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Nepal

Development Performance and Prospects

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South Asia Programs Department

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Currency Equivalents

Before October, 1975:	US\$1 = Nepalese Rupees (Rs) 10.56 Rs 1 = US\$0.094 = Indian Rupees (IR) 0.726
From October, 1975 - March, 1978:	US\$1 = Rs 12.50 Rs 1 = US\$0.080
After March, 1978:	US\$1 = Rs 12.00 Rs 1 = US\$0.083

Fiscal Year

Nepal Fiscal Year - July 16 to July 15

This report is based on the findings of a mission which visited Nepal in May/June 1979 composed of Y. Huang (Chief of Mission), J. Borthwick (Economist), D. Jamison (Human Resource Economist), S. Kandel (Industrial Economist), S. Roy (Agricultural Economist) and J. Tillman (Economist).

NEPAL: DEVELOPMENT PERFORMANCE AND PROSPECTS

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COUNTRY DATA - NEPAL

<u>AREA</u>	<u>POPULATION</u>	<u>DENSITY</u>
140,797 sq. km.	13.3 million (mid-1978)	94 per sq. km.
	Rate of Growth: 2.2% (from 1970 to 1977) ^{a/}	331.0 per sq. km. arable land

<u>POPULATION CHARACTERISTICS (1977)</u>		<u>HEALTH</u>	
Crude Birth Rate (per 1,000)	45	Population per physician	39,000
Crude Death Rate (per 1,000)	19	Population per hospital bed	6,630
Infant Mortality (per 1,000 live births)	150		

<u>INCOME DISTRIBUTION</u>		<u>DISTRIBUTION OF LAND OWNERSHIP</u>	
% of national income, highest quintile	..	% owned by top 10% of owners	..
lowest quintile	..	% owned by smallest 10% of owners	..

<u>ACCESS TO SAFE WATER (1975)</u>		<u>ACCESS TO ELECTRICITY (1975)</u>	
% of population - urban	81%	% of population - urban)	3.0
- rural	5%	- rural)	3.0

<u>NUTRITION (1974)</u>		<u>EDUCATION (1975-1976)</u>	
Calorie intake as % of requirements	95%	Adult literacy rate %	19%
Per capita protein intake (grams per day)	50	Primary school enrollment %	60%

GNP PER CAPITA in 1977^{b/}: US \$110

GROSS DOMESTIC PRODUCT IN 1976^{b/} ANNUAL RATE OF GROWTH (% , constant prices)

	US \$ Mln.	%	1965-75
GDP at Market Prices	1548	100.0	2.0
Gross Domestic Investment	155	10.0	
Gross National Saving	78	5.0	
Current Account Balance	- 3	- 0.2	
Exports of Goods, NFS	124	8.0	
Imports of Goods, NFS	201	13.0	

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1977^{b/}

	Value Added		Labor Force ^{c/}		V. A. Per Worker
	US \$ Mln.	%	Mln.	%	US \$
Agriculture	996	68.0	5.9	93.0	169
Industry	132	9.0	0.1	2.0	1,320
Services	337	23.0	0.3	5.0	1,123
Total/Average	1,465	100.0	6.3	100.0	232.5

GOVERNMENT FINANCE

	CENTRAL GOVERNMENT				% of GDP 1976/77
	Rs. Mln.				
	1975/76	1976/77	1977/78	1978/79	
Current Receipts	1,097.2	1,302.2	1,559.3	1,688.0	7.5
Current Expenditure	654.1	784.1	815.0	991.5	4.5
Current Surplus	443.1	518.1	744.3	696.5	3.0
Capital Expenditure	1,224.6	1,486.4	1,792.9	2,049.7	8.6
External Assistance (net)	489.5	538.1	830.7	1,019.3	3.1

Note: All conversions to US dollars in this table are at the average exchange rate prevailing during the period covered.

a/ Currently estimated at 2.6%.

b/ For these items, source is World Development Reports 1978 and 1979.

c/ Total labor force; unemployed are allocated to sector of their normal occupation.

.. Not available.

COUNTRY DATA - NEPAL

MONEY, CREDIT AND PRICES

	1975	1976	1977	1978	1979
	(Million Rs outstanding mid-July)				
Money and Quasi Money	2,064	2,524	3,223	3,772	4,517
Bank Credit to Government (net)	286	480	750	966	1,154
Bank Credit to Public Enterprises	569	567	511	869	1,108
Bank Credit to Private Sector	783	716	864	1,072	1,304
Money and Quasi Money as % of GDP	12.5	14.5	18.6
General Price Index (1973/74 = 100)	116.8	115.9	119.0	132.3	136.8
Annual Percentage changes in:					
General Price Index	16.8	-0.7	2.7	11.2	3.5
Bank Credit to Government	104.3	67.8	56.3	28.9	19.5
Bank Credit to Public Enterprises	341.1	-0.4	-9.9	70.1	27.5
Bank Credit to Private Sector	11.5	-8.6	20.7	24.1	21.6

BALANCE OF PAYMENTS

	1975/76	1976/77	1977/78
		(Millions US\$)	
Exports, f.o.b. <u>b/</u>	98.3	93.9	88.8
Imports, c.i.f. <u>b/</u>	156.3	166.9	209.7
<u>Trade Balance</u>	-58.0	-73.0	-120.9
Services, net	23.2	39.4	47.6
of which: Tourism	17.1	23.0	30.2
Transfers, net	27.7	30.8	25.1
of which: Private Remittance	18.7	21.5	18.3
Indian Excise Refund	7.9	9.3	8.1
<u>Current Account Balance</u>	-8.2	-2.8	-48.2
Official Grants	21.1	18.5	23.9
Official Capital, net	12.1	16.3	22.7
Private Capital, net	9.6	-10.3	-10.4
<u>Change in Reserves (-Inc.)</u>	-34.6	-21.7	12.0
Gross Reserves (mid July)	120.3	145.3	135.1
Net Reserves	114.9	137.8	126.1
Fuel and Related Materials			
Imports of which: Petroleum	14.3	17.6	17.5
Exports of which: Petroleum	--	--	--

RATE OF EXCHANGE

Through March 1978	Since March 1978
US\$ 1.00 = NRs 12.5	US\$ 1.00 = NRs 12.0
NR 1.00 = US\$ 0.08	NR 1.00 = US\$ 0.03

MERCHANDISE EXPORTS (1977/78) a/

	US\$ Mln.	%
Foodstuff & raw materials	71.5	82.6
Manufactures	14.7	17.0
<u>Total</u>	86.2	100.0

EXTERNAL DEBT, DECEMBER 31, 1978

	US\$ Mln.
Public Debt, incl. guaranteed	87.7
Non-Guaranteed Private Debt	.
<u>Total outstanding & Disbursed</u>	87.7

DEBT SERVICE RATIO for 1977 c/:

1.4

IBRD/IDA LENDING, (June 1979) (Million US\$):

	IBRD	IDA
Outstanding & Disbursed		42.5
Undisbursed		158.9
<u>Outstanding incl. Undisbursed</u>		201.4

a/ Customs basis.

b/ Payments basis.

c/ Ratio of Debt Service to Exports of Goods and Non-Factor Services.

. not applicable.

