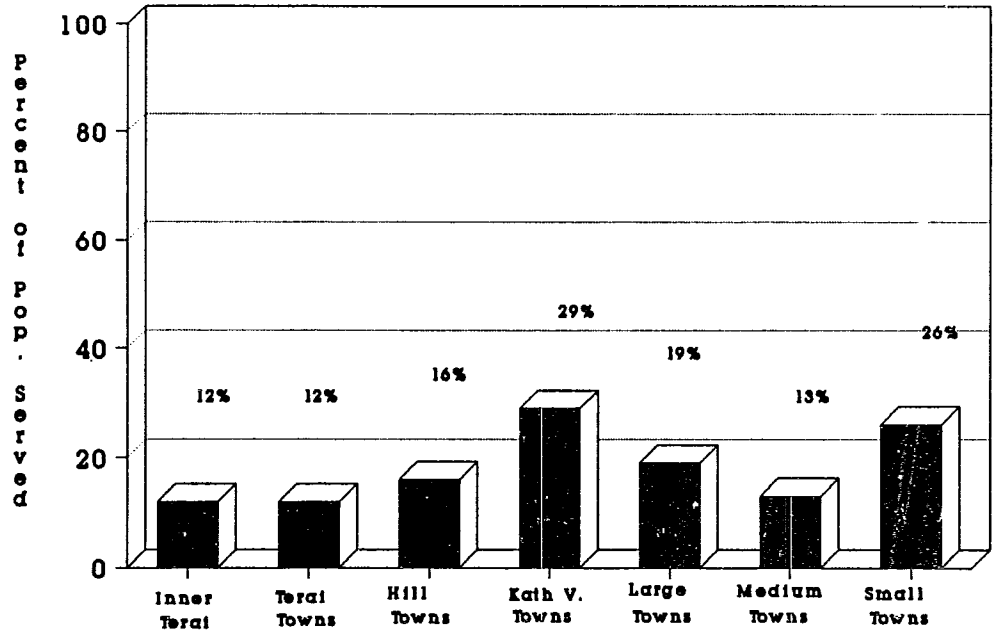
Figure 3.15

VARIABILITY OF URBAN SERVICE LEVELS (1987)

Electricity



Solid Waste Disposal



Note: Data cover all Town Panchayats except Bhaktapur.

Source: Management Support for Urban Development Project.

Figure 3.15 (Cont'd.)

3.4.4. Quality of Existing Urban Services

Deficits, expressed in percentages of population served, obscure a serious problem: even where services exist they are frequently of poor quality, due to insufficient maintenance and limited budgets for operations.

Certain figures illustrate this fact:

- Due to insufficient maintenance, urban road conditions are poor. It is estimated that, of the total road stock in ten secondary cities recently surveyed (MSTP/TDFB 1988), 34 percent was classified as being in poor condition, 43 percent in fair condition, and only 23 percent in good condition.

- Water sources are frequently not sufficient or safe, and low pressure and intermittent service is common. Of the 31 towns in Nepal with water systems, only five have 24 hour service available. Most towns are able to supply water for only two to eight hours a day (and less during the dry season) (MSUD, Water, 1989).

- Electricity supply is subject to frequent unscheduled interruptions in some towns, and voltage instability is common. Unaccounted losses in the system have been reduced in recent years, yet remain above 25 percent of total electricity generated.

- Stormwater drains (where they exist) are often not maintained, and are frequently clogged with uncollected solid waste.

3.4.5. Future Urban Service Needs

Current deficits in urban services, as serious as they are, are completely overshadowed by the expected needs of Nepalese cities in the coming 15 years. Population projections made for each of the 33 Town Panchayats (MSTP, 1989) show that by 2002 the total urban population will be 2.2 times larger than in 1987 (and this does not count the population residing in emerging new urban centers).

Infrastructure assessments made by MSTP for each of the 33 Town Panchayats in 1987/88 allow calculation of what the projected population increases will mean in terms of required future urban services, utilizing moderate standards of service. Overall, a startling picture emerges:

- 1.8 times as many kilometers of road will be needed in 2002 as presently exist.

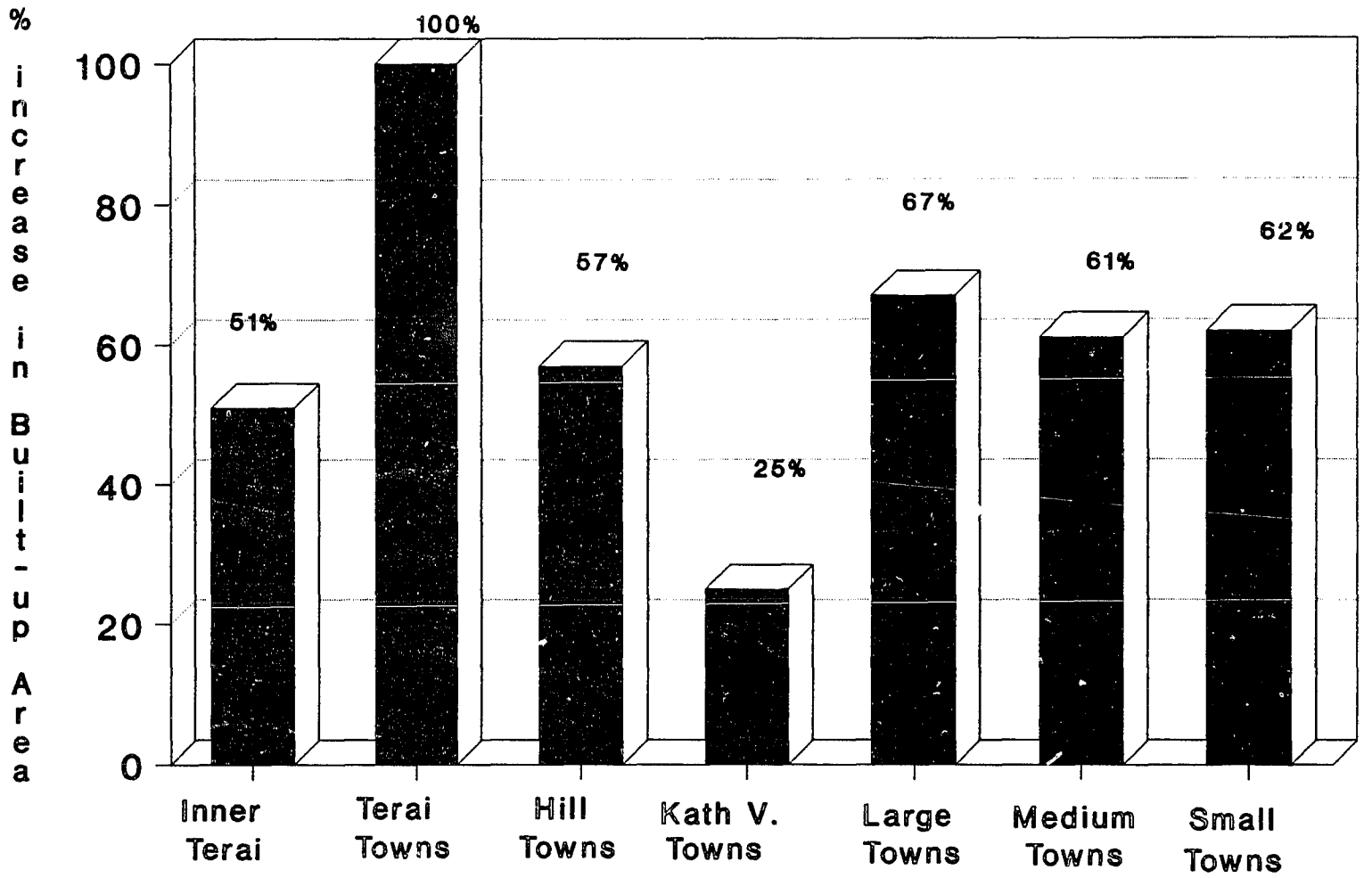
- 2.7 times as many new water connections will be needed as presently exist.

- Nine times as many kilometers of stormwater drains will be needed as presently exist.

- Almost 17 times as much solid waste will need to be collected than is presently being collected.

A sizable share of these requirements is for improving existing urban areas, but a large portion is for servicing future urban growth. Structure Plans for Town Panchayats prepared by MSTP allow estimates to be made of the area of new urban expansion required by the year 2002 (MSTP, *Planning and Land Use Data for Town Panchayats*, 1989). Required area expansions range from 25 percent in Kathmandu Valley towns to 100 percent in Terai towns; overall, for the 33 Town Panchayats, a 61 percent expansion in urban areas will be required. Expansion projections for different types and sizes of towns are shown in Figure 3.16.

ESTIMATES OF FUTURE URBAN LAND EXPANSION (1987-2002)



Note: Data cover all Town Panchayats except Bhaktapur.

Source: Management Support for Urban Development Project.

Figure 3.16

4. CURRENT INSTITUTIONS AND POLICIES

4.1. Institutional Structure for Urban Development

Decisions on urban development are made by many ministries, agencies, departments, and corporations. This section provides an overview of the roles and responsibilities of the institutions at the central, regional, and local levels that are involved in urban planning, administration, and services provision.

4.1.1. Multi-Sectoral and Administrative Institutions

National Development Council (NDC)

The NDC is chaired by His Majesty the King and consists of all of the Ministers of HMG, 19 district chairmen, 15 members of the National Panchayat, three ex prime ministers, seven other governmental officials and five distinguished private citizens. It meets twice a year and is responsible for providing basic policy direction to the National Planning Commission the growth and development of the country. It also reviews the overall implementation of development plans.

National Planning Commission (NPC)

The NPC is chaired by the Prime Minister and consists of five members who are appointed for five-year terms, plus a secretariat. The NPC, working under the guidance of the NDC, is responsible for the preparation of annual and five year plans. Each member of the NPC is responsible for several functional sectors. One member's portfolio includes urban development and housing. With the assistance of HMG ministries, NPC frames the basic policies, sectoral priorities, and program targets for annual and multi-year planning. These guidelines are used by the ministries to prepare their annual budgets and programs. The NPC also conducts periodic reviews of development policies, develops guiding policies such as the Basic Needs Statement, and monitors and evaluates the progress of development plans.

Ministry of Housing and Physical Planning (MHPP)

MHPP, established in 1988, is organized in two major units: (1) Housing, Resettlement, and Urban Development and (2) Water Supply, Sewerage, and Sanitation. The Housing, Resettlement, and Urban Development branch is primarily concerned with policies and programs relating to urban physical development, housing, and co-ordination of physical planning and implementation. It includes the Kathmandu Valley Development Authority, the Nepal Resettlement Company, the Building Department and the Department of Housing and Urban Development. The Water Supply, Sewerage, and Sanitation branch is responsible for policies and programs related to its sectors. It includes the Nepal Water Supply Corporation (formerly the Water Supply and Sewerage Corporation), the Solid Waste Management and Resource Mobilization Centre, and the Department of Water Supply and Sewerage.

Department of Housing & Urban Development (DHUD)

DHUD is the agency within MHPP which is specifically concerned with housing, urban planning and coordination of physical development. The Department is responsible for housing initiatives in support of the Basic Needs Program. It has been assigned various direct program and project execution functions by MHPP. The Department is organized into two divisions: Urban Development and Housing. The Urban Development Division provides assistance to local Panchayats through the Town Development Committees on land use planning, general town planning, and town extension schemes. The Housing Division formulates and implements a variety of housing programs and projects in urban and rural areas (See Section 4.2). The Department has five regional offices which provide technical assistance and planning co-ordination for localities.

Ministry of Panchayat and Local Development (MPLD)

MPLD is the central government's agency concerned with monitoring, supervising and supporting local governments (District, Town, and Village Panchayats). It is also the lead ministry for integrated rural development projects. MPLD's responsibilities include providing assistance for the management, financial planning, and general administration of local governments. The Ministry is organized into four divisions: (1) Urban and Local Development, (2) Training, (3) Coordination and Planning and (4) Personnel and Fiscal. The Urban Development Division was established in 1986 and consists of four sections; (1) Urban Planning Implementation, (2) Special Programmes and Basic Services, (3) Urban Resources Mobilization and (4) Funds and Material Grant Management. The UDD provides technical guidance on municipal finance and administration. UDD also serves as a coordinating center between other line agencies and the Town Panchayats and provides staff training in financial and general administration.

District Panchayat

Nepal has 75 Districts, each an autonomous unit of local government with an elected Panchayat (assembly). Town Panchayats are legally subordinate to District Panchayats. Districts have the authority to approve or reject plans and investment programs of the Towns. This and other powers of the Districts has caused some friction between a number of the larger Town Panchayats and the District Panchayats in which they are located.

Town Panchayats

The 33 Town Panchayats are Nepal's locally elected municipalities. They are composed of wards (from 9 to 33) each of which elects four members and a ward chairman. These representatives, plus the Upa Pradhan Pancha (Vice Mayor) and the Pradhan Pancha (Mayor) together constitute the Town Assembly which acts as the local legislative body. The Town Panchayat, which acts as an executive body, is composed of the Mayor, Vice Mayor and all the ward chairmen. Each Town Panchayat also has an administrative branch which is headed by a Pradhan Adhikrit (Chief Executive Officer) who is an HMG civil servant (of MPLD) deputed to the Town. The Town Panchayats have a wide range of responsibilities including urban planning and the provision of municipal services. Their urban planning responsibilities include the preparation of a town development plan, land acquisition,

coordination with other governmental agencies, and regulation of buildings. Towns have various sources of tax and non-tax revenue. In practice, Towns have weak technical capacity and very limited authority to act without the support and approval of HMG agencies. According to the Town Panchayat Act, HMG may declare any town area a Town Panchayat. The only criterion for forming a Town Panchayat that is specified in the Town Panchayat Act is an indirect reference to a minimum population of 9,000 (Section 3.1.1).

Town Development Fund Board (TDFB)

HMG created the TDFB in 1989 as an autonomous organization to provide financial and technical support to Town Panchayats. The TDFB is composed of a chairman, who is the Secretary of MHPP, and 12 members representing MPLD, the Ministry of Finance, Town Panchayats (five mayors), DHUD, Nepal Rastra Bank, another financial institution, and the executive director of the TDFB. The TDFB's basic function is to make grants and loans to the Towns. Grant funds have been provided from GTZ. Loan funds are being provided through a $ 10 million World Bank (IDA) credit. The grant program has been operating since 1988, and the loan program is expected to start in early 1990. The loans are to be given to qualifying Towns for infrastructure projects (18 years at 8 percent) and revenue generating projects (12 years at 12 percent). Grants are made available on a matching basis with the Town Panchayats for planning and implementation of demonstration projects, health education programs, improvements to tax record systems, and preparation of project plans or feasibility studies. The grant component has disbursed NRs 10,4000,000 to data. Technical assistance for the TDFB with support from UNCHS (Habitat) for a period of three years is expected to start in early 1990.

Kathmandu Valley Development Authority (KVDA)

The Act creating the KVDA was passed in 1988, but the organization has not yet begun operating. The KVDA was created in response to the recognition that: (1) the Kathmandu Valley needs special attention as a unique geographical area, (2) there are conflicts between urban and rural land uses in the Valley, and (3) there is a need to protect the environmental and cultural values of the Valley. It was also recognized that the Valley is affected by a multiplicity of jurisdictions and agencies that need to be coordinated. The KVDA is to be a planning and coordinating as well as an implementing agency. It has the power to establish and implement land use plans and to formulate and carry out various types of projects. It is also empowered to promote environmental protection by regulating development and the use of natural resources. The KVDA has the power to undertake various land development programs such as guided land development, land pooling, and sites and services. MHPP is currently developing the KVDA's operational policies and procedures and detailed organizational structure.

Town Development Committees (TDCs)

The Town Development Act of 1988 allows HMG to create Town Development Committees in any local area. The 1988 Act repeals the 1963 Town Development Committee Act and the 1973 Town Development Plan (Implementation) Act but allows the Committees that were formed under those acts to continue to exist under the new Act. There are now Town Development Committees in 19 individual Town Panchayats (not counting the Kathmandu

Valley Town Development Board for the three Valley TPs). The Act requires that 50 percent of the TDC's members be people's representatives and "social workers" (community leaders) but all other conditions of the TDC's composition are unspecified. The principal functions of the TDCs are:

1. To prepare town plans (for land use and development).
2. To undertake land development programs such as Guided Land Development, Land Pooling, and Sites & Services.
3. To develop and implement plans for historic and environmental preservation.
4. To assist in providing the infrastructure necessary for town development.

The Committees are also granted other powers including the right to impose a construction ban for up to two years on land located within the town plan area and to stop or demolish construction that has been undertaken in contravention of the Committee's regulation. Many of the functions of the Town Development Committees overlap those of the Town Panchayats (see Section 5.7).

Zonal Commissioner

The Zonal Commissioners are appointed by His Majesty the King and are the highest law enforcement authorities within each of Nepal's 14 zones. Zonal Commissioners usually do not play a major role in development programs. However, they are generally designated chairmen of Town Development Committees, and therefore they can exert substantial influence on urban development locally.

Chief District Officer

The Chief District Officer is the principal local law enforcement official. Although he rarely gets involved in development programs, the Land Acquisition Act of 1977 gives him a key role in land acquisition through expropriation on behalf of agencies that wish to obtain land. He can also play an important part in the enforcement of urban development and building regulations.

4.1.2. Sectoral Agencies

Nepal Water Supply Corporation (NWSC)

In 1989 HMG enacted the "Nepal Water Supply Corporation Act". This Act transferred to the newly created Nepal Water Supply Corporation the responsibilities of its predecessor agency, the Water Supply and Sewerage Corporation (WSSC). The new Corporation has expanded responsibilities and will be responsible for water supply and sanitation in all Town Panchayats, not just the 14 that were served by WSSC. The new Act grants greater autonomy to the Corporation in its operations, principally in regard to fees. Section 6 of the act gives the Corporation the power to set its rates on a break-even basis in place of the previous policy of providing services to its customers without regard to cost. The Act is expected to make the new Corporation more independent and financially viable than the WSSC.

The World Bank has been extensively involved in developing urban water supply and sewerage systems operated by WSSC and its predecessor, the Water Supply and Sanitation Board (WSSB). To date three water supply and sewerage projects using IDA credits have been implemented. The First Water Supply and Sewerage Project, which was begun in 1974, was designed to respond to the needs of the growing urban population in the Kathmandu and Pokhara Valleys. The Second Project, begun in 1977, was designed to provide drinking water for the Terai. The follow-up program, the Third Water Supply and Sewerage Project, was completed in 1988. Its purpose was to strengthen and extend the water supply and sewerage systems in the urban centers of the Kathmandu Valley, Pokhara, Biratnagar, Birgunj, Siddharthanagar, Butwal, Dharan, Hetauda, Janakpur, and Nepalgunj. The World Bank is now in the final stages of reviewing the financing of a follow up project for the same towns for the rehabilitation and improvement of the water supply systems, with a stress on reducing leakage, replacing undersized pipes, and improving billing systems.

Department of Water Supply and Sewerage (DWSS)

The Department of Water Supply and Sewerage has been the agency responsible for planning and development of water supply and sewerage in all areas except for the 14 Town Panchayats which were served by the former WSSC. With the assignment of responsibility for all 33 Town Panchayats to the new NWSC, DWSS will be shifting its coverage to the non-Town Panchayat urban centers and maintaining its focus on the rural areas.

Department of Roads (DOR)

The DOR, under the Ministry of Works & Transport, is responsible for the construction, maintenance, administration, and planning of all national roads. Each of the five Development Regions has an office headed by a Regional Engineer, below which are Zonal Engineers and District Engineers. The Regional level is responsible for new construction, the Zonal level for maintenance and administration and the District level for day-to-day maintenance operations. Planning and design are performed by the central Design Section of the Department. Although urban roads are not part of DOR's mandate, the Department supports local road efforts on an *ad hoc* basis by providing equipment and technical assistance.

Solid Waste Management and Resource Mobilization Center (SWMRMC)

This organization was formed in 1979 when the Solid Waste Management Board (SWMB) was started under the Ministry of Works and Transport with assistance from the Federal Republic of Germany (GTZ). This project was initiated in and extends only to the Kathmandu Valley. It was intended to improve the collection and disposal of solid waste by establishing a waste management system based on high degree of resource recovery. With the enactment of the Waste Act in 1987, the Solid Waste Management Board became the Solid Waste Management and Resource Mobilization Center under the Ministry of Housing and Physical Planning. This new legal entity, which continues to cover only Greater Kathmandu for the present, has a status similar to a government owned corporate body with more commercial flexibility and less government control.

Nepal Electricity Authority (NEA)

The Nepal Electricity Authority was formed in 1985 as a result of the consolidation of two former agencies, the Electricity Department and the Nepal Electricity Corporation. NEA is responsible for planning the generation, transmission, distribution and maintenance of electrical supply in Nepal. To achieve these objectives, the NEA has six directorates: Finance and Administration, Planning, Engineering, Construction, Operation and Maintenance, and Distribution and Consumer Services. To date NEA has been involved in most aspects of the power sector, except in major construction projects funded by external support organizations. Major power projects like the Karnali, Marsyangdi, and Pancheswor are all controlled by independent boards under the Ministry of Water Resources. The corporate objectives of NEA require that it maintain its independent corporate identity and self-sufficiency. Therefore, NEA will construct future power generating projects like the Arun-III and Jhimruk. NEA's desires for greater autonomy in setting its tariff structure and other functions are restricted by the Government's policy of providing electricity as a "basic need".

Nepal Telecommunication Corporation (NTC)

The Nepal Telecommunication Corporation (NTC) was formed in 1975 with the advent of the Communication Corporation Act. Its primary objective is to provide economical and efficient telecommunication services. The growth of NTC has been rapid, and it has a target to install 145,000 telephone lines by the end of the Eighth Five Year Plan (1990-1995). It is also one of the few utility agencies whose financial situation is sound. NTC has almost completed the Fourth Telecommunication Project. This is a $100 million project which includes loans from France, Belgium and IDA and grant assistance from Finland, Denmark and Japan. At the completion of this project in 1990, the total installed capacity will exceed 75,000 telephone lines. NTC's principal source of revenue is its national and international trunk services, which subsidize its less profitable local call services.

Ministry of Education and Culture (MOEC)

MOEC is responsible for the school system throughout the country, and it shares responsibility for vocational and technical training with various other ministries. Although Tribhuvan University in nominally under MOEC, it has its own management structure, and its 69 campuses are, in effect, operated autonomously. MOEC aims at increasing literacy and providing primary, intermediate, and secondary education throughout the country and thus does not differentiate between urban and rural education services. New schools are budgeted centrally, and their locations are set by the Ministry's ongoing school mapping exercise. Although in the past MOEC has funded most school construction, it is now, under the thrust of the Basic Needs Program, entrusting the financing of new schools to the local Panchayats and development committees. In the allocation of resources, decisions are centralized; budgeting, personnel, and curriculum decisions are made in Kathmandu and passed down to the schools through a regional and district structure. However, the running of the schools themselves is highly decentralized, with considerable power vested in local School Management Committees.

Ministry of Health (MOH)

The Ministry of Health is responsible for public health, primary and specialized health care, and family planning services throughout Nepal. It funds hospitals (mostly small, in the 15-30 bed range), health posts, specialized institutions and administrative offices, and ambulatory rural health care programs throughout the country, located according to its own criteria. (Cities, because they are the logical location for many MOH health facilities, tend to be relatively well off.) The Ministry also undertakes "vertical" health programs such as malaria eradication, immunization, diarrhea control and family planning. Current policy is to integrate all programs at the District level under a District Public Health Officer. The national Basic Needs Program reinforces the current policy of providing minimum services to the most people (i.e., basic health care), with emphasis on District and Village level programs.

4.1.3. Public-Private Land/Housing Companies

Housing Management and Construction Company (HMC)

HMC is a joint venture private and public company established in 1985 whose main objective is to develop land for housing by mobilizing private sector resources and executing "sites and services" schemes and other shelter projects. The share ownership of HMC is 30 percent government public sector corporations and 70 percent private investors. The total issued share capital is NRs. 20 million, and the authorized share capital is NRs. 100 million.

The main differences between HMC and NLDC (see below) are (1) HMC's chairman is from the private sector, while NLDC's chairman is the Secretary of MHPP and (2) HMC's public sector shares are owned by public corporations (not HMG), while NLDC has some shares owned directly by HMG.

Up to now, HMC's major effort has been the preparation of a detailed study and plan for a sites and services project of 67 hectares at Kisipiri, to the west of Kathmandu near Thankot. The project would consist of over 1,800 plots of different sizes and would accommodate more than 12,000 inhabitants.

The project proposal was presented in November 1986. To date, implementation of the project has been stalled, mainly due to (1) the Lands Act's restriction on land acquisition by one person/entity to no more than 50 ropanis in the Kathmandu Valley, (2) the difficulty of assembling the required tract of land, and (3) the double land registration tax that would have to be paid upon purchase and sale (12 percent each time).

Nepal Land Development Company (NLDC)

NLDC was established in 1989 as a public-private joint venture to undertake residential and commercial real estate developments. HMG, government corporations, and government financial institutions hold 25 percent of the shares; private investors are to hold 50 percent (of which a part have been bought); and 25 percent are for general public issue (not yet floated). The Board of NLDC represents the various share holding groups under the chairmanship of the Secretary of MHPP in an ex-officio capacity. The main impetus for the

establishment of NLDC was the government's desire to create a land development company with some direct government involvement. Among other things, NLDC was seen as a vehicle for a project to redevelop the site of the Central Jail in Kathmandu (52 ropanis) for residential or commercial uses. However, it appears that NLDC may not get involved in this project after all. NLDC is still in the formative stage as an organization.

4.2. Existing Urban Policies and Programs

4.2.1. Current Policies and Strategies

4.2.1.1. Seventh Plan

Recognizing the rapid growth in recent years of the urban population, the importance of urban centers in the national economy, and the pressure on urban services, the National Planning Commission included an explicit Urbanization and Habitation Policy for the first time in the Seventh Plan (1985-1990). Its inclusion reflected HMG's concern to establish a policy and program framework early in the nation's urbanization process. The urban policy of the Seventh Plan contained the following elements:

Objectives:

- To develop a well conceived and properly managed urban development plan for the country.
- To create opportunities for productive employment and increased income in parallel with urban growth.
- To use urbanization to supplement rural development efforts.

Policies:

1. Strengthening the role of local Panchayats in the formulation and implementation of urban development plans as per the principles of the Decentralization Act and Rules.
2. Promoting non-farm employment generation in urban places in response to rapid population and labor force growth.
3. Formulating long and short-term investment programs on the basis of available resources and capability within urban areas.
4. Strategic use of urban development programs to support rural development.
5. Special attention to encourage self-financing urban development and the mobilization of local economic and financial resources.
6. Special attention to urban environmental problems associated with the urbanization process.
7. Efforts to attract more investment from the private sector for urban development.

Strategies:

1. Preparation of a typology of urban areas on the basis of their geographical situation, population size, functional characteristics, economic resources, and development potential.

2. Enhancement of local resource mobilization and development capacity in accordance with the Decentralization Act.
3. Provision of central technical support and related training to help strengthen local Panchayats in the formulation and execution of urban development programs.
4. Institutional analysis and reform for urban development support at the central and local levels including a special institutional arrangement for Greater Kathmandu.
5. Preparation and implementation of physical and infrastructure development plans for all major towns of commercial and industrial importance.
6. Preparation of short and long-term investment programs for urban centers, and encouragement to the private sector to participate in them.
7. Establishment of appropriate service standards in settlements as per their economic and financial resources.
8. Adoption of a specific program to support productive employment in urban areas with emphasis on private sector incentives.
9. Provision of skill oriented programs to support productive employment efforts.
10. Gradual and planned development of regional development centers.
11. Special studies to evaluate the growth potential of settlements at the intersections of north/south regional corridors and the Mahendra Highway.

A review of the extent to which these policies have been carried out appears in Section 4.3 below.

4.2.1.2. Basic Needs Program

Some urban strategy statements are contained in the housing section of the *Programme for Fulfillment of Basic Needs (1985-2000)*, NPC. The housing aspects are not covered in this urban policy study. The following statements of "policies and measures" in the Basic Needs document are related to urban development issues:

- The adoption of strategies to develop rural centers into "concentrated settlement areas" (i).
- The preparation of guidelines by HMG to enable the private sector to provide housing plots for low-income families (this is related to urban land development) (iv).
- Application of the cost-recovery principle in the provision of infrastructure services in urban centers. Recovery of costs through the local Panchayats and by mobilizing people's participation. Integration of central government investment programs and those of the Panchayats (vi).
- Extension of support by HMG to acquire land for housing projects provided such projects conform to approved town plans. Adoption of legal measures for "clear-cut delineations of land ownership" and avoidance of double registration taxes on lands (for organized land development projects) (v).
- Encouragement to Town Panchayats and the private sector to participate in sites and services projects. Assistance by HMG for land acquisition and other activities related to housing initiated by non-government companies (xii).

- Execution of guided land development programs in cooperation with private landowners and Panchayats (ix).

4.2.1.3. Ministry of Panchayat and Local Development

The most recent policy document of MPLD on urban development dates back to mid-1988. Although some changes have occurred since then, much of this document ("Objectives of the MPLD Urban Development Division") remains valid. The main elements are as follows:

Policies:

1. Town Panchayats should be made responsible for the development of towns, in accordance with the Decentralization program of HMG.
2. The HMG central agencies should create an atmosphere conducive to the institutional development of Town Panchayats.
3. Entrusting more responsibility to Town Panchayats will promote local development and stimulate local leadership, which will strengthen the overall governmental system.
4. A single HMG agency should coordinate all central-level technical assistance and development programs for Town Panchayats, so that HMG's support is provided efficiently.

Strategies:

1. Promoting the involvement of Town Panchayats in formulating and implementing town development plans.
2. Developing legal provisions for Town Panchayats to mobilize internal resources, improve tax administration, and recover the costs of services.
3. Improving management capacities of Town Panchayats.
4. Assisting Town Panchayats to formulate short and long-term investment programs.
5. Arranging for training of Town Panchayat officials and staff.
6. Developing the Pokhara Panchayat and Urban Development Training Center as the main training center for Town Panchayat officials and staff as well as HMG personnel who support town development.
7. Improving the system for allocating grants to Town Panchayats on a rational basis.
8. Establishing and maintaining a data base on the Town Panchayats' finances and administrative arrangements, in order to monitor the capacity and performance of the Towns and thereby provide support more effectively.

4.2.1.4. Ministry of Housing and Physical Planning

The Department of Housing and Urban Development of the Ministry of Housing and Physical Planning has adopted two basic goals as a means of realizing the objectives of the Seventh Plan and the Basic Needs Program. These goals, which are stated the DHUD document "Urban Development And Housing Programs In Nepal: A Review" (1989), are:

- Fulfillment of the basic shelter needs by the year 2000.
- Promotion of planned development of urban areas to check haphazard urban growth, to accommodate growing urban population, and to complement rural development.

The strategies that have been devised by DHUD to meet these goals are:

1. Encouragement of private sector involvement with support from the government for providing low-income housing.
2. Establishment of an urban development framework through the integration of infrastructure with land use plans and the identification of economic growth activities to support urban development.
3. Promotion of institutional support activities by the establishment of financial and technical institutions.
4. Positive government intervention to implement land development projects.
5. Strengthening of institutional linkages including the unification of planning activities in the Kathmandu Valley and providing support to Town Panchayat initiatives in urban development.
6. Implementation of various housing related programs (see below).

4.2.2. Programs

4.2.2.1. Inter-Agency Programs

Management Support for Urban Development Project (MSUD)

MSUD is the current phase of a technical assistance project that started in 1985 as the Management Support for Town Panchayats Project (MSTP), with UNDP providing the financing and World Bank as executing agency. MSTP began as a one-year pilot project in 1985-86. The pilot project, which covered eight towns, focused on strengthening the capacity of Town Panchayats to increase their own revenues and manage their finances. The pilot project led to the formulation and approval by HMG/UNDP/World Bank of a full-scale two-year MSTP project which began in early 1987.

The MSTP project was initially organized with the Ministry of Panchayat and Local Development as the lead agency. The former Department of Housing, Building and Physical Planning (under MWT) played a technical support role in the project. The objectives of the project were:

1. To support increased local resource mobilization to finance and manage town infrastructure and services.
2. To strengthen the capacity of central government agencies to provide technical support to Town Panchayats.
3. To develop a framework for urban management and development, consisting of financial management techniques, urban plans, data bases, guidelines, and studies.

4. To assist in setting up a fund for making loans to Town Panchayats for town improvement projects, and assist Towns to identify and prepare projects for possible financing.

MSTP consisted of one project team with two components. One component worked on municipal finance, the other on physical planning and investment programming. There were three long-term expatriate advisers (in municipal finance, urban planning, and engineering), plus a variety of local consultants and short-term expatriate specialists.

The Management Support component of MSTP produced the following major outputs:

1. Financial Assessments for 21 Town Panchayats and Management and Finance Plans for 17 Town Panchayats.
2. Continuous monitoring of Town Panchayat finances using a computerized data base.
3. Various training programs for local and central officials and staff on financial accounting and record-keeping.
4. Provision of technical assistance to Towns on budgeting, tax record-keeping, and other subjects.
5. Technical support to HMG in revising legislation and rules governing Town Panchayat finances.
6. Technical support for designing the Town Development Fund.

The Physical Planning and Investment Programming Component of MSTP produced the following major outputs:

1. Structure Plans for 29 Town Panchayats.
2. Infrastructure Assessment reports for 33 Town Panchayats.
3. A data base, on computer, of physical planning and infrastructure data for all Town Panchayats.
4. Land use maps for 29 Towns; infrastructure network maps for 15 Towns.
5. Methodologies for preparing structure plans and infrastructure assessments.
6. Identification of infrastructure and revenue-generating projects and feasibility studies in 10 Towns.
7. Final designs for projects in seven Towns.
8. Training programs for local and central officials and staff on capital investment planning, infrastructure planning, urban infrastructure standards, and project management and control.

The success of MSTP in laying a foundation of local level support, new methods, data, plans, and studies led HMG, the World Bank, and UNDP to agree on a two-year follow-up project. This project was renamed Management Support for Urban Development (MSUD). MSUD, which began in April 1989, is intended to continue helping Town Panchayats to become more self-reliant in providing infrastructure and services. At the same time, the

project is designed to strengthen the capacity of central government institutions that support Town Panchayats.

The MSUD project is divided into two separate but collaborating units. Unit A works mainly on municipal finance and is attached to the Ministry of Panchayat and Local Development. Unit B works on urban planning and infrastructure programming, attached to the Ministry of Housing and Physical Planning.

MSUD Unit A is carrying out the following activities:

1. Assisting Town Panchayats to increase their revenues from taxes and fees.
2. Introducing better financial management and accounting practices in the Towns.
3. Improving the capacity of MPLD's Urban Development Division to monitor town finances, provide guidance on town finance and administration, and support municipal strengthening through technical assistance and training.

The work of Unit B falls into four main categories:

1. Training in urban planning and urban infrastructure management for persons at the central and local levels.
2. Preparation of various types of urban plans for several towns.
3. Drafting of new policies and regulations covering aspects of urban planning and infrastructure management.
4. Support to the Towns for the identification and preparation of infrastructure projects.

Units A and B of MSUD are linked by a Coordinating Committee composed of HMG officials and the Team Leaders of the two Units. The Coordinating Committee also includes representatives of the GTZ Urban Development Through Local Efforts (UDLE) Project and the newly-formed Town Development Fund Board.

Municipal Development and Earthquake Emergency Housing Reconstruction Project

The Municipal Development and Earthquake Emergency Housing Reconstruction Project was established in 1988 and comprises two distinct streams of investments, the Municipal Development Component (MDC) and the Earthquake Emergency Housing Reconstruction Component (EEHRC).

The Municipal Development Component complements the technical assistance and training work carried out since 1985 under the UNDP-financed, World Bank-executed MSUD Project (formerly the MSTP Project). The MDC includes five main sub-components: (a) the establishment and management of the Town Development Fund Board described in Section 4.1.1; (b) a line of credit to the Board; (c) a grant to the Board; (d) the purchase of equipment for the Board; and (e) technical assistance and training to the board and for urban development.

The primary objectives of MDC are: (a) to establish on a trial basis, a financial intermediary to assist HMG in providing appropriate financial support to Town Panchayats; (b) to provide long term loan financing for priority social infrastructure and revenue-generating projects to support growth of industry and to provide services to rising Town Panchayat populations; and (c) to strengthen further the financial and administrative capacity of Town Panchayats to prepare, implement, supervise and maintain investment projects.

The Earthquake Emergency Housing Reconstruction Component (EEHRC) is summarized below. Both components were combined into one project to enable IDA to respond quickly to reconstruction needs pursuant to the earthquake of August 1988. The MDC was appraised in June 1988 while the EEHRC was appraised in October 1988 and appended to the MDC. The MHPP is the coordinating ministry for both components.

For the project as a whole, IDA loan financing totals US $41.5 million. UNDP provides approximately $5.1 million in the form of grants to fund technical assistance and training requirements.[1] The total cost of the Municipal Development Component will approximate $17.8 million. Over the life of the project, $10.5 million of this will be in the form of IDA loans, $3.0 million contributed by HMG, $1.7 million from GTZ, and $2.6 million from UNDP. Of this amount, $0.6 million will be allocated to the Town Development Fund Board while $2.6 million will be allocated for technical assistance and training.

For the Earthquake Reconstruction Project (totalling $US 37.0 million) the HMG component comprises $3.5 million and the UNDP $2.5 million. The IDA loan contribution is approximately $31.0 million. Of this amount, roughly $29.1 million is devoted to housing reconstruction loans while technical assistance and training comprises some 2.5 million.