Mountain Region

Hill Region

Inner Terai

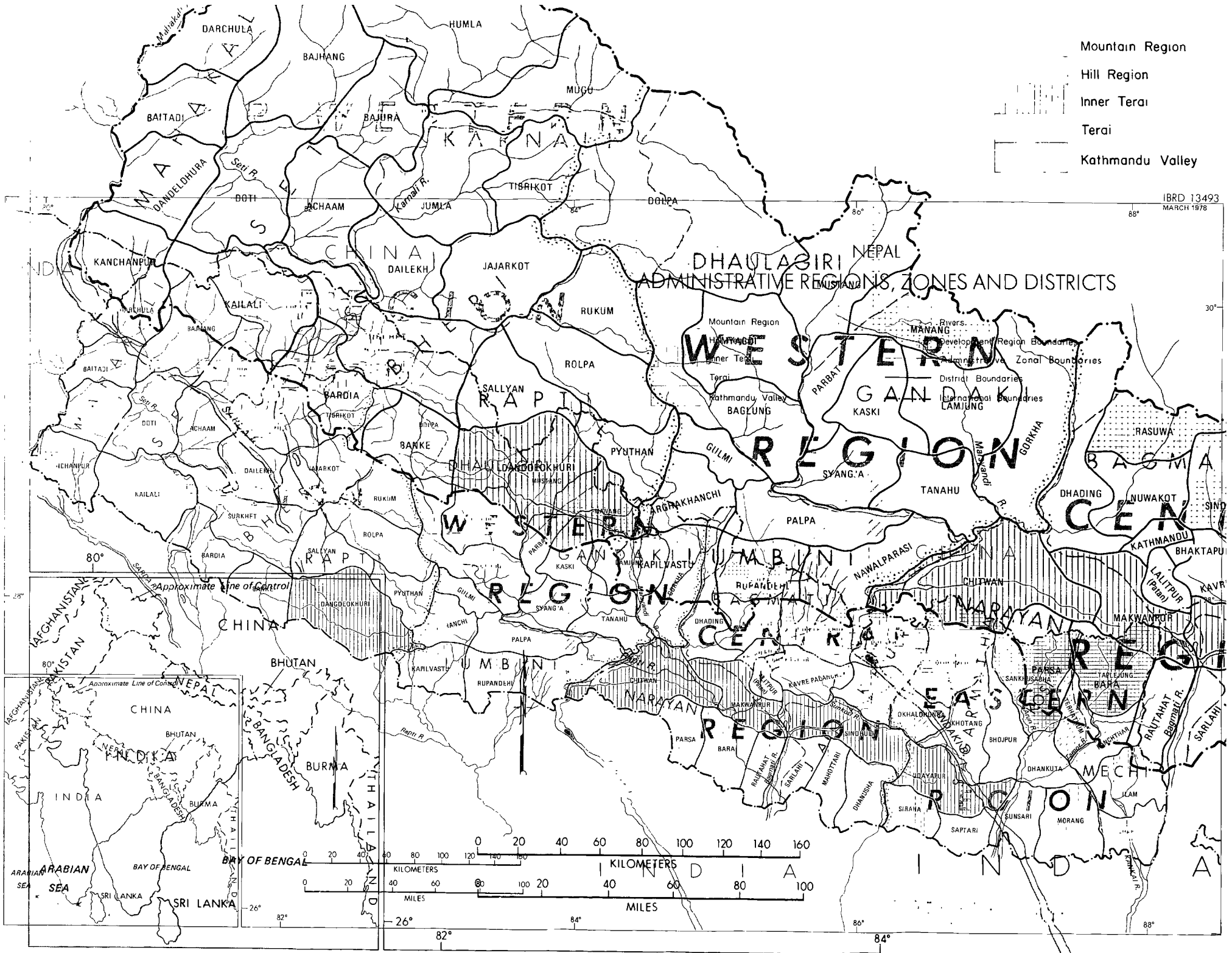
Terai

Kathmandu Valley

IBRD 13493

MARCH 1978

ADMINISTRATIVE REGIONS, ZONES AND DISTRICTS

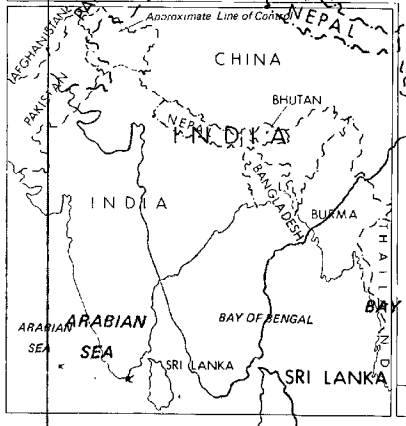
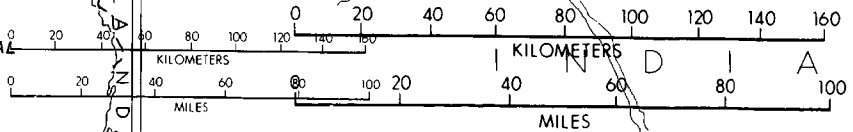


WESTERN REGION

CENTRAL REGION

EASTERN REGION

SOUTHERN REGION



PREFACE

With Nepal nearing the completion of its Fifth Development Plan and embarking on preparations for the Sixth Plan (1980/81-1984/85), it would seem opportune to take a longer-term view of the nation's performance and prospects. Chapter I reviews Nepal's policies and achievements during the Fifth Plan and identifies the major issues that must be addressed in the coming years. Chapter II then discusses the strategy options for the key development sectors - agriculture, industry, tourism, energy, and transport. Human resource development (population, health, and education) is examined in Chapter III. Chapter IV presents a macro-framework to evaluate Nepal's medium-term prospects and financing requirements, as well as the long-term implications for alleviating poverty and restructuring the economy. Chapter V concludes with a discussion of Nepal's external assistance needs.

POSTSCRIPT

An Update of the Sixth Plan Preparations

i. This report is based, in part, on information presented in a translation of HMG's Basic Principles of the Sixth Plan (1980-85), issued in April 1979. An amended Basic Principles was approved in November 1979, with an official translation to be issued. The publication schedule of this report precludes a revision to incorporate the numerous and extensive changes in the Basic Principles which are summarized below. The text of this report, therefore, refers to the original Basic Principles and not to the amended version. It should be noted, however, that on the whole, the amended Basic Principles and this report now share strikingly similar views on Nepal's prospects and priorities in the medium term. The focus of the amended Basic Principles has been sharpened to deal more directly with Nepal's development problems while allowing for the limited financial and human resources available. The target rate of growth has been reduced from 5% per year to 4% and planned development expenditures have been reduced by one-fifth from the original proposals.

ii. The strategy for agriculture stresses increasing production in the Terai by utilizing more fully the irrigation infrastructure, and improving access to extension services and associated inputs. Expanded foodgrains production in the Hills is emphasized in order to make the Hills more self-sufficient in foodgrains, since significant agro-climatic specialization between the Terai and Hills is feasible only in the long run. Reafforestation programs will be given priority in order to provide fuelwood and fodder as well as to reduce soil erosion. Improvement of the land tenure system is also highlighted as a necessary step to ensure that the full potential of agriculture is realized. The growth of cottage and small-scale industries is to be encouraged to provide greater employment opportunities. Rural electrification through mini-hydel is seen as an important element in providing for increased production in rural areas.

iii. The amended Basic Principles recognizes that a selective approach in meeting basic needs is necessary. Thus, increasing foodgrains production will meet the major need of improved nutrition. Better and more readily available supplies of drinking water and fuelwood will meet other needs, while also freeing labor currently wasted in their collection. Basic health facilities will also be expanded through integrated community health posts (ICHHP), while in education, stress is placed on improving the quality of primary and adult vocational education. The amended Basic Principles emphasizes the need for population control, and family planning programs are to be expanded. The other basic need to be met in rural areas is improved transport, and the Sixth Plan will include programs to improve trails, tracks, and suspension bridges.

iv. In recognizing that past development efforts have not made the most efficient use of the available resources, several measures to improve the country's absorptive capacity are proposed. Decision making is to be further decentralized, specifically by encouraging the private sector and by improving the performance of public enterprises, through giving management more responsibility. The Government's development administration is

to be improved through institutional reforms, such as the introduction and strengthening of planning cells in the line ministries. Finally, Nepal's future skilled manpower requirements are to be identified so that their supply can be increased in a timely fashion.

v. The financial resource prospects for the Sixth Plan period have been modified sharply. Projected annual revenue growth has been reduced from 9.5% to 7%, while regular expenditures are now anticipated to rise by 10% compared with the original estimate of 3.8%. With likely foreign assistance and additional taxes, the resources available to HMG for development expenditures are estimated to be Rs 16,000 million versus the earlier estimate of Rs 20,500 million. It is now estimated that about 60% of this would be for capital investment. In scaling down development expenditures from the previous levels, all sectors have been reduced in absolute terms, but the share of HMG development expenditures allocated to agriculture has rise from 27% to 29% and social services from 26% to 28%; while the share of industry and power has fallen from 26% to 22% and transport and communications from 22% to 21%.

SUMMARY AND CONCLUSIONS

The Fifth Plan (1975/76 - 1979/80)

i. The Fifth Plan was to be a turning point in the development of Nepal. The first four plans, with their emphasis on physical infrastructure, especially roads, were to establish a foundation which later, more comprehensive development endeavors could build upon. It was thus believed that the country was poised for more rapid growth on the order of 4-5% annually. The level of investment was to increase by more than 70% in real terms over the Fourth Plan, and the focus of investment was to shift towards the more directly productive sectors and the social services.

ii. Public investment performance has, in fact, been excellent; development expenditures have grown at over 15% annually in real terms. The reasons for this impressive performance have been the Government's ability to increase the level of public savings, as well as a three-fold acceleration in the growth of foreign aid disbursements. If present trends continue, Fifth Plan investment targets should be achieved. The Government has also been relatively successful in reorienting its investment away from the transport sector towards agriculture and the social services; however, transport outlays still absorb the largest share of the development budget.

iii. Macroeconomic performance, however, has been poor. Mainly because of stagnant agricultural production, real GDP has grown at less than 2.5% annually. This poor agricultural performance has in part been the result of successive poor monsoons during the first two years of the Plan, but it also reflects the failure to more fully exploit irrigation infrastructure, diffuse improved agricultural technology, and strengthen support services. The trade deficit has widened steadily, largely due to declining rice exports to India. Rapidly growing tourism earnings and foreign aid disbursements, however, have covered these deficits and enabled Nepal to maintain adequate international reserves.

iv. The failure of Nepal's development efforts, especially under the Fifth Plan, to result in any significant improvement in living standards is of deep concern. Investment still amounts to about 10% of GDP, and its continued growth is constrained by (a) the increasingly difficult task of mobilizing additional domestic resources, (b) the limited absorptive capacity, and (c) the pressing demands for basic needs satisfaction of the rapidly growing population. The Government's ability to undertake new investments is further constrained by Nepal's serious ecological problems that are manifesting themselves in severe fuelwood shortages and soil erosion.

v. By every indication then, Nepal has reached a critical stage in its development. The country is caught in a vicious circle of poverty, and as difficult as it is to break this circle, the next five to ten years may represent Nepal's last chance to do so without having to become completely dependent upon the goodwill of aid donors. Nepal possesses, however, underutilized infrastructure that can be exploited at relatively low cost, provided that future investments are well focused. Such investments should form an integral part of the development program in the coming years; if they do, real economic growth of 4% per annum should be possible.

vi. All this highlights the importance of the current preparations of a Sixth Plan (1980/81-1984/85). The objectives and principles governing the plan have been issued, calling for growth of 5% per annum, a doubling of the investment level to 22% of GDP by 1984/85, a continued shift of investment in favor of directly productive activities and social services, and the achievement of ambitious physical targets across all sectors (see Postscript). While Nepal has genuine and urgent needs in all these sectors, it is almost certain that the cost of meeting them will greatly exceed available resources. It will thus be necessary to establish clear cut priorities so as to achieve as efficient use as possible of available resources. Important issues which will need to be addressed in this process include the desirable balance between (a) consumption and investment, (b) programs in the Hills versus the Terai and (c) investment in human versus physical capital.

The Directly Productive Sectors and Infrastructure

vii. If development is to have meaning in Nepal, it must extend out from the Terai and the Kathmandu Valley, where efforts are presently concentrated, and reach the people in the Hills and Mountains. The strategy outlined in this report requires an effort to increase the growth rate of agriculture to about 3% per annum, making possible an overall growth rate for the economy of 4%. Increased foodgrains production must form the foundation for this growth, but diversification into cash crops is also required as a basis for agro-industries and exports.

viii. In view of marketing difficulties and the low purchasing power of the Hills population, foodgrains production must increase in the Hills to enable it to meet a much larger portion of its own food requirements than is presently possible. Integrated rural development programs offer the best hope of addressing the variety of problems that have to be solved in order to establish economically viable household units. These include livestock development, fodder improvement, irrigation development, promotion of cottage industries as well as better access to improved seeds, fertilizer, and extension services.

ix. This renewed attention to the Hills need not compromise efforts to realize the Terai's considerable potential for increasing foodgrain production. The Terai's disappointing performance in recent years reflects, to a significant extent, the inadequate irrigation system which is designed more for extensive rather than intensive cultivation. Recent efforts to rectify these defects - increasing the capacity of reservoirs, regulating water supplies and extending channels down to farm levels - are all welcome developments. Provided existing infrastructure is more fully exploited, significant production increases at relatively low cost should be possible in the medium term.

x. Special attention is merited for programs to alleviate marketing and distribution bottlenecks which presently aggravate the Hill-Terai food imbalance and render agro-climatic specialization impractical. Marketing services will need to be extended to link the Hills with the Terai (and also within isolated Hill areas). Substantial increases in public distribution of foodgrains to deficit areas will be required in the coming years. Aside

from strengthening the operations of the National Food Corporation, the Government is considering a food security program to maintain a reserve stock for distribution purposes. In addition, serious thought should be given to rural construction works as the basis for food for work programs which would simultaneously address the twin problems of unemployment and food deficits in the Hills while also meeting its legitimate infrastructure needs. Careful administration of such programs is required to ensure that producer incentives are not eroded and that corruption and waste are avoided.

xi. At present, Nepal's comparative advantage rests clearly with agriculture. This reflects the lack of natural resources that might serve as the basis for industry, the unsatisfactory human resource base that limits its competitiveness, as well as Nepal's small domestic market and landlocked position. The multiplicity and complexity of the constraints to industrial development discourage any generalized approach, and Nepal would be well advised to be very selective in its industrial initiatives. The medium-term priorities include improving the performance of public enterprises and promoting cottage and selected small-scale industries. Tourism offers perhaps the best near-term potential for increased foreign exchange earnings; however, efforts are needed to reduce its capital intensity, strengthen linkages with other local industries, and disperse its benefits beyond the Kathmandu Valley. For the longer-term, there is a need to identify the industrial subsectors in which Nepal could be competitive. Joint ventures with India offer possibilities for establishing mutually beneficial activities; however, Nepal should also continue its own efforts to diversify exports to third countries. Energy intensive industries are at best a very long-run possibility, while the potential for mineral-based industries has yet to be assessed. Nepal might, however, consider promoting certain industries that improve labor skills, such as light engineering, even if these industries were not sufficiently competitive at present; such investments should be considered as part of the cost of long-term human resource development.

xii. The benefits of the above measures will not be fully realized unless the policy environment that entrepreneurs face is improved. The incentives for private industry have not yet proven effective and public enterprises have generally received preferential treatment. It is, therefore, not surprising that Nepalese private entrepreneurship is very sparse and foreign investment virtually non-existent. A number of actions might be considered including: simplifying the tax system; encouraging foreign investment through more liberal repatriation allowances; and providing special fiscal incentives for export endeavors.

xiii. In supporting infrastructure, the principal needs lie in the energy sector. The exploitation of Hill forests for fuelwood has created the specter of ecological disaster; large-scale afforestation programs are thus essential, along with ingenuity in meeting rural energy needs, through for example, more efficient wood burning stoves. Meeting demands for electric power is another formidable task. If the power constraints to industrial expansion are to be alleviated and the demands of urban residential users satisfied, Nepal will need additional generating capability of between 100 to 150 MW by 1990. In the long run, there is also a potential for very large-scale hydro-plants which would lead to power exports to India, but many legal, financial, and political issues between Nepal and India are yet to be resolved.

Proposals for road construction must be carefully scrutinized in view of existing low traffic densities and the burden on the recurrent budget of mounting maintenance expenditures. Emphasis should now turn to feeder roads, consistent with the decreased share in the budget of road expenditures in the coming years.

Human Resource Development

xiv. As awesome as the tasks of developing the directly productive sectors are, Nepal faces perhaps no less pressing human resource development needs. Nepal's demographic situation is among the worst in the world and is deteriorating steadily. The rate of population growth is now estimated at 2.6% per annum, and population density with respect to cultivated land far exceeds that of Pakistan, Bangladesh and India. Nepal's expenditures per capita on family planning are low relative to other developing countries, and this is reflected in the low awareness and use of modern contraceptive methods. Unless population planning programs are mounted now and sustained through the foreseeable future, rapid population growth will nullify much of the development effort.

xv. Well-focused programs in health and education can assist greatly in facilitating population planning, alleviating human suffering, and laying the basis for increased productivity in the future. The education sector has been notably successful in not only achieving but also exceeding enrollment targets set for the Fifth Plan. The task ahead would appear to be one of consolidation at the primary school level and expansion and rationalization at the higher and technical education levels. In carrying out these programs, attention should focus on (a) reducing dropout rates; (b) improving the quality of education, particularly in terms of strengthening the curriculum and training qualified teachers; and (c) increasing enrollment of females at all grade levels.

xvi. Despite steady progress, the people of Nepal suffer from health conditions that are among the worst in the world. Life expectancy is still only 45 years, infant death rates exceed 150 per thousand, and malnutrition afflicts a significant proportion of the population. Over-population accounts for some of these problems, leading to lower food availabilities, while poor environmental sanitation facilitates the spread of communicable diseases.

xvii. There is little that the health care system can do about the aggregate food supply, but health education can improve the distribution of food within families to ensure that those most at risk receive adequate nutrition. In addition, programs focusing on specific nutrient deficiencies can, at reasonable cost, confer enormous benefits. Provision of iodized salt, for example, can eliminate goiter which causes retardation of physical and mental growth, and in extreme cases, cretinism. Other health problems can be controlled if not eliminated through, for example, access to safe water supplies to impede transmission of water-borne diseases, use of stoves with chimneys to reduce respiratory and cardio-pulmonary disorders, and programs to control malaria and tuberculosis. While shortages of trained manpower will continue to limit expansion of the public health services, greater availability of basic drugs can do much to improve curative services, as well as facilitate the contact needed to disseminate preventive health education.

xviii. The extent of Nepal's basic needs deficiencies presents a difficult choice between the priorities that they should receive relative to programs designed directly to accelerate growth. In the Nepalese context, increased allocations to education and health will be made partly at the expense of programs, which directly or indirectly, aim at increasing food production, which is the most pressing basic need at this time. The conflict, therefore, is not only between expenditures for basic needs and those for growth related investment, but also among the various types of basic needs themselves. The challenge to HMG is thus not so much to meet these pressing requirements in the social sectors, but to do so in a way that is consistent with the at least as urgent need to raise production and thereby incomes.