Urban Development Through Local Efforts (UDLE)

UDLE is a long-term project sponsored by GTZ (German Technical Cooperation Agency). Its purpose is "to support the process of transferring responsibility to the towns and strengthen their capacity to fulfill the tasks assigned to them". The project works through both the Ministry of Panchayat and Local Development and the Ministry of Housing and Physical Planning. UDLE provides advisory services, training, and limited financial support to the responsible Nepali institutions in the following fields:

1. Establishment and funding of the grant program of the Town Development Fund Board. The initial grant funding was DM 500,000. An additional amount has recently been approved. The grant program is targeted for various types of physical projects in the smaller Towns and for planning and feasibility studies in all Towns. UDLE helped prepare the legal and administrative basis for the TDFB and the operating rules for the grant component.

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[1]The German Agency for Technical Cooperation (GTZ) provides roughly US $1.7 million of grants for technical assistance through the Town Development Fund Board described in Section 4.1.1, while the Government of Nepal provides the remainder of project financing.

2. Transformation of the Panchayat Training Institute of Pokhara into a national training center for town development. This involves a program of physical improvements, institutional development, and advisory services.

3. Development of legal and administrative arrangements to strengthen decentralized urban development. UDLE has arranged numerous workshops and sponsored several studies.

4. Advisory services to Town Panchayats to improve their internal administration. Thirteen towns have received services and six have received further technical assistance.

5. Improvement of physical planning and its implementation. This involves advisory services for the Department of Housing and Urban Development in the areas of land development and planning laws.

The UDLE project is currently in an "orientation phase" from 1987 to 1990. Two further implementation phases are foreseen.

GTZ Town Development Projects

Bhaktapur: GTZ is supporting the "post-implementation phase" of the Bhaktapur Development Project, which lasted from 1974 to 1986. The main responsible institutions are MPLD and the Ministry of Education and Culture. The executing agencies are Bhaktapur Town Panchayat, the Department of Archaeology, WSSC, and the Economic Services Centre. The current phase will last until 1991. The work program consists mainly of physical works, including repair and maintenance of various infrastructure works, construction of buildings, rehabilitation of monuments, and improvement of the water supply system. The project is also supporting detailed planning for a town extension scheme. Institutional development activities are also being carried out. These focus on establishing regular maintenance work through the Town Panchayat and repair and maintenance of monuments through the Department of Archaeology.

Banepa: This GTZ project was designed to help strengthen the capacity of Banepa Town Panchayat to plan, implement, and maintain basic infrastructure. The main HMG agency involved is MPLD. The project started in 1987 and will run until 1990. The main components are: construction of a new Town Panchayat office building; courtyard, lane, and road improvements; improvement of the water supply system; and design and implementation of a sewerage disposal system.

Dhulikhel: GTZ is providing support for a project in Dhulikhel Town Panchayat which is intended to stimulate community self-help efforts. The main link agency is MPLD, and the executing agencies are the Town Panchayat and the Department of Water Supply and Sewerage. The project runs until 1990. Its main components are: expansion of the water supply system; development of storm drainage, sanitation (toilets), and solid waste disposal facilities; and upgrading of the roads and paths. The project is also sponsoring a study to recommend specific steps for the Town Panchayat to take over operation and maintenance of the water supply system.

Earthquake Affected Areas Reconstruction and Rehabilitation Project

This project has been developed to respond to the substantial damage that was caused in central and eastern Nepal by the earthquake that occurred on August 21, 1988. The heaviest damage, which caused the loss of 721 lives and 66,000 houses, occurred in the districts of Dhankuta, Sunsari, Ilam, Morang, and Udayapur.

HMG responded to this disaster by establishing the EAARRP, with support from the World Bank, UNDP, and UNCHS. The objectives of EAARRP are as follows:

1. Assist HMG in implementing its program to reconstruct housing damaged during the earthquake.
2. Improve construction standards and develop earthquake resistant features for incorporation in buildings through planning and development regulations.
3. Provide technical assistance and training for the housing sector to address longer term mitigation of future earthquake damage.
4. Address the environmental impact of the excessive use of timber in buildings and building products.

The following steps have been taken to implement the goals stated above:

1. HMG has constituted a Central Coordinating Committee under the chairmanship of the Minister of MHPP to coordinate reconstruction. A special staff office has been established to administer the EAARRP.
2. EAARRP has recruited 27 engineers and 243 overseers to work on the housing reconstruction program in the field.
3. Loans totaling approximately NRs. 343,300,000 have been granted to 47,330 households out of the 65,463 eligible through Nepal Bank Ltd. and Rastriya Banijya Bank, with an interest rebate to householders provided by HMG.
4. Construction of four of the 42 planned demonstration houses has commenced.
5. Training of 1,200 rural workers to popularize low-cost toilets and improved cooking stoves has begun.
6. EAARRP has commenced development of earthquake resistant building requirements which will be mandatory in District Headquarters and urban areas.

Service Centre Development Programme (SCDP)

The Decentralization Act (1982) and Regulations (1984) made provision for each of the 75 districts in Nepal to be divided into nine areas ("Ilakas"). A Service Center (SC) is to be established in each Ilaka. The Service Centers are intended to contribute to the strengthening of local-level planning and program implementation. From the standpoint of human settlements, MHPP views the Service Centers as helping to provide:

- better access for the rural population to social and economic services as part of the Basic Needs Program;
- a focus for creation of off-farm employment opportunities;

- living environments that are physically well-planned; and
- focal points for marketing facilities and services to enhance agricultural productivity and incomes in the surrounding areas.

The Ministry of Panchayat and Local Development is responsible for designating the locations of service centers and for acquiring land for public facilities in each center. Physical planning and programming is entrusted to MHPP through the DHUD. Implementation of physical improvements is supposed to be handled by Town Development Committees with technical support from the regional and district offices of DHUD.

So far MPLD has designated service centers in 52 districts (163 centers). Specific site selection and land acquisition has been carried out in some places, notably in some of the Districts where integrated rural development programs have been carried out.

The various agencies of HMG have embarked on an ambitious program in response to a Royal Directive, No. 16 of 1989, which calls for the designation and strengthening of all the Ilaka service centers of the Mid-Western Development Region over the next four years. The components of the program are:

- designation by MPLD of the service center areas based on locational criteria (1988-89);
- acquisition by MPLD of land for each service center: 6 bighas (4 hectares) in the Terai and 45 ropanis (2.3 hectares) in the Hills (1989-90);
- preparation by MHPP of master plans for the newly established service centers;
- maintenance by MHPP of previously existing centers; and
- provision of services by various agencies in service centers of at least three Ilakas of each District in the region per year.

MHPP's physical planning approach for service centers consists of two main elements: (1) Structure Plans for the centers as a whole and (2) Central Area Service Plans for short/medium term implementation on the government-acquired land. MHPP has so far prepared terms of reference for Structure Plans in 13 service centers of the Mid-Western Region. Final plan documents have been prepared for two of these (Pokharia in Parsa District and Dhunche in Rasuwa District). Field surveys and desk reports have been completed for the other 11.

MPLD has not yet acquired land in any of the newly designated centers. MHPP has not yet prepared any Central Area Plans or begun any physical improvements.

A review of issues related to the service center program appears in Section 5.1.2.2.

Rural Housing Loan Programs

These programs were devised as a component of the basic shelter program in FY 88/89 to develop a housing credit mechanism and to generate employment in rural areas for people with incomes below the poverty level. In order to achieve a wider coverage of shelter

improvement in rural areas, MHPP has adopted the strategy of collaborating with other agencies involved in rural development and employment.

Two sub-programs have been developed to implement this program:

Small Farmers Development Program (SFDP): This is a joint program of MHPP and the Agricultural Development Bank which will provide soft housing loans to landless marginal farmers. The housing loans are disbursed through ADB and an improved house design and technical assistance is provided by DHUD. MHPP has made available NRs. 6.5 million to ADB for loan disbursement, and a manual jointly prepared by DHUD/ADB has been finalized. In FY 88/89 the program served 168 landless families in the Western Region. The program will cover an additional 230 families during FY 89/90.

Rural Women's Welfare Program: This program provides grants and loans for poor, landless, and backward rural women in collaboration with MPLD and the Ministry of Labor & Social Welfare. Through MLSW, 19 families have been selected as beneficiaries in the Chitwan District and NRs. 425,000 (NRs. 300,000 loan and NRs. 125,000 grant) has been made available by MHPP. Through MPLD, NRs. 1.5 million is being made available by MHPP; beneficiary selection is still underway.

These rural housing loan programs are functioning on an *ad hoc* basis. MHPP is looking into options for institutionalizing these programs in a more suitable way, possibly through the proposed Housing Finance Company or another entity.

4.2.2.2. MHPP Programs

MHPP has developed specific programs to implement its objectives. The programs can be grouped into five categories:

- Urban Planning Programs
- Urban Housing Programs
- Rural Planning Programs
- Rural Housing Programs
- Policy and Institutional Support for Planning and Housing

Urban Planning Programs

Land Development Program

The Land Development Program consists basically of sites and services projects carried out by DHUD and TDCs. These projects are intended to contribute to the orderly subdivision of land, with the objective of promoting planned physical expansion of urban centers. In some cases consideration is being given to substituting the land pooling approach to avoid the initial land acquisition costs. DHUD and its regional offices are responsible for the preparation of project documents and for providing technical support, while the TDCs are responsible for program implementation. During FY 88/89 LDPs were initiated for Kathmandu (Dallu), Lalitpur (Saibhu), Lahan, Biratnagar, and Damak. LDPs are scheduled to begin

shortly in four other towns. Financing for these projects is being provided in part through a revolving fund set up by MHPP in FY 88/89. The operational guidelines and structure of the revolving fund have not yet been established (See Section 5.6 on Urban Land Development).

Guided Land Development

GLD is a method in which a road improvement plan for a local area is prepared on a cadastral map. The rights of way for widening existing roads and adding new road links are plotted along property lines to minimize the taking of land from individual plots. At the beginning of the planning process, a local level advisory committee is formed in each area and a building moratorium is imposed for several months. While the GLD plan is being prepared, planners undertake extensive collaboration with local land owners and residents. At the completion of the process, property owners agree to give up the needed right of way at no cost in exchange for the expected rise in land value. The building moratorium is lifted, and the official GLD map is then forwarded to the Town Panchayat, TDC and Land Administration (Revenue) Office. Building permits are subsequently given in accordance with the plan and the new roads are transferred to public ownership and recorded on the cadastral map.

The major thrust of this program to date has been in Kathmandu and Lalitpur. In Kathmandu GLDs were carried out in four wards in FY 88/89, and an additional five wards are being covered in FY 89/90. In Lalitpur GLDs were carried out in five wards last year, and an additional three wards are being covered this year. DHUD and its regional directorates have been assigned responsibility in FY 89/90 to carry out GLD programs in Birendranagar, Pokhara, Bhaktapur, Biratnagar, Nepalgunj and Birganj.

Land Pooling

Land pooling is a program in which land parcels are consolidated for orderly subdivision into streets, open spaces and serviced building plots. The streets and public open spaces are transferred to public ownership, some of the building plots are sold for cost recovery, and the remaining building plots are transferred back to the original land owners. Land pooling is a new approach in Nepal. The Central Regional Directorate of DHUD has been assigned in FY 88/89 to develop two land pooling projects in Kathmandu: Gongabu (12.5 hectares) and Balkhu (37.5 hectares).

Urban Planning Program

This program focuses on the preparation of physical development plans for Town Panchayats, District Headquarters and emerging townships (New Town Development Program). It also involves the preparation of base maps for these urban centers and the provision of technical assistance to the towns. Since 1987, the preparation of Structure Plans and Infrastructure Assessment reports, as well as provision of technical assistance for the 33 Town Panchayats, has been done through the MSTP (now MSUD) Project. DHUD on its own has focused on physical development plans and technical support for District Headquarters and "Newly Emerging Towns". Out of the 75 District Headquarters, 45 are not Town Panchayats. DHUD plans to support physical planning and plan implementation efforts in 25 of these over the

next 10 years. TDCs are to be established at the local level with technical manpower provided by DHUD. So far draft Structure Plans have been prepared for six District HQs (Kushma, Siraha, Besi Sahar, Tulsipur, Gorkha and Dandeldhura). Town Development Committees have been formed for Syangja, Tulsipur and Manthali. The DHUD program for FY 88/89-89/90 includes the preparation of physical development plans for three more District Headquarters (Guleria, Syangja, and Pyuthan).

DHUD's program for planning and development of newly emerging towns responds to the rapid growth of a number of new settlements as a result of their economically strategic locations, especially along the East-West Highway. This programme is about two years old. So far, the main focus of DHUD's efforts has been on Kohalpur, in the Mid-Western Region north of Nepalganj. A first-phase physical development plan has been prepared, and land development (subdivision) has begun on government lands. Three other emerging towns are to be the subjects of special studies and planning efforts in the coming year: Attariya (Far West), Manthali (Central), and Bharatpur (West). MHPP envisions that the planning work will be followed up by investment programs (funding is undetermined).

Urban Housing Programs

The Urban Housing Programme of DHUD is basically the same as the Land Development Programme presented in the previous section. It consists of several sites and services projects implemented directly by DHUD through TDCs. Under this program heading, the objective of Sites and Services is to make developed housing plots available to low and middle income groups in urban areas. In the future, DHUD envisages private land development companies and housing cooperatives becoming involved in Sites and Services. Long-term housing credit would be made available to low and middle income families through the proposed Housing Finance Company.

Rural Planning Programs

Cluster (Compact) Settlement Development Program (CSDP)

The Basic Needs Program envisions the development of "concentrated thick settlement areas" to address the problem of widely dispersed rural settlements which do not allow for efficient provision of basic services.

The CSDP was started in FY 88/89 with the goal of implementing pilot programs in each of the 14 zones of the country. The program elements are (1) concentrated resettlement projects in the Terai and Inner Terai, (2) development of compact settlements within Service Centers, and (3) promotion of compact settlements at other emerging settlements with economic growth potential.

The program is envisioned to be jointly executed by DHUD and the Nepal Resettlement Company (NRC). DHUD is to provide planning and technical support and NRC is to be the implementing agency at the local level.

The Forest Consolidation Commission would make land available and would also furnish the list of families to be settled at designated sites. The regional directorates & district offices of DHUD would also provide technical support. Funding would be made available by HMG for program execution. The cost of physical infrastructure and service provision would be recovered by the sale of plots to settlers.

Five places--Gorusinghe, Khajura, Laljhad, Bidur, and Chia Kaman--have been selected for implementation as of FY 88/89. Project documentation has been developed for the first four of these areas. Implementation of all the projects has been delayed pending the formal approval by MHPP of a memorandum of understanding between NRC and DHUD.

Village Block Development Program (VBDP)

MHPP has launched this program in response to the lack of land ownership title in 17,000 village blocks (covering 18,800 ha.) which have not been plotted on cadastral maps. HMG also deems it important to complement the land titling programs by introducing physical improvement programs. The objectives of the program are consolidation of village blocks through infrastructure and housing improvements and establishment of a process of participation by beneficiaries in actions to meet their interests. The program elements are:

- regularization of land title through the Department of Survey
- formulation of physical improvement plans
- formation of community groups
- provision of home improvement and construction loans through existing banks
- group participation with management support at the grass roots level

Management Committees will be formed at the District and Ilaka levels for the execution and supervision of the program.

The VBDP is a new program, and the village blocks to be included in the first phase of the program have not yet been identified by MHPP. The Department of Survey is collecting data on the areas of land requiring regularization of title. A Royal Directive has been issued to expedite the program of distributing land title certificates. MHPP has also given a report to the World Bank concerning the possibility of obtaining technical assistance and funding.

Rural Housing Programs

Home Improvement Program

This program seeks to improve the living conditions of low-income rural families by encouraging housing improvements. Grants and technical assistance are made available for the provision of low cost sanitation, smokeless stoves, roofing, and ventilation. Technical assistance will be provided by the district offices of DHUD. Funds are to be channeled as grants to targeted households through local User's Committees. Two districts--Baglung and Rasuwa--were covered in FY 88/89. In Baglung a grant has been provided for low cost sanitation for 250

households, and fiberglass W.C. pans for 250 sulav latrines will soon be delivered. In Rasuwa a grant of NRs. 200,000 and 100 W.C. pans have been provided. An additional 150 households will be covered in FY 89/90 (location is undetermined).

The Rural Housing Loan Programs are described above under Inter-Agency Programs.

Policy and Institutional Support for Planning and Housing

Policy and Technical Support for the Urban Sector

In early 1990, a new technical assistance project focusing on the housing sector will commence. The project, named Policy and Technical Support for the Urban Sector, is being financed by UNDP and executed through the UN Centre for Human Settlements (Habitat) and the Ministry of Housing and Physical Planning. The main components of the project are:

1. Development of a national shelter policy and strategy.
2. Preparation of a national training needs assessment and training strategy for the shelter sector.
3. Formulation and implementation of a national building code and building bylaws; in addition, preparation of epicenter and seismic maps of Nepal.
4. Development of new building materials and earthquake-resistant building techniques, with emphasis on alternatives to timber.

The project is partly occasioned by the need for medium- and long-term responses to the earthquake of August 1988, which caused serious damage in central and eastern Nepal.

Training Task Force for Urban Area Upgrading

This is a joint project of MHPP/DHUD and the Norwegian Institute of Technology. The project aims to provide "on-the-job training" to up to 40 DHUD staff in urban area upgrading through preparation of a practical area redevelopment plan and the execution of small projects based on the plan. The project will be carried out in three urban core areas of Kathmandu and Lalitpur. It began in October 1989 and will last for three years. The methodologies developed through the project will be documented for future use.

Proposed Nepal Housing Finance Company

MHPP is taking the lead in promoting the establishment of a Housing Finance Company. This proposed private sector company, which would have nominal HMG participation, would be designed to provide long term financing for new housing for low and middle income families, medium term financing for upgrading/repair of existing housing, and short-term financing to developers for project implementation. Up to 1988, discussions had proceeded among HMG, the International Finance Corporation (IFC), several Nepali banking corporations, and several Nepali private investors about the creation of a Housing Finance Company under the Finance Company Act. Technical assistance for starting up the HFC was to have been provided by UNDP, with India's Housing Development Finance Company (HDFC)

carrying out the technical support. For several reasons, the proposal involving IFC, UNDP and HDFC has been abandoned. The reasons include inability to resolve the shareholding structure of the proposed HFC and inability to agree on a suitable technical assistance arrangement. MHPP is now reviewing options for going ahead with the creation of the HFC.

Housing Co-operatives

MHPP has been collaborating with the Department of Cooperatives to promote the establishment of housing cooperatives. Rules and Regulations for housing co-operatives (under the Co-operatives Act 2041) were recently promulgated in 1989. The objectives of the Housing Co-operatives include the acquisition and distribution of developed plots of land, construction of housing units, and organization of social, cultural, recreational and educational programs for their members.

Technical & Financial Assistance to Town Development Committees

This program of DHUD is designed to strengthen Town Development Committees established under the Town Development Act of 1988. For this purpose, MHPP prepared a classification of urban centers according to their population, economic development potential, access to major infrastructure, and administrative importance. The classification as well as the strategy for technical and financial assistance to the TDCs was approved by the Cabinet in 1989. The following urban centers are receiving priority attention under this program in FY 89/90:

Development Region	Urban Centers
a. Eastern	Damak, Itahari, Lahan
b. Central	Bharatapur, Bidur, Manthali
c. Western	Butwal, Gorkha
d. Mid-Western	Nepalgunj, Kohalpur, Tribhuvannagar
e. Far-Western	Dhangadhi

The technical assistance involves deputation of staff from DHUD's central and regional offices as well as training. The financial assistance consists of annual grants to TDCs for technical staff salaries and allowances plus a limited amount of grants and loans for projects.

Shelter Assessment and Design Improvement

This program, being carried out by DHUD, is designed to develop improved housing designs for the three main ecological zones of the country: the Mountains, Hills, and Terai. Data is being collected from building permits in the three zones on: construction material, structural system, floor area, plan typologies, number of floors, plot size, architectural style, availability of utilities, and socio-cultural needs. Compilation of this data will allow for planning improved house types for rural and urban areas. The information to be made available to private individuals and organizations involved in housing programs. DHUD has prepared and published twelve designs of housing types suitable for urban and rural areas of the hills and terai regions. The designs range in cost from NRs. 30,000 to NRs. 115,000. Construction of model houses at Bhandar Village in the Chitwan District for flood affected families has been completed.

Technical Information Service Program

The objective of this program, under DHUD, is dissemination of information related to improved methods of house construction, building materials, low cost sanitation, and fuel-efficient cooking stoves. This is to be accomplished by the publication of booklets and diagrams, conducting seminars and workshops, and the use of the mass media. DHUD is seeking cooperation from Panchayats, NGOs and international organizations.

4.2.2.3. Sectoral Agency Programs

As pointed out in 4.6 below, the main line agencies of HMG having responsibilities in water, electricity, telephones, roads, health, and education are national organizations which do not have specific urban development programs. Certainly, many of their efforts are, for technical reasons, concentrated in urban centers where beneficiaries also reside or where a facility may conveniently be located to serve a larger rural hinterland (e.g., hospitals, schools). In planning, budgeting, and administration, these agencies operate through a hierarchical structure involving the following divisions:

- region
- zone
- district
- local development units(s)

Within these agencies there has been no program focus on cities and towns *per se*. For this reason it is difficult to describe their ongoing urban development efforts in isolation from their wider, national policies and programs. Here an attempt is made to review explicit, expressed policies and ongoing programs as they relate to town development. The five major infrastructure subsectors--electricity, water, sanitation, drainage, solid waste, and roads--are reviewed.

Electricity

Electrical power is a crucial subsector in Nepal, composed of generation, transmission and distribution components. The hydropower potential is Nepal--estimated to be about 83,000 MW--is one of the country's major comparative advantages. While at present the installed generating capacity in Nepal is only 184 MW, a major thrust toward hydropower development now underway is reflected in the Seventh Plan's budget allocations: 62 percent of allocations in the power sector were devoted to hydroelectric generation projects. The budget for extending and improving transmission facilities as part of the national grid has also been significant: about 9 percent of the power sector budget is earmarked for electrification and system improvement and 13.5 percent for District level projects under the Decentralization plan.

While both "electrification" and local level projects are aimed at urban as well as rural areas, there is an expressed policy in the Seventh Plan to extend electrification to small hamlets and rural areas. At the same time it is recognized that the use of limited resources must

be maximized, and that expansion should occur where there is the greatest concentration of demand (i.e., in cities).

Water Supply

HMG has expressed commitment to the goals of the "Drinking Water Supply and Sanitation Decade 1981-90," and sees as a basic need the provision of safe drinking water to all inhabitants. A prime policy of the Seventh Plan is that, to remove the largest deficits in water supply, "priority will be given to those rural areas where water is not available". Urban drinking water supply projects were allocated about 23 percent of the sector's Seventh Plan budget.

HMG remains cognizant of the fact that urban water service levels are inadequate and that the public perceives these services as insufficient. Much of the policy dialogue in urban water focuses on the achievements and problems of the IDA-financed Water Supply Projects, a series of urban drinking water and sanitation projects started in 1975, with efforts concentrated in Greater Kathmandu, Pokhara, Bhaktapur and eight other towns.

Sanitation

According to the Seventh Plan, "in prominent urban areas, sewerage systems will be gradually installed and the drains of all houses will be connected with this system as far as possible through private participation." In addition, "low cost waste disposal programmes will be taken up in the semi-urban areas. In order to arouse mass consciousness towards sanitation, necessary publicity, information and motivation programmes will be launched."

These policies have not received much support, nor has funding been forthcoming at the required level. Sewerage systems were installed in the 1980s in the main towns of the Kathmandu Valley, but there has been no funding for new systems in secondary towns. Low-cost disposal systems, while the object of numerous studies, have not yet reached a significant number of households, nor have public education campaigns reached significant numbers of people. In effect, the subsector of urban sewerage/sanitation has had only mixed results in Nepal.

Stormwater Drainage

Stormwater drainage is largely an "orphan" sector, as no line agency has forcefully claimed it for its own. By default, responsibility for drainage initiatives now lies largely with the Town Panchayats. Assistance from various line agencies has surfaced in recent years for the preparation of drainage plans. Currently, a Drainage Master Plan Study is underway for Kathmandu through UNDP technical assistance, housed under the umbrella of the Department of Water Supply and Sewerage. For some Terai towns, drainage studies and some design work have been carried out through the MSTP/MSUD project under the Ministry of Housing and Physical Planning at the request of the town panchayats themselves (Birganj, Biratnagar, Janakpur, Nepalganj).

Facilities for stormwater drainage in most towns remain poor. The Terai towns have severe drainage problems that are very costly to solve. Because of the lack of a workable model

for cost recovery for these facilities, funding has not been forthcoming. The Town Panchayats, due to lack of financial resources, have not yet been able to confront the task.

Urban Roads

Most of the urban roads in Nepal have been constructed over the years by HMG's Department of Roads. Some sections are also being maintained by DOR. The Town Panchayat Act gives authority to the Towns for construction and maintenance of roads in urban areas, but lack of resources and technical expertise within the Towns has resulted in a general neglect of maintenance and new construction.

Solid Waste

Except for the Kathmandu Valley, where the Solid Waste Management and Resource Mobilization Centre is responsible for solid waste collection, most Towns lack adequate systems for collecting and disposing of solid wastes. The Town Panchayats have traditionally handled solid wastes in a minimal way through their street sweeping programs, but collection equipment has been inadequate and proper disposal sites have not been set aside.

4.3. Implicit Urban Policy

It is only as recently as the Seventh Five Year Plan (1985-1990) that HMG formally established an explicit policy framework for urban development. However, many dimensions of government policy in the past have had and continue to have indirect effects on urbanization. Such policies are "implicit urban policies."

The range of policies that has had implicit urban dimensions is broad, encompassing national economic policy related to public and private sector investments in social overhead capital (infrastructure), education, public health, industry and trade, and agriculture.

4.3.1. National Economic Policies

In Nepal, as in other countries, there are clearly unintended spatial effects that derive from national economic policies. However, even when there is a clear perception that economic policies have effects that are contributing to urbanization, "few effects, if any, have been measured quantitatively". (Bertrand Renaud, *National Urbanization Policy In Developing Countries*, 1981). There are formidable methodological problems in comparing the total monetary value of implicit economic policies with the corresponding national budgetary resources devoted to explicit spatial policies.

In the case of Nepal, the list of economic policies with implicit under development effects could be quite long. It appears that in Nepal there has been no research in this sphere. Nonetheless, the main set of economic policies with urban or spatial effects revolves around Nepal's trade relationship with India. These issues assume primacy in the shaping of national economic policy, given Nepal's landlocked status and open border with India. This holds particularly when trade and transit issues are in flux (as they have been since March of 1989). In these circumstances, Nepal's national economic policies are, in a sense, held hostage to economic decisions taken elsewhere, thus limiting HMG's independent capacity

to effect policies relating to foreign trade, industrial development, government regulation of economic activities, and transport investment and regulation. In all of these spheres there may be imbedded urban development effects, over which Nepal lacks control, except in the context of its relationship with its dominant neighbor to the south.

The most obvious implicit urban effects that grow out of this situation are the growth of gateway cities along Nepal's border with India. Because of the completely open border regime, numerous towns and cities on the Nepal side have developed as exit/entry points for goods. Several of them have become urban centers of major national importance. If the border were to be closed and the number of designated exit/entry points reduced (as has been the case during most of 1989), those towns that lose their "gateway" status would suffer economic decline. At the same time, a mostly closed border would increase the flow of commodities along the east-west axis of the Mahendra Highway, giving impetus to the growth of towns located at key intersections of this highway with main north-south roads.

Another spatial effect of the Nepal-India relationship is the retardation of Nepal's industrial development as a result of having to adjust its import and export policies to the political and economic relationship with India. Because industries tend to be urban-based, this has probably restrained the economic development of Nepal's urban centers.

4.3.2. Investments in Infrastructure

For many years, Nepal assigned primacy to the creation of national infrastructure (i.e., electricity, water, and roads) considered to be broadly conducive to economic development. The main line agencies of HMG responsible for the development of investments in infrastructure, operating through regional, zonal, and district units, have not followed specific urban development strategies, even though many of their efforts have clearly contributed to urbanization and have been concentrated in urban areas. The following generalizations can be made.

In the provision of new services, cities are subsumed under zonal and district needs. This results in "give and take" between the center and local politicians in determining the amounts to be allocated to each District. In this process, because Districts in Nepal are predominantly rural, it is rural needs that have most weight in the distribution of funds from the center.

There is an implied bias in favor of servicing remote locations. Because tariffs for water, electricity and telephones are fixed nationally, tariffs do not reflect the relative locational cost of providing service. As a result, there is an implicit cross subsidy from urban centers to rural communities where the costs of providing these services are higher.

There is a tendency for services to be allocated without proper consideration of their costs. Rural electrification, for example, is seen as a social necessity, pursued to the extent that funds permit.

Existing and pent-up demand determine the provision of services. In the face of rapid urban growth and modest budgets, line agencies of HMG find themselves with a backlog of

applications for connection in urban areas. Given limited budgets, such agencies cannot give priority to expected future needs.

Industrial establishments are given priority over residential and commercial users of services, especially electricity.

These considerations notwithstanding, the aggregated social demand for services in urban areas, together with economies of scale that can be achieved as services are delivered in urban areas in a concentrated fashion, can be formidable in their effects. And, as the flow of people into urban areas of Nepal continues, investments in infrastructure may increasingly have an implicit urban bias, even as attempts are made to ensure that rural areas are not neglected.

4.3.3. Concentration of Decision-Making

The concentration of the government's decision-making authority in Kathmandu contributes to the concentration of economic activities in the capital region. A general statement by Renaud in his book on urban development policy is applicable to Nepal:

> First, central decision-makers insist on following stereotyped procedures in the name of efficiency and are sometimes ignorant of important local needs. Second, arguing with them is a costly process which leads to the progressive suppression of local initiative. Third, if central government officials have any bias, it is in favor of the capital region, which they know better and where they live. Central government officials commonly start with the premise that local officials are not very competent and should not be trusted, a self-fulfilling prophecy. The centralization of bureaucratic routines in the capital region also imposes severe costs in transaction time and money on individuals and businesses in other cities.

Although Greater Kathmandu is by no means a "primate" city in comparison those of with many other countries, the unique status of the capital is illustrated, for example, by the commonly-observed difficulty of posting government employees outside Kathmandu.

4.3.4. Agricultural Policy

As Renaud has emphasized, "Sound rural policies are most important at low levels of urbanization when the farm sector provides a large share of the national output. Excessive urban concentration because of past biases against the farm sector is difficult to correct until advanced stages of development" (Renaud, 1981).

While it is not suggested that there have been "past biases against the farm sector" in Nepal, it is arguable that successive national and rural development strategies have, together with the growth of population dependent on scarce land resources and environmental degradation, contributed directly and indirectly to the flow of persons from rural to urban areas. Within that frame, Nepal's agricultural policy has had an implicit urban bias.

During the first five Five Year Plans, HMG emphasized investment in national infrastructure to the neglect of directly productive investment in agriculture. This relative neglect of directly productive investment in agriculture was not capricious. The neglect of investment in agriculture,

r otwithstanding the obvious dependency of the Nepal economy on its agricultural sector, was consistent with the theory of economic development then operative.

Within this same time frame, Nepal failed to effect meaningful changes in the country's agrarian structure) even though steps were taken to enact and implement legislation for agrarian reform. Even such laws as were enacted (for example, laws setting a ceiling on the size of landholdings) were thwarted in implementation. In the case of ceilings, fictitious transfers of land could be and were effected to disguise the size of holdings maintained by dominant landholders.

As a result of failed land reform, it can be said that the agrarian structure of Nepal has not been changed in any fundamental way (by means of public policy) since 1951. That is to say, even in 1989, a relatively small number of landholders control the bulk of the arable land. In the Hills, for example, the larger landholders tend to be persons who control the best land in valley bottoms; they also tend to be persons of traditional elite status (ERL, 1988). And, these same persons tend also to control the levers of power in towns and to exercise economic control in rural areas by various means, including moneylending. Meanwhile, the mass of the people who are dependent on agriculture for survival have either tenuous rights in land or are landless. Yet, they are dependent on agriculture for survival and, generally, do not have skills that would enable them to secure non-agricultural employment in urban settlements. Persons in this category have for long periods lived at the margin of subsistence and, customarily, have migrated seasonally in search of employment. In recent years such persons have been marginalized to a point where they have no recourse but to migrate from rural to urban areas. This kind of migration differs markedly from the migration from rural areas (especially the Hills) in the 1950s, 1960s and 1970s to other regions, notably the rural Terai, where many migrants successfully carved out new landholdings where previously there had been untilled jungle.

The push of people out of agriculture into new settlements, including urban settlements in the Terai, has also been influenced by the tendency of the government, following the guidance of international development institutions, to end the historical neglect of directly productive investment in agriculture. The adoption in the 1970s and 1980s of a technology-driven strategy of rural economic development--to be implemented within the existing agrarian structure--did not produce a vibrant and productive agriculture; neither can it be said that the introduction of new technology in agriculture conferred direct benefits on those in rural areas who lack secure rights in land. The direct beneficiaries of new technology in agriculture tend to be landholders who enjoy secure rights in land, not those who have tenuous rights in land or no land at all.

In any event, even following many years of heavy investment in the agricultural sector, agricultural production for the nation as a whole has been virtually stagnant, and the evidence suggests that the rural poor increasingly have no option but to migrate permanently, rather than seasonally, from rural areas. In the 1990s, such persons will flow in increasing numbers into urban settlements in search of new options for employment. Regretiably, because they will be mainly illiterate and unskilled, they will be the most difficult segment of the national

labor force to be absorbed into such jobs as may be created in urban areas. Thus, agricultural policy, as it has evolved in Nepal, has contributed indirectly to the contemporary situation wherein permanent migration from rural to urban areas seems likely to accelerate in the period leading into the 21st Century.

It should be noted that Nepal's rural development policies are not solely responsible for such out-migration. Obviously, other variables, including the effects of natural population growth on scarce arable land resources and environmental degradation in the Hills have been in play.

4.3.5. Investments In Education

Nepal has been committed since 1971 to the development of a national education policy. The broad goals of the national education policy have been to:

- provide the citizens of Nepal with a common identity;
- contribute to the pool of trained manpower necessary to the nation's economic progress;
- instill broadly among the citizenry knowledge of science and technology; and
- preserve the cultural heritage of the Kingdom.

Notwithstanding these broad national goals, and the commitment over time to strike an appropriate balance between the various strata of education, investments in education have been concentrated disproportionately in the past in the sphere of higher education. For example, Tribhuvan University alone for many years claimed the largest share of national investment in education. With only three percent of enrollments, higher education still claims 25 percent of the education budget at the present time. Meanwhile, with renewed emphasis in the days ahead on primary and secondary education, as well as vocational training, those subsectors are expected to claim increasing budgetary shares of national education investment. Nonetheless, the growth of social demand for higher education continues, especially within urban areas where literate and highly educated citizens are concentrated.

Even if steps are taken to restrict the future growth of expenditure in higher education, it is intrinsic to the pattern of educational investment generally that it leads to capital expenditures in urban areas. Thus, even projected expenditures linked to the Basic Needs commitment to universal primary education will be associated with the construction by local communities, including Town Panchayats, of thousands of new schools located in transitional zones that are functionally more urban than rural and in urban areas. Thus, whether the relative shares of investment among educational subsectors remain the same or are altered significantly in the years ahead, educational investment by HMG and by local communities can be expected to contribute indirectly to urbanization.

4.3.6. Public Health Investments

It can be said that the urbanization of the Terai has resulted from implicit urban policies. From this perspective, there has been no more obvious "implicit urban policy" in Nepal than that associated with the eradication of malaria in the Terai in the 1950s. While not perceived at the time as an implicit urban policy, the anti-malaria program opened the

Terai for the first time in Nepal's history to settlement by in-migrants from other regions of the country. While many of the in-migrants sought to establish themselves in agriculture, the general opening of the Terai soon resulted in urban agglomerations along lines of trade and commerce with India. Thus, Nepal's public health expenditures clearly can be defined in retrospect as contributing indirectly to urbanization, and can be classified, therefore, as implicit urban policy.

4.3.7. Industrial Development

While Nepal's industrial structure is characterized by regionally dispersed small establishments of which roughly 95 percent are classified as cottage industries, the bulk of value-added in manufacturing comes from medium- and large-scale licensed enterprises, many of them in the public sector. These medium and large scale industries are mainly concentrated in the Kathmandu Valley and in the Terai in proximity to primary roads. And, because these industries must rely to a great extent on imported raw materials and capital and intermediate goods, such industries are peculiarly associated with gateway cities and market towns that benefit from trade flows between Nepal and India.

In the years ahead, it is likely that medium and large scale industry, whether developed in the public or the private sector, will continue to reap economic advantage from location in existing or new urban areas, particularly towns linked to border gateways in the Terai. It must be assumed that Nepal's economic links with India will continue to influence the location of industries dependent on the import of raw materials well into the 21st century. Thus, the growth of industries associated with imports and exports will have an implicit urban (and regional) bias for some time to come, even if steps are taken to disperse industry and to achieve more regional balance in industrial development.

4.4. Review of Urban Policy in the Seventh Plan

The urban development objectives, policies, and strategies of the Seventh Plan (1985-1990) are given in Section 4.2 above. This section gives a brief review of the extent which those provisions have been carried out. The headings below correspond to the major urban policies and strategies of the Seventh Plan.

The following are areas where significant progress has been made:

Self-Financing Urban Development Programs and Local Resource Mobilization: A major effort has been started through MPLD (under the MSTP/MSUD project) to help the Town Panchayats improve their resource mobilization. This has focused on the Towns' increasing the collection of "own source revenues" and controlling expenditures. An appreciable improvement in the Towns' financial performance has occurred in the past three years (though the trade and transit crisis with India has caused a setback, hopefully temporary). HMG's establishment of the Town Development Fund Board in 1989 is an important step towards the objective of self-financing urban development. In 1990, the TDFB will begin making loans to eligible Town Panchayats for infrastructure and other facilities. Initial capitalization of the TDFB is being provided by the World Bank.