Medium-Term Prospects

xix. In contrast to the poor growth performance throughout the 1970s, real GDP could grow at 4% per annum in the medium term if appropriate policies are followed and the requisite resources secured. Public investment will need to increase on the order of 12% annually in real terms, if this higher potential is to be realized. Associated recurrent expenditures will also need to expand commensurately to satisfy the operating and maintenance costs of the development budget.

xx. The proposed expenditure levels will require major efforts in resource mobilization. Nepal's excellent performance in this respect must not be allowed to slacken despite recent setbacks. One area where potential exists for raising revenues is that of agricultural land taxation which has declined steadily as a percentage of agricultural output. Aside from agricultural taxes, efforts will need to concentrate on improving tax administration through streamlining the tax department's working procedures, building up the number of tax administrators, and revising the legal codes. A potential source of new financing (that has hitherto been a drain on the budget) is the surplus that could be generated from improving the performance of public enterprises.

xxi. The medium-term balance of payments prospects are mixed. Merchandise exports will probably suffer from the reduced demand for rice from India, and transshipment problems will continue to hamper exports to third countries. Meanwhile, imports will need to expand more rapidly to fulfill development needs. Tourism earnings and private transfers will only offset part of the deterioration in the trade balance, and the current account deficit will likely rise to 8% of GDP from the present 3%. Foreign assistance will, therefore, need to grow rapidly, perhaps on the order of 15% annually in real terms. While this would be quite high, it would, nevertheless, represent a decline from recent experience.

xxii. The most disturbing element of Nepal's prospects in the medium term is the need to squeeze already very low consumption levels in order to generate the resources for investment. Moreover, evaluated against a much longer time perspective, growth of 4% offers only the most distant prospects of alleviating poverty in Nepal. Even by the year 2000, for example, about one-half of the population would be below or just at the minimum subsistence levels compared with a projected one-quarter for other low income countries.

xxiii. In this context, present economic policies and investment programs appear to represent an uphill struggle merely for economic and ecological survival, and it is unclear whether such policies would necessarily lead to the type of restructuring of the economy required to establish a basis for more rapid, long-term growth. While at this time, Nepal's comparative advantage lies clearly with agriculture, in the long run, its future hinges on the development of a substantial industrial sector, particularly one based upon labor-intensive techniques. At this stage, action should concentrate on establishing the preconditions for industrial progress such as: providing the right kind of financial incentives; research on the areas in which Nepal might develop comparative advantage and on the technical, financial, and marketing implications of ventures in these areas; streamlining of the administrative machinery dealing with industry; and a systematic effort to upgrade technical, administrative, and managerial skills. Simultaneously, consultations should be held with governments in neighboring countries to improve the conditions for access of Nepalese goods into these markets. As far as the domestic market is concerned, industrial progress will depend on growth in the rest of the economy, primarily in agriculture. Such growth is, of course, also needed to provide the resources for gradually increasing industrial investment. Unless efforts are mounted soon to address these long-term concerns, Nepal and the donor community may find themselves, several decades hence, still searching for a vehicle to move the economy beyond subsistence.

External Assistance

xxiv. Nepal's use of foreign assistance has risen rapidly in recent years. Under the Fifth Plan, disbursements have grown at 28% annually in current terms and presently exceed \$100 million. Donors now include 10 major bilateral sources and 4 multilateral agencies, and their programs have shifted away from transport infrastructure towards agriculture and power. In 1976, the Nepal Aid Group was formed to provide a forum to help coordinate the increasing level and complexity of assistance in line with HMG's development priorities. Local meetings between HMG and donors have also proven to be particularly useful in sharing views on specific problems or selected programs.

xxv. Nepal's development programs will continue to depend upon large amounts of foreign aid. Additional project aid is needed to help finance the acceleration in investment. In addition, to help compensate for the limited prospects for raising domestic resources, donors could assist by financing increased proportions of local costs. However, to minimize absorptive capacity constraints, donors are encouraged to implement their projects through the existing administrative infrastructure, and to make greater use of sector credits to support interrelated activities that would ordinarily not be suitable for financing on a project-by-project basis. On its part, HMG is advised to utilize available technical assistance to the extent possible to help alleviate the widespread shortages of technical and administrative manpower.

xxvi. It is unlikely that Nepal will be able to increase its resource mobilization efforts sufficiently to finance the domestic costs of both an accelerated investment program and the country's pressing recurrent expenditure requirements, particularly in the social sectors. Donors are, therefore,

urged to consider increasing commodity aid in addition to the annual average \$225 million required solely to sustain investment in 1979/80-1981/82. Commodity aid presently comprises 5% of total aid flows to Nepal, which is far less than is needed considering Nepal's poverty and isolation. In addition to rendering general revenue support, such aid is relatively quick-disbursing and provides donors with flexibility to respond to Nepal's overall needs. For example, relieving the shortages of fertilizer, steel, and cement would remove serious physical constraints on the nation's development efforts. In addition, consideration should be given to a food assistance program in view of the recent poor harvest. Such assistance should include the coincidental financing for distribution from the port to the Hills, since distribution costs are likely to far exceed the value of the food itself. In formulating such programs, great care will have to be exercised to cope with the many administrative complexities and adverse economic consequences that might arise. Donors might also consider providing other types of commodity assistance which would help Nepal to meet directly other basic needs, such as education materials and medical supplies. There is strong justification for such assistance, given their likely beneficial impact in mobilizing the peoples' energies in a development effort that very often promises only distant benefits.

CHAPTER I: THE FIFTH PLAN (1975/76-1979/80) AND THE DEVELOPMENT OUTLOOK

1.01 Few countries began their development as late and at such a natural disadvantage as Nepal. The country emerged from a self-imposed isolation in the early 1950s with practically no infrastructure. Transportation and communications over the hilly terrain were almost exclusively by foot. The administrative system was confined to collecting taxes and maintaining law and order. There were fewer than 300 university graduates in the country; less than one percent of the school age children attended schools; and public health services were virtually non-existent. The country itself was only a very loosely linked series of mini-economies, where most people paid little notice to what went on beyond their own villages.

1.02 Nepal's initial development efforts concentrated on establishing a foundation which later, more comprehensive development endeavors could build upon. The first task was to reorient the administrative system towards development. New ministries were established and modern budgeting and accounting practices introduced. Major emphasis was placed on education, especially higher education, and training abroad. At the same time, liberal use was made of technical assistance to alleviate the severe shortage of trained manpower. Not surprisingly, road construction emerged as the priority investment during the first four development plans (1956/57 - 1974/75): there was an undisputable need to unite the country through a modern transport system, foreign assistance was readily available for this purpose, and its demands on the evolving administrative structure were not severe. Development in the productive sectors, however, was constrained by this very lack of infrastructure, the small market size, and Nepal's low absorptive capacity for foreign aid.

1.03 Despite rapidly increasing development expenditures, investment remained low - less than 10% of estimated GDP during these two decades. Moreover, because of the capital intensive nature of the investment and the focus on infrastructure, there was little direct impact on incomes and living standards. Growth of real per capita incomes was estimated at less than 2% per annum. The Fifth Plan (1975/76 - 1979/80) was to become the turning point. It was believed that Nepal was poised for more rapid growth on the order of 4-5% annually. Development expenditures were to exceed Fourth Plan levels by at least 70% in real terms, and as the necessary primary infrastructure was largely in place, the major thrust of public investment was to be reoriented towards smaller, quicker-yielding investments and to the social services. In addition, the Fifth Plan would attempt to spread growth beyond the narrow and privileged confines of the Kathmandu Valley, and to mobilize the rural people for local development schemes.

Macroeconomic Performance

1.04 Despite Nepal's most intensive development efforts to date, economic performance under the Fifth Plan has not lived up to expectations. The primary cause has been a shortfall in agricultural production, which comprises over 60% of GDP. Under the Fifth Plan, foodgrains production was expected to

grow at an average rate of 3.6% per annum; cash crops production, at 11%. In fact, production of foodgrains and potatoes, the basic foodstuffs, has declined at an average rate of 1% annually. This decline is largely attributable to unfavorable weather; however, it is disturbing that this occurred despite acreage expansion and increased input use (para 2.12). Cash crops production, on the other hand, has grown at close to the planned rate, primarily because of significant increases in the area under cultivation in response to more favorable incentives (para 2.17). Cash crops, however, account for less than 10% of the total cropped area, and it is unlikely that, on the whole, growth in real agricultural value-added could have exceeded 1% annually.

1.05 Growth in other sectors has been mixed. Agro-related industries, primarily rice and oilseed mills, which contribute about half of the value added in industry, have suffered from the poor agricultural performance. Production in several large industries, including jute goods, sugar, leather goods, and cement, has increased, but most production targets set for the Fifth Plan will go unmet. In the services sector, only tourism has been dynamic, but it still only contributes about 1% to GDP. On the whole, it is unlikely that real growth in the non-agricultural sector has exceeded 5% per annum during the Fifth Plan, and that real GDP has grown at more than 2.5% annually.

1.06 Although inflation during the Fifth Plan through April 1979 has been moderate - averaging 3.9% per annum based on the National Consumer Price Index for Urban Areas - year to year variations have been large. This has been primarily due to fluctuations in food prices, which have a weight of over 60% in the index. 1/ Non-food prices have been more stable, and have grown at an average annual rate of 6.2%. Much of this stability can be attributed to low inflation in India - averaging only 2.3% annually in terms of wholesale prices. 2/ The fact that inflation in non-food goods in Nepal has surpassed that in India can, to some extent, be explained by Nepal's higher percentage of consumer goods imported from overseas, and the growth in the money supply at an average annual rate of 16%. The latter has been primarily the result of steadily rising international reserves and borrowings from the banking system by the government sector.

1.07 The disappointing overall performance of the domestic economy has been accompanied by balance of trade deterioration. The trade deficit more than doubled between 1975/76 and 1977/78. The principal reason for this deterioration has been lagging exports which declined by about 5% annually in current terms during this period. At the same time, imports in current terms have grown at about 15% per annum, largely in response to development expenditures growing in excess of 20% per annum.

1/ Food prices fell by almost 4% between 1974/75 and 1976/77, but increased by over 16% between 1976/77 and 1978/79.

2/ Imports from India carry a 22% weight in the Kathmandu consumer price index.

1.08 The poor export performance has largely been caused by declining rice exports, which fell from a recent high of 222,000 MT (Rs 636 million) in 1975/76 to 30,000 MT (Rs 132 million) in 1977/78. In the process, rice exports declined from 53% of total merchandise exports to about 12%. This decline has been partly the result of reduced availabilities for export as a consequence of the poor paddy harvests, and partly to the comfortable supply situation in India, which has nearly eliminated the need for imports from Nepal and depressed prices. Prior to 1976/77, rice exports had been shipped entirely to India, but since then exports to third countries have predominated. The biggest customer has been Bangladesh, but Nepal is now exporting increased amounts overseas. The major constraint to exporting overseas has been inadequate transshipment facilities in India. Exports of raw jute, jute goods and timber have increased, offsetting partially the decline in rice exports. Non-traditional exports, while growing rapidly, still comprise less than 20% of total exports.

1.09 The deterioration on the trade account has been partly covered by increased tourism receipts and partly by remittances from abroad. The current account has remained in deficit, but except in 1977/78, these deficits were more than offset by disbursements on foreign aid, thus permitting Nepal to accumulate net international reserves. In mid-March 1979, gross international reserves amounted to \$162 million (net reserves of \$140 million), or equivalent to about 6.5 months of imports.

1.10 In March 1978, major changes were made to the trade and payments system. The Nepalese rupee was devalued by 4% against the Indian rupee and revalued by the same amount against the US dollar to restore orderly cross-exchange rates. 1/ Also, the Exporters' Exchange Entitlement (EEE) scheme, which had been introduced in the 1960s to increase and diversify trade towards overseas countries, was replaced by a dual exchange rate system. 2/ Under the new system, all merchandise trade with countries other than India, except for imports of certain development goods, is valued at the premium rate of Rs 16.00 per US dollar. All other transactions take place at the basic rate of Rs 12.00 per dollar. At the same time, the licensing requirements for imports from overseas countries were relaxed. It is still too early to assess the impact of the new system, but the fact that the trade deficit with overseas countries rose by over 100% during the first nine months of 1978/79, whereas that with India increased by only 1%, suggests that there has been a considerable liberalization of imports from overseas relative to

1/ Nepal pegs to both the Indian rupee and the US dollar; rates for other major currencies are set daily.

2/ Under the EEE scheme, exporters were entitled to retain 45% of the foreign exchange earnings on raw materials (60% for processed goods) which could be spent on imports provided at least 10% was spent on development goods, and no more than 70% and 20% on basic consumer goods and luxury goods respectively. The premium fetched by these entitlements on the open market led to an effective exchange rate on export earnings which was about 60% above the official rate.

incentives to increase exports. If present trends continue, HMG may find it necessary to further adjust the exchange rate and/or the tariff system.

1.11 Another important development in 1978 was the signing of new trade and transit treaties with India. Separate treaties were signed for the first time, along with a third agreement aimed at controlling unauthorized trade along the common border. The new trade treaty is valid for five years and provides for somewhat improved access for Nepalese goods into the Indian market. The new transit treaty is valid for seven years. It provides for improved transshipment arrangements for Nepal and an overland route to Bangladesh.

Development Performance

1.12 Fiscal performance so far during the Fifth Plan has been excellent - development expenditures more than doubled in current terms between 1974/75 and 1978/79, and the 21% growth rate represents an impressive improvement over the Fourth Plan. As Table I-1 indicates, the expenditure target under the minimum program has almost been reached, and barring a major deceleration in 1979/80, the Fifth Plan total will probably even exceed the target specified under the maximum program. ^{1/} Five years ago, even the minimum program represented an unprecedented and perhaps even unrealistic target for expenditures.

Table I-1: FIFTH PLAN PUBLIC INVESTMENT PERFORMANCE, 1975/76 - 1979/80

	<u>Proposed Program</u>		<u>Actual Expenditures</u> /a
	<u>Minimum</u>	<u>Maximum</u>	
Development Expenditures, (Rs million at 1974/75 prices)	6,170	7,545	5,796 (4 years) 7,750 (5 years projected /b)
Foreign Financing	45%	45%	44%
Regular Budget Savings	32%	34%	34%
Domestic Borrowing and Use of Cash Balances	<u>23%</u>	<u>21%</u>	<u>22%</u>
	100%	100%	100%

/a Development expenditures deflated at 5% per annum.

/b Projected on the basis of 1978/79 estimates and 1974/75-1977/78 average growth rate.

1.13 Two major factors are responsible for this impressive fiscal performance. First, HMG has been able to sustain the same high rate of growth in public savings that was achieved during the Fourth Plan. Revenues during the Fifth Plan have grown at an average annual rate of 14% in current terms, despite the poor growth record and the narrow tax base. Growth in regular expenditures has been kept to 13% annually, thereby allowing savings on the

^{1/} Due to uncertainties concerning the availability of resources, two programs were drawn up for the Fifth Plan - a minimum program that set a target for public sector development expenditures of Rs 6,170 million in 1974/75 prices, and a maximum program with a target of Rs 7,545 million.

regular budget to continue expanding. The more important factor, however, has been the significant acceleration in foreign aid disbursements, which at 28% annually in current terms, have been growing more than three times as fast as during the Fourth Plan. These higher disbursements account almost entirely for the acceleration in the growth rate of development expenditures. The reasons for the higher disbursements are not easily explained, but it would appear that the levels of commitments to Nepal, as well as disbursement rates, have increased, indicative of improved absorptive capacity.

1.14 There are, however, several concerns with this otherwise impressive resource mobilization effort. First, fiscal performance was uneven in 1978/79. Although overall revenues rose by about 15%, those from the land tax and income tax fell below 1977/78 levels. At the same time, regular expenditures increased by 22%, largely because of an increase in civil service salaries. While these factors are mostly temporary or one-time in nature, there are strong indications that revenue growth is beginning to slacken. Much of the past revenue expansion has been the result of adjustments in tax rates on goods and services which account for about three-quarters of total tax revenues. There is, however, only limited scope for further adjustments in tax rates in this area, and additional revenues will have to come through broadening the tax base and improving tax administration (para 4.09-4.10).

1.15 A second area of concern covers current expenditures. Granted the desirability for increasing resources for investment, important development-related current expenditures such as maintenance and outlays for support staff, including extension workers, can become excessively squeezed in the process. It is unfortunately not possible to determine the exact level of recurrent expenditures, as many such expenditures (e.g. teacher salaries) are financed out of the development budget; nevertheless, there is evidence to suggest that maintenance of existing roads and irrigation infrastructure has been unduly restricted in the past. The full benefits of these investments are not being realized, and major rehabilitation is now necessary in certain cases.

1.16 While the Government can justifiably point to its fiscal achievements with considerable pride, its greatest disappointment has to be the continued failure of development programs, especially the Fifth Plan, to significantly improve incomes and living standards. For such a broad objective, obviously no single factor can be held accountable. The successive poor monsoons of 1976/77 and 1977/78 are undoubtedly partly to blame, as has been the poor response of the private sector to investment opportunities. Even though the level of public investment has risen to 10% of GDP during the Fifth Plan, this is still low by international standards and cannot be expected to sustain rapid growth. 1/ The amount of investment in directly

1/ This apparent rapid growth as a percent of GDP is somewhat distorted by the fact that while investment has accelerated since the Fourth Plan from 16% to 21% annual growth, GDP growth has declined from 11% to less than 4% annually (all in current prices).

productive activities has, moreover, been limited by the strong demand for investment in social services, as well as in continued funding of ongoing projects, many of which are capital intensive. More important and far-reaching factors, however, lie in the project planning, budgeting, and implementation processes.

1.17 On the surface, it would appear that the Government has been relatively successful in reorienting its development expenditures towards more productive investments and social services. Table I-2 shows that the share of transport infrastructure outlays has declined substantially over the Fourth Plan in favor of agriculture, power and the social services.