In the area of cost recovery for urban services, attention has been focused on trying to improve the financial position of the "tariff" sectoral agencies (NWSC, NEA, NTC). Much remains to be done, especially in getting local governments involved in cost sharing and cost recovery.

Institutional Reform (Central and Local): Quite a lot has happened in this field. In 1988 HMG created the Ministry of Housing and Physical Planning with a mandate to coordinate and manage physical development of urban areas. A new Department of Housing and Urban Development was formed under MHPP. Besides having responsibility for physical planning and housing, MHPP has been put in charge of all water supply, drainage, sanitation, and solid waste collection programs. In late 1989, HMG created a new, more autonomous Nepal Water Supply Corporation to look after all the Town Panchayats (replacing the Water Supply and Sewerage Corporation, which covered only 14 Towns). During the Seventh Plan period, HMG also created an Urban Development Division in the Ministry of Panchayat and Local Development. This Division's purpose is to promote improvements in financial and administrative performance of the Town Panchayats. In addition, HMG has designated the Pokhara Panchayat and Urban Development Training Center as the main institution for providing training to officials and staff of Town Panchayats and HMG agencies involved in urban development. PUDTC has received some special institutional support.

In the following areas, some progress has been made, but more needs to be done:

Strengthening the Role of Town Panchayats: Progress on this has been mixed. On the positive side, HMG has undertaken two significant technical assistance projects (MSTP/MSUD with support from UNDP and World Bank; and UDLE with support from GTZ) whose main objectives are to build up the capacities of the Town Panchayats. These projects have provided a substantial amount of technical assistance and training directly at the local level. The most visible result is an improvement of the financial performance of the Towns generally in the past three years. HMG has also set up a Fund which is providing grants to the Towns and which will soon be making loans enabling Town Panchayats to finance projects with their own resources. HMG has also recently announced a policy of encouraging Towns to take on responsibility for operation and maintenance of water supply systems. On the negative side, most HMG agencies continue to perform in the traditional "top-down" manner, without adequately consulting or involving Town Panchayats, let alone encouraging them to take the lead. MHPP is mainly working through the Town Development Committees, which are creations of HMG, for executing its programs at the local level.

Investment Programs for Urban Areas: In the past three years, important efforts have been made to lay a foundation for urban investment planning. These include a data base on Town Panchayats' expenditures and revenues handled by MPLD and a set of Structure Plans and Infrastructure Assessment reports on all Town Panchayats prepared through MHPP. Some technical assistance and training has been provided to Town Panchayats on budgeting and capital investment planning. But, HMG and the Towns are still far away from being able to prepare multi-year urban capital investment programs and budgets that

match available resources with high-priority needs. Central government investment coordination in urban areas is especially weak.

Urban Programs to Support Rural Development: HMG's main effort under this heading is the Service Center Development Program being carried out by MPLD and MHPP. The program focuses on the construction of public buildings and supporting infrastructure in the Service Centers. Little attention has been paid to the selection and use of Service Centers for strengthening key links in the agricultural marketing system. HMG may place more emphasis on this aspect in the next Plan period.

Provision of Central-Level Support for Local Urban Development Programs: Both MPLD and MHPP have been providing technical support and training to Town Panchayats in their respective areas: MPLD in municipal finance and administration and MHPP in urban planning and provision of services. While the quantity and quality of support has increased, major limitations remain. One is that both ministries need more well-trained staff to work with the Town Panchayats. Another is that the work so far has relied heavily on donor-supported programs. HMG needs to make greater efforts to institutionalize this capacity.

Preparation and Implementation of Physical and Infrastructure Plans for Major Urban Centers: With the support of the MSUD/MSTP project, the Department of Housing and Urban Development has prepared Structure Plans for 29 Town Panchayats and will complete four more in 1990. A detailed land use plan for Bhaktapur was prepared in 1986 with support from GTZ. Long-term efforts are still needed to establish an effective framework of urban planning laws, regulations, and implementation mechanisms. The implementation of urban plans and regulations remains particularly weak.

Service Standards for Settlements: Some progress has been made under MHPP on the development of design standards for urban roads, water supply, and drainage. Further work needs to be done to refine, officially adopt, and disseminate the standards.

Development of Regional Centers: In the early 1970s, HMG designated five regional development centers in the Hill areas which have received special investments and planning support. Two of these are major cities (Kathmandu and Pokhara) with strong economic bases. The other three are minor settlements with weak economic bases (Dhankuta, Birendranagar, and Dipayal). HMG now recognizes that the latter will remain mainly administrative centers in the foreseeable future, and that further investments in them must be limited to what is economically productive.

Planning of Nodal Centers Along E-W Highway: HMG recognized that several settlements at key intersections of the East-West (Mahendra) Highway and main north-south roads were likely to develop rapidly. So far, MHPP has focused its attention on Kohalpur in the Mid-West, for which first-stage physical planning and site demarcation has been carried out. Additional work is needed on this and other "nodal centers".

Urban Employment Generation: HMG has not yet prepared an overall strategy for urban employment generation. However, a number of programs have been undertaken in the areas of cottage industry development, small business promotion, and vocational training (See Section 5.2).

In these remaining areas, little progress has been made during the Seventh Plan:

Attention to Urban Environmental Problems: HMG lacks a strategy for addressing urban environmental problems. Awareness is growing at the central and local levels of the need to mitigate problems such as industrial waste, water pollution, air pollution, destruction of green space, and noise. However, action on these fronts has not been a priority. In 1988, MHPP launched a plan in Greater Kathmandu to preserve agricultural lands as green belts for the future. Despite opposition and implementation difficulties, MHPP is continuing to implement the plan.

Attracting Private Sector Investment for Urban Development: More needs to be done in this field.

Regarding private sector employment generation, HMG has begun a process of economic liberalization, but much remains to be done (See Section 6.11).

HMG could increase the provision of developed urban land by creating a favorable environment for organized private sector land development companies. Their main needs are sources of financing and regulatory reform.

The prospects for private sector involvement in urban services seem to be most promising in two areas: (1) mobilizing private capital for construction of infrastructure through voluntary contributions and (2) privatizing the operation and maintenance of services at the local level.

4.5. Past and Present Regional Development Policies

In 1974, a regional planning division was formed under the National Planning Commission. Offices of NPC and various HMG and semi-government agencies have also been established in each of the Regional Development Centers to support the regional planning effort.

4.5.1. Regional Development Policies To Date

Regional development planning was initiated in the Third Plan, with the division of country into regions on the basis of watersheds. The Fourth Plan emphasized the need for modernizing traditional main north-south trade routes in the Karnali, Gandaki, Bagmati, and Kosi regions. It proposed the establishment of north-south access roads and development axes from the Mahendra (East-West) Highway into the Hills to promote the integration of the country. Regional balance and integration were adopted as the principal objectives of the Fifth Plan. The country was divided into four east-west "development regions" (later expanded to five) at the time of the Fifth Plan.

Regional development objectives of the Sixth Plan were not unlike those of the Fifth Plan. Special emphasis was placed on integrated rural development, the establishment of market settlements, development planning, and small farmer development programs. While continued emphasis on the development axes was stated as a priority, only two of the integrated development projects corresponded with the alignment of these corridors.

Many of the key regional objectives of the Seventh Plan will be carried over into the Eighth. The Seventh Plan proposed the establishment of sub-regions within the Himal, Hill, and Terai areas of each development region, each of which would include several districts. It also proposed tiers of development centers and service centers (development region, development sub-region, district, and ilaka) for provision of infrastructure, and economic, and social services.

The Seventh Plan proposed that a minimum of one "development center" would be established in each sub-region. These were proposed as sub-regional economic centers or market towns to be linked to the development regions by road. A service center was proposed to be established in each of the nine Ilakas of each District. The selection of these centers was to be based on a number of criteria including: centrality, convenience in movement, catchment area and population size, local resources, etc.

The Seventh Plan also proposed strengthening the five regional development centers (from west to east: Dipayal, Surkhet, Pokhara, Kathmandu, and Dhankuta) in order to help them carry out their functions. It also suggested a series of resource surveys in agriculture, forestry, land, livestock, village industries and fuel in order to help identify development potential which could be supported. District development programs were to be carried out in the context of sub-regional plans.

4.5.2. Principles of the Regional Development Plan 1990-2000

The NPC's *Regional Development Master Plan* was approved by the National Development Council in November 1989. The document states that for the most part the preceding plans have not met their economic and social objectives. However, good progress has been made in establishing inter-regional infrastructure networks such as the Mahendra Highway, north-south road corridors, distribution of telecommunications, power, and some social services.

The regional development policy and strategy which has been prepared sets out the following broad policies:

- Gradual reduction of inter-regional and inter-subregional economic and social imbalances through enhancement of local development potentials.
- Mobilization of local resources for investment programming supported by prioritized investment programs.
- Use of existing infrastructure and facilities, where possible, to build economic activities.
- Development of the functional interrelationships between regions, sub-regions, urban and rural areas to enhance national integration.

- Mobilization of local participation in the implementation of regional development programs.
- Implementation of regional development plans through the decentralization program.
- Development of internal transportation facilities and protection of the environment.

The Plan states that the following will govern the overall investment strategy:

- Priority towards production-oriented activities that rely on existing infrastructure and mobilize local resources and labor; and the Basic Needs Program. Programs and criteria will be established for central, regional, and district level projects.
- Economic development of backward areas.
- Attraction of private investment throughout the country in productive sectors.

A number of programmatic guidelines have been set out by the plan:

- Economic emphasis on light-weight, high-value agricultural products, small scale processing industries, artistic handicrafts, and the introduction of appropriate new technology.
- The development of farming enterprises and large scale industries and irrigation in the Terai.
- Emphasis on export oriented activities in the Eastern Development Region because of its proximity to ports and neighboring countries.
- In the Central Development Region, emphasis is to be placed on the Kathmandu Valley's role as a tourist center; the region's potential for exports in the garment and carpet industries; and building on existing infrastructure. Where possible, economic activities are to be deconcentrated from the capital.
- Continued exploitation of the country's various attractions for tourism development (an unusual sector which lends itself to development of the Hill and Mountain areas). Special emphasis is recommended on integrated tourism development of the area between Kathmandu and Pokhara because of the existing road network.
- In the Mid-Western Development Region, implementation of the Karnali hydro-electric project (the largest in South Asia) is expected to have a major impact.
- In western areas, emphasis is to be placed on use of improved agricultural techniques and better utilization of forest and pasture lands which are the most important in the country.
- Development of various skills-building programs to help realize local potential and increase incomes.
- Implementation of regional, sub-regional, and local level land use plans for utilization of local resources without harming the environment.
- Reactivation of the role of the zonal offices in development activities.

The Regional Plan also gives the following sectoral guidelines:

Industry:

- Emphasis is to be placed on cottage, small and medium scale industries in the Himals and Hills: weaving, copper, brass, cold storage, agro-processing; etc.
- Larger industries are to be promoted in the foothill and upper Terai areas. Export industries are to be emphasized in the Eastern region.
- Industries for producing goods under the Basic Needs Program will be established outside the Kathmandu Valley.
- In the Hill areas of the Western Development Region, emphasis will be placed on dhaka clothweaving, cottage industries, cold storage, food and fruits processing and handicraft industries for tourism.
- In the Mid Western and Western Terai, emphasis will be on medium and large scale industries. Forest and agro industries will be emphasized in the Mid Western and Far Western Development Regions.
- The private sector will be encouraged to establish cloth, shoes, and other consumer goods in these sub-regions.

Tourism:

- Emphasis will be placed on expanding the tourism potential of the Central Development region, building on existing transport and infrastructure.
- Efforts will also be made to further develop tourism in the Western Development Region.

Transport:

- Focus is on completion of the north-south roads, construction of the "middle hill highway", roads to help develop the tourism potential of the western region, the use of ropeways, and waterway development.
- Construction of additional suspension bridges on main trails. Improvement of existing airport facilities. Trade posts in two other northern locations; possible modern air facilities in the western Terai.
- Continuation of programs to provide telephone and telecommunications in District Headquarters.

Education:

- Increased primary education facilities and adult literacy.

Settlement Strategy:

- Adoption of the basic principles of the urban policies in the Seventh Plan; with emphasis on implementation of these policies.
- Institutional arrangements will be established at the regional level to prepare, implement, monitor, and evaluate sectoral programs in an integrated fashion. Districts will be the key units for collection of data, plan preparation, and implementation.

- Gradual development of geographically accessible service centers.
- Development of small settlements as commodity collection centers and the strengthening and extension of markets for local production and distribution.
- Concentration of settlements will be emphasized where possible to facilitate the provision of services; identification of the functional types of small settlements
- In light of increasing pressure for urbanization, particularly in the Terai, steps will be taken to plan and develop settlements where existing infrastructure already exists notably along the Mahendra Highway and other growth axes.
- Physical development plans will be prepared for major bazaar settlements along highways and other urban centers.
- Market towns will be identified and supported with facilities.
- New settlements are proposed in the Himal and Hill regions as well as continued resettlement in the Terai.

4.6. Industrial Location Policies

4.6.1. HMG-Level Policies

Only recently has HMG begun to establish specific guidelines and policies pertaining to industrial location. Nepal's economic plans for many years did not include specific recommendations concerning the location of industries. The absence of such recommendations no doubt reflected the incipient nature of industrial activity in the country.

This notwithstanding, all the Five-Year Plans from the Fourth to the Seventh have included references to industrial policy. The Fourth Plan, for example, suggested that industrial districts be established as a means of fostering regional development of industries. And, the Fifth Plan made recommendations concerning the location of small and medium scale industries within industrial districts.

Industrial policy has continued to evolve. The general thrust has been to provide "permissive inducements" (mainly by means of tax concessions) designed to affect the spatial distribution of industries in the country. The most recent additions to policy in this sphere were in 1987 and 1989. In 1987, HMG divided the Kingdom of Nepal conceptually and physically into three areas for purposes of industrial development: (1) a developed area in which industries would receive no tax concessions; (2) a semi-developed area in which they would receive a 15 percent tax rebate; and (3) an undeveloped area in which they would receive a 30 percent tax rebate. The 1987 policy was based on the notion that permissive inducements might be effective in encouraging industries to locate outside of the Kathmandu Valley and other more developed areas. The clear intent was to encourage the regional dispersion of new industries, ensuring to the extent possible that the less developed areas of the country would be favored.

In 1989, the Industrial Promotion Committee, chaired by the Minister of Finance and Industry, increased considerably the specificity of HMG's still incipient industrial location policy. The Committee's recommendations were couched in compulsive, rather than permissive, terms.

Within the new policy frame, industries were classified into two categories: an "A" category of industries to be prohibited within Kathmandu Valley and within ten kilometers of other urban centers, and a "B" category of industries to be prohibited within five kilometers of towns and areas classified by the government as "densely populated". The prohibited industries appear to have been selected mainly with a view toward limiting urban pollution. The directive issued by the Industrial Promotion Committee does not state how the new guidelines are to be implemented or which agencies of the government are to enforce them. The "compulsive" nature of the guidelines is compromised by two loopholes: one permitting already established industries on the prohibited list to continue and expand their operations on a conditional basis, and another exempting "industrial districts" (which tend to be located within urban areas) from the regulations.

The complex of existing policy concerning industrial location includes earlier guidelines that are still in effect. For example, since 1974 most industries have not been permitted to locate within eight kilometers of Nepal's international borders. However, this stipulation was modified by a provision in the Industrial Enterprises Act of 1981 to permit a number of industries, including cottage industries and other industries established with the approval of HMG, to be within the eight kilometer boundary zone.

4.6.2. Town Panchayat-Level Policies

Town Panchayats have not been considered, nor have they considered themselves, as exerting effective influence over the location of industries within their areas. However, the Town Panchayats may have scope for influencing industrial location by working creatively within existing laws (e.g., The Town Panchayat Act) that pertain to their functions. For example, the current legislation gives Town Panchayats some scope for spatial planning within their boundaries. However, Town Panchayats' powers in this arena cannot be exercised unilaterally without HMG approval. Similarly, the laws permit Town Panchayats to establish the terms and conditions by which buildings are established within their borders and to purchase and sell land for purposes consistent with a development plan. Depending on the quality and vision of local leadership, these powers also would seem to give an enterprising Town Panchayat scope for maneuver in setting conditions that would either encourage or discourage industrial development within its boundaries.

Town Panchayats have also been entrusted with some taxing authority, and this authority (as discussed in Section 5.5 of this report) should, in time, enable them both to increase local revenues and to employ those resources more systematically for urban development programs, including programs associated with the attraction and maintenance of new industries within municipal borders.

4.6.3. Industrial Location Goals and the Means of Achieving them

As noted earlier, HMG has only recently focused its attention on how best to define and foster desired patterns of industrial location. Its incipient policies in this area thus far combine mainly permissive incentives and compulsive controls. Such incentives and controls will tend to be ignored or evaded if HMG does not further develop its strategies. In this

respect, the March 1989 recommendations of the Industrial Promotion Committee are an important step in the right direction. The continuing need will be to establish definitions of industrial location policy and to translate those definitions into workable guidelines that not only serve national development objectives, but also promote local, decentralized initiatives.

In making progress toward a coherent industrial location policy, it is important that emphasis be placed on the establishment of reasonable (i.e., implementable) locational objectives. This implies the need not only for practical policy, but also for effective coordination of "process-oriented" behavior at different levels of government. This means that the "terms of reference" for industrial location policy must be understood at all levels of government from Kathmandu to the Regional, District, Town and Village levels, especially if industrial location policy is to be implemented in ways that contribute to "decentralization" and "regional balance" objectives of HMG. In this context, it is critical that industrial location policy be designed so as not to retard the pace of industrial investment, especially investment originating in the private sector.

Within this frame of reference, it should be possible to elaborate and implement industrial location policies that:

- effect limited dispersal of industries around the country, consistent with the economic viability of those industries;
- restrict the location of some industries in certain locations (e.g., the Kathmandu Valley) for diverse reasons, including long-term ecological considerations; and
- generate employment in regionally differentiated ways, and especially in ways that contribute to the economic development of rapidly growing Town Panchayat municipal areas.

In all this, a delicate balance must be struck between establishing appropriate controls concerning the location of industry and incentives favoring the development of new industries that have the potential for fostering economic growth and job creation.

5. URBAN DEVELOPMENT ISSUES AND PROBLEMS

5.1. Issues and Problems in Regional and Urban Development Policy

5.1.1. Regional Policy Issues and Problems

According to the NPC's "Regional Development Master Plan 1990-2000", past efforts to achieve balanced regional development have not been successful. The document suggests that so far, little progress has been made in reducing the disparities between the Terai and the Hills, rural and urban areas, and riches and poorer classes of society. In fact, changes in regional per capita gross domestic product suggest that these gaps are widening.

The Regional Development Master plan notes that while there are clearly different sub-regional resource endowments, the existing resources of some of the relatively less-developed places have not been thoroughly understood and exploited.

The document states that infrastructure investment has been concentrated primarily in several specific areas, notably the Terai, Kathmandu, and Pokhara. It suggests that this has segmented the national economic and social structure and that redoubled efforts are necessary to bring about balanced economic and social development.

The document further notes that while regional development plans have been produced since the Fourth Five Year Plan, sectoral policies and programs relating to population, water resources, integrated rural development, etc. have not been compatible with regional development concepts and thinking.

Problems in implementing regional policy are not unique to Nepal. Most countries have enunciated the objective of balanced regional development stressing both equity and the realization of development potential. Unfortunately, these polices have been largely unimplementable for the very reasons cited above: regions and sub-regions do not have the same endowments, and sectoral policies are generally deficit driven or oriented toward efficiency and practical outputs which reinforce existing trends. Finally, few countries have had the financial and management resources necessary to truly have a significant impact on spatial development.

While NPC population and economic development projections for the Eighth Five Year Plan do somewhat reflect the very different resource bases which exist among sub-regions, greater emphasis should be placed on incrementally helping each sub-region reach its own development potential and to address the most critical social issues. The Basic Needs program is a laudable concept in this regard, but policies like it must reflect true resource constraints for plan implementation and provide better guidance on the most judicious use of development resources, especially in light of Nepal's economically sensitive situation.

Nepal, at present, simply cannot ignore the need for high economic payoff in its investment, better utilization of its existing administrative and physical infrastructure for social and economic

development, and careful allocation of scarce human resources to carry out its development policies. The proposed emphasis on the middle hills road, for example, is extremely questionable at this time.

Furthermore, in cases like the service center policy, a much more cautious and step-wise approach should be taken with respect to the establishment and development of institutional infrastructure and service facilities at the regional, sub-regional, and service center levels.

Finally, the force of existing demographic and economic trends cannot be ignored. It is better to reinforce positive trends where possible. International experience suggests that these trends can only be modified at best, even in a longer-term planning framework.

5.1.2. Urban Policy Issues and Problems

The urban policy agenda set out in the Seventh Five Year Plan was the first ever to be incorporated in the national planning process. While not all elements of the policy guidelines were implemented, they proved to be a useful basis for setting out a workable agenda for the HMG and the supporting donor community to pursue. This section deals with the problems associated with implementation of some of these policies, new issues which have arisen since the establishment of the Ministry of Housing and Physical Planning, and special concerns, such as service center development, that relate to broader national policies as they impact on settlement policy.

5.1.2.1. The Urban Component of the Seventh Five Year Plan

Local Government Capacity Building

Major efforts were made over the plan period to increase local resource mobilization, and management efficiency and to provide urban places with a sound technical foundation for planning and investment programming. Town Panchayats remain, however, technically weak.

Urban Economic Development and Employment Generation

A fundamental goal of the current urban policy was the creation of urban jobs in response to rapid population and labor force growth. Very little progress was made in this regard. For one, there is no clear cut institutional party which is responsible for economic development in urban areas. While sectoral offices and programs exist which deal with components of economic development and employment concerns, there is an absence of leadership in this vital area (see Section 5.2). Thus, efforts in this regard can be considered *ad hoc* at best. This is particularly striking given the emphasis which needs to be placed on this subject.

Investment Programming for Urban Services and Economic Development

The Ministries of Housing and Physical Planning and Panchayat and Local Development have analyzed urban investment needs and undertaken resource mobilization efforts during the course of the Seventh Five Year Plan. Yet, while resource mobilization by its nature is integrated into the planning and budgeting process, no planning or budgetary linkages

have been established for longer term investment planning for the Town Panchayats. Furthermore, while structure plans and infrastructure assessments have been elaborated as a basis for guiding longer term investment planning, their benefit has not yet been exploited in a systematic way.

Use of Urban Development Program to Support Rural Development

Any urban-rural development complementarities and supporting investment that have occurred have taken place in an unplanned fashion. Urban and rural initiatives are perceived as either sectoral or self contained. So far, no conceptual approach or implementation strategy has been prepared which would alter this situation. While, in principle, planning and budgeting relationships exist between District, Town, and Village Panchayats, there is little collaborative effort to build complementary programs in this regard. The service center development program, which has the potential for being a vehicle for strengthening urban-rural economic linkages, is being conceived strictly in terms of construction of physical facilities.

Urban Environmental Problems

While initiatives in planning, infrastructure development and solid waste disposal make contributions to addressing environmental issues, no strategy has been developed which deals with urban environmental problems.

Encouraging Self Financing Urban Development and Local Resource Mobilization

Efforts in this regard have been made but success is mixed. There is still a major problem to be resolved between the provision of services and direct cost recovery as well as direct taxation in general.

Central-Level Institution Building

Considerable progress has been made in terms of the formation of new institutions: MHPP, MPLD/UDD, DHUD, and the TDFB. However, the performance of these entities needs substantial improvement or remains untested. In the case of DHUD, central and regional-level capacity is seemingly overextended.

Planned Development of Regional Development Centers

Until the Seventh Plan most central urban planning and technical support was oriented towards the Regional Development Centers with mixed success. In the Seventh Plan, available technical and financial resources were better distributed to address a broad range of urban places, particularly those confronted with rapid urban growth. Future efforts in Dhankuta, Surkhet, and Dipayal need to be commensurate with their development potential.

Special Attention Settlements at Key Intersections of the E-W Highway and N-S Corridors

A program is underway to undertake planning for settlements at these intersections. However, no strategic analysis of the economic and financial impact of settlement growth in these places and their relationship to border/gateway settlements and the E-W highway has been carried out.

5.1.2.2. MHPP Programs and Policies

In addition to the broader urban policy goals of the Seventh Five Year Plan, the creation of the Ministry of Housing and Physical Planning resulted in a wide range of other initiatives which will be discussed briefly in a policy context.

Management of Growth in Existing Towns

MHPP has undertaken an innovative program in guided land development and is venturing into initiatives in land pooling. Excellent success in the former suggests more initiative in this regard while a pilot program in land pooling is developed.

Planned Expansion and Development of Growing Towns

Good progress has been made in providing physical plans for existing Town Panchayats. One key problem area is institutionalizing the plans into the budgetary and planning process so that they do not remain static documents. Another problem is elaborating the urban planning framework into a more dynamic and effective system.

Land Development Programs

Government land development programs to date have had little success (see Section 5.6). This strategy needs careful review.

Emerging Town Development Program

This program is a direct response to both enunciated policies and existing trends. The problem is that care needs to be taken to properly capture the economic and financial benefits of urban development in these settlements and to weigh the advantages of public investment in these places versus existing well established towns.

Rural Settlement and District Headquarter Planning

Rapid growth of rural settlements, particularly in the Terai, requires a quick response which is not too demanding on already over-extended central technical support. Basic guidelines for expansion need to be provided to these places. Rural settlements in the Hills have not demonstrated the dynamism of those in the Terai. Given resource constraints, selection of places for central planning support should be carefully evaluated. The provision of development guidelines and training for local parties appears most relevant.

Cluster (Compact) and Village Block Development

Other than in the Earthquake Rehabilitation effort, the cluster planning and village block approaches should be evaluated to see if they will achieve the desirable goals without constraining access of farmers to their cultivated land. As for rural settlements, care must be taken to find solutions which do not further overextend existing technical resources in the MHPP. Clear community initiative, participation, and leadership in the program should be criteria for intervention.

Service Centers

HMG's service center policy represents a well intended desire to broaden the base of service delivery and access throughout the Kingdom, and to assist in the implementation of the Basic Needs Program and Decentralization. Intentions to provide a base for absorbing surplus rural populations and promotion of off farm employment and economic development are also very worthy causes. However, the nature and magnitude of the intended program in the current economic context should be given additional reflection.

While service centers have been set up in a number of Districts, there has been little analysis of their impact and the methodological approach which has been used for their establishment. One such study, the *Rapti Zone Regional Assessment* (PADCO/USAID, 1985), did some analysis on this subject. The findings raised some issues which merit further analysis.

Do services already exist in proposed service center areas ?

The Rapti study found that HMG had already established an important network of settlement-based public services throughout the Zone, mainly in rented facilities. While it was observed that services were lacking in some places, a good foundation was found to be already in place.

Should service centers or service provision be given priority ?

While many facilities already existed in the Zone, service provision was found to be low or lacking. In many places, basic inputs needed in health and veterinary posts, for example, were absent. In addition, staff positions were often vacant. In this context, it was not clear that the development or construction of service centers would necessarily improve the quality of service delivery.

Is the construction of service facilities financially worthwhile ?

At the time of the Rapti Study, the basic service centers being built consisted of a supervisor's office, a visitor's office, a meeting and training hall, a post office, an agricultural and veterinary sub-station, a small godown, and staff quarters. The costs of these units (excluding land) was on the order of NRs. 1.2 million; costs which were found to far exceed those of traditional methods and rental options.

Is more attention needed in identifying SC sites ?

While the criteria for selection of service center sites and service center grades at the District, sub-District and Ilaka level were found to be reasonable, more attention was needed in siting facilities where service gaps persisted. It was also found that the time-distance relationship to service areas needed to be given greater consideration (i.e., one day round trip), since this was found to vary considerably. In addition, the accessibility of locations was also found to be a problem. Often, ill-situated sites were suggested for the facilities.

5.2. Urban Economic Development and Employment Generation

5.2.1. Introduction

There will be an increasing need over the next fifteen years to increase the rate of economic growth in Nepal and to generate productive employment opportunities for a rapidly growing national and urban population. And, because of the virtually stagnant growth of the agricultural sector, and the high rate of underemployment in that sector, there is an additional compulsion for those concerned about Nepal's long-term economic development to search for means of providing productive non-agricultural employment for increasing numbers of people in urban areas.

Between 1987 and 2002 Nepal's urban population, as defined by the urban population of Town Panchayats (see Table 3.2), is projected to grow by about 1.4 million. Assuming a constant urban labor force participation rate of 55 percent (1981 Census), the expected increment in the urban labor force would be about 770,000 over the 15-year period. However, for a truer picture of the size of the urban labor force and its growth, one should also take into account the non-Town Panchayat urban centers. Estimating this is difficult due to lack of data. According to the Census, approximately 6.4 million people lived in urban centers of five to ten thousand population in 1981. The actual growth rate of this population is unknown, but 3.5 percent per year could be considered a "moderate" rate, lower than that of the Town Panchayats (over 5 percent) but still higher than the national average (roughly 2.5 percent). Although no data exist on the employment characteristics of this segment of the urban population, on the basis of a few reasonable assumptions about its growth, participation rate, and agricultural/non-agricultural distribution, the increment of urban workers in the non-Town Panchayat urban centers over the 1987-2002 period can be very roughly estimated at 1.0 to 1.5 million. Despite the speculative nature of these figures, the basic point is beyond doubt: the smaller urban centers will contribute a larger increment in the urban labor force than the present Town Panchayats. Putting the two together, one obtains an order of magnitude of "plus or minus" two million new urban workers over the next 15 years. The question is, can the economy of Nepal generate productive jobs for these new urban workers?

Non-agricultural employment opportunities are at present extremely limited in Nepal. In this context, raising the rate of industrial investment will clearly be a key element in any development strategy to generate non-farm employment. However, this cannot be done by HMG alone, even with donor assistance. In recent years, foreign resources have accounted for between 40 and 45 percent of all investment, public and private; however, the share of foreign resources in investment cannot continue growing indefinitely. The latent energies of Nepal's private sector must be tapped if the anticipated investment gap (especially as it pertains to job creation in urban areas) is to be closed.

While HMG will continue in the Eighth Plan period to have primary responsibility at the national level for orchestrating economic development, establishing industrial policy guidelines, and providing (in concert with donor agencies) resources for employment generating projects, the gap between the supply of productive employment opportunities in urban areas and the numbers of people seeking employment in the coming will no doubt grow unless HMG's initiatives are complemented by private initiatives.

The role of the private sector will be especially critical in generating jobs for the majority of in-migrants to urban areas who, typically, will be illiterate and unskilled. It is these persons who will have to be absorbed in small units of production where, over a wide range, labor can be substituted for capital in productive processes. In this context, HMG will have to continue to give priority to the development of cottage industries, but will have to bear in mind that the value added per worker in cottage industries has been as low as NRs. 76, as compared to more than NRs. 6,000 in large manufacturing establishments, and the intensity of employment in cottage industries is very low (Industrial Services Centre, "Cottage Industry Development Study", Kathmandu, 1979).

There is no way, in the short run, that medium and large scale industries, however important they may be to the economic growth and development of Nepal in the long run, will absorb great numbers of new entries into the growing urban labor force. The capital intensity of their production, relative to small scale and cottage industries, mitigates against this. It is well known, in any event, that such larger scale industries (especially those located in the Terai) customarily favor skilled workers from India over Nepalese.

In these circumstances, HMG must take steps to unleash the energies of private investors; to diminish the bureaucratic and discretionary controls that inhibit private investment; to provide economic incentives that are conducive to private sector investment; to encourage the decentralization of private investment; to provide economic incentives for the private sector to invest in in-service training; and, in general:

- rationalize its administrative procedures,
- simplify its rules,
- amend some laws,
- rescind others, and
- reduce its intrusive control over private sector activity, both domestic and foreign.

By such means, a creative symbiosis between HMG and the private sector can be fostered in a manner conducive to the generation of productive employment of the growing urban labor force, and to the regionally balanced and decentralized economic development of the country.

5.2.2. Government Policies and Programs

5.2.2.1. Policy Framework

The Government of Nepal in its Seventh Five Year Plan delineates a clear policy direction regarding employment generation, particularly as it pertains to small scale and cottage industries: "... to create employment opportunities to check the problems of unemployment and underemployment both in the rural and urban areas..." In addition, the need for "general, intensive and promotional programs" was clearly stated with specific emphasis on skill oriented training for small industries. In the preface of HMG's 1987 Industrial Policy document, while the need for sustained development in the large scale industrial sector is fully recognized, the government again emphasizes the need for development of smaller scale enterprises. It also states, "While formulating this new industrial policy, priority

has been given to industries producing goods which meet basic needs". This represents a substantive policy shift by HMG resulting from the perception that industries which were intended to meet basic needs have not in the past been assisted, as customs rates, sales and excise taxes were found to favor large industrial concerns. HMG has therefore opted in favor of targeting the small industrial sector as a means of redressing imbalances in the industrial sector and confronting the growing problem of unemployment in both urban and rural areas.

In the 1987 Industrial Policy, therefore, important measures were introduced to promote the growth and development of small industry, including tax exemptions, credit extension and export insurance for the small entrepreneur.

5.2.2.2. Employment Generation Projects

In Nepal the majority of employment generation schemes are either directly administered by or associated with various government ministries.

Department of Cottage and Village Industry (DCVI)

DCVI is one of the oldest government institutions providing basic and middle level skills to the small and cottage manufacturing sectors. The primary administrative function of DCVI (a line agency of the Ministry of Industry) is to generate employment opportunities in the non-farm sector, to increase industrial production, to promote exports, and to upgrade the living standards of the rural population by promoting cottage and village industries.

Currently DCVI has field offices in all 75 districts of Nepal and its major programs encompass the following:

1. Technical training in mechanical, electrical, woodcrafts, textiles, ceramics, leather, hosiery, stitching and carpet making.
2. Handicrafts promotion through provision of designs, models, tools and equipment.
3. Industrial services provision: conducting surveys on local raw materials, local markets and feasible projects.
4. Production Section engaged in production of Nepali envelopes, files, cotton cloth, etc.
5. Industrial administration via the issuance of licenses and registration of industries.
6. A training project in the manufacture of ready-made garments and Nepali hand-made paper, sponsored by DCVI in technical collaboration with the Government of Japan.
7. The TRUGA Project, which provides gainful employment opportunities to rural areas and regional urban centers comprising skills training and assistance in starting micro-businesses, sponsored by DCVI in cooperation with ILO (See Vocational Training Section).
8. A promotional program for the small scale ceramics industry sponsored by DCVI in collaboration with GTZ. Indigenous potters are trained in the use of appropriate technology and start-up assistance is provided for first time entrepreneurs.

Cottage Industry Development Board (CIDB)

CIDB is another line agency within the Ministry of Industry. It was initially established to coordinate and ensure effective promotional measures for rural and semi-urban industries. CIDB's current programs include:

1. Identification of potential entrepreneurs, the organization of Entrepreneurship Development Programs, and skill development training.
2. Identification of viable industries and provision of promotional activities, consultancy services, and assistance in expansion to private sector industries.
3. Provision of raw material, tools, and equipment to the micro-industries in rural and semi-urban areas.

Cottage and Small Industry Project (CSI)

Under the auspices of CIDB, the UNDP assisted Cottage and Small Industry Project (CSI) currently operates. CSI assists the CIDB in providing direct support and enhancing its institutional capabilities to develop and promote cottage and small industries (both rural and urban) in 27 districts throughout Nepal. The project's main activities are training of entrepreneurs in technical various skills, providing entrepreneurs with managerial training and counseling, financing the provision of raw materials, equipment and tools, and providing loans and start-up capital to small entrepreneurs.

Small Business Promotion Project (SBPP)

The Small Business Promotion Project was formed in 1984 as a joint undertaking between the Ministry of Industry and the Federal Republic of Germany. It is executed by GTZ and HMG counterpart institutions including the Industrial Services Center (Ministry of Industry), DCVI and the Agriculture Development Bank. SBPP operates in seven primarily urban locations: Bhaktapur, Pokhara, Dharan, Butwal, Bhairahawa, Bharatpur and Nepalgunj. The project's primary objective is to stimulate the creation and growth of small business in Nepal through five main programs:

1. **New Business Creation:** Assists potential entrepreneurs to start their own businesses via achievement motivation training, business idea generation, screening and evaluation of business schemes and sustained follow-up activities.

2. **Small Business Consultancy:** Assists existing small businessmen to enhance their managerial competence, productivity and competitiveness through managerial training and market development.

3. **Technical Advisory Services:** Assists both existing and potential small businessmen to solve specific technical problems by deputing local technicians and providing information on sources of raw materials, machinery and appropriate technology.

4. **Complementary Credit Program:** Facilitates sourcing of funds and maintains a revolving fund for relending to potential and existing small businessmen via the Agriculture Development Bank.

5. **Institutional Linkages:** Helps other institutions and NGOs in strengthening programs for small and micro enterprise development. Sponsors entrepreneurship programs for special target groups.

Women's Training Centers Project

With regional training centers in Jawalakhel, Pokhara, Dhankuta and Surket the WTCs (under the Ministry of Panchayat and Local Development) have emphasized the training needs of women with a view toward greater employment and income generating potential. Training includes emphasis on skills germane to handicraft, kitchen, gardening, poultry etc. The project's relatively recent establishment precludes an assessment of the outputs at present.

Women's Skill Development Project

This project addresses the income-generating needs of poor, largely urban women. Under the Nepal Women's Organization, it is a model for NGO involvement in micro-industrial promotion. Though the project is small, it offers skill training in block printing, sewing, knitting, and spinning and provides market outlets for goods produced by project participants.