Table I-2: SECTORAL DISTRIBUTION OF DEVELOPMENT EXPENDITURES - FOURTH AND FIFTH PLANS (in percent)

	<u>Fourth Plan</u>	<u>Fifth Plan</u>		<u>Fifth Plan</u>
	1970/71-1974/75	1975/76 - 1979/80		1975/76-1978/79
	(actual)	(proposed)		(actual)
		Max.	Min.	
		Program	Program	
Agriculture,	22.6	30.2	29.8	27.3
of which Irrigation	(8.3)	(12.1)	(11.7)	(9.4)
Industry	10.1	9.4	10.4	7.0
Power	5.2	10.6	12.0	9.8
Transport	42.8	26.4	23.2	28.6
Social Services,	19.3	23.4	24.6	27.3
of which Education	(8.5)	(8.9)	(10.5)	(11.7)
Health	(5.3)	(6.0)	(6.9)	(6.2)
Water Supply	<u>(1.7)</u>	<u>(3.3)</u>	<u>(3.5)</u>	<u>(3.3)</u>
	100.0	100.0	100.0	100.0

1.18 Despite these accomplishments, Table I-2 also shows that relative outlays in the productive sectors--agriculture, industry, and power--have been below expectations. These shortfalls stem largely from the poor integration of the planning and budgeting exercises. The annual budget allocations have reflected reasonably closely the priorities and strategies of the five year plans, but implicitly provided for significant underexpenditures. ^{1/} Actual under-expenditures, however, have not accrued evenly across sectors, leading to large deviations in the pattern of actual expenditures from budget allocations. So far during the Fifth Plan, overall under-expenditures on the budget have averaged 21%. But under-expenditures in the transport and communications sector have averaged only 11% and those in the social services only 12%. The larger than average under-expenditures have accrued in the directly productive areas where major development efforts are more recent and projects have proven more difficult to prepare and implement.

^{1/} Otherwise annual expenditures could significantly exceed plan totals, and, based on resource mobilization trends, have a large unfinanced component.

1.19 The greater than average under-expenditure on the development budget in agriculture is reflected in large shortfalls in meeting Fifth Plan physical targets for the sector. In irrigation, for instance, the target was to bring 146,000 additional hectares under major schemes; however, by the end of 1978/79, only about 60,000 ha had been added. Shortfalls of at least 50% of targets are likely in the areas of fertilizer distribution, resettlement, and afforestation. The target for extending the area under improved seeds is likely to be met, but the significance of this accomplishment is diminished by the failure of fertilizer distribution and other agricultural services to expand commensurately.

1.20 A number of factors help to explain the large shortfalls in industry such as the lack of viable investment opportunities and shortages in electric power. Installed hydro-electric power capacity was to increase by about 57 MW during the Plan period; however, due primarily to delays in the Kulekhani (60MW) and Devighat (14MW) projects, only 16 MW will be added. Because of this shortfall, it has been necessary to install some 12 MW of diesel generating capacity in the interim. On the other hand, the Government has been more successful than anticipated in developing of mini-hydropower schemes. So far seven schemes totaling 632 KW have either been commissioned, or are under construction.

1.21 Roads development continues to be the largest single area of investment, despite the declared intention to shift more towards directly productive sectors during the Fifth Plan. Overall additions to the network are likely to exceed original intentions and cost estimates. The bulk of these additions, however, will have been in lower-cost, unimproved roads in line with past donor recommendations.

1.22 Progress has also been mixed in the development of social services. Education enrollments have greatly exceeded original expectations (para 3.17). This rapid expansion has helped to keep under-expenditures in the social sectors as a whole to the relatively low level of 12%. Less progress has been made in the areas of health and family planning. It had been hoped to reduce the birth rate from 40 to 38 per 1000, and infant mortality from over 200 to 150 per 1000. However, it now appears that the population growth rate has risen from 2.2% to 2.6% per annum, largely as a result of decreasing death rates. ^{1/} The Fifth Plan was also to mark a major effort to bring basic health services to the rural population - specifically 459 new health posts and 15 new hospitals were to be added under the Plan. Progress to date indicates a major shortfall in this area; so far, only 182 new health posts and 9 new hospitals have been added.

1.23 Finally, economic growth during the Fifth Plan has been slow because of the failure to build upon and exploit past investments, especially in transport infrastructure. This stems, to a large degree, from a well-intentioned

^{1/} Demographic Sample Survey of Nepal, Central Bureau of Statistics, National Planning Commission, July 1978.

National Planning Commission decision during the Third Plan to spread development beyond the Kathmandu Valley, to as broad a front as possible. In practice, however, manpower and financial resources have often been spread too thinly. Operating and maintenance allocations have been excessively restricted in some sectors, and projects have often proceeded without adequate preparation. The strategy has nevertheless had its successes. In the transportation sector, for example, access to hitherto isolated areas has been established, and many roads are being built to feeder road standards. In irrigation, on the other hand, the strategy has resulted in HMG emphasizing only the major irrigation infrastructure, leaving the farm-level distribution to the local panchayats and farmers. Often no follow-up investments were made, thus lowering overall returns.

The Need for a New Push

1.24 The most significant manifestation of slow economic growth over the last decade has been the failure of foodgrains production to keep pace with population growth. Unless this deteriorating food balance situation can be reversed, Nepal, which once had a substantial food surplus, will become a net food importer within a decade; perhaps by as early as 1984/85 (see Annex I). The food problem is most critical in the Hills and Mountains where current production meets only about two-thirds of subsistence needs (Table I-3). ^{1/} Although production in the Terai could more than cover the deficit in the Hills and Mountains, the latter's isolation and poverty preclude any organized internal trade. Substantial amounts do, however, reach the Hills via small traders and returning seasonal migrants. The remainder is traded abroad, through the Rice Exporting Companies and informal border trade.

Table I-3: NEPAL - SUMMARY FOOD BALANCE - 1976/77

	<u>Hills and Mountains</u>	<u>Terai</u>	<u>All Nepal</u>
Population ('000)	8,071	5,065	13,136
Consumable cereals and potato production ('000 tons) <u>/a</u>	1,107	1,622	2,729
<u>Minimum Subsistence Needs</u>			
Cereals and potato needs ('000 tons)	1,552	941	2,493
Deficit (-) or Surplus (+) ('000 tons)	-445	+681	+236
Days subsistence per capita/year	260	629	398

/a Allows for waste, seed requirements, and conversion into food.

Source: Annex I.

^{1/} Based on so-called "normal" consumption requirements (approximately 10% higher than "subsistence" needs), Hills production meets only about 238 days needs. National production in this case does not even meet total needs; only 363 days worth.

1.25 The poor and deteriorating foodgrains situation in the Hills is also having profound social and economic effects on the Terai. Increasing numbers of the Hills population have been forced to migrate to the Terai in search of work, both on a seasonal and permanent basis. Between 1961 and 1971, 400,000 people are estimated to have migrated permanently from the Hills to the Terai. Most have settled in an uncontrolled fashion, severely hindering official efforts to develop forest and land resources systematically. A far larger number, however, migrate only seasonally; for example, a survey of one panchayat in Far-Western Nepal revealed that 55% of the male labor force have left for up to three months at a time in search of employment during the slack agricultural season. 1/

1.26 Another consequence has been the decline in rice exports, which have been the foundation of Nepal's balance of payments surpluses in the past. Meanwhile, Nepal has been unable to diversify its exports away from primary products (mainly rice and timber), which have accounted for over 80% of exports since the early 1960s. In face of rapidly growing imports, the years of comfortable surpluses on the overall balance would appear to have come to an end.

1.27 While there is thus an undeniable need to raise production, especially in agriculture, Nepal also suffers from other critical deficiencies which the Government will find hard to ignore. Social services, although rapidly improving, are still inadequate even by regional standards; the quality of life - measured in terms of mortality, illiteracy, and malnutrition - remains among the lowest in the world. At the same time, Nepal's fragile ecological system deteriorates steadily. In fact, the Hills of Nepal have all the makings for a circle of unparalleled ecological destruction. The people are exceedingly poor and pressure on agricultural land is already among the most severe in the world. Steep hillsides, ordinarily unsuitable for anything other than forest and forage crop cover, are being stripped to meet the requirements for crop land, fuelwood, and livestock fodder. As a result, this unstable land is eroding away, destroying other valuable crop land in the process. The consequences of this are being felt even in the Terai, where flooding occurs because riverbeds have risen as a result of large amounts of silt being carried down.

1.28 By every indication then, Nepal has reached a critical time in its development. The country is caught in a vicious circle of poverty in which the ability to raise investment and per capita incomes is constrained by the thin natural resource base, scarcity of trained manpower, limited domestic resource mobilization prospects, and consumption demands of the rapidly growing population itself. The dynamics of these forces are such that as difficult as it is to break this circle, the next five to ten years may represent Nepal's last chance to do so without having to become completely dependent upon the goodwill of aid donors (para 4.20). Even that task will be extremely difficult considering the massive demands that population pressures and

1/ INAS, Tribhuvan University, Land and Migration in Far-Western Nepal, 1977.

related social and environmental needs will place on scarce resources. More than ever, Nepal will have to search for efficient, cost-effective means of meeting basic needs, as well as ensuring high returns on investments.

1.29 As the capital intensive projects that dominated the early years of the Fifth Plan are winding down, Nepal will in the future be able to invest increased amounts in the directly productive sectors. Moreover, much of the past investment in physical infrastructure, especially in the agriculture and transportation sectors, has yet to be adequately exploited. The required follow-up investments are relatively modest, and provided they are well-focused, the potential benefits are high. As Chapter IV proposes, real economic growth of about 4% annually should be possible if such measures are pursued. At the same time, however, much of this growth would be eroded by the rapidly growing population. It is therefore difficult to foresee any dramatic improvement in the next decade; the Sixth Plan itself would have to be considered a success if it could arrest the most serious of these adverse trends.