5.2.2.3. Vocational Training Projects

The development of technical and vocational education and training in Nepal is a fairly recent phenomenon. Prior to 1971, vocational training or technical education at either secondary or post-secondary levels was for the most part ignored. With the development of the New Education System Plan in 1971, a myriad of new projects were created with the explicit purpose of introducing such training at higher levels of education with various institutes of Tribhuvan University assuming responsibility for implementation of technically oriented curricula. Heavy emphasis was placed on the preparation of middle and basic level manpower.

This approach over time proved unsuccessful, and as a result a system of smaller technical schools and individual projects has been introduced under the aegis of the Ministry of Education and Culture, as well as various other ministries and training centers.

National Technical and Vocational Education Committee (NTVEC)/Directorate of Technical and Vocational Education (DTVE)

NTVEC and its secretariat, DTVE, are responsible for the coordination of technical education and vocational training. Both fall under the authority of the Ministry of Education and Culture. NTVEC is primarily involved with the development of policies for the Ministry's Technical Schools program. DTVE is responsible for overseeing the operation and administration of all technical school curricula.

Under the auspices of DTVE, seven Technical Schools are currently in operation in Dhankuta, Jiri, Karnali, Lahan, Balaju, Patan and Sano Thimi. Though not officially affiliated with DTVE, the Butwal Technical Institute is particularly noteworthy as it sponsors an apprentice program with direct linkages to local industry. It has a very high success rate in terms of placement of personnel.

Labor Supply Center Project

In the late 1970s, the Department of Labor established what are known as Labor Supply Centers as a result of an ILO study and recommendations. Today seven such centers in various parts of the country exist. Each center has a staff of some 15 persons, whose primary thrust is the establishment of apprenticeship programs whereby young trainees are sponsored by local industrial plants. Today there are 1,200 trainees enrolled in the LSCs undergoing a range of training programs including mechanics, carpentry, masonry, weaving, plumbing, etc.

Basic Vocational Training Project

In the last year, UNDP in collaboration with the Government of Japan and the ILO initiated a project to assist the Department of Labor in overcoming some of the administrative and managerial bottlenecks associated with the LSC Project. Long-term project objectives include providing skilled manpower for Nepal's industrial sector, reducing Nepal's dependence on imported manpower and promoting non-agricultural self-employment. In the near term the program aims to broaden the training capacity of DOL, with a focus on the underprivileged. The project provides training centers and mobile units, comprehensive training of DOL trainers and administrators and follow-up support for trainees.

Training for Rural Gainful Employment Activities (TRUGA)

The TRUGA Project is a vocational training methodology developed by the ILO to promote employment and income generation activities in rural and regional urban centers, through intensive skill training. The project was initiated in 1984 under the auspices of DCVI, and training programs were begun in five Districts. Since 1984, 22 courses in nine subject areas have been offered with over 287 persons receiving formal training. It is reported that 60 percent of trainees were engaged in gainful employment upon completion of the course. The second phase of the project (1988-1991) is underway, and the scope has been expanded to include 24 Districts within the Mid and Far West Development Regions. Current targets are to provide skill training to 600-800 persons through 31 training seminars.

5.2.2.4. Further Directions for Employment Generation Efforts

The aggregate impact of such employment generation and vocational training projects is difficult to quantify, as most have been designed for and implemented on a micro level. Thus it would be speculative to attempt to asses the overall effectiveness of such projects given the magnitude of the existing employment problems and the prospect of their worsening in the years ahead. What is certain (and a widely accepted fact among specialists) is that much more will have to be done in the way of government intervention to bolster private sector development in this regard, particularly efforts for the small entrepreneur.

It is understood that the needs of small businesses are multiple and varied. It is therefore nearly impossible for one institution to address the spectrum of need throughout this sector. A broad approach is required which integrates both public and private sector efforts with strong organizational infrastructure and significant resources.

Based on its experience in small business promotion and vocational training, the UNDP has developed a series of recommendations to guide HMG policy toward more equitable development of the small and cottage industry sector in the following critical areas:

1. **Training:** Small business practitioners require training inputs consisting of technical training, production management, supervisory training, entrepreneurship, marketing and other areas.

2. **Technical/Management Consultancies:** Existing entrepreneurs need technical, managerial, and financial advice--expertise which needs reinforcement in the local consulting environment.

3. **Legal Services:** Enterprises need legal advice to gain access to business incentives and privileges. This consists of licensing (particularly for raw materials), business registration and general legal advice.

4. **Finance:** Small businesses need more liberal collateral loans from the banking community.

5. **Production Upgrading:** Enterprises need to periodically upgrade production facilities, staff, methods, systems and productivity. This need area consists of productivity improvement, skilled workers, energy supply, quality control, maintenance, safety, and access to raw materials for inputs.

6. **Marketing:** Assistance is required to help enterprises constantly develop products, expand markets and improve marketing practices. Better marketing consulting services, access to marketing channels, product development centers and export information is very much needed.

7. **Information Services:** More emphasis must be placed on updating information regarding technical and managerial development in Nepal and elsewhere. This need area consists of model schemes, technical information, HMG policy and rule dissemination, and regular publications.

Each of the highlighted projects, whether involved with employment generation or vocational training, is for the most part concentrated on a micro level serving local communities throughout Nepal. The cumulative impact of these initiatives is hard to quantify due to the diverse nature of program objectives, the varying outputs of each, and the very localized nature of the programs. It is likely that their total impact on unemployment/underemployment remains small.

Nonetheless, there is much room for improvement of job generation and vocational training particularly in the small business and industrial sector. Government involvement has traditionally been a key component of the success of any project and its role is still critical. Government inputs not only in terms of financial assistance but also in supportive administrative assistance are crucial to the success of any project.

As most such projects are regionally decentralized, the response of government has tended to be somewhat delayed in terms of the day to day managerial and training needs of individual projects. By the accounts of participants and program directors alike, this is the most important area where improved government response is needed.

The consensus of expert opinion is that it would be difficult to expand these programs to include broader geographical or programmatic scopes. Nonetheless government involvement in such efforts remains important, particularly in light of recent HMG policy initiatives which highlight the growing importance of the small enterprise sector in the national economy. Most importantly, such programs serve as a crucial link between central government and hinterland economies and imply an increasing role for government in promoting local economic development throughout the diverse regions of the country.

5.3. Institutional Issues and Problems

Significant changes have occurred recently in the institutional framework for urban development in Nepal. These include the creation of the Ministry of Housing and Physical Planning and the Department of Housing and Urban Development in 1988, the formation of the Urban Development Division in MPLD in 1986, the establishment of the Town Development Fund Board in 1989, and the transformation of WSSC into the Nepal Water Supply Corporation. These changes have helped to clarify responsibilities and strengthen institutional capacity for dealing with urban problems.

A number of institutional issues remain to be addressed, however. These are briefly reviewed below.

5.3.1. General Urban Planning and Management

At present there is no formal mechanism for coordination of the central government's urban development policies or programs.

The roles of the two main ministries involved in urban development--MPLD and MHPP--have been clarified. MPLD is responsible for supervising local government operations and providing policy and technical support for strengthening Town Panchayat finances and administration. MHPP is in charge of the physical aspects of urban development: urban planning and the provision of infrastructure and services. Despite this fairly clear definition of roles, the fact that there are two central government ministries involved in urban development makes the provision of support to the Town Panchayats somewhat less efficient than it might be. One example of this is the provision of training facilities for urban development. The two ministries should avoid setting up separate training centers, as this would be a duplication of resources.

The programs initiated by MHPP since its inception in 1988 demonstrate a strong bias toward central planning and management. Almost all programs are designed and executed by central, regional, or district offices of the ministry. In the area of urban planning, MHPP has decided to work mainly through the Town Development Committees, which are creatures of the central government, rather than the Town Panchayats. Only in one area--water supply--has MHPP made a significant policy decision in favor of local government control.

The ministry is now beginning to promote the creation of independent water supply boards in the Town Panchayats which would initially handle operation and maintenance and eventually take up some construction tasks.

Despite universal claims to support decentralization, most HMG agencies practice top-down management. MPLD's Urban Development Division, by contrast, has focused its program on strengthening the financial and administrative performance of the Town Panchayats, with appreciable results. Most of this work has been done with international support, and it remains for MPLD to institutionalize the capacity to carry on with the work.

HMG's policy regarding the mechanism for central-local relations is unclear. MPLD is designated as the coordinating agency for local government affairs. However, some HMG agencies and Town Panchayats have interpreted this to mean that they must go through MPLD wherever they need to have contact with each other. Obviously this is impractical, given the magnitude of the contacts needed between HMG and the Towns to promote decentralization. A clear and reasonable policy in this regard is needed.

At the local level, the existence of Town Development Committees (19 at present) alongside many Town Panchayats remains problematic. Both have similar functions and powers in physical planning, yet the TDCs are extensions of the central government while Town Panchayats are elected local governments. The potential for problems is higher now that MHPP is relying on the TDCs for implementing a number of programs and is planning to depute its own technical staff to the TDCs. On the other hand, TDCs are acknowledged to have two advantages: One is the fact that they normally include the Zonal Commissioner and CDO, which gives them enforcement powers that the Towns lack. The other is that TDCs can undertake physical planning over any area designated by HMG, while Town Panchayats are limited to their own boundaries. Nevertheless, there is a clear issue here of decentralized planning by Town Panchayats versus centralized planning by HMG through the TDCs. In the near future, several things could be done:

- Ensure that Pradhan Panchas (mayors) play a leading role in all TDCs.
- Establish a policy that TDCs will not initiate programs or projects without the formal approval of the Town Panchayat.
- Shift the focus of MHPP toward working directly and primarily through the Town Panchayats, with TDCs playing a support role.

These measures could be formalized in the rules and regulations, which have not yet been written, of the Town Panchayat Act Amendment of 1987 and the Town Development Act of 1988.

In the longer term future, the leading role of Town Panchayats should be formalized through new and amended laws.

DHUD has begun implementing a number of housing and urban planning programs in non-Town Panchayat urban centers, including District Headquarters, emerging settlements, and service centers. The local government role has not been clearly spelled out. The District

Panchayats should begin to develop capacities to support planning and development of the smaller urban centers.

5.3.2. Institutional Roles and Responsibilities in the Provision of Urban Services

Urban Road Construction and Maintenance

Major national roads are the responsibility of the Department of Roads (DOR) for both construction and maintenance. Urban roads (i.e., smaller arterials and feeder and residential roads within Town Panchayat boundaries) are, however, the responsibility of the Town Panchayat. Yet the distinction is not clear, and in some cases urban roads are built and maintained by DOR; Kathmandu/Lalitpur is a prime example. Traditionally Town Panchayats have not devoted any significant portion of their budgets to roads, sometimes assuming that DOR will build/improve them as part of its own operations.

There is a need to classify all existing urban roads into categories so that responsibility for maintenance may be apportioned among agencies, including the Department of Roads, the Town Panchayat, and the District Panchayat, and maintenance budgets may be constituted according to needs.

Stormwater Drainage

The responsibility for urban stormwater drainage should be assigned directly to the Town Panchayats. One source of current confusion is the use of the Nepali word "nala", which refers to the open roadside drain commonly constructed by the Department of Roads for protection of the road itself, not for stormwater drainage with area-wide coverage.

While side drains for stormwater drainage are often included in new road construction, the delineation of responsibility for proper urban drainage, where all roads, paths, and private and public properties are given drainage protection, has not been specified in existing legal provisions. By default, drainage works have become a responsibility of the Town Panchayats, yet the Towns have not historically taken up this responsibility. The result is that drainage civil works have generally been carried out in an *ad hoc* manner, in the absence of master planning, and with inadequate technical input.

Sanitation

NWSC is responsible for the provision of sewerage systems, yet to date projects have been implemented only in the core areas of the three Town Panchayats within the Kathmandu Valley. Due to their high cost and minimal cost recovery, sewerage systems in other towns have not been undertaken; the remainder of the urban population that have sanitary facilities rely upon private, on-site systems, either septic tanks or pit latrines.

Over half of the population, however, is estimated to be unserved and generally resorts to open air defecation on stream banks or on vacant land near their dwellings Since a large portion of sanitary facilities are privately owned, operation and maintenance is obviously private affair. DWSS is the lead agency for on-site sanitation, although components of the

program are also supported by MOH, SWMRMC, and external support organizations such as UNICEF, WHO, and others.

Water Supply

Although NWSC (until recently WSSC) is mandated to provide drinking water systems in urban areas, its record to date has been less than impressive. Internal weaknesses have yet to be overcome within the agency, particularly in the areas of management, leak detection and repair, billing and collection, and operation and maintenance. External support has been forthcoming from IDA in support of NWSC (and predecessor agencies) since the early 1970s. Appraisal of a new project for rehabilitation of water systems in Kathmandu, Lalitpur, and several other towns is currently underway in order to increase NWSC's managerial, financial, and operation and maintenance capacity.

In the past decade the idea of independently financed and controlled urban water systems has been voiced by some towns (e.g., Biratnagar and Pokhara), but has not met with success because of various difficulties in negotiations with HMG. Efforts have been initiated, however, to form independent water boards in Birganj and Dhulikhel, and the proposals are receiving support in MHPP. Remaining to be overcome are jurisdictional questions between NWSC and the Town Panchayats in the areas of major maintenance, training, and system extension, currently outside the capabilities of the Town Panchayats.

Electric Power

NEA continues to face internal weaknesses in accounting procedures, personnel policies, management of field offices, and load management within urban distribution systems. Thus far, generation and transmission facilities have received most attention from external support organizations, yet there continues to be a need to strengthen outdated distribution systems within urban areas in order to facilitate load management. Although NEA remains in charge of constructing and managing electricity supply in urban areas, it has entered into cost-sharing arrangement with Town Panchayats for installation of distribution networks. Town Panchayats typically purchase the materials and NEA supplies the technical manpower.

5.3.3. Decentralization and Town Panchayats

It has been five years since the decentralization program was introduced in Nepal. The main objective has been to delegate power to mobilize resources and to design and implement development plans to the District, Town, Village, and Service Center levels. The decentralization scheme has not yet been effectively carried out at all the levels.

Progress in the Implementation of the Scheme

The execution of the decentralization scheme has been gradually improving. In 1988/89, out of the 75 Districts in the country, 71 prepared their annual plans which were subsequently approved by the District Panchayat assemblies compared to only 55 Districts in 1987/88. The five planning committees in each District now conduct some exercises in the preparation of sectoral plans which are reviewed by a joint planning committee prior to their submission to the District Panchayat assembly for final approval.

In 51 Districts, the sites for service centers have been decided, while for the remaining 24 Districts the proposed sites for service centers await final approval. The Panchayat Development Land Tax (PDLT) has been enforced in 60 Village Panchayats of Jhapa, Morang, Saptari, Rupendehi and Banke Districts and in two Town Panchayats, Damak and Bhadrapur, of Jhapa district.

Finally, following a revision of financial provisions, the first and second trimester advances from the approved budgets can now be made to the line agencies at District levels even without the submission of a financial statement of expenditure.

Constraints

A number of constraints have been observed in the smooth operation of the decentralized planning process. The Decentralization Act of 1982 clearly states that all development related district offices of line agencies will operate as branches of the District Panchayat Secretariat. But against the spirit of the act, a few district line agencies such as the Department of Roads, the Forest Office, the Irrigation Office, and the Department of Housing and Urban Development do not consider themselves as branches of the District Panchayat Secretariats. They tend to operate entirely as separate entities directly under the central departments and ministries.

The role of the members of the Rastriya Panchayat (Parliament) is not well specified in the decentralized planning process. Consequently, there have been instances when, contrary to the budgets approved by the District Panchayat assembly, changes were introduced in local projects due to pressure from Rastriya Panchayat members.

Lack of coordination among the concerned ministries at the national level has also greatly hampered the implementation of the Decentralization Act. Furthermore, as provided for in the Decentralization Act, District profiles, which contain essential data for decentralized planning, are not yet being prepared satisfactorily in all the Districts.

Decentralized Planning in the Town Panchayat

The Town Development Plan Formulation Committee prepares the annual and periodic plans (lists of projects, often without a budget) which are then approved by the Town Panchayat assembly. The Decentralization Act requires that the Town Panchayat annual plan be formally incorporated in the District annual plan. Planning exercises in Town Panchayats have been relatively more effective than at other levels; hence, relatively more progress has been observed in the implementation of the decentralization scheme by the Town Panchayats. The Towns in general have better resource bases, and their own local resource mobilization has improved substantially during the past several years.

The Town Panchayats account for a considerable proportion of District populations and are usually the main economic and administrative centers of the Districts. The Decentralization Act, however, has lumped Town and Village Panchayats in a single category under the District Panchayat. Since large and medium-sized Towns are politically more powerful, well organized and self-reliant than the Districts, conflicts have arisen between them. Such conflicts may be largely attributable to the lack of well defined roles of the Town and District Panchayats.

Various supervisory functions of District Panchayats over the Towns have been a source of friction. Districts are empowered to approve the annual and periodic plans of the Towns. Districts must approve cash contributions for projects costing over NRs. 5,000. They also approve the use of the "Panchayat Development and Land Tax" to finance special projects in the Towns. While the District Panchayats, being of higher rank than the Towns, are authorized to supervise the operations of the Town Panchayats, they are not authorized to penalize the Towns in case of violations of District directives. The small-sized towns, on the other hand, in view of their dependence on the Districts for financial support, have better relations with them. Another area of conflict has been the sharing of revenues between Districts and Towns (see Section 5.5).

The decentralization scheme contains a long list of functions and responsibilities of the Town Panchayats including education, health, public works, water supply, electricity, industry, and trade, among others. The District line agencies of the government as well as the District Panchayats, also manage these development activities. The lack of proper coordination between the District Panchayats, line agencies and the Town Panchayats has given rise to duplication of functions and misunderstanding. The NPC Regional Planning Offices have not been able to sort out these problems. In fact they have been viewed as simply another level in the hierarchy unable to render any real support.

It is generally felt that the Districts treat the Town and Village Panchayats on the same basis. Since there is relatively greater representation of Village Panchayats in the District assembly, priority has leaned more towards rural development programs. The District Panchayats have paid little attention to urban problems and occasionally have rejected or revised the sections of the annual development programs designed by the Towns. As a result, there has been an increasing tendency by the Town Panchayats to maintain direct links with the ministries and central agencies for financial and technical support in the implementation of urban development programs.

The relationship between the Towns and the line agencies of the government is also not well defined, creating difficulties in the planning process under the decentralization scheme. The Town Development Plan Formulation Committee as a rule has to prepare the annual plan based on the planning guidelines and the availability of grants-in-aid. But in most cases the line agencies are not able to come up with the appropriate planning guidelines or even supervise the development works in the urban areas.

During the last few years, there has been a growing awareness that the Town Panchayats need to be treated as independent entities. Substantial technical and financial support for the Towns has been provided by multilateral and bilateral agencies (see Section 4.1). In addition, there has been increasing local participation, better mobilization of local resources and greater private sector involvement in the development programs and activities of the Town Panchayats. The Towns are now relatively better equipped than the Districts for the preparation and implementation of their annual development plans.

The political leaders at District and Town Panchayat levels are quite aware of the provisions on the delegation of authority under the decentralization scheme. However, they are not familiar with the actual planning process under the scheme. This highlights the need for designing and conducting training programs for District and Town Panchayat officials on the planning process under Decentralization (Amatya, "Impact of Decentralization on the Planning Process: A Case Study of Salyan and Dang Districts", 1987).

So far, there is still no single agency responsible for coordinating the development activities of the Town Panchayats and the government line agencies. The Regional Housing and Urban Development Offices and the Regional Planning Offices are candidates for this function.

Town Panchayats, despite their extensive responsibilities under the Town Panchayat Act and Decentralization Act, have little independent authority. These problems are also discussed in Sections 5.5 and 5.7.

5.3.4. HMG Manpower for Urban Development

This section discusses the manpower development needs of the Department of Housing and Urban Development and the Urban Development Division of MPLD. These are the two principal HMG agencies that handle the preparation, coordination and implementation of urban development activities. The issues related to Town Panchayat management are discussed in Section 5.5 of this report.

DHUD Organization

The Department of Housing and Urban Development is organized at three levels: central, regional and district. The central level of the department is organized into two main branches, the Housing Division and the Urban Development Division. The central divisions of DHUD are expected to focus on policy analysis and preparation of plans, programs, and projects. The regional and district offices are primarily responsible for implementation and direct technical support to local authorities. The Regional Offices also are the posting place for technical personnel to be deputed to the Town Development Committees. The number to be made available to each TDC has been determined in a July 1989 report issued by MHPP entitled *Classification of Urban Areas with Reference to Urban Development*. The report grouped TDCs in four categories based on population, commercial and industrial development, and availability of infrastructure. DHUD intends to assign technical staff to each of the categories according to its ranking. Group A and priority TDCs are to have eight people assigned, Group B four, and Group C two. This program has not yet been implemented. However, some of the existing technical staff that were assigned to TDCs from DHUD's predecessor agency will be posted to the regional directorates.

The District Offices of DHUD are presently combined with the District Offices of the Buildings Department. DHUD has established housing and urban development units in 14 District Offices so far.

DHUD is organized in a traditional hierarchical fashion similar to that of line agencies. This organizational arrangement places representatives of the Department at the regional and

local levels but retains most decision making authority at the central level. The fact that most programs of DHUD are centrally initiated reinforces this structure of operation.

DHUD Staffing

DHUD is still in the process of staffing itself, and many of its sanctioned positions have not been filled. Some positions are occupied by people on deputation from their assigned posts, and other jobs are being done by temporary employees, some of whom are expected to be confirmed as permanent staff later on. A summary of the present actual and sanctioned (permanent staff positions approved by the Ministry of Finance) technical staff follows:

	Actual	Sanctioned
DHUD Central Staff	42	77
Regional Directorates	93	256
District Offices	64	332
TDCs	80	95
Total	279	760

The Department is primarily staffed by people trained as civil engineers, architects and overseers. Of the current professional staff, only 14 have experience or degrees in urban planning, and there are almost no other trained planners in Nepal outside of the Department. DHUD's intention is to recruit people with degrees in engineering or architecture and turn them into planners through additional training and work experience.

The expansion of DHUD's technical staff has been planned with the idea of the Department as both a planning and an implementing agency. A large share of the sanctioned technical positions are lower-level implementation-oriented staff (overseers surveyors, draftsmen). At the moment, DHUD is directly implementing various land development and housing programs. In the medium to long term future, other specialized agencies may take over these programs. This means that DHUD's direct implementation functions may eventually be limited, and it may focus more on planning and coordination. This would have implications for its staffing pattern.

DHUD Training Needs

The basic and urgent need of DHUD is to provide technical training to its professional staff in up-to-date techniques of urban planning and housing programs. This need may be met in five ways:

- Sending staff abroad for long-term degree programs (one to two years). This approach is expensive and has a delayed payoff, but it is worth pursuing.

- Sending staff abroad for short non-degree programs (one to six months). Such training should stress skill-building and problem-solving, not general orientation.
- Conducting workshops and seminars conducted in Nepal, organized by HMG and in some cases supported by technical assistance projects.
- Provided structured on-the-job training.
- Offering courses on urban planning and housing at Tribhuvan University, with eventual establishment of an urban planning and management program.

Higher-level officials in the Department of Housing and Urban Development, as well as the Ministry of Housing and Physical Planning, also require training in current approaches to urban policy and programs. These needs may be met in several ways:

- international conferences
- international seminars, such as those run by the World Bank's Economic Development Institute
- seminars in Nepal on particular topics
- observation-type study tours

Training Institutions

The Pokhara Urban Development Training Center (PUDTC) is an existing facility which is oriented to providing training related to urban development. Although the center is now under the control of MPLD, its role could easily be expanded to meet the needs of MHPP. Discussions have been held between the Ministers of these two agencies to discuss this issue and an agreement in principle has been reached. Use of this facility by MHPP would preclude the necessity of developing a new institution and would allow more extensive and efficient use of an existing facility. The mission of this institute could also be expanded to provide high level seminars for senior planners and managers to build up their abilities in long term planning and policy making.

MPLD and MHPP should also consider working with the National Administrative Staff College (NASC) to develop short seminars on urban development for high-ranking HMG officials (e.g., Secretaries, Additional Secretaries, Director Generals, Zonal Commissioners), perhaps in conjunction with other NASC programs.

MPLD/UDD

The staff of the Urban Development Division of MPLD includes one Joint Secretary, who heads the Division, one Under Secretary, and several section officers. An assessment of the functions, powers, organization, and staffing of the Urban Development Division will be carried out in the first part of 1990. This study, which will be conducted with the support of MSUD, will review the present role of the UDD and its relationship to the other divisions of MPLD, other government agencies, and the Town Panchayats. Recommendations as to the staffing and training needs of MPLD/UDD will be available upon completion of this study in the spring of 1990.

5.3.5. Greater Use of Local Consultants

In addition to the training needs discussed above, consideration must also be given to other long term staffing issues, particularly that of filling professional positions outside of Kathmandu. The future staffing plan of DHUD requires a substantial number of people to be posted to the regional directorates. Experience has shown that it is extremely difficult to recruit professionals for permanent assignments outside of Kathmandu, and that therefore it will be difficult to hire sufficient full time staff for the regional directorates other than the Central. Additionally, some of the work of the regional directorates will be of a one-time nature which will not require the continuing services of full-time staff.

The combined problem of recruiting staff for positions in the field and of temporarily staffing some positions could be mitigated by the more extensive use of consultants, which would allow for professional assistance to be made available on a short-term basis. The objections which have been raised against this approach are:

- the substitution of private policy for public policy;
- the difficulty of locating competent consultants outside of Kathmandu;
- the high costs of consulting services; and
- the loss of employment opportunities within HMG.

Although each of these points has some merit, in considering whether or not to recommend the more extensive use of consultants the following points should be borne in mind:

- The overall policy framework and direction of urban development should always be established by HMG agencies. However, the specific technical work necessary to perform the planning and development tasks could be carried out in an expeditious manner by the use of consultants acting under the guidance of HMG officers.

- The availability of consultants outside Kathmandu is being alleviated as new consulting firms are established throughout the country. However, even if this trend did not exist, it would still be possible to recruit the required technical help from Kathmandu provided that the time periods of service were fixed and short.

- Although the daily costs of consultants is substantially higher than that of permanent HMG employees, the overall project costs may often be lower because the temporary nature of the tasks does not justify the hiring of full-time permanent staff. Private consultants can often provide more facilities and equipment to their employees which can reduce costs by increasing efficiency.

- The conditions of government service which discourage efficiency and a high level of performance are widely acknowledged. They are a constraint to the useful expansion of government agencies. The limits to growth of the size and responsibilities of government agencies and the complementary role of the private sector deserves further discussion.

The Nepal Engineers Association has formed a Task Force on promotion of private consultancy, especially in architecture and engineering. It is preparing to submit to HMG a report giving recommendations on increasing the use of local consultants to support government activities.

5.4. Issues in Urban Service Provision

The issues and problems associated with urban service provision are overshadowed by one inescapable fact: that the rapid population growth in cities of Nepal, combined with a serious deficit in existing services, makes meeting present and future demand an extremely difficult task. This current situation has been described in Section 5.3 above. The investment and financing implications are explored here, along with certain associated issues which must be addressed in order to meet the challenge.

5.4.1. Investment Requirements and Available Resources

Infrastructure assessments of 32 Town Panchayats made in 1987/88 as part of the MSTP Project allow estimates to be made of public investment needs in the urban sector through the year 2002. These investment requirements are presented in Table 5.1 for the primary urban service sectors. In addition, total investments for different town groupings are shown in Table 5.2, expressed on a per capita basis. The major infrastructure sectors of roads, water supply, sanitation, stormwater drainage, and solid waste are covered. School construction is also included, but the centralized services of electricity, health and police are not; also excluded are smaller municipal services such as fire brigade, markets, public transport, and bus/truck parks. (The assumptions and standards used in calculating the investment requirements are described in Section 5.4.8 below.)

As can be seen, urban service investment requirements are enormous, totaling NRs. 14,172 million at 1987 prices (excluding electricity) and representing an annual average expenditure of NRs. 945 million. The largest requirement overall is in the water supply sector, followed by stormwater drainage, roads, education, sanitation, and solid waste. The two sectors of water supply and drainage represent, together, 73 percent of total investment requirements over the fifteen year period (excluding electricity).

These investment amounts would seriously strain HMG's available resources. As shown in Table 5.3, annual urban service investment requirements would represent 19.6 percent of HMG's average 1985-1988 total development expenditures. Given the very intense demand on HMG's development budget coming from the various national development sectors (such as agriculture, industry, and transport) and from ambitious social development programs, it is difficult to see how a high proportion can be devoted to basic urban services.

In certain sectors of the national development budget, projected urban investment requirements overwhelm current expenditure levels. This is particularly true of the water sector, where current drinking water expenditures (which includes all national drinking water programs, both urban and rural) are only three fourths of what is required for urban water alone.

TABLE 5.1

ESTIMATES OF TOTAL PUBLIC INVESTMENTS REQUIRED FOR URBAN SERVICES IN TOWN PANCHAYATS 1987-2002 (in millions of 1987 Rupees)

Sectors	1987-1992	1992-1997	1997-2002	Total	Annual Average 1987-2002
Urban Roads	1,149	435	782	2,366	158
Water Supply	2,312	1,298	1,817	5,427	362
Drainage	1,592	1,924	1,379	4,896	326
Sanitation	114	108	102	326	22
Solid Waste	26	26	54	106	7
Education	226	312	513	1,051	70
Total	5,419	4,103	4,627	14,172	945

Note: Figures for the electricity sector are not available.

Source: MSTP Project

TABLE 5.2

VARIATIONS IN PER CAPITA INVESTMENT REQUIREMENTS FOR URBAN SERVICES IN TOWN PANCHAYATS 1987-2002 (in Rupees per capita of 1994 population estimates)

Town Groups	Urban Roads	Water	Drainage	Sanitation	Solid Waste	Education	All Sector Total
Terai Towns	2,084	3,997	4,278	244	74	1,046	11,723
Inner Terai	1,129	3,679	2,529	222	66	680	8,305
Hill Towns	2,634	2,548	4,889	156	70	1,001	11,298
Kath. Valley Towns	510	2,733	1,185	159	53	--	4,640
Large Towns	701	3,456	1,619	203	65	569	6,613
Medium-Sized Towns	997	2,861	2,056	176	57	746	6,893
Small Towns	4,608	2,407	8,932	149	58	1,569	17,723
All Towns Average	1,309	3,002	2,708	180	59	581	7,839

Source: MSTP Project

TABLE 5.3

COMPARISON OF NATIONAL BUDGET EXPENDITURES WITH URBAN INVESTMENT REQUIREMENTS (In millions of 1987 Rupees)

National Budget Item	Average Annual Expenditures 1985/6 - 1987/8	Annual Urban Investment Requirement	Urban Requirement as % of Total Devp. Expenditure
Total Development Expenditures	4826.5	945.0	19.6
Drinking Water	274.7	362.0	7.5
Electrification & Networks	280.0 *	--	--

* Assumed to be 22 percent of Total Electricity Budget Item

Source: MSTP Project

A more realistic way to compare urban service investment requirements with available resources may be to look at the activities of the Town Panchayats themselves. Their responsibilities for urban service provision are wide and growing (see Section 3.4 and Section 5.4.4 below). If one compares the aggregate annual revenues, recurrent expenditures, and potential capital investment resources of 29 Town Panchayats against future urban service investment requirements, the deficit is enormous (Figure 5.1). Unfortunately, much of the surplus is already committed to capital expenditures with would consume much of the potential surplus.

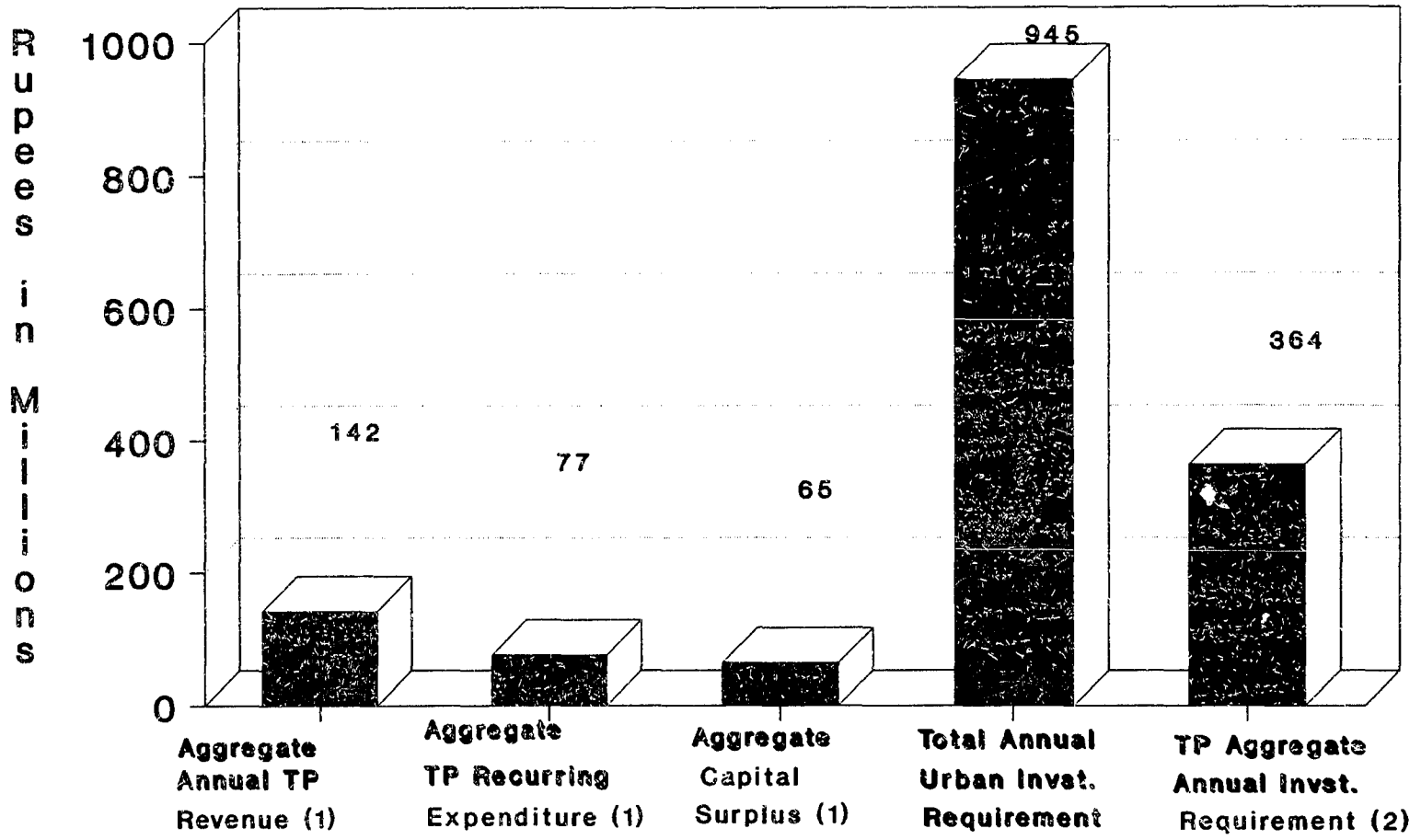
If only those investment requirements which are strictly Town Panchayat responsibilities are considered (assuming Town Panchayat contributions are 10 percent for roads, 10 percent of water, 0 percent of electricity, 90 percent of drainage, 50 percent of sanitation, and 100 percent of solid waste), the gap remains considerable: annual urban investment requirements represent 4.5 times the 1987/88 capital surplus for all Towns. And this gap is understated, since other Town Panchayat investment responsibilities--such as schools, fire departments, and markets--are not included. Of course, the figures on aggregate Town Panchayat financing capabilities mask wide variations in individual Town performances. Nevertheless, the Town Panchayats as a whole would have to increase their capital surpluses by over 10 percent per year between 1987 and 2002 to meet the estimated annual investment immediately needed to cover their share of capital investment in urban services.

5.4.2. Financing and Cost Recovery: The Tariff Sector

The urban infrastructure services of water supply, sanitation, electricity, and telecommunications are the responsibility of national level agencies which have the mandate

COMPARISON OF TP INVESTMENT POTENTIAL WITH URBAN INVESTMENT REQUIREMENTS

(in Millions of 1987 Rupees)



(1) Based on 1987/88 data (2) Only investments that are TP responsibilities.

Source: Management Support for Urban Development Project.

Figure 5.1

to recover costs through connection charges and consumption tariffs. These line agencies are financially autonomous, and generally serve the nation. Thus the issue of financing and cost recovery in urban areas can only be addressed by looking at the overall national performance of these agencies:

The Nepal Telecommunications Corporation (NTC)

NTC is responsible for providing telephones as well as other telecommunication services. It has shown an ability to expand its services (particularly new telephone connections in cities) rapidly over the last two decades and to recover costs. NTC is financially healthy, recording consistent profits (the profit margin on net revenue was 35.1 percent in 1977/78, 14.7 percent in 1986/87, and 9.1 percent in 1987/88). Profit margins have been maintained by a series of tariff increases and by expanding the more profitable international services. The financing of new projects has been partially from operating surpluses and partially through concessionary financing from external support organizations.

Because NTC has shown healthy self-financed growth, its ability to provide future urban services without financial constraints is relatively assured, thus the telecommunications sector receives little attention here.

The Nepal Electricity Authority (NEA)

NEA is responsible for electric power operations nationwide, including generation, transmission, distribution, management, operation and maintenance. It has expanded services rapidly over the last decade to meet an increasing demand for power, with at least a "break even" financial performance. The Rate of Return (ROR) on net fixed assets ranged from -0.6 percent to +2.5 percent over the period 1981/82 to 1985/86, largely due to a series of tariff rate increases. A future ROR target of 6 percent has been agreed with the IDA; however, even at this level of performance it will be difficult for NEA to self-finance its investment program. Its past reliance on concessional foreign aid to finance investments will probably continue, although NEA's level of debt servicing is expected to improve.