The Sixth Plan

1.30 The preparations of a Sixth Plan, covering the period 1980/81 - 1984/85, have begun and a document outlining the Basic Principles governing the plan has been issued. ^{1/} It calls for achieving an annual growth rate of 5% in real GDP and for more than doubling the investment level to about 22% of GDP by 1984/85. No major change in development strategy is proposed; instead, the Sixth Plan will continue the shift towards investments in directly productive activities and the social services. Special emphasis is to be given to those programs that generate employment, mobilize the support of the rural people in local-level development projects, and provide encouragement to the private sector.

1.31 A number of ambitious development targets have been set, including: (a) achieving over 90% primary education enrollment (presently given as 77%); (b) providing safe drinking water to 40% of the population (presently 9%); (c) establishing health posts in all 75 districts (compared to the present 43); and (d) irrigating 25% of the agricultural land in the Hills and 40% of the Terai by 1990 (presently 12% in the Terai, and almost certainly much less in the Hills). As yet, unquantified goals have also been set for developing hydro-power, establishing import-substitution industries, and expanding the road network.

1.32 While Nepal has genuine and urgent needs in all these areas, it is almost certain that the cost of meeting them will greatly exceed available resources. Despite the constraints to increasing revenues, it has been assumed that revenues can continue to grow at their present rate of about 9.5% per annum in real terms, while real growth in regular expenditures can be limited to 3.8% annually, significantly less than at present. Even under these optimistic assumptions, the share of foreign financing would have to increase from about 50% of total development expenditures at present,

^{1/} National Planning Commission, Basic Principles of the Sixth Plan, 1978, translated version dated April 1979. See Postscript for a discussion of a more recent amended version.

to 57% if the overall investment targets are to be met. Under these circumstances, it will be necessary during further plan preparations to carefully review priorities so as to achieve as efficient use as possible of available resources. Important questions which will need to be addressed in the process include the desirable balance between consumption and investment in general, between investment in the Hills versus the Terai, and between investment in human versus physical capital.

1.33 Preparations for the Sixth Plan will also have to address the need to strengthen HMG's project preparation and implementation capabilities, and to increase the availability of trained manpower. Nepal is rapidly reaching a stage where the principal constraint to increasing investment is no longer a lack of resources, but a shortage of viable projects and qualified staff to implement them. This shortage of personnel is pervasive within the Government, but perhaps most severe in the areas related to HMG's employment and basic needs objectives--agricultural staff, paramedical specialists, and qualified primary school teachers. Apart from expanding formal education, a variety of policies and programs that might mitigate these constraints should be considered, including more efficient deployment of existing staff, revamping the award and incentive system for government workers, increasing development efforts at the local level, and making greater use of technical assistance. A more general concern is the need to restructure the Government's administrative system so that it can provide stronger leadership in the development process. Specific areas for attention include: the frequent transfers of key personnel, which hamper economic management at all levels of Government; the lack of coordination among public agencies in implementing projects; the reluctance of civil servants to exercise authority in an environment where fear of being accused of impropriety predominates; and the urgent need to integrate more fully the processes of planning, budgeting, and plan implementation.

1.34 While investment will undoubtedly have to increase during the medium term and steps will have to be taken to improve absorptive capacity, experience has shown that development prospects depend less on the level of investment than they do on the sectoral and project composition of the investment. The Fifth Plan, in particular, has revealed this dependence, and unless the proposed investments are more production oriented and cost-effective, the prospects for the Sixth Plan are unlikely to be better.

CHAPTER II: DEVELOPING PHYSICAL RESOURCES

A. Agriculture

2.01 Agriculture is the foundation of the Nepalese economy - it accounts for over sixty percent of GDP, provides employment to about 90% of the labor force, and is the source of about 80% of exports. An expanding agricultural economy is thus a prerequisite to general economic improvement. It is needed to meet the pressing food needs of the population, to create employment opportunities while simultaneously stabilizing the uncontrolled migration from the Hills to the Terai, and to provide the resources, both domestic and external, for development.

2.02 Policies designed to achieve these goals have had to cope with Nepal's unique physical and ecological environment, which is as varied as it is difficult. The Hills and Mountains account for only one-third of the arable land but must support nearly two-thirds of the population. Population density in these areas has reached alarming proportions - almost 1,500 persons per square kilometer of arable land - and individual family land holdings have fallen to an average of less than 0.4 ha. While acreage extension is both technically and economically unsound in many areas, cultivation nevertheless continues to be pushed onto marginal lands. Relative isolation of the Hills from the rest of the country, stemming from lack of transport and communication facilities, has further exacerbated development problems.

2.03 The typical fragmented Hill farm is now barely able to support the five to six persons that depend upon it. Even the most casual observer is struck by the terracing of every square meter of accessible terrain, including what would normally be prohibitively steep slopes. The principal crop is maize accounting for 36% of the area, followed by paddy (26%), wheat (14%) and millet (11%). Animal husbandry is an important supportive activity since dairy products form an integral part of the diet, and manure is used both for fertilizer, and indicative of the limited sources of alternative energy, increasingly for fuel.

2.04 The situation in the tropical Terai provides a marked contrast. The Terai plains are easily accessible, water supplies more readily utilized, and the land to man ratio more favorable. With a population density of less than 400 persons per square kilometer, farms, averaging 1.7 hectares in size, are capable of generating substantial surpluses. The dominant crop is paddy, accounting for 66% of the cropped area, followed by wheat (15%). The balance consists of various cash crops, such as sugar cane, oil seeds, tobacco and potatoes. The Terai's surplus of foodgrains partly covers the needs of the deficit areas in the Hills and Mountains; the rest is exported.

2.05 Reflecting these regional differences, the Fourth and Fifth Development Plans were designed to: (a) reap maximum benefits from the existing infrastructure in the Terai; and (b) lay the basis for specialization of agricultural production according to agro-climatic potential. In actual

practice, however, the country has not been able to realize the full potential of its past investments. Nor has the strategy of agro-climatic specialization been pursued to any appreciable degree; instead a policy of concentrating on Terai agriculture to the "benign neglect" of the Hills and Mountains emerged.

2.06 As originally conceived, the strategy of agro-climatic specialization was based on comparative advantage, recognizing the respective resource endowments and agro-climatic potential of the Hills and the Terai. In the Hills, this meant concentrating on potatoes and high value items like horticultural crops, tea and livestock products (dairy and wool). The Terai, on the other hand, would concentrate on foodgrains and tropical/sub-tropical cash crops, for which it is more suited. These two regions would then trade with each other on the basis of these production patterns, raising incomes in both regions in the process. Moreover, because of the more abundant supplies of land, the Terai would offer significant employment opportunities to the excess labor of the Hills.

2.07 In view of the country's limited financial and manpower resources and the relative potentials for generating surpluses in the Terai and the Hills, the Government had little choice in the past but to focus on Terai agriculture. This policy, however, has not been able to forestall several adverse trends. First, per capita production in the Hills has declined in absolute terms, reducing real per capita incomes of the majority of the population. Second, the decline has adversely affected the already dangerously low nutrition levels in these areas. Third, because of the increasingly severe food deficits in the Hills, migration to the Terai has accelerated, leading to reduction in exportable surpluses in the Terai and bringing about unplanned settlements. Fourth, as a result of the neglect of the Hills, locally created capital, in terms of terracing, water control structures and irrigation channels constructed by farmers, was being depleted through increasing erosion. Finally, overexploitation of grasslands and forests, due to failure to develop alternative livestock feeds as well as to meet energy needs, has resulted in severe soil erosion, threatening ecological disaster.

Towards a Strategy

2.08 The present production pattern in agriculture is characterized by partial specialization. The Hills and Terai both produce foodgrains. However, the Hills also produce some horticultural and livestock products, while the Terai produces cash field crops. Obviously, there are sound economic reasons for this production pattern, the most important one being the lack of adequate transport facilities. By implication, total costs incurred by some Hill farmers in producing foodgrains are lower than the costs (inclusive of transport charges) involved in the exchange of non-foodgrain products for foodgrain "imports" from the Terai. Furthermore, even if it can be demonstrated that Hill farmers can produce horticultural products at lower costs compared to foodgrains, there is the formidable problem of marketing.

2.09 In the Basic Principles of the Sixth Plan, a slight shift from the strategy of previous plans is discernible. Where technically feasible, the need for promoting foodgrain production in remote and hilly areas is now noted in the context of meeting the food needs of the people. However, the

principal emphasis continues to be promotion of horticulture and livestock development in the Hills and Mountains and cereal and cash crop development in the Terai. The Basic Principles do not mention how this specialization is to be achieved; moreover, there is no attempt to establish relative priorities among the wide range of sub-sector issues that are identified.

2.10 A coherent strategy for agricultural development thus remains to be formulated. Such a strategy would have to be based upon present production patterns, which have evolved because of the poor marketing links. Reflecting these realities, the medium-term strategy summarized below has the following elements. It places the highest priority on resolving the food problem in the Hills and Mountains. In this context, simultaneously with development efforts to raise foodgrains production in the Terai, renewed attention to selected zones in the Hills is needed where foodgrains production is technically feasible. Increasing the relative priority given to the Hills is necessary to ensure that incomes there are sufficient to: (a) purchase the goods originating from the Terai; (b) create the market for the products of cottage and small-scale industries in the Hills; and (c) create in the longer-run the basis for agro-climatic specialization as it hopefully will evolve. Aside from the concern with increased food production per se, a realistic strategy must also encompass programs to improve marketing and distribution services, which in turn have an impact on pricing policies. Without such improvements, not only will the present Hill-Terai food imbalance continue, but agro-climatic specialization as a long-term strategy will also prove to be impractical.