NEA has experienced consistent difficulties in cost recovery. Unbillable system losses have averaged 30 percent of power production over the last decade. Billing and collection efforts, particularly in the public sector, need improvement; for example, government establishments have consistently failed to pay their bills. Government arrears in 1985/86 reached NRs. 38 million, representing one full year of all government billings.

Investments in urban distribution systems only represent a small part of NEA's investment program. For example, of the Seventh Plan power sector's budget of NRs. 4,757 million, 22 percent was to be devoted to electrification, system improvement, and district level projects. Since these investment items are national, only a portion can be assumed to go directly to urban areas. NEA's struggle to finance its major items--generation and transmission--mean that urban area investments for distribution system improvements (needed in several urban areas) have not received priority.

A rural electrification program is gaining momentum, in spite of the fact that it is not being subsidized from the center by HMG. In addition to its financial objective, NEA has been saddled with the largely social objective of improving service to rural areas (in spite of limited economic returns in the short run). Since NEA's tariff rates and connection charges are set nationwide without area-specific cost recovery, improvements in many smaller towns cannot show full cost recovery without recourse to distributive financing from the center.

The Nepal Water Supply Corporation (NWSC)

NWSC is responsible nationwide for drinking water and sewerage provision in Town Panchayats. In spite of this sector's importance and considerable capital and technical assistance from external support organizations, financial performance of the NWSC (and its predecessor agencies) can be termed poor (HMG's WSSC Study Committee Notes, 1987). Annual deficits of 100 percent of gross revenues have been recorded. Actual collections amount to about 92 percent of current billings; however, NWSC suffers from internal weaknesses which have lead as a result to poor revenue collection, inadequate metering of consumers, delayed billing, and poor collection practices. In addition, NWSC has tended toward indiscriminate hiring of temporary personnel. System operations have been inefficient as the result of system losses which range as high as 50-70 percent in some towns.

Tariff increases have been delayed because of political resistance. NWSC has obtained recent Cabinet approval of its December 1988 proposal for a 108 percent tariff increase, to be effective from October 16, 1989. Tariff increases alone, without increases in operational efficiency, cannot be expected to bring about permanent fiscal solvency.

The financial deficiencies of NWSC present a serious problem for towns, as normal budgetary allocations for urban water system improvements are grossly deficient. As with electricity, water tariffs and connection charges are uniform nationwide, thus tariffs are not set locally with respect to actual production costs. Any new water projects for towns must currently rely on financing from either HMG budget allocations or external assistance.

NWSC is also responsible for sewerage systems. Only three towns (Kathmandu, Lalitpur, and Bhaktapur) currently have sewerage systems in portions of their urbanized area. NWSC recovers a portion of these costs through a surcharge of 25 percent on water tariffs applied to those within the service area, although this has not been rigidly enforced. NWSC's inability to recover the costs of sewerage investments, combined with the low capacity of many urban families to pay the connection and user charges, has meant that there is little interest from funding sources to replicate fully reticulated sewerage systems in other Nepalese towns.

5.4.3. Financing and Cost Recovery: Other Line Agencies

The financing of the non-tariff line agencies which provide urban services (roads, health, education, and security) depends directly on HMG allocations from its general budget. Potentially, roads could be fully funded through the fuel tax, yet revenue from this tax goes to the Ministry of Finance and only about 10 percent is returned to the Roads Department for maintenance (and none to the Town Panchayats).

The issue of cost recovery for services is inseparable from the issue of the government's ability to mobilize savings, widen its revenue base, and improve revenue collections. A full discussion of this issue is beyond the scope of this report. However, it should be noted that central government budgetary performance is weak. Overall annual deficits over the period 1981/82 to 1987/88 were consistently as high as or higher than total annual revenues, and two thirds of deficits were financed by foreign grants and foreign borrowing. Government revenues remained over this period at between eight and nine percent of GDP, which in turn averaged growth rates of only three percent. The implication for urban services provided by non-tariff line agencies is clear: in the absence of improved budgetary performance, funding will be increasingly constrained, and there will be continual competition for scarce funds at the central level from other sectors, including rural development requirements.

It should be pointed out that the financing of school construction has become the responsibility of local government. While MOEC continues to finance school operations, urban school construction has become an additional financial burden on Town Panchayats (see next section).

5.4.4. Financing and Cost Recovery: Town Panchayats

Town Panchayats (TPs) have been legislated wide responsibilities for urban service provision. To finance these services they are permitted to raise their own revenues from a variety of sources. Having budgetary independence and separate accountability, Town Panchayats are thus important agents in urban service delivery and cost recovery.

Town Panchayat Responsibilities

Town Panchayats have traditionally financed such infrastructure and service items as bus and truck parks, fire services, markets, and public water fountains. In the last decade TPs have been given wider responsibilities, although generally without a concomitant increase in powers to carry them out. The additional services that have become part of their portfolios, either explicitly or by default, include urban roads (both construction and maintenance) stormwater drainage, and school construction.

The trend of increasing TP responsibility continues, evidenced by the TPs being asked in many cases to contribute to the financing of line agency services like water and electricity through cost sharing arrangements.

TP Potential for Financing Urban Services

In recent years TPs have considerably improved collection of their own source revenues (see Section 5.5). Even with improved revenues, the amounts available to finance capital projects are still far from sufficient to meet future investment needs for infrastructure services. Some Towns have enough surpluses to begin borrowing for specific projects under the newly established Town Development Fund Board (TDFB). Yet the size of loans that TP's can support through debt servicing is, in many cases, small compared to total need. This is illustrated in Table 5.4, which shows the TDF loan amounts that could be supported for particular projects in ten Towns, set against the total 1987-2002 investment requirements.

TABLE 5.4

POTENTIAL TDFB LOAN AND INVESTMENT REQUIREMENTS FOR TEN TOWN PANCHAYATS (In millions of 1987 Rupees)

	Proposed Affordable TDFB Loans	15-Year Investment Requirement	Requirement/Loan Ratio
Roads	5.7	704.3	124.0
Water	4.3	2,571.3	598.0
Drainage	105.1	1,662.8	16.0
Sanitation (Septic/Latrines)	2.4	162.6	68.0
Solid Waste	5.1	55.1	11.0
TOTAL	122.6	5,156.1	42.0

Source: MSTP Project, April 1988.

5.4.5. Financing and Cost Recovery: Conclusions

From the above discussion it is clear that if Nepal is to meet the challenge of urban growth, it must mobilize new resources to pay for needed services, both those provided by line agencies and those which are Town Panchayat responsibilities. Under existing financing and cost recovery mechanisms, deficits in urban services are expected to increase rapidly, even assuming improvements in tax collection and revenue generation. There are, however, untapped revenue sources with potential for development (i.e., cost sharing arrangements, private sector capital, improvements in direct taxation, etc.). The fulfillment of much of this potential will require the direct involvement of the Town Panchayats in order to mobilize the necessary capital. The achievement of this potential through pertinent strategies is discussed in Sections 6.5 and 6.11.

5.4.6. Efficiency in Service Delivery

The substantial size of future investment requirements in urban infrastructure (see above) could be reduced significantly if it were possible to rectify two fundamental problems with urban service delivery: (1) the inefficient physical expansion of towns due to urban sprawl and (2) the lack of coordination in infrastructure works.

The physical expansion of Nepalese towns in the last two decades has followed an unplanned, sprawling pattern in which the population densities of new areas are low and remain low for years. Serving such development is expensive. Water supply, electric power, telephone and sanitary facilities must serve spatially large areas. Additional kilometers of roads and drains need to be built to serve this low density development. In this case, either networks

can be designed to serve the future population of new areas (with the resulting under-utilized capacity and maintenance problems) or networks are laid with low capacities (resulting in costly upgrading and rehabilitation as population increases). Either way, the total investment required is much higher than would be necessary if a more rational, orderly spatial development of towns were the norm.

In costing future infrastructure investment requirements (Section 5.4.1 above), it has been assumed that average residential densities of new urban areas will not exceed 100 to 150 inhabitants per hectare over the next 15 years. This accurately reflects the current low intensity of new urban settlement. Were it possible to encourage more efficient development, with average residential densities of 200 to 250 inhabitants per hectare, savings in certain infrastructure costs could be substantial. Should present urban expansion patterns continue, however, the large estimates of required investment in urban infrastructure cannot be significantly reduced. In fact, they could very well be greater. The crucial issue of urban land development is discussed in depth in Section 5.6.

In the installation of new water, power, telephone or drainage lines there is an almost complete absence of local coordination, especially with road works. The result is that costs of service provision rise: pavements are torn up and must be repaved, trenching efforts are often duplicated, and damage to existing lines is common (not to mention the social and economic costs of disruption of services and movement). The result is higher investment and maintenance costs for the network components of infrastructure services. The issue of coordination of the different infrastructure agencies is, from the institutional point of view, also discussed in Section 5.4.9 below.

5.4.7. Public Attitudes Towards Paying for Services

Nepal has a long urban history, which includes the traditional ruler's role to provide essential urban services to his people. Water supply in particular was made freely available through public fountains and ponds. Also, streets were paved with stones and public spaces created without any charges. The services were free for all.

It is important to realize that this traditional urban arrangement has continued in Nepal until very recently (and is still a significant factor in the life of Kathmandu). The provision of modern urban services (piped water, electricity, roads for vehicular traffic, etc.) began only two or three decades ago. The current beneficiaries of these services include many, perhaps the majority, who are of rural origin. Seen in this context, it is understandable that one recurring problem with cost recovery for urban services is a belief that consumers need not pay (or pay only nominally) for such services. Collection by line agencies of user charges has been problematic, while attempts to raise tariffs are met by political resistance.

In most past attempts at increasing revenues, the new tax or higher tariff rate was implemented only after an improvement in service could be demonstrated. In the current environment of externally financed projects, however, it is not generally possible to improve service without first increasing tariffs.

5.4.8. Norms and Standards

In any discussion of norms and standards for urban services, it is useful first to set what might be considered a reasonable upper limit. Such a standard of provision has been used in the calculations of deficits and required investments presented above in Sections 3.4 and 5.4.1. The standards used for roads, stormwater drainage, sanitation (including sewerage), and solid waste collection and disposal can be described as "adequate but modest". Standards used for each subsector can be briefly summarized:

Water: Private connections to all urban households from a reticulated municipal system which is pressurized on a 24-hour basis. Water is fully treated at source and adequate storage is provided to cover peak demand and to maintain adequate pressures.

Electricity: Private connections to all urban households from a power distribution system connected to the national grid. The power supply should be subject to a minimum of interruption, with the system providing stable voltage, free of spikes and surges, and within normal tolerances.

Stormwater drainage: Drainage works to alleviate flooding for rainfall rates less than the one in two year maximum hourly rainfall. Stormwater drains are not designed to handle domestic wastes or river over-flooding; only local catchment areas are considered. Covered masonry channels for urban roads and open lined and unlined drains for semi-urban areas are considered for cost calculations.

Sanitation: In all cases sanitation is based on the provision of individual household septic tanks or pit/privy latrines. This "alternative" sanitation was adopted rather than the much more expensive reticulated sewerage solution.

Roads: All roads are assumed to have a maximum of two lanes, and all except minor residential roads (class A, B, or C) are to have asphalt sealed pavements. Investment calculations include significant betterment costs (ranging from 66 percent of construction costs for unpaved residential roads to 30 percent for paved residential roads), applied over the design life of the road.

Although the above standards were used for cost estimation purposes in MSTP infrastructure assessment reports for 32 Town Panchayats, there is an almost total absence of the use of agreed standards and technical specifications within individual Towns at present. This is an area being addressed by the MSUD project as part of its current activities.

5.4.9. Linkages between Line Agencies and the Town Panchayats

Under the current administrative structure, there is a need for the line agencies of HMG to communicate more effectively among themselves and with the Town Panchayats in order to coordinate their activities and to plan together for future development and growth. In the face of increased urbanization, HMG line agencies in infrastructure sectors have been hard-pressed both to provide services when requested and to plan for the future. Individual line agencies have been separately responsible for urban services in their sectors,

even though they carry out their activities in the absence of specific urban development policies, and often without involving the Town Panchayats in their planning. In urban areas, there are two components of the problem: (1) service to existing urban core areas, and (2) service to new residential developments outside of the existing core.

With regard to infrastructure service to core areas, there is an existing backlog of needed facilities in almost all sectors resulting from years of under-funding of infrastructure projects and insufficient maintenance for those that were constructed. Outside of core areas, informal land development is proceeding in an uncontrolled manner in the absence of effective planning and regulation. Individual land owners continue to build houses in areas without services in the expectation that the government will eventually provide them.

In new land developments, access roads have inadequate widths and alignments, drainage provisions are nonexistent, and land is not set aside for community facilities. Under this system, infrastructure costs are unnecessarily high not only because of the lack of attention to basic land development principles, but also because there is no established procedure for developers of urban land to bear some of the costs of proper planning and infrastructure development.

In Kathmandu, the line agencies have begun meeting weekly under the chairmanship of MHPP in order to improve cooperation among agencies within the Kathmandu Valley.

In order to narrow the gap between Town Panchayats and the line agencies, HMG may consider the phase-wise transfer of some responsibilities for infrastructure service delivery (particularly operation and maintenance) from the line agencies to the Town Panchayats, with the speed of the transfer based upon the individual economic strength and administrative capabilities of each Town Panchayat. As part of this process, line agencies need to be restructured from their current role as solely implementing agencies to a role in which they also function as supporting institutions. Town Panchayats would thus take the lead for some aspects of infrastructure service delivery with respect to their own urban areas (particularly operation and maintenance).

5.4.10. Donor Initiated/Supported Infrastructure Projects

There is a considerable donor presence in most urban service sectors. Because of the number of projects involved, there is a need for MHPP to effectively coordinate line agency activities which have impact on urban development in order to insure communication at all levels.

Two key problems relating to the nature of external support in Nepal arise due to the lack of a strong public expenditure planning system. First, the current system allows external support agencies to develop separate project administrations for implementation of projects, including systems (and pay scales) which may be incompatible with replication of results under ongoing HMG procedures. Consequently, potential benefits resulting from project activities may not utilized following project completion. Secondly, externally funded projects are often not properly integrated with HMG's budgeting system. This may result in operating

budgets not being allocated in a timely manner following project completion. Thus, to fulfill the objectives of external assistance it is important to develop strong policy guidance within government (preferably through a jointly agreed-upon strategy).

5.4.11. The Parent-Less Sector of Stormwater Drainage

In the past there has been no HMG line agency with clear responsibility for stormwater drainage in Nepal, nor has any agency claimed it forcefully as its own. By default, the responsibility has fallen to the Town Panchayats to press for action in the area of stormwater drainage. Clearly, Terai towns feel the greatest need, because of their flat terrain and low slopes within natural drainage ways. Many Terai towns are also located within the flood plain of a nearby river. Hill towns, while equally lacking in drainage facilities, are less susceptible to drainage problems because of the high natural slopes of their terrain.

5.4.12. Urban Service Provision and Urban Economic Development Potential

Urban services are generally seen as needed for both social and economic reasons. Yet measurements of need are, by default, usually in terms of physical and population-serving deficits. The approach in this report is no exception. This raises an important issue: assuming a strategy for urban development identifies certain towns as growth centers, how can urban service delivery mechanisms be sensitive to the implied economic needs? It would seem logical that if a town is identified as having a great benefit/cost potential in terms of industry or commerce, that it be provided with a higher standard of urban roads, power, and telecommunications and perhaps other urban services so that its potential can be realized, or at least so that urban service deficits do not impede economic growth. The question of how this might be achieved given the existing environment of financing and cost recovery deserves attention. It may be time, in fact, for HMG to reassess its current policies in light of its limited ability to affect urban growth processes, with the objective of formulating a new strategy for allocating HMG grants and available financing that would have significant economic impact within the limited resources available.

5.5. Municipal Management and Finance

5.5.1. Municipal Management

Responsibilities of Town Panchayats

The ability of the Town Panchayats to assume the urban management obligations assigned to them under the Decentralization Act and the Town Panchayat Act is limited by the organizational problems and staffing deficiencies of the towns. Additionally, even though the towns are the institutions that are supposed to construct and maintain local services such as urban roads, water supply and sanitation, most of these municipal services are provided by sectoral agencies of the central government or by public corporations.

The recently enacted Town Development Act (1988) and the Town Panchayat Act Amendment (1987) assign responsibility for physical planning to both the Town Development Committees and Town Panchayats respectively. As a result of this overlap and of the perceived shortcomings of the Town Panchayats, their role in urban management is being superseded

by sectoral agencies of the central government, which has limited their influence over the development of their towns. In order to take over their rightful responsibilities, the Towns must identify and correct their deficiencies.

The Panchayat system was introduced in Nepal in 1960 to establish local government at three levels: the district, town, and village. The Town Panchayats were created by the Town Panchayat Act of 1962, which allows an area with a population greater than 9,000 to be designated as an official urban jurisdiction. Although the rules have changed somewhat since that time, the basic regulations remain similar, and today there are 33 Town Panchayats. Depending on their size, they are divided into between 9 and 33 wards, with each ward electing four members and a chairman. A mayor (Pradhan Pancha) and vice mayor (Upa Pradhan Pancha) are also elected at the same time. Elected officials serve for five years. The ward chairmen, mayor and vice mayor together constitute the Town Panchayat, which acts as an executive body, while the Town Assembly, which acts as a legislative organization, is composed of all the members of the Town Panchayat plus the ward members. Administrative responsibility is under the control of an executive officer (Pradhan Adhikrit) who is an appointed civil servant of the central government (MPLD).

The Town Panchayat Act assigned 54 functions to the Towns which were later expanded to 118 by the Decentralization Rules of 1984. These responsibilities were classified into 11 categories: (1) education and cultural development, (2) health and population, (3) agriculture, irrigation, and land reform, (4) construction and transport, (5) drinking water and electricity, (6) forest, soil conservation and environment, (7) industry, commerce and tourism, (8) fuel arrangement, (9) social welfare, (10) Panchayat affairs and (11) administrative and miscellaneous. In spite of their being assigned a broad range of responsibilities, there is a widespread recognition that the Towns have not been able to perform more than a few of their fundamental functions without the assistance or approval of central government officials and agencies.

To effectively carry out their responsibilities the Town Panchayats must improve their capabilities in the following areas:

- employment of qualified technical staff
- establishment of a clear and rational organizational structure
- definition of functional responsibilities of other government agencies in relation to the Towns
- mobilization of financial resources proportional to their responsibilities

The ability of the Towns to mobilize and manage adequate financial resources is discussed in the municipal finance section of this chapter. The remainder of this section briefly reviews the other conditions in the Towns and how they might be improved.

Improvements in Staffing

The Town Panchayats can only carry out their urban management and service delivery responsibilities successfully if they have a sufficient number of adequately trained technical

staff available to them. Nepal as a whole has a limited number of trained and experienced technicians and managers. In 1987, out of a total of 2,776 Town Panchayat employees, there were only 105 technical staff. Of these, only seven were engineers; 38 were overseers, and 60 were skilled and semi-skilled workers such as electricians, plumbers, etc. There are no urban planners employed by any Town Panchayats (MSTP, 1989). Most professionals and technicians are based in Kathmandu, and they are often reluctant to take employment outside of the capital. Additionally, the conditions of Town Panchayat service are usually not attractive enough in terms of salary, working conditions, equipment, fringe benefits, and promotion or transfer possibilities to attract qualified persons to relocate. As a result the Towns have not been able to hire the technically trained staff that would allow them to carry out their assigned missions. Although the Towns have a great deal of theoretical power over local affairs, they have not had the ability to exercise those powers. Consequently, other governmental agencies (mainly central) have filled the void.

Several measures are possible to overcome or mitigate these problems. The first approach is the training of existing technical manpower in the towns in specific skills. This would allow for the job enhancement of existing employees and could also be accomplished more quickly than other longer term approaches. A structure for training now exists through various organizations such as the Pokhara Urban Development Training Center. Both the MSUD and UDLE projects have been providing training for Town Panchayat officials and staff. A second approach to the problem of obtaining qualified staff is the improvement of conditions of Town service itself to make it more attractive. Improvements could be achieved both by upgrading the conditions of Town employment and by the establishment of a professional service organization for Town employees.

Improving the conditions of town service would require spending more for additional salaries, improved working conditions and equipment. This would require the reallocation of financial resources, but the implementation of other management improvements suggested in this section should result in overall savings that could be used for this purpose. In particular, salaries and fringe benefits should be made comparable to those of service in HMG so as to make Town service competitive and professionally desirable.

The Towns, which independently hire and promote their own staffs, are highly patronage oriented. Employees desiring professional advancement must attempt to obtain a promotion in their present Town through their political connections or move to a new job in a different Town, because the present system has no provision for a uniform promotion policy or inter-Town transfers. This issue can only be addressed by the creation of a professional service that would offer employees promotion and transfer opportunities, as well as improved working conditions such as uniform and comprehensive fringe benefits similar to those of the national government. The establishment of such a program would make town service more attractive to technically skilled individuals and aid in their recruitment.

There are two approaches to this problem. The first is the establishment of a town service within the central government, and the second is a "town civil service". The creation of a branch of service within the existing HMG employment structure is attractive in terms of

there being an existing organizational framework within which to place the new service with no need to create a new bureaucratic structure. This approach, however, would further remove control of local affairs from the Town Panchayats and concentrate power at the central level in contravention of the decentralization policy. Establishment of a Town civil service as an independent entity, although removing some control from individual Town Panchayats, would, if properly administered, allow for the creation of an independent professional service that would make Town employment more attractive and allow the Towns to compete more effectively for trained technical personnel. The problem of attracting greater numbers of technically qualified people to Town service requires further study and discussion, but ultimately it can only be resolved by both expanding the total pool of trained people and at the same time making town service more attractive.

More Rational Organization

Organizations require a clear and rational structure to function effectively. The organizational structures of the Town Panchayats need considerable upgrading. Recently the UDLE Project, on behalf of MPLD, has been conducting a series of assessments of the organizational problems of Town Panchayats entitled "An Analysis of Organizational Structure, Manpower Distribution and Job Description". Many of the Towns that have been studied were found to have organizations that were not matched to their current responsibilities and which did not allocate their resources effectively. Among the problems identified were unnecessary sections, illogical grouping of functions, quantitative overstaffing and qualitative understaffing, and inter-sectional coordination problems. This investigation also revealed that adequate job descriptions have not been prepared and adopted, which has created confusion in job assignments and performance as well as functional duplication, both of which have prevented the development by the Town employees of an attitude of responsibility towards job performance. A consultant working in conjunction with UDLE has been reviewing and meeting with the Town Panchayats to develop revised organization charts which, if implemented, would allow the Towns to allocate their resources in a more efficient and responsive manner. In its study of the Butwal Town Panchayat, for example, the UDLE study team found that the existing organization had a number of weaknesses:

- It emphasizes the administrative wing at the expense of the elected officials and statutory committees.
- No subsections have been created and the relationship between sections is not indicated.
- Irrelevant sections headed by low level employees have been created.
- Sections have been vaguely and inappropriately named.
- A section to deal with litigation and disputes is missing.

In order to correct these deficiencies, the study recommended the adoption of an organizational structure that reduced the number of sections from the existing 11 to 5 with appropriate sub-sections being added. The existing and proposed organization structures are shown in Figures 5.2 and 5.3.

FIGURE 5.2

BUTWAL TOWN PANCHAYAT
EXISTING ORGANIZATION AND MANPOWER DISTRIBUTION
(1989)

Administration Section		Account Section		Birendra Park	
Nayab Subba	1	Accountant	1	Gardener	2
Kharidar	2	Sub-Accountant	1	Sipahi	1
Typist Kharidar	1	Mukhiya	1		
Driver	1	Sipahi	1		
Mukhiya	1				
Bahidar	2				
Sipahi	16				
Store Section		**Tax Section**		**Guest House**	
Kharidar	1	Nayab Subba	1	Bahidar	1
Sipahi	2	Mukhiya	1	Sipahi	2
		Havaldar Mukhiya	1		
		Sipahi	4		
Electricity Section		**Land Management Section**		**Health Section**	
Mistri (Electrician Mukhiya)	1	Kharidar	2	Sanitation Inspector (Nayab Subba)	1
Linesman (Bahidar)	6	Mukhiya	1	Driver (Kharidar)	1
Sipahi	3	Havaldar	1	Mukhiya	1
		Sipahi	4	Havaldar (Mukhiya)	1
				Plumber (Mukhiya)	1
				Asst. Plumber (Bahidar)	5
				Jamdar (Bahidar)	2
				Sipahi	10
				Sweepers	55
Fire Brigade Section		**Construction and Planning Section**			
Fire Brigade In-Charge (Nayab Subba)	1	Asst. Engineer	1		
Driver	2	Kharidar	1		
Havaldar	1	Sipahi	1		
Fireman	9				

Source: UDLE

FIGURE 5.3

BUTWAL TOWN PANCHAYAT PROPOSED ORGANIZATION

Sections	Sub-Sections
1. Planning and Technical Section	1. Planning Sub-Section 2. Implementation Sub-Section 3. House Construction Approval and Supervision Sub-Section 4. Statistics and Review Sub-Section
2. Revenue and Financial Administration Section	1. Revenue Sub-Section 2. Financial Administration Sub-Section 3. Audit Sub-Section 4. Procurement Sub-Section
3. Social Welfare Section	1. Civic Amenities and Sanitation Sub-Section 2. Fire Brigade Sub-Section
4. Legal and Litigation Section	
5. General and Internal Administration Section	1. Personnel Administration Sub-Section 2. Internal Administration Sub-Section

Source: UDLE

Responsibilities of Towns and HMG Agencies

As previously discussed in this section and also in Section 5.7 (Urban Planning Systems), there are many areas where the responsibilities for urban planning and service delivery are simultaneously assigned to several branches of government. The recent legislative revisions relating to the Town Panchayats and the Town Development Committees have not clarified the responsibilities and methods of operation of the various institutions involved in urban development and service delivery. There are two major areas which if corrected could lead to a clarification of this situation: (1) rearrangement of agency responsibilities and (2) revision of rules and regulations. Although the Towns do not have the ability to act unilaterally, nonetheless as discussed below they do have a role in the clarification of responsibilities.

There is now a vast difference between the 118 mandatory functions assigned to the Towns by the Decentralization Act and their ability to carry them out. As a result only a small percentage are actually performed. The present situation is one in which a few core functions are implemented by the Town Panchayats while the majority are carried out either in conjunction with sectoral agencies of HMG or by HMG agencies exclusively. A recent study by UDLE (LCRC and GTZ/UDLE, *Town Panchayat-Sectoral Agency Relations ... in the Context of HMG's Decentralization Policy*, March 1989, Draft) has recommended as a first step that a "memorandum of understanding" be prepared between the Town Panchayats and the various sectoral agencies specifying the areas and degree of involvement of the agencies, eventual contributions of the Town Panchayats and the forms of communication. These memorandums could lead to a second step which would be the taking over of more responsibilities by the Town Panchayats. Both the MHPP for urban water supply and the Ministry of Works and Transport for urban roads have developed proposals which move in this direction. The UDLE study further suggested that a strategy for the transfer of responsibilities on a phased basis to the Towns should be prepared based on a classification of the strengths of individual Town Panchayats. To accomplish this, the Towns must be prepared by an increase in their managerial and administrative capacities, and by the provision of adequate personnel and financial resources. Simultaneously the sectoral agencies must be restructured from implementing to supporting and supervising institutions.

5.5.2. Municipal Finance

5.5.2.1. Background

In 1985, GTZ sponsored a study (LCRC, *Town Panchayat Finances in Nepal*), which provided the first documentation of municipal finances in Nepal. In the same year, HMG, together with the UNDP and World Bank, launched the first phase of the Management Support for Town Panchayats Project to test an approach for providing technical assistance and training to the towns in financial management and resource mobilization.
Since then, a number of initiatives have been taken:

- The MSTP Project was expanded and implemented to cover all 33 towns. The project included major efforts to strengthen the towns' financial capacities, including revenue generation, budgeting, and financial controls. Technical assistance in these areas is continuing under the MSUD project.

- MPLD set up its Urban Development Division in 1986 to supervise and strengthen Town Panchayat finances and administration.

- With the support of MSTP/MSUD, a municipal finance data base has been established. This covers all Town Panchayat expenditures and revenues, and it is updated every six months, allowing accurate monitoring of local financial performance.

- HMG enacted an Amendment to the Town Panchayat Act in 1987 which, among other things, gives the towns significantly more taxing and revenue-raising authority. Rules and Regulations for the Amendment were issued in 1988.

- HMG established the Town Development Fund Board in 1989 as an autonomous entity to provide loans and grants to the Town Panchayats. The towns have never before had access to long-term credit. The loan program of the TDFB is expected to start in early 1990 with initial capitalization from the World Bank.

As shown in Figure 5.4, the towns have increased their aggregate "own source revenues" substantially in the past several years while restraining growth of their current expenditures. This has enabled many of the towns to generate larger surpluses for capital investment. These improvements are due in part to the technical assistance and training of the MSTP/MSUD Project.

However, the bulk of the recent improvement in revenue collection is from the trade tax (octroi), an indirect tax. The towns still have not improved their collection of direct taxes.

5.5.2.2. Current Issues in Municipal Finance

Trade Tax vs. Direct Taxes

A significant feature of Nepal's municipal finances is that the Town Panchayats obtain most of their income from their own source revenues (OSR). In FY 1988/89, OSR accounted for 79 percent of aggregate Town Panchayat revenues, up from 73 percent in 1987/88. Grants from HMG were 14 percent of revenues, and the rest was made up of loans and miscellaneous sources.

The trade tax, or octroi, accounted for 73 percent of own source revenues of 29 Towns in 1987/88. The octroi is collected at the road entry points of each Town and is levied on all goods brought in except those for daily consumption. Octroi revenues increased significantly in 1988/89, as all Towns implemented the maximum rate, which was raised by HMG in 1987. The rate is currently NRs. 1.00 per NRs. 100 of the value of goods.

The Town Panchayat Act Amendment of 1987 mandates the reduction of the octroi rate to NRs. 0.50 per 100 in 1993 (2050 B.S.) and the octroi's abolishment in 1998 (2055 B.S.). This phase-out is in response to various problems of the octroi:

AGGREGATE FINANCIAL PERFORMANCE
29 TOWN PANCHAYATS (total amounts)
(in constant Rupees at 45/46 prices)

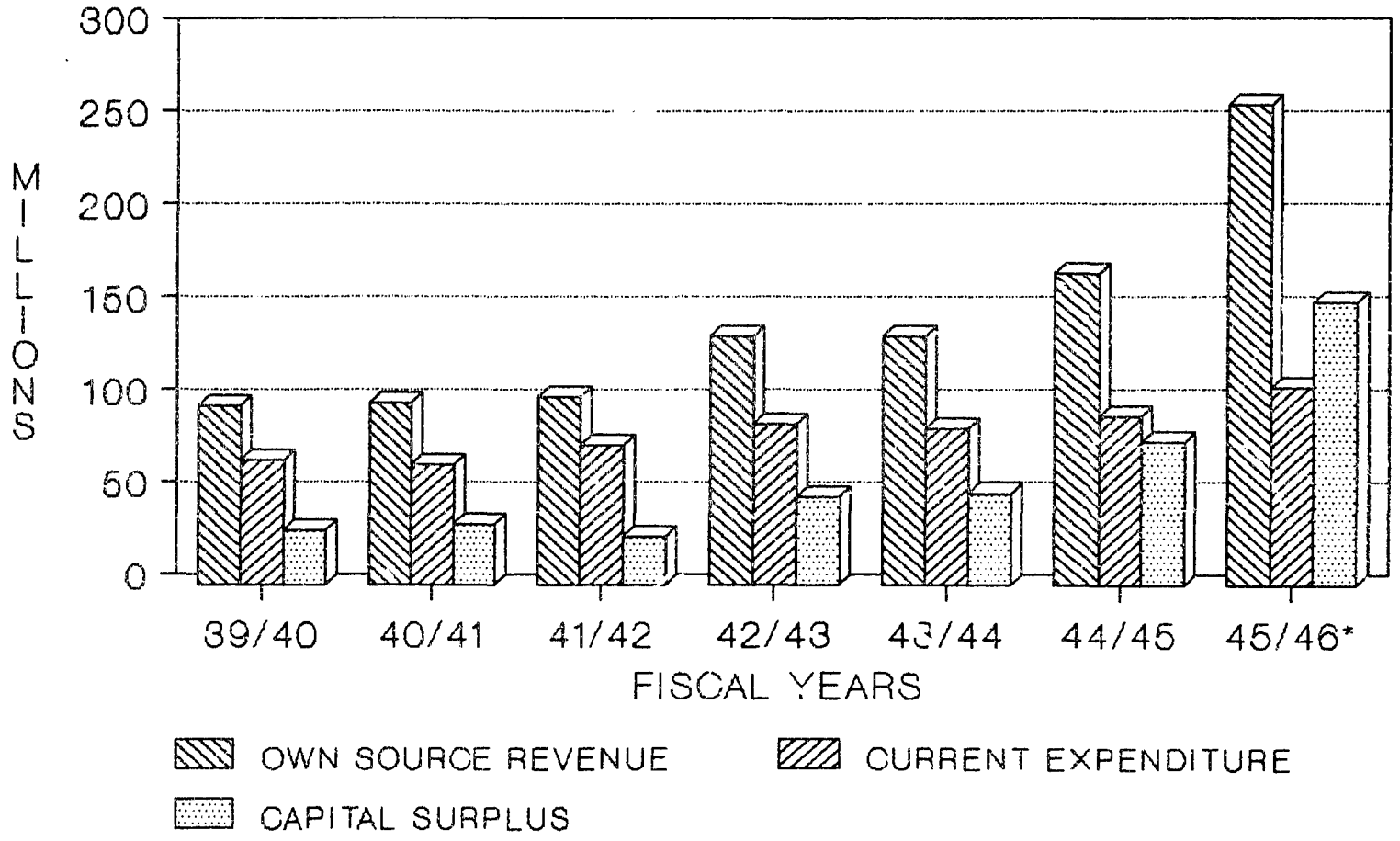


FIGURE 5.4

* Town Panchayats' Estimate

MSTP PROJEOT

- The octroi tends to be improperly administered and inconsistently applied. Complaints about these problems, mainly from the business community, have increased in the last several years since most Towns began collecting the octroi through private contractors.

- Being an indirect tax, the octroi is seen, rightly, as an economically inefficient and inequitable tax. The levy is "hidden" from the local citizens, making the tax politically convenient. It "obscures the accountability that local officials should have toward their taxpayers" (MSTP, *Town Panchayat Finance Legislation Study*, 1986).

The octroi shares the negative features of indirect taxes generally: their costs are passed on from tax payers to consumers; there is no relation between the tax payer and the beneficiary jurisdiction; and they are regressive.

Table 5.5 gives a summary of all of the Town Panchayat's revenue sources. Town Panchayats have the authority to collect various direct taxes: the rooftop (house) tax, the house rent tax, the professional tax (on businesses), and the vehicle tax. In 1987/88, these sources accounted for only seven percent of total own source revenues of 29 Towns. The Towns also have power to collect numerous non-tax revenues, including rents and charges for Town facilities or lands, fees and fines, and proceeds from the sale of stones, gravel, sand, or other assets. Together, non-tax revenues are significant, comprising 20 percent of own source revenues of 29 Towns in 1987/88.

The main issue is for the Towns to reduce their overwhelming dependence on the octroi and move toward a greater reliance on direct taxes and benefit-based fees. So far, despite substantial training and technical assistance, the Town leaders have demonstrated little inclination to do this. The legally-scheduled phase-out of the octroi is still too far in the future to constitute an incentive for action.

A related issue currently being debated is whether the octroi should be managed centrally. This has arisen in part because of the trade and transit crisis of 1989. The decline in shipments of goods into and throughout Nepal has caused many of the Town Panchayats to experience serious drops in their octroi income. This negative effect has not been evenly distributed, however. The two main Towns still serving as national entry points (Biratnagar and Birgunj) and the Kathmandu Valley Towns have not been significantly hurt. The "losing" towns have asked HMG to temporarily suspend local octroi collection and to collect the tax centrally, so that the revenues may be redistributed more equitably. HMG has yet to act on the proposal. While this proposal may have some advantages, it goes against the principles of autonomy and accountability in local taxation.

The MSUD Project is assisting MPLD to develop a strategy for managing the phase-out of the octroi. This will have two components: a short-term approach for better local administration of the octroi and a medium/long term approach for promoting a switch to direct taxes.

TABLE 5.5

TOWN PANCHAYATS' OWN REVENUE SOURCES

Type	Percent of Total Own Source Revenues in 1987/88	Rate
A. Taxes		
1. Rooftop Tax	0.23	NRs. 3 to 3,000 per year depending on the house characteristics and location
2. House Rent Tax		Maximum 5% of rent for land or pond
3. Professional Tax	1.81	Various flat rates on business and commercial establishments depending on the type and their capital investment or turnover
4. Vehicle Tax	4.69	Various rates on vehicles registered within the Town or entering it
5. Octroi (Trade Tax)	72.84	1% on value of goods for commercial, professional, or industrial use, except daily consumption goods
B. Non-Tax Revenues		
1. Rents and Charges for use of Town Panchayat Facilities or Lands (public toilets, parks, markets, guest houses, fish ponds, etc.)	3.61	As set by the Town Assembly
2. Fees and Fines	11.72	
Building Permit Fees		NRs. 0.02 to 1.00 per square foot, depending on type, quality, area, and number of floors
Parking Fees		As set by the Town Assembly
Utility Charges for Services Provided by the Town		" "
Fees for Issuing Licenses or Performing Appraisals		" "
Fees for Temporary Use of Public Spaces		" "
Fines for Violating Building Permit Regulations and Other Infractions		" "
3. Others - Sales of Sand, Gravel, Lands, or Other Assets	5.10	

Source: MSTP Project

Increasing Revenues from Direct Taxes and Fees

The Town Panchayat Act Amendment of 1987 increased the rates that Towns can charge on all their taxes and fees. The allowable rates for direct taxes appear to be high enough for the Towns, in principle, to use them to replace the octroi and eventually surpass it as an income source.

The transition to direct revenues will not be easy. The Towns lack experience in administering direct taxes. Moreover, the towns will have a difficult time obtaining public support for increasing direct taxes because they have not yet earned the local public's respect for efficient administration and delivery of services. One way to handle this problem initially is for the Towns to tie increased revenue collection directly to the financing and provision of particular services. This would demonstrate clearly that the taxes are producing public benefits.

Another essential short-term measure is the establishment by the Town Panchayats of registers and record-keeping systems for the various direct taxes and fees. Almost all the Town Panchayats have now set up record-keeping systems for the professional tax, under the guidance of MSTP/MSUD.

In the short to medium term, the Town Panchayats can considerably increase their revenues from the "rooftop tax", which is the closest thing the towns have to a property tax. The main requirements are a house registry and a campaign to convince the public of the benefits of compliance. One obstacle to implementing the rooftop tax is the public perception that it duplicates the central government's land tax. In the long run HMG should consider a complete restructuring of the property tax system. Currently there are four property-based taxes: the rooftop and house rent taxes, which are collected by Town Panchayats, and the land tax and urban house and compound tax, both collected by the central government. The land tax has very low effective maximum rates and generates a relatively small amount of revenue, but compliance is generally good because proof of tax payment helps establish property ownership rights. The house and compound tax has high rates but also very high exemption levels and extreme under-assessment of values, yielding a very low collection. HMG should consider combining these four taxes for urban areas and creating one urban property tax collected by Town Panchayats (MSTP, *Town Panchayat Finance Legislation Study*, 1986).

Town Panchayats need to increase their collections of fees, fines, rents, and charges. This may be done by raising rates and improving collection efforts. Towns have made little use of benefit-based levies; that is, direct recovery from beneficiaries of the costs of constructing and operating public services. A few Towns have tried "cost-sharing" schemes, in which local residents contribute labor and/or cash for small projects. More use of cost sharing and user charges is badly needed.

Enforcement of Revenue Collection

Neither the Town Panchayat Act nor the Rules provide the Towns with powers to enforce payment of their taxes. No penalties are specified. Each time a Town wishes to impose sanctions for tax evasion, it must appeal to the Chief District Officer to take action. This approach is very ineffective.

Some Towns have started withholding building permits and other Town-issued certificates to people who have not paid their Town taxes. Several Towns are making arrangements with the local Transportation Department offices to require Town tax clearances before issuing vehicle registrations. This type of approach can be effective, but it risks imposing excessive "red tape" on individuals if not managed efficiently.

The MSUD Project is preparing to make proposals to MPLD for legislative changes that will give Town Panchayats their own enforcement powers over local tax collection.

Reform of the Grant System for Towns

MSTP's 1986 Town Panchayat Finance Legislation Study recommended changing the HMG grant system for Town Panchayats to achieve the following:

- Making the grant allocations more predictable, so that the Towns can use them for their budget planning.
- Introducing performance incentives into the allocation formula to reward Towns that improve their own resource mobilization.

Although grants accounted for only 29 percent of total Town revenues in FY 1987/88, they represent a much larger share of income for the smaller Town Panchayats. The grant system was revised in the Town Panchayat Rules of 1988, which set fo th the following guidelines:

- Twenty percent of the total grant pool is to be apportioned on the basis of population.
- Forty percent is to be distributed to give a larger share to lower-income Towns.
- Twenty percent is to be allotted to reward Towns that make the biggest efforts to mobilize their own resources.
- Twenty percent is to be apportioned for undertaking special projects in the Towns.

The MSUD Project prepared detailed formulas for implementing these guidelines in 1988. MPLD has indicated that it will use the formulas for issuing grants in FY 1989/90 (only a small amount of administrative grants had been disbursed as of December 1989).

Rationalization of Taxation at Different Levels

A document of the MSUD project ("Terms of Reference, Study of Rationalization of Local Taxation", 1989) makes the following observations (paraphrased):

> The bulk of national taxes [75 percent] is derived from three indirect taxes, namely customs duties (and countervailing duties), sales taxes, and excises. Customs duties are levied on imports and

excises on domestic products. Sales taxes (like the octroi) are levied on both imports and domestic products. These taxes overlap. For example, customs duties, countervailing duties, sales taxes, and octroi are levied on the imports of raw materials, while excises and sales taxes are imposed on the outputs produced from such materials. If these outputs are transported from one Town Panchayat to another, they are subject to the octroi. This system of multiple taxation has several disadvantages: it is cascading, it tends to be inequitable, and it gives rise to uncontrolled and unintended incidence of taxation.

In 1989, MSUD commissioned a study to recommend solutions to these problems. Its main findings were as follows:

- Income and commodity taxes should be levied by HMG.
- Property taxes should be consolidated and collected at the local level.
- The octroi should be phased out.
- The quality and quantity of local tax administration personnel must be increased.

In addition to these issues, there are also problems about the distribution of tax revenues and grants between Town and District Panchayats. Under the guidelines of HMG, Towns are supposed to receive their central government grants through the Districts. However, because of objections from the Towns, MPLD has been disbursing grants directly to them. The District Panchayat Act of 1962 says that Districts are entitled to collect up to five percent of the own source revenues of Town and Village Panchayats. However, the Towns do not, as a rule, surrender any of their revenues to the Districts. As these transfers of revenues are not really necessary and create irritation between Towns and Districts, these provisions should be abolished (MSTP, *Town Panchayat Finance Legislation Study*, 1986).

The Town Panchayats also claim that they should be entitled to receive a share of the HMG Land Tax. District Panchayats have been collecting a share of this tax in the form of a surcharge on the tax collected in the District. This issue would be solved by the development of a single urban property tax as suggested above.

Budget Planning

Town Panchayats have recently been improving their annual budget preparation. Budgets are based on more reasonable revenue estimates than in the past, and the annual budgeting schedule is more often adhered to.

Major improvements are still needed in capital investment planning. The Towns have traditionally carried out only very small projects, such as primary schools, shallow wells, and minor road upgrading, which require modest technical skills and little time to build. A few of the largest Towns have recently constructed bigger projects such as drains and meeting halls. The Towns' limited experience with capital investments reflects their lack of financial resources, a condition which is in the process of changing. Now that some Towns have bigger surpluses and the capacity to carry out larger projects, their capital investment planning and execution needs to be upgraded. In FY 1987/88, capital expenditures were 55 percent of the Towns' total budgets. The Towns' typical practice of dividing all or most of the annual budget surplus

equally among all the wards needs to be changed. Town officials are being counseled to devote a part of the surplus to larger, Town-wide projects, reserving a more limited share for small, ward-level works. Town officials and staff also need more training in the various steps of investment planning, including project identification, feasibility analysis, multi-year budgeting, and program management.

5.6. Urban Land Development

Land is a central concern for both urban development and housing. One major issue is the provision of services for land, which is dealt with in Section 5.4 and other parts of this report. Another issue is high land prices. This is most directly related to the affordability of shelter, which is outside the scope of this study. However, the potential for redistributing some of the benefits of rapid land value appreciation is of interest here. The main focus of this section is on the process of developing land for urban use. The key issue is: How to transform the present informal system of urban land development into a more rational one, so that inefficient land use gives way to planned development.

Nepal's rapidly growing towns and cities are taking over land at a fast pace. The MSTP project estimated that, between 1987 and 2002, Nepal's 33 Town Panchayats will require 9,490 hectares of newly-developed urban land to accommodate their expanding populations. This represents a 61 percent expansion in relation to the total 1987-88 urban land area. The MSTP estimate of land requirements assumes moderate urban densities in the range of 150 persons per hectare. The ten largest municipalities (over 50,000 population)[2] account for 65 percent of the total land requirement (6,210 hectares).

5.6.1. The Existing Informal Development Process

Urban land development in Nepal is largely carried out by private households on a plot-by-plot basis. Organized land subdivision and development by the private sector has not been implemented so far. The subdivision and development if individual plots follows the construction by government of primary (arterial) and secondary (connector) roads, which open up new areas for urban growth. Other types of infrastructure (water, electricity, drainage) are usually provided by public agencies after an area has been settled, in response to demands from the residents.

Some land development regulations have been adopted for Greater Kathmandu and Pokhara, but they are generally not enforced. Other cities and towns have no land development standards. Land use plans have been adopted for a number of urban centers, but they are not effective, especially in controlling or guiding private land development. Thus the prevailing method of land development can be called informal, because (1) it occurs in the absence of an effective planning and regulatory framework and (2) it is carried out by individual plot owners rather than professional land developers.

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[2]Bhaktapur, Biratnagar, Birgunj, Dharan, Hetauda, Janakpur, Kathmandu, Lalitpur, Mahendranagar, and Pokhara.

In major urban centers, especially Greater Kathmandu, "land brokers" play an important role in the informal land development system. Brokers act as middlemen to effectuate the subdivision of land and the introduction of access roads in newly-developing areas. The brokers, who are often well-known community leaders or businessmen, arrange "deals" by mediating between sellers and buyers of land in a particular area. In the process, the brokers take the lead in determining the sizes and shapes of subdivided plots and the directions and widths of access roads. The brokers also ensure that the required land transactions are carried out smoothly. For this, the brokers use influence and speci[illegible]ills in dealing with the Land Administration authorities. The brokers' reward for their work is a series of commissions from the land sellers and buyers.

Brokers serve a positive function in helping to open up land for urban development. The problem is that brokers have neither the knowledge or incentive to apply technical standards in their subdivision activities. Their objectives are to minimize the loss of land for roads or other public uses and maximize the gains for their clients and themselves.

The atrociously inefficient development patterns that result from the existing system are visible in the neighborhoods of Greater Kathmandu and other main cities that have developed over the past 10 to 20 years. Adjacent plots are of widely varying sizes and shapes. Access roads zigzag erratically along plot boundaries. The widths of the access roads are pitifully inadequate. Plots and roads are laid out with no consideration for stormwater drainage. Roads remain unpaved, and other basic services may be absent.

A good, concise review of the informal land development system appears in a 1986 report by the Housing Management and Construction Company Ltd. (HMC, pp. 10-12). Drawing from this report, the shortcomings of the present system may be summarized as follows:

1. Land is not provided, as part of private development, for public uses such as parks, playgrounds, schools, and utilities. Government does not have the funds to purchase adequate lands for these uses.
2. Plots and roads do not conform to basic engineering principles. Inefficient layouts are more costly to service.
3. Timely infrastructure provision at full cost recovery does not occur. Instead, infrastructure provision is postponed in hopes that it will be provided free at a later time by the public sector. The cost of land does not reflect the servicing costs.
4. Construction proceeds in a sporadic way at low densities, contributing to inefficient infrastructure demands.
5. The financial benefits of land price escalation that accrue to private land owners and brokers are not tapped to pay for infrastructure.

5.6.2. The Government's Response So Far

In response to the above problems, the government has taken a number of initiatives. Through the Town Development Committees, land development regulations have been

introduced in Greater Kathmandu and Pokhara to try to rationalize private land development. The regulations include zoning, density standards (height, ground coverage, and setback regulations), and building codes. Although the regulations themselves have some shortcomings, the real problem is the inability to enforce them. The legal and institutional framework is lacking for effective permit-giving, technical review, inspection, and imposition of penalties. Traditional subdivision regulations are ineffective in the face of the individual plot-by-plot development system. The public or community benefits of land development regulations are not well understood or appreciated. As a result, land development standards or regulations tend to be viewed as infringements on private property rights.

Another response by the government was to facilitate the establishment in 1985 of Nepal's first private-public joint venture real estate development company, the Housing Management and Construction Company Ltd. (HMC). Seventy percent of HMC's shares are held by private investors, and 30 percent by public corporations. HMC's primary activity so far has been the preparation of a detailed study and proposal for a 67 hectare sites and services project to be located west of Kathmandu at Kisipiri, near Thankot. The proposal for this project was presented in 1986, but it has yet to be implemented. There are several obstacles, including the "land ceiling" and the difficulty of assembling land, which are reviewed in the next sub-section.

In 1989, HMG set up a new enterprise, the Nepal Land Development Company. One quarter of NLDC's shares are owned by the government and public corporations. The chairman of NLDC is the Secretary of the Ministry of Housing and Physical Planning. NLDC's mission is to develop urban land for commercial and residential uses. The organization is still in the formative stage.

Despite its involvement in the creation of HMC and NLDC, the government has not yet established a framework that permits private, organized land development to operate (see below). The government has, however, recently stepped up its efforts to implement land development projects itself. The Department of Housing and Urban Development of MHPP has been assigned to carry out a number of sites and services projects in Kathmandu (Dallu and Saibhu) and in several other cities. It is also responsible for two land pooling (readjustment) schemes (Gongabu and Balkhu) in the Kathmandu area.

MHPP is putting its emphasis on direct governmental implementation of land development projects while giving little attention to facilitating a process of organized private sector land delivery. This focus on public sector-implemented projects seems to have two sources. First, it reflects a bias that land and housing are "social goods" that should be provided by government rather than by profit-making private enterprise. This notion ignores the fact that the bulk of urban land and housing are already being provided by private individuals who are, in many cases, reaping handsome capital gains. The other reason may be a concern that MHPP must demonstrate its active role in fulfilling the shelter targets of the Basic Needs Program through its own direct programs and projects.

Unfortunately, the government has a poor track record of implementing land development projects. Two HMG sites and service projects in Kathmandu dating back about ten years (Gaifutar and Kuleswor) were plagued with problems in land assembly, finance, coordination, and management (see HMC 1986, Malla, 1986). In the mid-1980s, Town Development Committees in Birgunj and Hetauda, with limited support from the central government, undertook ambitious "town extension schemes". These did result in the planned subdivision of large tracts of land and the sale of plots. However, to this day both areas remain almost totally unserviced and un-built-upon (see Structure Plans for Birgunj and Hetauda, DHUD/MSTP, 1987).

In the last fiscal year (2045/46 or 1988/89), MHPP set up a "Revolving Fund" of NRs. 50 million to finance additional land development schemes through DHUD and the TDCs. Out of this fund, loan agreements were signed in mid-1989 for a total of NRs. 13.5 million for projects in four towns (Bharatpur, Dhulikel, Jaleswor, and Lahan). The agreements were made without specifying the interest rate or mode of repayment and without the prior preparation of specific physical plans, financial plans, or institutional arrangements. The Revolving Fund has been entrusted to DHUD, but there are no staff to manage it.

The Department of Housing and Urban Development maintains that its role in these land development projects is to provide technical support in planning and finance to the Town Development Committees. At present, DHUD's capacity to do this is extremely limited. It has few experienced civil engineers and no financial analysts. DHUD's Regional Directorates are very weak, having been set up just in the past year. The Department's District Offices are only in the embryo stage. DHUD's senior technical staff members, few in number, are spread very thinly over a large number of programs. The Town Development Committees, for the most part, lack technical staff.

DHUD has proposed to HMG that its personnel be expanded considerably to staff good-sized technical offices at the Regional and District levels as well as technical secretariats for TDCs across the country. Even if this major staffing expansion can be achieved--which is unlikely in the present climate of HMG austerity--the desirability of such a massive organizational apparatus is questionable.

The operational problems of public sector land development projects in Nepal (essentially sites and services) so far can be summarized as follows (see Malla, 1986; von Rabenau 1989; Structure Plans for Birgunj, Hetauda, Jaleswor, DHUD/MSTP-MSUD 1987-89):

1. Acquiring land at below-market prices and the tendency to sell it at historical rather than current market prices, causing inequities and inefficiency.
2. Counting on other agencies to finance and install infrastructure, which is unrealistic in the context of Nepal's huge urban infrastructure deficits. The line agencies give first priority to deficits, not new projects.
3. Failing to set plot prices at levels sufficient to cover infrastructure costs. Lack of infrastructure in previous projects has been a major factor preventing house construction.

4. Using down payments as working capital. This practice is not bad in principle, but it has been misused. Down payments have been collected (and plots have even been sold) in projects where land acquisition had not been completed. The funds from down payments have been commonly used for further land acquisition, or even unrelated expenses.
5. Fragmenting of responsibility for project planning and implementation between the DHUD central office, the DHUD Regional Directorates, the Town Development Committees, and in some cases other entities (Town Panchayats, Chief District Officers, etc.). There are no examples of projects with effective management units. The organizational set-up guarantees long delays, which plays havoc with the financial viability of projects.
6. Collecting down payments in exchange for a "locked-in" plot price. Implementation delays then cause price devaluations which become subsidies to buyers.
7. Being unable to complete the initial land acquisition, due to disputes with land owners. This delays implementation and prevents legal transfer of plots to beneficiaries.
8. Using proceeds from plot sales for purposes unrelated to the project. Income has not been earmarked consistently for project-related expenses, especially infrastructure.
9. Expropriating land at below-market cost (a common practice). This has engendered resentment in the public. For this reason, MHPP is interested in using the land pooling approach, which requires no land purchasing and involves returning developed plots to the original land owners.
10. Experiencing difficulty in applying beneficiary selection criteria. Most of the plots in government land development projects have been bought as investments, not for house construction.

Even if the DHUD and TDCs improved their staffing and corrected their approach to sites and services projects, they would still lack the financial and organizational capacity to provide more than a small fraction of the total amount of serviced land needed by the urban population. This raises several questions: To what extent does it make sense for the government be involved in direct implementation of land development programs? If it should be involved, what target groups should it serve? Are the DHUD and TDCs really the appropriate mechanisms? What is to be done with the Revolving Fund for land development?

Proposals in answer to these questions are presented in the Policies and Strategies section of this paper.

While the sites and services-type projects of the government have been generally unsuccessful, a different, recently-initiated land development approach called "guided land development" has shown substantial promise. A description of GLD appears in Section 4.2.

Guided land development is a promising approach for several reasons:

- Planning is carried out through a formal system of consultation and collaboration with local land owners and residents. This helps ensure success.
- The degree of intervention is modest; that is, the approach improves on the existing land use patterns without radical modifications. This maximizes community support and cooperation and economizes on technical manpower (which is in short supply).
- Planning is done on the basis of cadastral maps, which enables all landowners to see clearly how their interests are affected. The burden on each land owner is minimized by taking land for roads and other facilities from plot frontages.
- Most land owners agree to give up the land for roads and other facilities without compensation, in exchange for expected increases in land values resulting from the implementation of the GLD scheme. This lightens the financial burden on the public sector and represents a healthy form of "cost sharing".

Several aspects of the GLD program are still weak. These deserve more attention from MHPP. First, most of the new GLD road rights of way have not been demarcated in the field. Second, the responsibility of the Land Administration Office in helping to enforce the GLD plans has not been clearly confirmed. Third, adequate provisions have not been made to compensate persons who lose most of their land in a GLD scheme. Some of these people may receive plots in a sites and services project, but the scope for such land exchanges is limited. Finally, there is no long-term, replicable financing strategy for the physical improvements (e.g. widening the roads, moving compound walls, paving, drainage). Using a betterment tax would be desirable, but this would have to be introduced carefully, with plenty of local support.

The planners in charge of the GLD schemes have not been able to obtain land dedications for community facilities such as playgrounds or schools. It is doubtful whether such dedications are possible under the GLD approach in areas, such as Kathmandu, where land ownership is so fragmented. Organized land subdivision, on the other hand, would enable land to be provided for these facilities.

Land pooling is a promising approach for land development in Nepal, but it requires a high level of management. So far, MHPP has not made progress on the two land pooling projects identified in 1988 because of inadequate technical manpower to manage them.

5.6.3. Obstacles to Organized Land Subdivision and Development

At present there are two private-public joint venture land development companies (HMC and NLDC) and 22 private housing and land development companies registered with the Department of Industry. None of these entities have yet implemented any projects.

The most crucial factor in land development is time. Land prices in Kathmandu and other main cities are rising rapidly, and financing costs are around 18 percent per year. In this

environment, it is absolutely necessary to harness the efficiency of specialized land development companies, particularly those of the private sector. This has not yet been done.

Land Ceiling

One problem is the provision of the Land Act of 1964 which prohibits an individual from owning more than 50 ropanis (2.5 hectares) in the Kathmandu Valley, 80 ropanis (4 hectares) in other Hill areas, and 25 bighas (17 hectares) in the Terai. So far, HMG has not officially provided an exemption from these limits for land development companies. One way HMG could do this is to issue an order under Section 12(d) of the Lands Act, which allows exemptions for industries (land development companies are already classified as service industries under DOI). The exemption could be for a limited period during which development must take place. HMC has estimated that 200 ropanis (10 hectares) is the minimum financially viable project size in the Kathmandu Valley.

Financing

Access to finance is another bottleneck. Although a few potential developers may have access to large amounts of capital, most would require loans to operate. The banks in Nepal have no experience in lending for land development projects, and their policies are not oriented toward such ventures. Their operations tend to be limited to highly-secured, very short-term (around one year) loans. Land developers need loan terms of several years, and in most cases would not have the collateral normally demanded by the banks. Mortgaging of the land being developed has not been tried, and the potential problems of this in the Nepal context have not been explored. The government is pursuing the possibility of establishing a Housing Finance Company which would make short-term loans to developers as well as long-term loans to households.

Land Assembly

Another difficulty is assembling a reasonably-sized tract of land for a development project (see Carroll, Chhetri and Mathema, 1987). Ownership of land on the fringes of the main urban areas is very fragmented (especially in the Kathmandu Valley). Negotiating with many parcel owners is, at best, a time-consuming and difficult task for a potential land developer. In addition, the mechanisms for land transfer are associated with various legal stipulations that can generate disputes (and sometimes litigation) over rightful ownership, plot boundaries, and other property rights. The poor state of most cadastral records is one part of this problem. Another is the regulation in the Land Survey Act prohibiting the old plot boundaries and registration numbers from being erased from cadastral records when land is sold or subdivided. This is intended to protect the rights of land owners or claimants, but it makes registration of plots in new developments difficult. Current law and custom also result in overlapping and conflicting property rights over any given parcel. The Land Act gives an agricultural tenant the right to 25 percent of the land or its market value prior to its conversion to non-agricultural use. Another potential source of conflict is the "right of first purchase" that may be exercised by immediate blood relatives who occupy an adjoining plot or tenants who may offer an equal purchase price.

The land brokers are adapted to working in this environment. Their specialized knowledge of land laws and of how to use the existing records, coupled with their official contacts and skills at mediating between parties, help ensure that land transactions can proceed smoothly.

To facilitate land assembly, it has been suggested that HMG should acquire land by eminent domain (compulsory taking) on behalf of land development companies and turn it over to them. This would have to be justified legally under the Land Acquisition Act by considering land development for housing as a "public purpose" in the "public interest". The land development companies would put up the money to enable HMG to pay the market price. HMG has so far not accepted this proposal. Apart from the politically controversial nature of the idea, it is uncertain whether this approach would in fact be more expeditious than private negotiation for land purchase. Governmental land acquisition procedures are often very slow. The government would, moreover, probably confront resistance among landowners skeptical of its intention to pay market prices for land. The usual practice has been for government to pay well below market rates in expropriation cases.

Cost Recovery

An indirect but significant difficulty for organized land development is the government's usual practice of constructing urban infrastructure without cost recovery after an area has been developed informally. Among other things, this places responsible land developers, in principle, at a competitive disadvantage. Plots in subdivisions that include adequate basic services are more expensive than regular "informal" plots. In the informal system, households pay less initially for an unserviced plot and eventually obtain services at no cost provided they are willing to wait.

Infrastructure Provision

The non-availability of certain services may be an obstacle to some organized land development projects. In most hill cities, especially Greater Kathmandu, water supply is limited. HMC found that the Water Supply and Sewerage Corporation was unwilling to give permission to connect the proposed Kisipiri project to the existing Kathmandu water system, because the system is overburdened and in poor condition. Although some sites in the hills may have their own ground or surface water sources, many will depend on off-site connections to a municipal system.

Because of the lack of experience with organized land development in Nepal, land developers may have difficulties in obtaining permission from the HMG infrastructure agencies to connect to existing networks. Even more difficult will be obtaining commitments from these agencies to provide off-site infrastructure such as main water or electric lines. Private developers could construct most infrastructure themselves, if they could obtain financing, HMG sectoral agency cooperation, and facilities for the importation of construction and engineering equipment (i.e., duty concessions and foreign exchange).

Double Land Registration Tax

The "double land registration tax" remains a major problem for potential land developers. The tax is 12 percent on the value of the land (7 percent paid by the seller and 5 percent by the buyer). A developer would have to pay twice, once upon purchase and once upon sale. If the developed plots averaged, say, 2.5 times the price of the original land, then the total tax would come to over 40 percent of the initial land cost. HMG has been considering granting an exemption on part of the tax for land development companies, but as of December 1989 no formal decision had been made.

Proposed policies and strategies for land development appear in Section 6.8.

5.7. Urban Planning Systems

The recognition of the need to control and shape urban expansion in Nepal has existed for many years, and laws for urban planning have been in effect for several decades. The Town Panchayat Act of 1962 contained provisions for municipal authority over building permits and building by-laws. The first urban planning law was the Town Development Committee Act of 1963. This was followed in 1973 by the Town Planning Implementation Act which applied to the five "regional development centers" of the country.

Since that time, there has been an increase in concern about the urbanization process, and awareness has been growing among national and local politicians, government officials, and professionals about the need to improve and modernize the systems for urban planning.

Institutional changes in the past several years include the creation of the Ministry of Housing and Physical Planning and the Department of Housing and Urban Development in 1988, the establishment of the Urban Development Division of the Ministry of Panchayat and Local Development in 1987, and the initiation of several major internationally funded projects to support urban development (MSTP/MSUD, UDLE, and the World Bank's Municipal Development Project).

Two new Acts have recently been passed which affect planning in the entire country except for the Kathmandu Valley (the specific issues and legislation affecting the Valley are discussed in Section 5.8 of this report). These are:

- The 1987 Amendment to the Town Panchayat Act. This deals mainly with municipal finances, but it also contains a key provision (clause 24A) giving Town Panchayats new urban planning authority.
- The Town Development Act of 1988. This replaces and repeals the old TDC Act of 1963 and TDC Act of 1973.

This section provides an assessment of the systems relating to physical planning only and does not cover investment or socio-economic planning.

Inadequacies in the laws are one part of the problem of urban physical planning in Nepal. However, even if the laws were perfected from a technical standpoint, planning would still be hampered by institutional weaknesses, lack of understanding, political factors, and other problems of implementation. Many of the requisite powers for urban planning now exist, but the problem often is the inability or the unwillingness of government to use authority effectively. A further basic problem is that the degree to which the government may restrict private development rights without compensation has not been established. The general public perception is that any limitation of private land use rights in the public interest constitutes a taking and must therefore be compensated. This not only puts a large financial burden on the government but also casts a chill on the planning process because of the anticipated costs of planning actions.

Successful planning requires implementation of all the steps in the urban planning process. These include definition of the required plans, assignment of responsibility for plan preparation, community input, plan revision, enforcement, inter-agency coordination, and approval. A review of the problems of the urban planning process follows:

Definitions of Town Plans

None of the major planning Acts provides an adequate definition of a "Town Plan" or recognizes that there must be several types of town plans for various purposes. Planners in Nepal are beginning to work out such definitions (see "Central Model for a Plan System (Revised Second Draft)", in Physical Planning Workshop, MHPP-UDLE/GTZ, July 1988). The different types of required plans and who is responsible for each should be made explicit and consistent in the Acts or through Rules and Regulations.

Plan Approval

The existing planning Acts fail to specify a procedure for official approval of various types of plans. The laws typically say that "HMG" must approve plans without specifying which agency. Traditionally all town plans have been sent to the Cabinet for official approval, which is a cumbersome, time-consuming approach. Most plans should be approved by a special coordination committee or by MHPP.

Plan Revision

The planning Acts fail to provide a procedure for revising plans to reflect changed conditions or to keep them in line with actual urban growth. The laws permit HMG to override the planning decisions of the Town Panchayats or Town Development Committees. The existing laws also codify the authority of TDCs and HMG to issue *ad hoc* directives even after a plan has been approved. This leads to the following problems:

1. Those with influence can undermine existing plans or the decisions of local planning bodies by appealing to higher political authorities for reversals, changes, or exemptions.
2. Over time a series of confusing, partial, and seemingly arbitrary decisions and directives may accumulate pertaining to a particular area or issue, seriously undermining the people's faith in government planning.

3. The lack of finality of plans leaves property owners in doubt about making decisions concerning their land because there is always the possibility of another directive from above which may change the "rules of the game".

Plan Enforcement

Town Panchayats lack enforcement powers and must rely on HMG for law enforcement. This means that the Towns have very limited power to impose sanctions for violations of urban planning regulations. While the Towns have the authority to impose fines, they must seek the cooperation of the Chief District Officer, who reports to the Ministry of Home Affairs, for their enforcement "muscle".

Community Participation

None of the planning laws provide for review or input by members of the local community before plans are adopted or implemented. This reflects the traditional authoritarian approach to planning in Nepal. The lack of community consultation and participation is being recognized as a serious handicap to effective planning.

Sectoral Agency Coordination

There are no provisions in any of the Acts to require HMG agencies involved in infrastructure provision to abide by town plans. Therefore the required public services are often not provided in the areas that have been designated for town expansion, and infrastructure investments are not consistent with land use plans.

Overlap Between TPs and TDCs

The legislation sets up a conflict of authority between Town Development Committees and Town Panchayats in the same local jurisdictions. Currently TDCs exist in 19 Towns (outside the Kathmandu Valley). Similar powers are granted to both TPs and TDCs over land use and physical development through town plans. The TDCs are corporate entities answerable to the central government, while Town Panchayats are locally elected autonomous municipal bodies. Although in some cases the two may collaborate, the potential for friction is always present. The Town Development Act of 1988 contains no reference whatsoever to the TDC's relationship to a Town Panchayat. The Town Panchayat Act Amendment of 1987 contains only one reference to TDCs, which says that the TP must maintain coordination with the TDC while undertaking planning.

TDC Composition

The new Town Development Act of 1988 leaves the composition and leadership of Town Development Committees unspecified. TDCs should have stable memberships, with the relevant local administrative and technical organizations represented. Under the old TDC Act of 1963, TDCs were chaired by the Zonal Commissioner whose supreme authority in law enforcement has generally been considered useful in the implementation of plans. The

1988 Act makes no mention of the role of the Pradhan Pancha (mayor) of the Town Panchayat in the TDC.

TDCs' Income and Staff

The law does not provide for Town Development Committees to have regular, budgeted sources of income. This makes the TDCs dependent on *ad hoc* income from land development projects or other revenue generating schemes to pay their expenses. Because of this lack of revenue many TDCs are inactive. TDCs should not have to depend on income from commercial type ventures to perform their work. The law also does not provide for the TDCs to be staffed. A TDC is basically a decision-making body which requires a technical staff to act effectively. Most TDCs lack this. MHPP is proposing to allocate staff, through the DHUD, to the TDCs.

Land Acquisition

The Land Acquisition Act of 1977 is the basic law enabling the government to take land for public purposes either by negotiation or by eminent domain. The main limitations of the Land Acquisition Act are:

1. The Act does not require market value to be paid if land is being acquired for HMG. Compensation is to be set according to the government's own guidelines. In practice, compensation is usually well below market value. The expectation that government will pay less than the market value for land has made implementation of urban land development programs increasingly difficult.
2. The Act does not require that land be acquired in conformance with a development plan. In fact, the Act says that if the acquired land is not needed for its original purpose, HMG can use it for any other purpose. As a consequence, land owners are exposed to arbitrary expropriation.
3. The Act makes reference to time limits within which land owners must accept or reject offers of compensation, but it is vague on the time span within which HMG is required to give the compensation.

Building Permits

The power to issue building permits lies with the Town Panchayats. The procedure for issuing building permits in the Town Panchayat Act was originally intended to protect property rights on the building parcel and the adjacent land. It was not oriented towards fulfillment of planning or building standards. To make building permits more effective, the following measures are needed:

1. Simplify the process for Towns to adopt and implement building by-laws without excessive HMG review.
2. Increase the ability of the Towns to review building permits on a technical rather than a political basis.
3. Clarify that the building permit requirement extends to all types of structures, not just residential structures as suggested by the wording of the Town Panchayat Act.

Land Registration

The cadastral records in Nepal are, with a few exceptions, 20 to 25 years old. They are generally imprecise, and they frequently contain significant errors. Although the registration lists are updated regularly, the cadastral maps are often not updated. New roads are almost never indicated on the maps. The subdivision of parcels is recorded, as per regulations, without erasing the previous plot boundaries or numbers. The records are maintained in an antiquated fashion, and many are in poor physical condition. Litigation over property rights to land is by far the leading type of litigation in Nepal. The unreliability of land registration records contributes greatly to this and makes urban planning more difficult than it already is. So far HMG has undertaken to modernize the cadastral records in a few localities, but progress is slow and coverage is limited.

Role of the Land Administration Office

The Land Administration Office has the main responsibility for recording land transfers. However the role of this office in land use planning is not specified in the laws. There is no system for the Land Administration Office to record the rights-of-way of new roads on its cadastral maps. A more complicated but basic issue is the potential role of this office in helping to enforce subdivision regulations. It may do this by refusing to certify land transactions unless they have been approved by the Town Panchayat or TDC planning office as being in conformance with subdivision regulations.

Subdivision Controls

The existing process of private land development in Nepal makes it very difficult to impose subdivision controls for planning. Land subdivision and development occur privately on a plot-by-plot basis. Organized development of larger tracts has not yet been introduced. One reason for this is the difficulty of assembling parcels of land owing to fragmentation of land ownership into many small holdings in most cities, especially Kathmandu. In addition, the land transfer process is hampered by antiquated and often unreliable cadastral records and Nepal's complicated traditional laws regarding land inheritance. This custom divides land equally among male heirs and makes it difficult to impose minimum plot sizes.

Zoning Procedure

Various towns have land use (zoning) plans, but there are no administrative procedures for dealing with zoning implementation. Mechanisms are lacking for problems such as pre-existing or non-conforming uses, non-complying structures, zoning variances, and interpretations of land use rules and regulations. These procedures should all be determined and specified so that potential zoning problems can be resolved in a consistent and predictable manner.

5.8. Planning and Development of Kathmandu Valley

5.8.1. Issues and Problems

The Kathmandu Valley is a unique area with outstanding geographical, cultural, and architectural features. The Valley is the home of nearly one million inhabitants within three Districts, three cities including the national capital, several small towns, and about 350 villages and hamlets (in 107 Village Panchayats). The Kathmandu Valley is the main destination of most of the tourists who come to Nepal.

Rapid population growth in the Valley, especially in the urban area of Greater Kathmandu, has created problems of increasing concern to government and the population at large. The main problems are:

There are increasing conflicts between urban and rural functions within the Valley's finite land resources. The Valley is a highly productive agricultural area, and agriculture is a key part of the Valley's economic and cultural makeup. By the year 2001, at current rates of uncontrolled urban expansion, 35 percent of the Valley's good arable land will be urbanized, including 56 percent of the Class I arable land. By 2020, urban growth could take over all the good arable land and cover 60 percent of the Valley area (PADCO, *Kathmandu Valley Urban Land Policy Study*, HMG/USAID, 1986).

The urban area of Greater Kathmandu has been growing in an unplanned, inefficient manner. While the central core areas have very high densities (up to 1,200 persons per hectare in central Kathmandu), fringe areas are developing at very low densities, as low as 15 to 50 persons per hectare. Other negative features of urban land development are described in Section 5.6.

Very recently, concern has emerged about pollution of water and air in the Valley. The most obvious water pollution issue is the flow of untreated sewerage and other wastes into the Bagmati and Vishnumati Rivers and other waterways. The air over the Valley has become noticeably smoggy in the past several years, due to vehicle emissions and wood burning. Apart from its public health impacts, pollution is felt to be damaging the attractiveness of the Valley in the eyes of the outside world.

Attempts to prepare and implement land use plans and development regulations have been largely ineffective. Institutions involved in planning and development control for the Valley are weak. There is little or no coordination among agencies and local jurisdictions involved in planning and public works in the Valley.

5.8.2. Past and Current Planning Framework

The former Department of Housing, Building and Physical Planning prepared the first land use plan for the Kathmandu Valley was prepared in 1969. This plan was never officially adopted, but it has served as the basis for subsequent proposals. In the mid-1970s, a new land use plan for the Valley was prepared, titled *Kathmandu Valley Physical Development*

Plan. This plan included a land use map and several documents dealing with urban design, planned residential development, development along major roads, zoning, urban infrastructure, and density, building regulations for central core areas. In 1976, HMG officially approved this plan. The same year, HMG created a Kathmandu Valley Town Development Committee composed of senior HMG and local officials to implement the plan. The 1976 plan had numerous flaws, including undefined land use boundaries and categories, and lack of attention to areas beyond the Ring Road.

In 1984, the Kathmandu Valley Town Planning Office prepared a new proposal, the *Kathmandu Valley Physical Development Concept*. This contained a revised zoning scheme for the area within the Ring Road and some building regulations. This 1984 scheme suffered from similar problems as the earlier one: limited geographical scope, vague definitions of land use categories and locations, lack of specific guidelines for implementation.

In 1986, USAID sponsored the *Kathmandu Valley Urban Land Policy Study*, prepared for the Kathmandu Valley Town Planning Office. The results of the study were disseminated in a high-level seminar. The study made numerous recommendations, many of which have begun to be implemented.

In 1987, a draft Structure Plan for Greater Kathmandu, based largely on the 1986 Land Policy Study, was prepared with support from the MSTP Project. Using this and other inputs, the Kathmandu Valley Town Planning Team produced a "Revised Land Use Plan" for the Valley in 1988. This latest Plan is still under discussion. Although it contains some refinements in zoning and development regulations, it is not yet considered ready for formal adoption. The documentation of its recommendations needs to be improved and its land use provisions need to be made more precise. It has also been observed that this latest plan encompasses too much. As a Valley-wide plan, it should focus on overall land use zoning and major facilities (such as the main road network). Detailed land development and building regulations should be left to local area plans.

An inadequate institutional structure has contributed to the failure of planning for the Valley. The Kathmandu Valley Town Development Committee has operated under a very general and ambiguous legal framework (the Town Development Plan Implementation Act of 1973, now repealed). As a result, the structure of the KVTDC and its operational policies have been determined through a series of Cabinet decisions, not through a clear and specific enabling law. The KVTDC's management structure has been linked to various ministries, creating a confused decision-making system. The KVTDC has also lacked enough trained staff, and its weak financial base made it incapable of taking the lead in planning and development.

Over the past 10 years, beginning with a study by CEDA in 1979, the idea of creating a Development Authority for the Valley was considered to help solve the above problems. HMG convened a high-level Task Force in 1986 to study the issue. This group recommended the creation of a more autonomous and streamlined body. In 1988, a new Kathmandu Valley

Development Act was passed and given Royal Assent. This Act mandates a Kathmandu Valley Development Authority with powers to make and enforce land use plans, engage in land development, and implement projects. HMG is now in the process of formulating the structure and operational rules for the KVDA.

In June 1988, the Ministry of Housing and Physical Planning introduced the "Land Development and Conservation Scheme" in Greater Kathmandu. This program had three components: (1) designation of various low-lying ("flood plain") areas as preserved green spaces, (2) implementation of "guided land development" schemes (see Section 5.6) in several wards, and (3) implementation of two "land pooling" projects. Very good progress has been made on (2), mixed progress on (1), and little progress on (3). Nevertheless, the overall Scheme represents the a major attempt to take action against land use problems in the Valley.

5.8.3. Agenda for the Near Future

The Kathmandu Valley Development Authority needs to be made operational as soon as possible. HMG should take care, however, not to repeat the mistakes made in Development Authorities elsewhere. One mistake to avoid is emphasizing the Authority's project implementation functions at the expense of its planning, coordination, and enforcement functions. Another mistake would be to give the Authority control over projects and functions that are better left to local governments. In addition, HMG should not make the KVDA a major project implementing agency unless adequate provision is made for the operation and maintenance of the projects.

One of HMG's highest priorities for the Valley should be the formulation and adoption of a practical and effective general land use plan. This must be followed by the preparation of more specific local-area land use plans, which are most urgently needed for the suburban and fringe zones of the main cities. A special effort must be made to overcome the inadequacies of earlier land use plans, especially imprecise/erroneous demarcation of land use zones. Both the general and local-area plans will have to be rigorously enforced by the KVDA with high-level HMG support.

The major recommendations of the 1986 Urban Land Policy Study remain valid. They are:

- The Kathmandu Valley's administrative, touristic, and economic functions should be enhanced within limits to preserve its cultural, historic, and environmental values.
- Valuable agricultural land (the low-lying lands) should be preserved both for protection of the environment and landscape of the Valley and for maintenance of local agricultural production.
- Urban development should be encouraged on the elevated ("tar") lands, while densification/consolidation of existing built-up areas should be promoted.
- Urban growth should be guided by "positive" public investment and well as regulations: HMG should plan and coordinate its development projects based on a land use plan, should create enforcement mechanisms to preserve protected areas, and should obligate sectoral agencies not to introduce infrastructure in such areas.

- HMG should establish effective development and building regulations and enlist the cooperation of land brokers.
- The Guthi Corporation (a religious trust which owns much land in the Valley) should be encouraged to manage its land assets in accordance with the Valley Plan.
- A transportation plan for the Valley which includes physical improvements, traffic management provisions, and measures to improve public transport should be devised.
- Other recommendations regarding the cadastral system, land taxation, and financing of land owner compensation and infrastructure should be considered.

The "guided land development" program started in 1988 is a major effort to promote consolidation and more rational growth of newly-developing fringe areas. Another noteworthy recent measure is a decision of the Industrial Promotion Committee (in March 1989) to prohibit the establishment of 14 types of polluting industries within the Kathmandu Valley.

Recently, HMG began to consider limiting industrial development in the Valley to control pollution. In March 1989, the Industrial Promotion Committee decided to prohibit the establishment of 14 types of polluting industries within the Kathmandu Valley. MHPP has been discussing the development of more detailed regulations governing the types and locations of industries in the Valley.

The recent attempt to designate low-lying lands around Greater Kathmandu as preserved green (agricultural) areas has run into strong opposition from land owners. HMG does not have a clear and consistent policy on whether to give compensation for this type of land use control.

The old city core areas of Kathmandu and Lalitpur have a clear need for upgrading. Water supply, drainage, and sanitation are the most urgent priorities. Infrastructure upgrading has been carried out in Bhaktapur with support from GTZ. A pilot on-site training program in area upgrading, focusing on three core neighborhoods of Kathmandu and Lalitpur, is being initiated with assistance from the Norwegian Institute of Technology. This project should provide lessons and a model for wider application.

A one-year project, supported by the Asian Development Bank, will begin in mid-1990 to provide technical assistance for planning and development of the Kathmandu Valley. Its main components are:

- Finalizing the Valley land use plan and preparing local area plans.
- Identifying and preparing preliminary plans for projects that would further the objectives of the above plans (including infrastructure, land development, and area upgrading).
- Improving the systems for coordinating investments and regulating land uses.
- Reviewing environmental quality problems and preparing an action plan to begin addressing them.
- Strengthening institutions through technical assistance and training.

6. RECOMMENDED POLICIES AND STRATEGIES

6.1. National Framework for Urban Policy

6.1.1. Elements of General Development Strategy

The success of Nepalese development strategies is premised on a favorable trade regime with India and third countries and ongoing reforms to liberalize the economy. To quote a recent internal document of USAID/Nepal:

> Without stable and progressive economic growth there can be no alleviation of poverty nor containment of environmental degradation. Recovery and growth can only be achieved through greatly expanded economic participation. In the past, the freedom and incentives for producers, user groups, marketing groups, small entrepreneurs, and business interests to play a full and responsible role in Nepal's economic development have been limited. There can be no economic turn-around and sustainable growth unless the policy, regulatory, and public investment criteria and other incentive structures are changed to clearly promote broad entrepreneurial participation in productive economic pursuits.

The principles noted above should provide a basis for general development strategy throughout the Eighth Plan.

Development Efficiency and Incremental Realization of Sub-Regional Development Potential

As was noted in Section 5.1, HMG should adopt a regional development policy aimed at incrementally helping each sub-region reach its own development potential and to address the most critical social service issues. It is important to recognize that not all sub-regions have the same potential for "equal" economic and social development in real terms. In the national interest, it is important that those places with stronger economic potential receive sustained support for efficiency reasons.

The Regional Development Master Plan has suggested some general guidelines for development priority in each of the sub-regions based on their comparative advantages in development. This is an important policy orientation. A great deal of work has also been carried out in the development of District and Village level profiles which should help guide regional development efforts. An analysis of various eco-zones throughout each of the subregions is also understood to be underway. Recent studies have been undertaken on the trade flows between various settlements throughout the country and the functional activities within various settlements. This information will be very valuable for future planning purposes and can help lead to integrated urban-rural development planning.

Complementary and Coordinated Urban-Rural Development Initiatives

The scope of this study does not permit an evaluation of the complete set of sectoral policies. The key concern of the study is in the role of the settlement system in national development and the way it can support regional and rural development efforts. In this context, it appears that additional policy and programmatic guidelines are needed so that sectoral initiatives are undertaken in a better planned and more productive fashion. Efforts to address environmental degradation is such a program.

The installation of power, water supply, roads, agro input storage, and other investments are often settlement-based. These initiatives increase the capacity of settlements to serve the rural hinterland. In addition, improvements in rural productivity and income generation create demand in settlements for product storage, marketing, processing, finances, etc. These linkages need to be assessed at the local level, and investments planned and coordinated accordingly.

Renewed Support to the Decentralization Program

The Decentralization Program provides a vehicle for coordinating local initiative and "ownership" in development based on local resources and potential. Decentralization should also serve as a means for the coordinated urban-rural initiatives cited above. Measures need to be taken to strengthen District and Village Panchayats (and Town Panchayats) and to capitalize on and reinforce the initiatives of user groups, NGOs, and individuals.

Market-Led Private Sector-Driven Development Strategy

Efforts to genuinely improve agricultural productivity have been mixed if not poor. USAID, in consultation with Nepalese authorities, has sketched out a conceptual framework which deserves consideration as policy by HMG. The elements of this approach are as follows:

- The major source of growth for Nepali agricultural livestock and forestry products exists in the adjacent markets of India, and secondarily in domestic and third country markets.
- Food crop production in the Hills is unlikely to keep pace with Hill area demand, but the lower lying Terai grain belt can satisfy these needs assuming Hill consumers have the income to buy food and that efforts are made to enhance household incomes.
- Terai food and cash crops do not appear to enjoy a strong long-term comparative advantage vis a vis the Indian market. Nevertheless, Terai zones are linked with supply networks of adjacent Indian market centers which have traditionally generated a regular demand for Terai food and cash crops.
- The sub-tropical and temperate growing conditions of the Hills of Nepal must be better exploited to provide a basis for expanded production of higher value, lower volume cash commodities and out-of-season fruits and vegetables for which a significant and growing demand exists in India and other regional markets. Exploitation of this comparative advantage could have a major impact on incomes and purchasing power of Hill households.
- Local market-led econ[illegible] and increased purchasing power will also have an impact on the settlements of the Hill districts which presently have very weak economies.
- Linkages of Hill production systems and consumption centers with domestic and Indian marketing systems has traditionally stimulated growth in strategic market towns in the Terai and lower Hills. This has generated off-farm employment, product collection, sorting, processing, packing, s[illegible]pping and other activities. It has stimulated service activities such as finance, input sales, communications and other primarily settlement-based activities.

On the basis of the above conceptual framework, the following strategy guidelines are recommended:

1. A market-led approach to agricultural development to exploit opportunities in India and third countries as well as for import substitution.
2. Emphasis on income and employment generation particularly through support (and removal of impediments) to local entrepreneurship.
3. An expanded role for private sector participation at all levels and less reliance on public interventions.
4. Greater cash crop and marketing orientation to research, extension, and production activities.
5. Support for the emerging Terai and lower Hills as an agro-marketing growth corridor running parallel to the long border with India.

At the present time, the developmental policy and implementation environment is not yet in place for these strategic elements to be carried out during the Eighth Plan period. For example,the production and marketing chain required to respond to domestic and international opportunities is at an early stage of development. Special emphasis should be placed on the identification of necessary reforms to implement these strategic principles over the plan period.

6.1.2. Urban Policy Objectives and Guidelines

The remainder of this chapter provides specific recommendations for policies and strategies for various components of urban development: employment generation, urban services, institutional development, municipal strengthening, land development, planning systems, and private participation. The purpose of this section is to set out broad policy objectives for consideration. Recommended objectives are as follows:

- To strengthen the planning and management framework at the central, regional, district, town, and village levels with specific emphasis on local economic development and service provision.
- To increase the productive contribution which urban development can make to national development.
- To facilitate increased opportunities for gainful employment and increased real income in urban areas.
- To facilitate the strengthening of urban labor force skills to improve access to productive employment.
- To support development of urban infrastructure and services in response to economic growth potential.
- To increase access to services, land, and shelter for growing urban populations, with special emphasis on lower and middle income groups.
- To increase the resource pool for urban development and render it self financing.
- To provide for the orderly and efficient development of urban settlements and solution to urban environmental problems.

- To encourage and remove bottlenecks to private initiatives in urban development with emphasis on export promotion and marketing, job creation, human resource development, and service and shelter provision.
- To commit scarce public development resources (both human and financial) judiciously and selectively, on the basis of demonstrated effectiveness and public interest.

6.2. Classification of Settlements for Targeted Policy and Investment Programming

6.2.1. Suggested Classification

In elaborating a suggested classification of settlements for Nepal, special care was taken to avoid generally applied international classifications. This was done because Nepal's settlement system and its dynamics are believed to be unique due to the country's geographic and geopolitical characteristics. Thus, it was felt that generally applied classifications such as "growth poles", "market towns" and "service centers" may lead to erroneous developmental thinking and programming. Several attempts, for example, have been made apply theoretical regional development models such as "central place theory" to Nepal.

As a basis for the settlement classification, a functional matrix for 60 Hill and Terai settlements (including all Town Panchayats) was prepared. The matrix, which appears in Annex B, should be discussed and further elaborated.

This study concluded that no single terms lend themselves to defining or classifying settlement types. As a result, the suggested classification (Figure 6.1) is based on several functional and spatial concepts.

6.2.2. Policy and Programmatic Implications of the Settlement Classification

The classification is intended to help formulate policies and programs for specific urban centers. The following guidelines are meant to be indicative and deserve further discussion:

6.2.2.1. Terai Settlements

The evolution of Terai settlements will depend on the establishment of a new trade and transit agreement with India. The following assumes that the former relationship will be reestablished. If this is not the case, policies will have to be dramatically altered. For example, if the number of exit/entry points is reduced, the towns that lose their gateway function will suffer economic setbacks. Those towns retaining this function will require increased planning and development assistance as will emerging nodal settlements along the East-West Highway, which would become a major development corridor.

Main and Secondary Gateways to India

These settlements have already benefitted from various sectoral investment programs and intensive support to improve municipal resource mobilization, management, and town and infrastructure planning. High priority must be given to get planned improvements underway to address growing service deficits and environmental problems.

FIGURE 6.1

SUGGESTED FUNCTIONAL CLASSIFICATION OF SETTLEMENTS

Key to Functional Characteristics:

A/a: Higher and Lower order administrative centers
E/e: Higher and Lower order economic centers
Ag/ag: Higher and Lower order agro-service centers
N/n: Higher and Lower order nodal centers *
C/c: Higher and Lower order catering centers
H/h: Higher and Lower order historic/cultural centers
T/t: Higher and Lower order tourism centers

TERAI AND INNER TERAI		***HILLS***	
1. Main Gateway India		1. Greater Kathmandu	
■ Biratnagar and Birganj	(A/E/Ag/N)	■ Kathmandu and Lalitpur	(A*/E/Ag/N/H/T)
2. Secondary Gateway India/Administrative Center		2. Secondary Gateway Interior	
■ Nepalgunj and Siddharthanagar	(A/E/Ag/n)	■ Pokhara	(A/e/ag/n/T)
3. Minor Gateway India		3. Minor Gateway India	
■ Dhangadhi	(A/e/Ag/N)	■ Baitadi	(A/C)
■ Jaleswor	(A/Ag)		
■ Mahendranagar	(A/Ag)		
■ Bhadrapur	(A/e/Ag)		
■ Karkarvitta	(Ag/c)		
4. Main Interior Gateway (Foothill)		4. Agro Service Center	
■ Butwal and Bharatpur	(A/e/Ag/N)	■ Bhaktapur	(A/e/Ag/H/T)
		■ Banepa	(A/Ag/C)
5. Minor Interior Gateway		5. Minor Interior Gateway/Trading Center	
■ Birendranagar	(A/n)	■ Tansen	(A/e/C)
■ Tribhuvannagar	(A/ag/n)	■ Baglung	(A/C)
■ Sindhuli	(A/ag/n)	■ Phidim	(A/C)
■ Dharan	(a/ag/C)	■ Kataari	(c)
6. Agro Service Center		6. Interior Administrative/Trading Center	
■ Janakpur	(A/E/Ag/H/t)	■ Dhankuta	(A/c)
■ Rajbiraj	(A/e/Ag)	■ Dipayal	(a/n/c)
■ Malangwa	(A/Ag)	■ Gorkha	(A/n/h/c)
■ Kalaiya	(a/ag)	■ Charikot	(A/c)
■ Tulsipur	(A/ag/n/c)	■ Jomsom	(A/ag/n/t/c)
■ Lahan	(Ag/n/C)	■ Tamghas	(A/c)
■ Taulihawa	(ag/c)	■ Jumla	(A/ag/n/c)
		■ Barabise	(c)
		■ Gajuri	(c)
7. Emerging Nodal/Catering Center		7. Catering Centers	
■ Kohalpur	(e/ag/N/C)	■ Mugling	(C)
■ Lamahi	(ag/n/C)	■ Chaujhari	(c)
■ Itahari	(a/ag/n/C)		
■ Inaruwa	(a/Ag/C)		

* Nodal centers are important highway intersections, rail heads, or road heads where goods shipments are transferred between modes of transport.

Priority should also be attached to building on the economic base which has been established in these settlements by attracting private capital for industrial development and improvements in their functions as marketing, distribution and agro-processing centers.

Minor Gateways to India

Physical improvements in these places should be of secondary priority and introduced progressively. However, as in the case of the higher order gateways, emphasis should be placed on building on their existing economic bases particularly in their marketing, distribution, agro-service and processing capabilities.

Main Interior Gateways

These places have the potential to evolve into important and economically diversified settlements and should be given high priority for economic and physical development.

Minor Interior Gateways

Physical improvements in these places should be of secondary priority and introduced progressively. Each will continue to require support to build or maintain moderate self-sustaining economic bases related to their gateway functions.

Agro-service Centers

Janakpur, as an important pilgrimage site, is a special case and should be given high priority for physical development improvement. For agro-service centers generally, emphasis should be placed on deepening and diversifying their bases as agricultural service, marketing, and distribution centers. This should be accompanied with measures to improve agriculture production.

Emerging Nodal/Catering Centers

The key priority at the present time in these places is providing an organized basis for physical and economic development, as rapid growth trends are already in force.

6.2.2.2. Hill Settlements

Greater Kathmandu is the subject of specific recommendations in Section 6.10.

Secondary Gateway Interior

Priority should be given to consolidating development efforts in Pokhara, strengthening its role as a tourism center, and improving its ability to serve as a marketing, distribution and agro-processing center.

Minor Gateway India

Baitadi, like other gateway places, should be strengthened in its ability to serve in the marketing and distribution chain.

Agro Service Centers

While designated as agro-service centers, agro-production in these places might be better oriented toward cash crop production including potential exports. Bhaktapur needs to capitalize on its role as a day tourism center, while Banepa needs to capitalize on its proximity to Kathmandu and its potential location for deconcentration of light industry from the Kathmandu Valley.

Minor Interior Gateway/Trading Centers

The key issue of concern in these settlements is strengthening the economic bases of their hinterlands by turning to a cash crop export orientation and in the local processing and marketing capabilities that can be generated within the settlements.

Interior Administrative/Trading Centers

Many District Headquarters lack economic development potential. Among them, however, are places that do serve as sub-regional (but small) economic and service centers. As indicated above, their relative importance will depend on efforts to capitalize on their potential cash crop production, marketing and local processing capabilities.

6.3. Implicit Urban Policies

Policies

1. HMG should recognize that a number of government policies have had, and will continue to have, indirect effects that contribute to urbanization and therefore constitute "implicit urban policies".
2. HMG should seek to specify the implicit urban policies imbedded in national economic policy within and across sectors. It should use this understanding to strike conscious balances between urban development objectives and other objectives.

Strategies and Approaches

1. HMG should establish a working group in the NPC charged with identifying implicit urban policies imbedded in government policies and programs being undertaken for general development purposes.
2. The working group mentioned above, having identified instances of implicit urban policy, should ensure that the content and implications of these policies are disseminated broadly within the government with a view toward ensuring that unintended urban policies are either supported, when appropriate to the national interest, or curtailed when perceived to be inappropriate to the national development strategy.

6.4. Urban Economic Development and Employment Generation Policies

Policies

1. HMG, while continuing to promote more rapid growth in the agrarian sector of the national economy, should take steps in the 1990s to foster development in rapidly

growing urban areas of the nation by generating productive employment opportunities in increasing numbers in various sectors of the urban economy.

2. HMG should endeavor to foster industrial development along lines that strike a balance between productive efficiency (linked to the capital intensity of production) and labor absorbency.
3. HMG should take steps to tap the energies and initiatives of private investors, both foreign and domestic, with a view toward increasing the rate of productive investment in urban sectors of the economy.
4. HMG, in cooperation with the private sector and foreign donors, should expand manpower training programs targeted to the diverse needs for skilled labor of different sectors of the urban economy in the years ahead.
5. HMG, bearing in mind the likelihood that the greatest numbers of permanent in-migrants to urban areas in the years ahead (until 2002) will be illiterate, unskilled persons, should work with international agencies (e.g., ILO) and private investors to devise programs that will absorb such persons productively in urban areas.

Strategies and Approaches

1. HMG should provide economic incentives to small businesses that invest in technical training, production management, and supervisory training.
2. HMG, while not relaxing industrial guidelines established to control the location of new industry, should provide incentives (tax concessions, rebates and subsidies) to private investors who create non-farm employment opportunities in urban areas outside of Kathmandu and "gateway" cities in the Terai.
3. HMG should work with private sector investors in new industries to encourage in-service training for Nepalese workers.
4. HMG should provide technical advice and assistance to local units of government, including Town Panchayats, with a view toward encouraging decentralized community initiatives that facilitate local investment in labor absorbing industries.
5. HMG, in the Eighth Plan period, should establish improved data on the existing (and changing) distribution (by sector) of the urban labor force with a view toward establishing better estimates over time of the sectoral demand for labor.
6. HMG, in association with private sector investors (indigenous and foreign) should develop improved manpower training programs with a view toward anticipating to the extent possible changes in the demand for labor by sector in urban areas.
7. HMG should improve marketing practices by providing consulting services and access to marketing channels, product development centers and export information.
8. HMG should reduce discretionary controls that hinder private investment.
9. HMG should endeavor to provide legal and other services to small businesses in order to facilitate productive investment.
10. HMG should explore means of absorbing segments of the growing national labor force in agriculture by effecting tenurial reforms that would give marginal cultivators secure

rights in land and by encouraging the growth of rural-based, agriculture-linked small industries (e.g., food processing).

6.5. Urban Services

Policies

1. As far as possible, the costs of urban improvements should be recouped directly from the beneficiaries of those improvements.
2. Within "tariff sector" line agencies, the government should acknowledge the need for a delinking of social and economic objectives in order to make explicit in budgeting which infrastructure elements are directly cost-recoverable from consumers and which are not (but are part of HMG's social objectives).
3. In order to give further substance to decentralization initiatives in line agencies at the Town Panchayat level, local tariffs should be linked to the costs of providing services, thus strengthening accountability and budgetary independence at the local level.
4. The government should continue to promote improved revenue performance and increased capital surpluses by the Town Panchayats in order to mobilize investment potential for urban services.
5. Line agencies need to be restructured from their current role as solely implementing agencies to a role in which they also function as supporting institutions. Town Panchayats would thus take the lead for some aspects of infrastructure service delivery with respect to their own urban areas (particularly operation and maintenance).
6. Both the line agencies and the Town Panchayats should adopt multi-year capital investment planning and budgeting systems.

Strategies and Approaches

1. For "tariff sector" line agencies, the subsidy element in the provision and servicing of items such as public standpipes, public toilets, and street lighting should be phased out where possible by developing innovative programs to privatize these services (with external support, if necessary).
2. There is a need for capital development planning and budgeting for individual Town Panchayats by the line agencies. This can be accomplished first with assistance from the center, but in the long run budgetary independence could be introduced, where required, through the establishment of local offices serving individual Towns. Local offices could act as bulk purchasers of services from the center, then in turn act as retail distributors of those same services.
3. The government should provide additional technical support to Town Panchayats and other urban centers to facilitate rational land use planning in order to make development of infrastructure more efficient.
4. There is a need to foster better coordination of physical planning and budgetary programming among line agencies and Town Panchayats for infrastructure service delivery.

5. Town Panchayats should adopt multi-year capital investment budgets as part of their own annual budgeting procedure. This could start with only Town Panchayat revenues and, in the long run, include funds from HMG line agencies and grants (assuming these can be made predictable and available to the Towns).
6. It is necessary to widely implement urban road standards for new roads and for improvements to existing roads (as recently formulated by MHPP/MSUD).
7. In order to apportion clear responsibility between the Town Panchayats, the Roads Department, and the District Panchayat, there is a need to classify existing urban roads (e.g., class A, B, C, D) and allocate maintenance responsibilities for each.
8. There is a need for further codification of realistic norms and standards for urban infrastructure delivery by line agencies and the Town Panchayats, building upon the efforts already carried out by MHPP/MSUD for the development of urban road standards.
9. It would be useful to formulate a street naming and house numbering scheme to allow proper location of houses/buildings for utility repairs (and other uses).
10. From a public health point of view there is an identifiable need to document successful interventions that can improve the coverage and utilization of sanitary facilities in urban areas. Successful approaches need to be demonstrated to fundamental problems, including: (1) the limited public awareness of the health benefits of proper human waste disposal and (2) the limited affordability of the proposed system, thus far necessitating donor subsidies.
11. The formation of local users groups through the local Panchayat would help establish a sense of ownership and satisfaction when HMG line agencies carry out local infrastructure projects.
12. A cooperation mechanism needs to be developed so that the location of other infrastructure services (i.e., water supply, electric power, telephone) are considered during the design and implementation of road construction works.
13. For the improvement of revenue collection and consumer relations, it would be beneficial if HMG tariff subsector line agencies (e.g., NWSC, NEA, NTC) established additional offices for bill paying and complaints registration in urban areas in conjunction with (and/or operated by) the Town Panchayats.
14. In order to strengthen the technical capabilities of the Town Panchayats, HMG should depute technical personnel from MHPP and various line agencies to respond to short term or long term needs on an individual project basis.
15. Documentation of successful standpost street lights billing and collection models from the Asia region can be helpful in effectively implementing operation and maintenance practices for these services.
16. HMG should narrow the gap between Town Panchayats and the line agencies by formulating a phase-wise transfer of some responsibilities for infrastructure service delivery (particularly operation and maintenance) from the line agencies to the Town Panchayats, with the speed of the transfer based upon the individual economic strength and administrative capabilities of each Town Panchayat.

6.6. Institutional Framework

Policies

1. HMG should establish an inter-agency body to coordinate national urban policies and programs.
2. HMG should clarify its policy on central-local contacts. MPLD should remain the coordinating agency for local government affairs. It should have a major voice in the formulation of programs for local governments. At the same time, other HMG agencies and Town Panchayats should be free to maintain direct contacts with each other on operational matters as part of the Decentralization program.
3. In Town Panchayat areas, the Town Panchayats should take the lead in planning, management, and implementation of local programs. HMG agencies will support the leading role of Town Panchayats.
4. Town Development Committees should initiate programs in Town Panchayats only after receiving formal approval of the Town Panchayat.
5. HMG should support the creation of independent water supply boards in the Town Panchayats. NWSC will provide assistance to these boards.
6. The Town Panchayats should take responsibility for urban stormwater drainage. However, HMG must facilitate the provision of financing for drainage projects.

Strategies and Approaches

1. HMG should establish an urban policy and program coordination body to provide guidance to MPLD, MHPP and other organizations involved in urban development. This body should be capable of issuing directives and of meeting several times per year.
2. MHPP should encourage the Town Panchayats to initiate and take responsibility for more urban development programs. It should consult with the Town Panchayats in a thorough and formal way before starting programs.
3. MHPP should formally structure its local programs in the Towns with the Town Panchayat as the leading organization. TDCs should play a supportive role.
4. MHPP should support the establishment of rules and regulations giving Town Panchayats the leading role in urban planning and plan implementation; giving Pradhan Panchas a leading role in TDCs; and requiring Town Panchayat approval of any actions of Town Development Committees.
5. The Town Panchayat Act and Town Development Act should be revised to specify the powers and functions of TDCs versus Town Panchayats, with the leading role being given to the latter.
6. Under the Decentralization program, Town Panchayats should be given higher status and be formally authorized to maintain direct linkages with HMG agencies.
7. The Town Development Plan Formulation Committee should be given more autonomy in establishing the Town investment plan. The authority of the District Panchayat to modify the annual or periodic Town plan should be restricted.

8. HMG, in consultation with local governments, should prepare guidelines for the involvement of District and Village Panchayats in the planning and development of non-Town Panchayat urban centers. The upcoming Management Support for District and Village Panchayats project of UNDP/World Bank could assist in this.
9. HMG should establish guidelines on the division of responsibility for urban roads between the Department of Roads and the Town Panchayats. The latter should be assigned clear responsibility for certain categories of roads.
10. MHPP should prepare guidelines for the operation of Town Panchayat water supply boards and encourage the formation of such boards on a technically and financially sound basis.
11. MPLD and MHPP should jointly support the further strengthening and utilization of the Pokhara Urban Development Training Center.
12. DHUD should appoint a manpower development and training officer to coordinate and seek support for various types of training for its staff.
13. In order to efficiently use their manpower, MPLD and MHPP should contract local consultants for implementing projects, conducting studies, and doing other fixed-term assignments. Town Panchayats should also use consultants whenever possible.
14. HMG should maintain closer liaison with professional associations (such as the Nepal Engineers Association and the Management Association of Nepal) to promote professional development, joint training activities, and use of consultants.

6.7. Municipal Management and Finance

6.7.1. Municipal Management

Policies

1. The managerial and administrative capacities of the Town Panchayats should be improved through the creation of a "Town Civil Service" independent of HMG's system.
2. The Town Panchayats should be encouraged to implement new organizational structures designed to clarify functions and make management more efficient.
3. HMG should gradually transfer responsibility and authority for specific functions to the Town Panchayats and eliminate overlap between central and local functions.

Strategies and Approaches

1. HMG, in conjunction with the Town Panchayats, should form a task force to develop a program for implementation of an independent "Town Civil Service".
2. The Town Panchayats should follow the recommendations of management specialists in reorganizing along clear functional lines. HMG should continue to provide assistance in implementing reorganization schemes.
3. MPLD should prepare, with the participation of local officials, a "Town Panchayat Administration Manual" for elected officials and staff.

4. The Towns should establish pay scales and fringe benefits comparable to those of HMG.
5. The Towns should give top priority to hiring additional technical staff for planning and infrastructure management.
6. MPLD/UDD and DHUD should continue to provide training for Town Panchayat employees.
7. Town Panchayats should prepare job descriptions for all employees.
8. Town Panchayats, with HMG support, should develop "memoranda of understanding" with sectoral agencies defining mutual responsibilities for service provision.
9. In the medium-term future, responsibilities for urban services should be demarcated as per the recommendations in Section 6.6 (Institutional Framework). Town Panchayats should take over primary responsibility for local urban roads and urban stormwater drainage. In the longer term, the Towns should also take over urban water supply. However, HMG will remain involved in major capital investments in these sectors.

6.7.2. Municipal Finance

Policies

1. HMG should encourage and assist Town Panchayats to further improve financial resource mobilization from their own revenue sources.
2. HMG should provide guidance and support for Town Panchayats to increase collection of direct taxes and reduce their reliance on indirect taxes.
3. HMG should support measures by the Town Panchayats to increase the use of direct charges to beneficiaries of Town-provided services.
4. HMG should adopt a new grant distribution system to make the grants more predictable and rational and to provide incentives to the Towns for improved financial performance.
5. HMG should support the provision of credit financing to Town Panchayats.

Strategies and Approaches

1. Town Panchayats, with support from HMG, should introduce administrative reforms of the octroi. These may include auditing procedures and strict policing of collections.
2. HMG should provide technical assistance to the Towns for greater use of existing direct taxes.
3. HMG should establish laws and regulations giving the Town Panchayats direct authority to enforce penalties for non-payment of local taxes.
4. MPLD should implement a new Town Panchayat grant distribution formula, which has already been designed.
5. Town Panchayats should introduce user charges for services provided by them, including drinking water and solid waste collection.
6. Town Panchayats should implement measures to recover the capital and operating costs of Town-provided infrastructure including roads and drainage works.

7. HMG should implement the loan program of the Town Development Fund Board and provide support for its financial and technical soundness.
8. HMG should develop policies and strategies to promote lending by commercial banks to Town Panchayats for financially and technically viable projects in the medium to long-term future.
9. Town Panchayats should set up tax registries and tax record-keeping systems for all their direct taxes.
10. Town Panchayats should implement their direct taxes by (a) tying the revenues initially to specific, identifiable town improvement projects and (b) undertaking public information campaigns.
11. Town Panchayats should continue to establish systems to require proof of local tax payments for issuance of building permits, vehicle registrations, etc.
12. Town Panchayats may enforce compliance with local taxes by publishing lists of delinquent payers.
13. HMG should immediately undertake a study to recommend a time-bound strategy for rationalizing the urban property tax system, with the objective of creating a single urban property tax to be collected by Town Panchayats. The legal reforms for this should be enacted by the end of the Eighth Plan period, so that implementation can begin during the Ninth Plan.
14. In the medium to long term future, Town Panchayats should begin to base the professional tax on business volumes, so that revenues would grow automatically with economic growth.
15. HMG should explore additional sources of credit for the Town Panchayats. Feasibility studies should be carried out on new initiatives such as (a) promoting a municipal bond market within Nepal or (b) redirecting a portion of local Land Revenue taxes to a capital development fund for each Town.

6.8. Land Development

Policies

1. The government should reaffirm its policy that the private sector must play a major role in developing land for urban use. On this basis, the government should facilitate the formation and operation of private sector land development companies.
2. The government should formulate appropriate credit and tax policies for land development companies.
3. The government should provide the appropriate policy framework to enable private sector land development companies to have access to:
   - Land
   - Financing
   - Urban Services
4. The government should assist the process of land development by establishing an effective urban planning framework.

5. Increasing the supply of developed urban land will benefit all income groups. To help ensure that the needs of the lower-income population are met, the government should also:
   - Target its own land development programs to the population below the median income.
   - Ensure that subsidies, if any, benefit the lower-income groups.
   - Improve the efficiency and effectiveness of government-executed land development programs.

Strategies and Approaches

1. To guide private land development in a more orderly way, DHUD should initiate a major program to assist Town Panchayats, with support from the Town Development Committees, in setting up effective land development regulations (zoning, subdivision controls, and building regulations). Other recommendations related to the urban planning framework appear in Section 6.9.
2. MHPP should collaborate with the Ministry of Land Reform to establish a formal system whereby private land subdivisions are required to carry the endorsement of the local planning (technical) authority before being registered. Such a measure needs to be phased in to avoid unnecessary burdens on individuals.
3. DHUD should take the lead in arranging training and technical assistance to private land developers, including brokers, in proper site planning and design standards. DHUD should arrange for the preparation of manuals and other technical materials to be made available to private land developers and brokers to promote a higher standard of land subdivision.
4. MHPP should take the lead in legalizing a suspension of the "land ceiling" for private land development companies. The suspension could be for a limited time and apply to registered companies only.
5. MHPP should continue the guided land development program, expanding it to secondary cities. Regional Directorates and District Offices should focus on the implementation of GLD programs with strong participation of the Town Panchayats, local leaders and residents.
6. The GLD program should be strengthened through the following measures:
   a. Completed GLD plans should be disseminated widely in the community to encourage brokers and land owners to use them as a basis for further subdivision and introduction of access roads.
   b. All road rights of way in GLD areas should be demarcated in the field, with community participation.
   c. A agreement should be signed between MHPP and the Ministry of Land Reform to implement the transfer of the GLD rights-of-way to the official land records.
   d. MHPP should prepare a specific program for providing compensation to those who lose an unreasonable amount of land in a GLD scheme. This may involve "earmarking" certain revenues for this purpose.

e. MHPP should do a study of the feasibility of implementing a betterment tax to finance physical improvements in GLD areas.

7. The government should facilitate the provision of financing for land development projects by:
   - establishing a Housing Finance Company with provisions for making short-term loans to land developers; and
   - assisting commercial banks to modify their lending policies so as to support financially viable land development projects.

8. To facilitate organized land development, HMG should speed up efforts to improve the land registration system. This would include accelerating the modern resurveying of lands, developing better updating procedure for land records, and modernizing the record storage and retrieval system.

9. MHPP should work with the sectoral infrastructure agencies to set up an efficient, easy system for facilitating the implementation of land development projects by the private sector. The sectoral agencies should collaborate with developers who are prepared to finance infrastructure themselves.

10. HMG should facilitate the importation of construction and engineering equipment by private land development companies.

11. Establishment of cost recovery measures for urban infrastructure will facilitate the delivery of serviced land on a financially viable basis, whether it is done by the public or private sector. This issue is dealt with in Section 6.5.

12. The Department of Housing and Urban Development's primary function in land development should be to provide technical guidance and oversee planning programs like GLD. DHUD's role in the implementation of sites and services projects should be limited to supervising a small number of pilot and demonstration projects. DHUD should pursue one or two land pooling projects, but only if adequate staffing is provided to manage them.

13. MHPP should end the practice of committing itself to executing land development projects or town extension schemes in the absence of adequate local consultation, management arrangements, financial planning, or technical manpower.

14. MHPP should conduct a detailed evaluation of its policies and practices for implementing land development projects. If this evaluation concludes that HMG should be a direct implementer of sites and services or town extension projects, then an appropriate institutional structure must be created. HMG may consider the creation of a specialized governmental unit for this purpose. Such a unit should have a mandate to carry out projects on a financially viable and technically sound basis.

15. MHPP should carry out an assessment of the Revolving Fund for land development. The study should recommend a proper institutional "home" for the Fund, so that it may receive rational financial management.

6.9. Urban Planning Systems

Policies

1. The Town Panchayats should be the lead agencies for urban planning within their jurisdictions.
2. The Town Development Committees should play a supporting role in Town Panchayat planning and development; they should provide assistance when requested by the Town Panchayats.
3. HMG should take steps toward enacting a single, comprehensive urban planning law.
4. Town plans should be prepared from the bottom up; i.e., planning policies, strategies, and actions should originate from the local level as per HMG's Decentralization policy.
5. Community consultation and participation should be an integral part of the planning process.

Strategies and Approaches

1. The focus of attention in urban planning should shift away from producing plans and toward strengthening the planning process and the institutional arrangements for planning.
2. HMG should initiate studies leading to the drafting of a single, comprehensive urban planning law which gives the leading responsibility to Town Panchayats (in municipal areas) and specifies the processes and authorities for planning actions.
3. In the short term, HMG should prepare coordinated rules and regulations for implementing the urban planning provisions of the Town Panchayat Act Amendment of 1987 and the Town Development Act of 1988. These rules should provide clear specifications of planning concepts and procedures, according to modern principles of urban planning.
4. New planning rules should include provisions for community consultation and participation.
5. The rules should also define the composition of the TDCs and specify a leading role for the Pradhan Pancha of the Town Panchayat in the TDC.
6. The rules should require sectoral agencies to act in compliance with approved town plans.
7. MHPP and MPLD should provide training to Town Panchayat officials and staff in urban planning.
8. HMG should activate the Town Development Central Coordination Committee called for in the TDC Act. One of its main functions should be to officially approve town plans.
9. HMG should carry out a detailed assessment of the land registration and records system, with the objective of recommending a long-term program of cadastral modernization.
10. HMG should establish a clear policy regarding the government's rights to restrict private land development in order to promote the general public good (i.e., environmental quality, orderly urban development, etc.). If this policy provides that land owners should receive some compensation, HMG should devise and implement a practical program for raising the needed funds. Setting aside proceeds from a specific tax or fee should be considered for this purpose.

11. Through rules and regulations and, if needed, legislative amendments, Town Panchayats should be provided with powers to directly enforce planning regulations through fines and other penalties.
12. MHPP should provide technical support to the Town Panchayats for improving their building permit procedures and establishing technical criteria for granting building permits.

6.10. Kathmandu Valley

Policies

1. The Kathmandu Valley should be developed and maintained as the nation's primary governmental center and as a major center of culture, tourism, and historic preservation. The cities making up Greater Kathmandu (Kathmandu and Lalitpur) should continue to serve as regional economic and services centers. The Kathmandu Valley should not, however, be a center of large industries.
2. Productive agricultural land in low-lying areas of the Valley should be preserved as such in order to maintain environmental quality, sustain agricultural production, and provide green spaces for the long-term future.
3. Urban growth should be encouraged on "tar" (elevated) lands.
4. HMG should act to minimize environmental pollution and degradation in the Valley.
5. HMG should promote orderly development and densification of fringe urban areas through a mixture of investments ("positive measures") and regulations (controls).
6. New and improved mechanisms for land use planning and development control should be implemented (see Sections 6.8 and 6.9).
7. Government and public land acquisition should be consistent with the plans and policies for development of the Valley.
8. The Kathmandu Valley Development Authority should (a) be developed as a strong planning, coordinating, and enforcement agency, (b) have authority to implement projects, but not duplicating the functions of sectoral agencies and Town Panchayats, and (c) will have the authority to coordinate the investment programs of other HMG agencies in furtherance of the Valley land use and development plans.

Strategies and Approaches

1. A long-term, Valley-wide land use plan should be finalized as a matter of the highest priority and submitted to HMG for approval. This plan should clearly demarcate land use zones and specify permitted and non-permitted uses in these zones.
2. Local area plans should be prepared for central city core areas, urban fringe areas, and other areas. As these local area plans cannot be mass-produced quickly, the KVDA should prioritize the areas which most need detailed planning. These plans should contain detailed zoning, land development regulations, building controls, and infrastructure plans.

3. HMG should, on a high-priority basis, prepare the working regulations for the Kathmandu Valley Development Authority, assign staff to it, and make it operational.
4. The KVDA should oversee, with support from NPC and MOF, the preparation of a multi-year capital investment program for the Kathmandu Valley which will include projects of all the HMG sectoral agencies.
5. HMG should implement the recommendations on land planning and development of Sections 6.8 and 6.9 in the Valley.
6. HMG should assist in setting up technical units for control of land use and building in the three Districts of the Valley, to regulate development in the rural (non-Town Panchayat) areas.
7. The newly-initiated on-site area upgrading program under Norwegian/HMG sponsorship should be used as a "laboratory" for testing community-based, multi-sectoral approaches to core area upgrading for later wider application.
8. HMG should take actions to involve the Guthi Corporation in furthering the land use policies for the Valley. The Guthi Corporation may place valuable agricultural lands under its jurisdiction so as to preserve them; it may also acquire preservation areas in exchange for other lands.
9. HMG should undertake studies of air pollution, water pollution, and other environmental problems in the Valley (e.g., waste disposal) which will recommend new legislation, rules, and institutional mechanisms to control such problems.
10. HMG should prepare a strategy, with rules and regulations, to limit the types, sizes, and locations of industrial establishments in the Kathmandu Valley in order to maintain the Valley's scenic and environmental qualities.

6.11. Strengthening Private Sector Contributions

Notwithstanding Nepal's long-term commitment to governmental planning for development, there appear to be no obstacles in terms of policy to the strengthening of private sector contributions to the economic development of the country. Indeed the Constitution of Nepal makes plain that the State is responsible for providing appropriate protection to private enterprise. Within the frame of the Constitution, the State is also responsible for ensuring the maximum possible participation of Nepal's citizenry in the economy of the country.

6.11.1. Private Sector Urban Economic Development and Employment Generation

Policies

1. HMG should continue to work toward the establishment of a favorable environment for private sector initiatives that foster economic development in all of its aspects, including the generation of employment opportunities in rapidly growing urban areas.
2. HMG, while preserving industrial location and related guidelines perceived to be in the national interest, should take steps to remove impediments to private sector initiatives,

especially those that generate employment in urban areas and, more generally, contribute to economic development.

Strategies and Approaches

1. HMG should initiate action to:
   - rationalize its administrative procedures,
   - simplify its rules,
   - amend some laws,
   - rescind others,
   - reduce its intrusive control over private sector activity, and
   - work out a "one window system approach" by which private entrepreneurs can function expeditiously in interactions with government.
2. HMG should take the lead in providing systematic guidance (in the absence in Nepal of corporate lawyers who could be expected to have a working knowledge of all legislation bearing on the establishment of private ventures in Nepal) to prospective investors, domestic and foreign.
3. HMG should provide translation of laws and regulations when those laws and regulations have been published only in Nepali.
4. HMG should strive to remove supply side bottlenecks that may inhibit private investment and industrial development by providing infrastructural development, training programs in management and industrial skills, as well as programs to stimulate entrepreneurship.
5. HMG should endeavor to provide appropriate inducements to private investors (including tax incentives, rebates, and export subsidies) to encourage and development of needed industries, including industries pledged to employ Nepali workers.
6. HMG should review compulsive controls (designed to affect industrial location, on a continuing basis with a view toward determining whether such controls are inhibiting or promoting appropriate kinds and levels of private investment.
7. HMG should determine the degree to which it can appropriately modify or eliminate the following specific constraints on private sector activity.
   a. Constraints that affect the regulation and distribution of foreign exchange to various importers and exporters.
   b. Discretionary controls that condition the working of Export-Import Control Rules.
   c. Cumbersome procedures and discretionary controls that condition the administration of the Foreign Investment and Technology Act of 1981 and may inhibit the process by which permission can be secured to open industries conducive to national development.
   d. Discretionary administration of rules pertaining to the assessment and collection of income taxes that have led to confusion, wrong interpretations of law, and errors in tax assessment that are difficult to correct.

8. HMG should work in concert with private investors and foreign donors to establish or further develop training centers (like those now being developed by the ILO, for example) capable of producing skilled workers to meet the needs of specific industries.
9. HMG should provide incentives to private industry to develop in-service training programs for Nepali workers.
10. HMG should take steps to streamline procedures by which small businesses can secure loans for productive investment.
11. HMG should establish and make known publicly its locational priorities for forms of social overhead capital that support industrial investment and job creation in urban areas (on a regionally differentiated basis).
12. HMG should work with local units of government to rationalize tax structures and to enhance the capacity of local communities (and especially Town Panchayats) to raise revenues to support investment in services that facilitate local investment and job creation.

6.11.2. Private Sector Land Development

Many of the policies and strategies suggested in Section 6.8 (Land Development) are oriented toward facilitating the private sector. They are briefly reviewed again here:

Policies

1. The government should facilitate the formation of private land development companies.
2. The government should formulate appropriate credit and tax policies for private land development companies.
3. The government should provide the necessary policy framework to enable the private sector to obtain land, financing, and infrastructure for land development.

Strategies and Approaches

1. Training should be provided, with support from DHUD, for private land developers, including brokers, in site planning and design standards. Manuals should also be prepared and made available to private developers and brokers.
2. MHPP should take the lead in legalizing a suspension of the "land ceiling" for private land development companies.
3. The government should help provide financing for organized private land development by:
   - establishing a private-public Housing Finance Company with capacity to make short-term loans to private land developers; and
   - assisting commercial banks to modify their lending policies so as to support financially viable land development projects.
4. HMG should speed up efforts to improve the land registration system.
5. The sectoral infrastructure agencies should set up mechanisms for providing speedy cooperation to private land development projects. The sectoral agencies should extend

full support to private developers who are prepared to finance infrastructure themselves on a cost-recovery basis.

6. HMG should facilitate the importation of construction and engineering equipment by private land development companies.

6.11.3. Private Sector Urban Services

Policies

1. Where possible, government should mobilize private sector capital to supplement public sector contributions for infrastructure service provision.
2. Town Panchayats should privatize the operation and maintenance of their public sector facilities where possible.

Strategies

1. Where possible, private sector capital should be mobilized for the provision of footpaths, stormwater drainage, and road paving in residential and commercial areas through voluntary contributions.
2. HMG line agencies and Town Panchayats involved in infrastructure services should consider handing over to private contractors some of their maintenance responsibilities based upon annual bids for services (e.g., street cleaning, public toilets, bus parks, etc.).
3. Innovative programs should be developed for privatization of revenue collection from street lighting, public standposts, public toilets, etc., in order to improve revenue generation and the viability and sustainability of such services.
4. There is a need to involve the private sector more specifically in the implementation of sanitation programs, for instance, by stocking low-cost latrine pans and slabs at local shops in market towns and by training plumbers in their installation.

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ANNEX A

URBAN SETTLEMENT CHARACTERISTICS

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
FAR WESTERN DEVELOPMENT REGION				
MAHENDRANAGAR (Terai) Town Panchayat Zonal HQ District HQ	Commerce and Services Cottage Industries Wood/products Food processing	Manufactured Goods - India	Processed Cereals - Adjacent hill districts, Dhandeldhura, Silgagarhi, Baitadi Nepalgunj, Siddharthanagar Third Country Goods - India Timber/products - India/Nepal Indian Manufactured Goods - Hill districts	On India/Nepal border Junction of: East-West Highway Proximity to Dhanghadi-Dandeldhura Rd Indian Rail and Road Network Airport with links to Dhangadhi, Nepalgunj, and Kathmandu
DHANGADHI (Terai) Town Panchayat Zonal HQ District HQ Regional Admin. Ctr.	Commerce and Services Food processing Mills Wood/products Chemical-resin/turpentine	Manufactured Goods - India	Processed Cereals - Hill Districts Timber products - India/Nepal Third Country Goods - India	Proximity Indian Border 13 km. south of E-W hwy Air Service Kathmandu and Western Hill airports Dhangadhi-Dandeldhura Road Indian Road and Rail
DIPAYAL (Hills) Town Panchayat Regional Center District HQ	Basic commerce/services	Manufactured Goods - India Foodgrains - Dhanghadi Mahendranagar	Indian Manufactured Goods - Hill Districts	End Dhangadhi-Dandeldhura Rd. Traditional Trade Routes

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
BAITADI (Hills) District HQ District Hospital	Commerce and Services Catering to local hinterland	Consumer Durables and Foodgrains - India (Tanakpur and Pitrogahr) Chinese Durables - Kathmandu Foodgrains - Dhangadhi and Mahendranagar	Ghee, bamboo, woolen handicrafts Medicinal herbs - India, Dhangadhi, Mahendranagar Imported Consumer Durables - local hinterland	Proximity western Indian border Traditional trade routes
WESTERN DEVELOPMENT ZONE				
NEPALGUNJ (Terai) Zonal HQ District HQ Town Panchayat Medical Campus Regional Panchayat Training Center Regional Hospital	Forest Industries Industrial Estate Agro-Processing (Prohib. on Industrial establishments) Regional Wholesale Retail Center	Manufactured Goods Pig Iron, iron, Metals Machinery, electrical equipment Chemicals, plastic, coal - India Oil seeds, rice, wheat - Terai, India	Manufactured, goods Machinery, etc. from India - Northern Districts, Nepal Foodgrains - Hill Districts Hill products, ghee, ginger - India	Proximity Indian Border Indian Roads/Railhead Proximity E-W Highway Route North to Surkhet Hinterland defined by Rapti and Karnali Rivers Airport with links to Kathmandu and Hills
BIRENDRANAGAR (Terai) Regional Development Center District HQ Town Panchayat Three Univ. Campuses 15 bed hospital	Cottage Industries Textiles, garments, Small food industries Lime quarry Agro-settlement Industrial estate being developed	Manufactured Goods - India, Nepal Ghee, ginger, woolen goods - Hill districts-settlements (Jumla, Dailekh, Jarjarkot, etc.) Commerce and services	Manufactured goods, consumer durables, and agricultural products - Hill District settlements	Hill valley settlement Route south to E-W Hwy and Nepalgunj Air services to Kathmandu Jumla, and Nepalgunj Power grid

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
TRIBUVANNAGAR (Gorahi) (Inner Teral) Town Panchayat District HQ Two Campuses 15 bed hospital	Wholesale, retail commerce Services Cottage and small industries, food, agro-processing	Manufactured goods - India via Nepalgunj - Chinese via Butwal Foodgrains - Krishnanagar	Manufactured goods, foodgrains cloth, kerosene, salt, etc. - E. Rukum, Dang, Rolpa Pyuthan	Valley Settlement Route to Tulsipur and Lamahi (E-W Highway) Earthroad to Pyuthan and partially to Libang Recently tied to power grid
TULSIPUR (Inner Teral) Zonal HQ Eye Hospital	Agro-settlement Commerce and services Cottage Industry	Manufactured goods - India via Nepalgunj - Chinese via Butwal	Manufactured and consumer goods, vegetables, animal products, cloth - local area	Route via Gorahi to Lamahi (E-W Highway) Eventually direct route to E-W Highway via Amri (south)
SALYAN (Hills) District HQ Hospital Campus	Basic Commerce/ Services	Manufactured goods - India via Nepalgunj - Chinese via Butwal	Manufactured goods - local area	Ridge Settlement Jeepable road to Tulsipur Local generator
PYUTHAN (Hills) District HQ	Basic Commerce/ Services	Manufactured goods - India via Nepalgunj - Chinese via Butwal Clothing - Kathmandu Consumer Durables - Butwal Kerosene, cooking oil, salt, cereals from Gorahi	Manufactured goods - local area Oranges, herbs, ginger, soyabean, garlic, ghee (all not from settlement)	Tractorable road to Gorahi Partly Jeepable Local generator Ridge Settlement but proximity Pyuthan Valley
JUMLA (Hills) District HQ Zonal HQ	Basic Commerce/ Services Catering Cottage industry in leather, furniture, and textiles	Sugar, salt and kerosene - Mid-Western Terai	Agro-products: apples, other fruit, wool products - Nepalgunj Re-export sugar, salt, kerosene - local area	Nodal center traditional Trade routes Airport with linkages to Chaujhari, Pokhara

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
CHAUJHARI (Hills) Service center	Basic commerce/services Catering	Manufactured goods - Indian via Nepalgunj Surkhet; Other goods via Kathmandu	Ghee and woolen products to Nepalgunj and Jumla	Nodal center on traditional trade routes Airport with linkages to Pokhara, Kathmandu
LAMAHI (Inner Terai) Service center	Commerce/services Catering E-W Hwy	Consumer goods - Nepalgunj and Butwal Foodgrains - Terai	Consumer goods - Deokhuri Valley	Airport with linkages to Kathmandu and Nepalgunj Valley Settlement
MIDWESTERN DEVELOPMENT ZONE				
POKHARA (Hills) Regional Development Center Zonal HQ District HQ Town Panchayat	Regional Commerce/ services Wholesale/Retail center Medium Industries: Foods Agro-processing	Foodgrains, cereals - Terai, Gandaki and Dhaulagiri Pig Iron, Iron Steel, metals, machinery, electrical equipment, textiles, oilseeds, sugar, chemicals, plastics, coal, cement	Exports most imported goods to hinterland Noodles (foodstuffs)	Valley settlement Air service to Palungtar, Kathmandu, and most regional airports
BHAIRAHAWA (Siddarthanagar) (Terai) District HQ Town Panchayat	Regional Commerce/ Services Wholesale/Retail center Some Industries	Manufactured goods, machinery, consumer durables, for distribution to Hills (pig iron, iron/steel, metals, other metals, textiles, chemicals, coal, plastic) - India Foodgrains - Western Nepal	Trading center for surplus grains from Western Terai sold to Lumbini, Ghandaki, Dhauligiri Wholesale potatoes to East and North, i.e., Kakarvitta and Kodari Distribution center of manufactured goods to Northern Hill areas	Air services to KTM/West Nepal Proximity Indian railroads On Indian Border On Siddhartha Highway to Pokhara/India Several kilometers south of E-W Highway at Butwal As smaller Indian Gateway, locationally disadvantaged vis-à-vis Butwal

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
BUTWAL (Terai) Town Panchayat Zonal HQ Technical Institute Educational center	Historical break of bulk center Regional commerce/ services Transport depot and repair Growing industrial center	Manufactured goods from Bhairawa/Pokhara Wholesale trade of ghee, ginger, wool, herbs, other Hill district products	Third country products - India Sale of Hill products to local and Indian market	Key transport center On E-W Highway and Siddhartha Highway to Pokhara
TANSEN District HQ (Hills) 3 University Campuses	Historical trade center Traditional trade w/ western hinterland Local commerce/services Cottage/small industries textiles, furniture, mills, dhaka cloth, Nepali hats, hosiery	Manufactured goods - India Agricultural and animal products from surrounding Hill settlements	Manufactured goods - local hinterland Marketing of agricultural and animal products - local hinterland	Ridge town On traditional trade route adversely affected by Siddhartha Highway which bypasses town
WALING-SYANGJA (Hills) District HQ University Campus	Commerce/services cottage industry repair, etc.	Consumerables and manufactured goods - India via Butwal/ Bhairawa Salt, oil, cloth, other consumer durables - Butwal, Bhairawa Confectionery, biscuits from Kathmandu, Pokhara Rice and Soybean oil - Birgunj	Ghee, ginger, oranges from District to Butwal and Bhairawa Local Raksi, confectionery to neighboring districts Baglung, Parbat Rice and soybean oil to local hinterland	Waling 2km from Syangja En route to Pokhara and Butwal/Bhairawa Traditional trade routes
JOMSON (Hills) District HQ	Retail commerce/services Catering	Origin most imports - Western Terai Sugar, salt, kerosene - Pokhara, Syangja, Hills Salt, wool, sheep, tea, cloth - Tibet	Nepal paper, chili, sugar, soybean, spices, wheat, apples, peas - Tibet Apples, fruits, wool products - Nepalgunj	Trade/trekking route to Pokhara and other traditional trade routes Air service to Pokhara

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
BAGLUNG (Hills) District HQ	Commerce/services, tailors, goldsmiths, repair furniture, cobblers, quilts, rice mills, textiles. (270 retail, 12 wholesale establishments)	Foodgrains, onion, eggs, salt, kerosene, pots, cloth, flour - Butwal Noodles, biscuits, soaps, cigarettes, etc. - Pokhara Indian goods, cement, construction materials - Bhairawa Hides, herbs, goats, sheep, horses - Mustang-Myaagdi Luxury imports, third country goods - Kathmandu	Ghee, wool, herbs, hides, raksi, woolen goods, carpets, Nepal paper, slater, honey, bamboo goods, soybean, furniture - local hinterland and Mustang	On Baglung-Pokhara road Traditional trade routes
KUSHMA (Hills) District HQ	Traditional trade/break of bulk center Basic commerce/services	Consumer and agro-goods from Butwal	District exports include animal products, ghee, wool, goats, medicinal herbs, ginger, garlic, soybeans	40 km. west of Pokhara route to Baglung
DAMOULI (Hills) District HQ	Commerce/services, small industry, agro-processing mills, brick factories, textiles, cottage industries	Consumer goods from Bharatpur, Pokhara, Birgunj, Bhairawa, Butwal, and Kathmandu Pokhara - biscuits, thread, soaps, teas; Birgunj and Bhairawa - pulses, salt, paper, cement; Kathmandu - medicine, distillary, soft drinks, luxury items, plastic; Nayaranghat - foodgrains	Exports of herbs, ghee, cinnamon bark, herbs, garlic, tobacco, soybeans, vegetables, honey, woolen goods, and carpets to Kathmandu, Pokhara, and India	On Pokhara-Kathmandu Highway

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
GORKHA (Hills) District HQ	Commerce/services 135 retail, 42 wholesale Textiles, wood products, blankets, rope	Sugar, foodgrain, consumer commodities - Bharatpur, Bhairahawa, Birgunj	Distribution of imports to local hinterland	Gorkha-Nayaranghat Road
CENTRAL DEVELOPMENT REGION				
METROPOLITAN KATHMANDU KATHMANDU/Lalitpur (Hills) National Capital Regional Dev. Center Zonal HQ District HQ Town Panchayat Tribhuvan University Engineering Campus	Primary Economic, Services, Administrative, Industrial, Cultural, Tourism Center	Primary destination most country imports	Key exporter of Nepal manufactured goods - Nepal Tourism-related exports	Primary Transport Node International air services. Routes to Kodari, and E-W Highway via Bharatpur, Hetauda, Pokhara
BHAKTAPUR (Hills) Zonal HQ District HQ Town Panchayat Hospital	Cultural/tourism center Commerce/services - 304 retail, mainly food Agriculture dominant Industrial and Cottage Industries/Handicrafts - 702 units: cloth, bricks, etc.	Imports rice and maize Variety of manufactured goods, machines, etc. from India, China via other settlements	Exports wheat, carpets, handicrafts, bricks, woolen goods, metal products - Kathmandu and local hinterland	Kathmandu Valley Settlement Linkages to Kathmandu-Koderi Road but bypassed Ties to northern and eastern Hill districts
BANEPA (Hills) Town Panchayat	Commerce/services 315 retail units 53 Cottage Industry 122 services 2 Industries	Key imports from Kathmandu Valley: variety manufactured goods, clothing, foodgrains, etc. Transit point to Kathmandu from Charikot (magnesite), Barabise (slate), livestock	Transit point for goods from Kathmandu North (foodgrains, petrol, cement)	Valley settlement East of Kathmandu Valley, linked by Kathmandu-Koderi road

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
DHULIKHEL (Hills) District HQ Campus under construction	Agro-settlement Basic commerce/services 345 commercial units (most outside TP) Tourism-hotel Business migration to Kotari, Lahan, etc.	Diminished role as a trading center Kathmandu Valley Settlements	Salt, clothing, sugar - local hinterland Modest exports of foodgrains and animal products to Kathmandu and local hinterland	Ridge town Along road between Kathmandu and Kodari (Tibet) agro goods
BARABISE (Mountain)	146 retail units commerce and services cottage industries, carpets, catering services	Transit point for items from Tibet such as Chinese manufactured goods and wool via Tatopani.	Distribution Tibetan items to local hill districts	Northeast of Kathmandu Traditonal trade route
BIDUR/Trisuli Bazaar (Hills) District HQ Town Panchayat	Commerce/services - 468 retail, 7[illegible] services - 42 cottage industries Agro-processing	Raw material for agro-processing, cottage industries; manufactured goods	Manufactured goods Beaten rice, brick, furniture - local hinterland	Route to Kathmandu via Nuwakot Traditional trade routes to West and North
CHARIKOT (Hills) District HQ 43 government offices	Retail and services - 158 retail units	Retail commodities from Banepa and Dhulikhel Foodgrain, cement, fertilizer from Kathmandu	Distribution of retail commodities to local hinterland	On Lomsangu-Jiri road to Banepa, Dhulikhel
GAJURI (Hills)	Commercial trading center Military outpost Cottage industries such as carpets, furniture, metal pots	Fruits and vegetables from Dhading district	Distribution of fruits and vegetables to local hinterland and Kathmandu	On Pokhara/Kathmandu Road
MUGLING (Hills)	Transport bus depot Basic commerce and services, mainly catering	From Bharatpur: cloth, clothes, foodgrains, Indian consumer goods, fruit	Distribution of imports to localized hinterland and in highway catering	Located at junction of roads from Pokhara and Bharatpur to Kathmandu

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
BHARATPUR/ NAYARANGHAT (Inner Terai) District HQ Town Panchayat	Gateway commerce and services/transport center Agro-supply center Emerging industrial center Emerging wholesale center	Imports of Indian consumerables and manufactured goods Transit of other goods to Hill hinterland	Surplus cereals sold to Kathmandu and Hill hinterland, including Kodari, Gorkha, Pokhara	Located at Key junction of E-W Highway and northern routes to Kathmandu and Pokhara Air service to Siddhartha-nagar and Kathmandu
HETAUDA (Inner Terai) Zonal HQ Town Panchayat	Important but declining Industrial, wholesale center, diversifed cottage industry Commerce/services Remains important transport center	Imports of manufactured goods, machinery, chemicals, etc. for industry, commerce	Industrial exports to Kathmandu and Nepal, more limited export consumerables to Kathmandu and hills	Junction of E-W Highway Route from Birgunj and Triubhuvan Highway to Kathmandu (now less used than route via Mugling) Former key gateway to Kathmandu
SINDHULI (Inner Terai) District HQ	Hill gateway for reception and distribution of agro-products to Hill hinterland, catering center Rice mills, brick/tile	Consumer goods, clothes from Janakpur; rice, maize, bananas; agro-products and reception and distribution center, catering center, and gateway to northern hill districts	Distribution of rice, banana, ghee, fruits, maize foodgrains, potatoes, ginger, garlic, to Raamechap District and beyond	45 km north of Janakpur Feeder link to E-W Highway
BIRGUNJ (Terai) District HQ Town Panchayat	Key Gateway with India and diversified economy, agro-market center Growing industrial center especially north of town	Transit point for imports to Nepal via India	Export of transit goods from India, export of agricultural products	Indian border settlement at key gateway of country imports Air service to Kathmandu via Simra Light guage rail connection with Raxaul (India)

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
KALAIYA (Terai) District HQ Town Panchayat	Agro service center commerce/services Rice/Sugar production Mills, furniture Satellite Birgunj growth recently stagnant	Manufactured goods and consumerables, machinery, etc. via Birgunj	Exports of rice and sugar to Hills	Feeder roads to Birgunj and E-W highway
JANAKPUR (Terai) District HQ Town Panchayat Main Religious Center	Agro-processing, commercial, service center Fish farming Site major cigarette factory Other industries	Manufactured goods, machinery - neighboring Terai districts/Kathmandu	Processed agricultural and manufactured goods - neighboring Terai settlements/districts Cigarettes - national market	Between E-W Highway and Indian Border via Jaleswor Secondary Gateway with India Air service to Kathmandu
JALESWOR (Terai) Zonal HQ District HQ Town Panchayat	Agro-market center, foodgrains Livestock, vegetable bazaar Localized commerce/services Cottage industry and rice mills Satellite of Janakpur Fish farming	Manufactured, consumer goods from India	Foodgrains, oilseeds, vegetables Consumerables, manufactured goods to local hinterland	3 km from Indian Border road, railhead at Pupari/Bhitmore
MALANGAWA (Terai) District HQ Town Panchayat 49 Administrative Offices 15 bed hospital	Commerce and Services Rice mills, brick, bidi industries Agro center for rice, wheat, sugarcane, tobacco, oilseed	Manufactured goods and consumerables from India	Export of rice, wheat Sugar, tobacco, oilseed to Nepal,India	Indian border settlement On feeder road to E-W Highway to Nawalpur; pavement of road to enhance Malangawa's economic role as gateway.

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
EASTERN DEVELOPMENT REGION				
BHOJPUR (Hills) District HQ University Campus	Commerce and services cottage industry center wood products, weaving, catering center	Indian manufactured goods, consumerables - Dharan Third country goods from Kathmandu	Distribution of consumer-ables to local district settlements	20 km north of Dhankuta Air service to Tumlingtar, other small regional airports, and Kathmandu
KHANDBARI (Hills) District HQ	Commerce and services, cottage industries weaving, shoe making, masonry, rice mills	Indian manufactured goods, consumerables from Dharan Third country consumer-ables from Kathmandu Medicine from Biratnagar	Local distribution Indian manufactured goods/ consumerables	Trail link to Dhankuta
OKHALDHUNGA (Hills) District HQ University Campus	Minor commerce/services cottage industries - furniture	Imports consumer durables from Lahan and Kataari	Export of maize, wheat, millet, rice, potatoes, vegetables, animal products, fruits to Kataari and Dharan	40 km northwest of Lahan Trail link to Kataari which is linked by motorable road to Lahan
PHIDIM (Hills) District HQ	Minor commerce/services cottage industries - carpet brick and tile	Imports foodgrains, consumer durables, salt, sugar, rice, kerosene, oil, from Dharan and Ilam	Distribution of imports to local hinterland Exports cardamom, spices to Singapore via india Oranges, lemons, blankets ghee, cows, goats to local hinterland	20 km northwest of Ilam Tied by jeepable trail under construction
TEHRATUM (Hills) District HQ	Commerce/services cottage industries, shoes, confectionery, cotton and textiles	Imports consumerables from Dharan	Exports ghee, herbs, potatoes, woolen garments, Dhaka caps Local distribution of manufactured, consumer goods, ground nuts, peas, chicken	20 km north of Dhankuta Linked by Tehratum-Taplejung trail

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
DHANKUTA (Hills) Regional Development Center Town Panchayat	Basic commerce/services reduced in importance with extension of road to Hile, Basantpur	Imports consumerables from Dharan	Localized distribution of consumer products	Ridge settlement now bypassed by route from Dharan to Hile and beyond
ILAM (Hills) Zonal HQ District HQ Town Panchayat	Wholesale/retail center Major tea industry Major agricultural center Cottage industries	Imports for distribution rice, clothing, consumer goods, construction materials	Exports tea, cardamom, outside Nepal Oranges, potatoes, ginger, vegetables, floor brushes, ghee to Jhapa District for distribution	On main trade route to Pdanchathar and Taplejung Road from Charli at E-W Hwy to Phidim and Taplejung (being paved) bypasses Ilam Bazaar. This may undermine Ilam's wholesale/retail role.
DHARAN (Low Hills) Zonal HQ Town Panchayat 4 Campuses	Commerce/services center diminishing in importance due to N-S road Cottage Industries with new industrial estate was site British army recruitment camp market center	Imports for distribution rice, clothing, consumer goods, construction materials	Market hill produce Local consumer goods	Access to E-W highway via Itahara/Biratnagar Indian railheads
DAMAK (Terai) Town Panchayat	Emerging commerce/ services/agro-processing center Rich agricultural area, large animal market (800 sold daily) Site Himalayan Tea Enterprise Cottage industries	Imports of manufactured and consumer goods Fruit and ghee from Hill districts sold locally	Exports agro-products, foodgrains, jute, tea, livestock, in Nepal Wholesale, retail trade with western Jhapa and Panchathar Districts and SW Ilam district	Strategic location on E-W highway and northern trade routes

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
BIRTAMODE	Commerce/services Catering Agro-processing Rice mills	Imports tea from Jhapa District Consumer durables from Biratnagar and Kakarvitta	Local distribution of consumer and agro-products Tea to Kathmandu/Nepal	9 km north of Bhadrapur on E-W Highway
ITAHARI Private University Campus	Commerce/services and growing industrial center Rice/foodgrain processing	Imports manufactured Indian goods, machinery, etc., mainly from Biratnagar	Supplier of foodgrain and consumer goods to Hills	20 km north of Biratnagar on E-W Highway and N-S route to Dharan and Hills
KAKARVITTA (Terai)	Emerging Indian gateway town and local commercial center; overcoming Bhadrapur	Imports consumer goods via India	Exports Hill products to India: animal and agro-products, foodgrains Export point of international tea trade from Ilam and Jhapa	Strategic location on E-W Highway 20 km northeast of Bhadrapur
BHADRAPUR (Terai) Town Panchayat District HQ	Traditional trade center rice and oil Entry point from Bengal-Bihar and industrial center (declining)	Imports consumer and manufactured goods via India	Traditional exported rice, jute and timber to India (declining)	Poor ties to E-W Highway and Indian road and rail network, resulting in loss of economic role in favor of Kakarvitta
BIRATNAGAR (Terai) District HQ Town Panchayat	Major commercial/ services, industrial center Metals, plastics, soap, chemicals, wood, mixed diversified manufacturing	Key entry point of imports from India now declining in favor of Birgunj	Traditional export point Jute for international market (declining) Key foodgrain trade center of Eastern Development Region for export to Hills and India Key export point of consumer and manufactured goods from India to Eastern Hills	Strong linkages to Indian road and rail networks, proximity to E-W Highway on N-W route to Hills via Dharan Some decline in favor of Itahari Air service to Kathmandu and regional airports (Rajbiraj, Janakpur)

SETTLEMENT AND KEY PUBLIC SERVICE FUNCTIONS	KEY ECONOMIC ACTIVITIES	KEY IMPORTS Source and Type	KEY EXPORTS Destination and Type	LOCATIONAL CHARACTERISTICS
RAJBIRAJ (Terai) Town Panchayat Zonal HQ District HQ Zonal hospital University campus	Agricultural center Local commerce/services	Imports consumer goods via India and Terai Settlements	Localized export of rice, wheat, potato, declining export of jute	Location unfavorable as gateway, transport node 12 km from Indian border Distant to E-W Highway Good local road network Air service to Kathmandu

ANNEX B

Functional Classification of Urban Centers

FUNCTIONAL CLASSIFICATION OF HILL URBAN CENTERS													
	Towns	Greater Kathmandu	Secondary Gateway Interior	Minor Gateway India	Agro Service Center	Minor Gateway Interior/ Trade Center	Interior Admin./ Trade Center	Catering Center	Emerging Nodal/ Catering Center	Economic Center	Tourism Center	Historic/ Cultural Center	Administrative Center
	Town Panchayats:												
1.	Kathmandu	■			■					■	■	■	■
2.	Lalitpur	■			■					■	■	■	■
3.	Pokhara		■		■					■	■		■
4.	Bhaktapur				■					■	■		■
5.	Banepa				■			■					■
6.	Dhankuta						■	■					■
7.	Dipayal						■	■					■
8.	Ilam							■					■
9.	Bidur/Trisuli							■					■
10.	Dhulikhel							■					■
11.	Tansen					■		■		■			■
	Non-Town Panchayats:												
12.	Baitadi							■					■
13.	Baglung					■		■					■
14.	Phidim					■		■					■
15.	Kataari					■		■					

FUNCTIONAL CLASSIFICATION OF HILL URBAN CENTERS													
	Towns	Greater Kathmandu	Secondary Gateway Interior	Minor Gateway India	Agro Service Center	Minor Gateway Interior/ Trade Center	Interior Admin./ Trade Center	Catering Center	Emerging Nodal/ Catering Center	Economic Center	Tourism Center	Historic/ Cultural Center	Administrative Center
16.	Gorkha						■	■				■	■
17.	Charikot						■	■					■
18.	Jomson				■		■	■			■		■
19.	Tamghaas						■						■
20.	Jumla				■		■	■					■
21.	Mugling							■					
22.	Gajuri						■	■					
23.	Barabise						■	■					
24.	Pyuthan							■					■
25.	Waaling							■					■
26.	Khandbari							■					■
27.	Bhojpur							■					■
28.	Tehrathum							■					■
29.	Damauli							■					■
30.	Okhaldhunga							■					■
31.	Kushma							■					■
32.	Chaujuri							■					

Source: Management Support for Urban Development Project, 1989.

FUNCTIONAL CLASSIFICATION OF TERAI URBAN CENTERS														
	Towns	Main Gateway India	Secondary Gateway India	Minor Gateway India	Main Interior Gateway (foothill)	Minor Interior Gateway	Agro Service Center	Nodal Center	Catering Center	Emerging Nodal/ Catering Center	Economic Center	Tourism Center	Hist./ Cultural Center	Admin. Center
	Town Panchayats:													
1.	Biratnagar	■					■	■			■			■
2.	Birgunj	■					■	■			■			■
3.	Nepalgunj		■				■	■			■			■
4.	Sidharthanagar		■				■	■			■			■
5.	Butwal		■		■		■	■			■			■
6.	Bharatpur		■		■		■	■			■			■
7.	Hetauda						■							■
8.	Janakpur						■				■	■	■	■
9.	Dhangadhi			■			■	■			■			
10.	Mahendranagar			■			■							■
11.	Jaleswor			■			■							■
12.	Bhadrapur			■			■				■			■
13.	Birendranagar					■		■						■
14.	Tribhuvannagar (Ghorahi)					■	■	■						■
15.	Inaruwa						■		■	■				■
16.	Damak						■			■				
17.	Rajbiraj						■				■			■

FUNCTIONAL CLASSIFICATION OF TERAI URBAN CENTERS

	Towns	Main Gateway India	Secondary Gateway India	Minor Gateway India	Main Interior Gateway (foothill)	Minor Interior Gateway	Agro Service Center	Nodal Center	Catering Center	Emerging Nodal/ Catering Center	Economic Center	Tourism Center	Hist./ Cultural Center	Admin. Center
18.	Kalaiya						■							■
19.	Malangawa						■							■
20.	Dharan					■	■		■					■
21.	Lahan						■	■	■					
22.	Taulihawa						■		■					
	Non-Town Panchayats:													
23.	Kakarvitta			■			■		■					
24.	Sindhuli					■	■	■						■
25.	Birtamod						■			■				
26.	Itahari						■	■	■	■				■
27.	Kohalpur							■	■	■	■			
28.	Lamahi						■	■	■					
29.	Tulsipur					■	■	■	■					■

Source: Management Support for Urban Development Project, 1989.