2.11 In addition, there is a need to diversify the economic base. For the Hills, small-scale agro-related activities and cottage industries are necessary to supplement agricultural incomes which, in many cases, may never be adequate to support families above subsistence levels. In the Terai, it is desirable to promote cash crops as a supplement to foodcrops production, both for import substitution and possible export to India. The micro-foundations of this overall strategy are complex and cover the entire spectrum of requirements for developing agriculture. Most of these requirements, such as extension, manpower development, and credit, have been addressed in recent sector and project reports and therefore need not be reexamined here; however, the major features of this strategy are elaborated upon below. 1/

Strategy Implementation: Regional Programs

(a) Terai

2.12 The most promising opportunities for increased crop production lie in the Terai, particularly in irrigated areas. To a large extent, fulfilling the food needs of the Hills will, in the medium term, depend upon the continued redistribution of Terai surpluses to the more easily accessible Hill areas. Meanwhile, unless export earnings derived from the foodgrains surplus of the Terai expand, Nepal will be hard pressed to finance its import requirements in the coming years. Against this background, the most disturbing trend in the four years of development experience during the Fifth Plan has been the

1/ See, in particular, Nepal Agricultural Sector Review. Report No. 2205-NEP, World Bank, April 27, 1979.

stagnation of Terai agriculture (Table II-1). Foodgrain production has declined, accompanied by an even more precipitous decrease in average yields. A number of factors responsible for this poor performance are readily identifiable; in particular, reclamation of marginal land and poor weather. But the fact remains that during the period 1974/75-1977/78, an estimated 60,000 hectares have been added to the irrigated area; fertilizer consumption has gone up by an estimated 40%; and the area under high-yielding varieties has increased from practically nothing to 677,000 hectares. This divergence between input performance and production must be addressed in the process of formulating any medium-term strategy that is to be successful.

Table II-1: TERAI - FOODGRAIN PRODUCTION

	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
Production (mill. tons)	2.47	2.60	2.38	2.26
Area (mill. hectares)	1.41	1.47	1.48	1.43
Yield (Kgs./hectare)	1,755	1,772	1,612	1,580

Source: Ministry of Food, Agriculture and Irrigation.

2.13 Achieving any major increase in agricultural productivity will hinge on a variety of factors, including: (a) availability of suitable technologies; (b) requisite institutions to diffuse the technology; and (c) appropriate incentives to induce farmers to adopt the new technology. The basic technical pre-requisite is, of course, the availability of new and proven varieties of seeds which would be responsive to nutrients and offer significant increases in yields. This condition has been largely satisfied in the case of major cereals in the Terai. However, actual realization of higher yields requires not only improved seeds, but also a package of inputs such as chemical fertilizers, pesticides and, most important, an adequate irrigation system.

2.14 The areas where the new varieties can be introduced require a proper and timely flow of irrigation water. All the land in the Terai that is reported to be irrigated does not, in fact, satisfy these conditions. First, a part of the irrigated area is covered by wells and small reservoirs that are heavily dependent on uncertain rainfall. Second, several of the older, larger irrigation schemes are unable to support agriculture requiring intensive water use. These schemes have just one main channel which does not bring water down to the farm level. The water wastage, that occurs in the process of delivery is, according to some estimates, as high as 50%.

2.15 The actual delivery of water to farmers' fields is inadequate, both with respect to timing and flow. The former problem arises from the lack of any regulatory mechanism at the head of the tributary; the latter arises when a canal serves a larger command area than it can properly cover. Some of the older systems were designed to provide protection to as large an area as possible to give farmers at least one assured crop in a year. This arrangement may have suited the needs of the time, but recent advances in agriculture, particularly the introduction of the high-yielding varieties, require new systems designed for intensive cultivation. For this purpose, there is a need to increase the capacity of reservoirs, to line selectively canals to

reduce water wastage, to set up various control mechanisms to regulate water supplies, and, most important, to extend channels down to farm levels. Until such changes are made, the availability of water will remain, to a large extent, a binding constraint to the extension of the new technology.

2.16 The Basic Principles appropriately emphasizes the need for rapid expansion in irrigated area as a precondition for increasing foodgrain production; however, there is no explicit recognition of the virtues of intensive over extensive irrigation services. In recent years, steps have been taken to rectify defects of the earlier irrigation schemes. Projects, such as Sunsari-Morang and Birganj, have been specifically launched for this purpose--to upgrade existing canals and extend the irrigation system down to farm levels. Birganj, for example, is now reaching the stage where it is having an impact on production. Preliminary results have indicated that selective increases in rice yields of up to 50% are possible. In addition, the Government has implemented a number of efficient projects with short gestation periods and attractive returns, such as groundwater development for irrigation with tubewells. In view of Nepal's limited resources and immediate needs, priority should be placed on utilizing more fully the existing infrastructure instead of establishing totally new irrigation facilities, particularly those designed for extensive farming.

2.17 Efforts to increase foodgrain production in the Terai should also be accompanied by further diversification into cash crops. In recent years, cash crops production has been relatively impressive; per annum growth averaged about 11% during the first four years of the Fifth Plan period. This was attributable in part to the declining foodgrain prices in the Terai, consequent to the bumper harvests in India, which shifted the relative domestic price ratios in favor of cash crops. In addition, government procurement prices for such crops as sugar cane and cotton have been raised, while jute benefitted from the now abolished premia under the Exporter's Exchange Entitlement Scheme. The prospects both for the domestic market and for export are good for such crops as cotton, tobacco, jute, sugar cane, and oilseeds. In the medium term, these crops should play an increasingly important role in Nepal's development, not only as a means of diversifying exports, but also as the basis for agro-industrial expansion.

(b) Hills and Mountains

2.18 The Hills and Mountains do not, in themselves, constitute a homogeneous region. Conditions vary enormously with respect to altitude, topography, climate, and resources. Development is handicapped by lack of suitable high yielding varieties which can flourish under these diverse agro-climatic conditions. Yields are also low for lack of knowledge of improved farm practices suitable for these areas. Reflecting these obstacles, past efforts to raise production in the Hills have been few and limited in scope.

2.19 For the development of the Hills, priority should be given to improving foodgrains production in conjunction with livestock development, fodder improvement and irrigation development. Despite the generally low overall agricultural potential in these areas, opportunities exist for raising foodgrains production in the short term. It will be necessary, however, to

identify the agro-climatic zones where such production can be stepped up, the type of technology that will be appropriate, as well as the overall impact such programs will have on foodgrains availability.

2.20 Present farming practices are wasteful of resources; for example, broadcasting of seeds makes efficient use of manure difficult. Furthermore, insect pests, which attack maize and millet crops, can be controlled by simple low cost measures requiring, for example, nothing more than an empty tin can to apply pesticides. Simple improvements to traditional irrigation schemes, coupled with the adoption of improved crop husbandry practices, involving use of better seeds and more fertilizer, will greatly improve yields. Such a program calls for provision of inputs and extension efforts, which, by virtue of its simplicity, does not require highly trained staff.

2.21 Given the importance of livestock products in the diet of people living in these areas, actions must be taken to improve the availability of animal feed, including the rational use of existing forests, establishment of new forest areas, better control of natural forage cover and development of fodder reserves. Such a program is not costly to implement but depends largely on the full cooperation of farmers. In addition, introduction of organized livestock marketing and provision of veterinary services, principally to control internal parasites, will greatly improve productivity.

2.22 In contrast, a more difficult task is in irrigation development in the Hill areas. Of the approximately 300,000 ha of irrigable land, at least 100,000 ha should be developed in the next decade. In the interior valleys, seasonal surface water diversion should be undertaken with the complementary development of small scale storage and, where possible, tubewells so as to provide a continuous water supply. Present investigations suggest that at least two main categories of Hill terrace irrigation are possible and could be implemented concurrently. The first would embody a high degree of farmer participation covering individual areas generally limited to about 50 ha. Both development of new projects and selective rehabilitation and upgrading of existing farmer built works would be included. The second category would involve large projects, with a much greater involvement of the Irrigation Department, covering between 150 ha to 500 ha.

2.23 A strategy for Hill development would not be complete without recognizing the importance of non-agricultural activities. In general, the average size of land holdings is too small to generate much more than subsistence needs, and population pressures are likely to exacerbate this situation. The creation of economically viable farm units will require increasing diversification into other activities. To some extent, income and employment pressures could be alleviated by developing selected Hill district centers for small-scale industrial and handicraft activities such as metal working, brick making, textiles, machinery repairs, and wood products as well as for traditional services and commerce. With respect to more localized off-farm activity, there is a need to investigate the potential of afforestation programs and cottage industries, although the logistical requirements for the latter--moving in raw materials and marketing the finished products--are formidable. To the extent that such industries are agro-based, part of the difficulties could be eased. Production of ghee, honey, cheese, and wood works are obvious examples.

2.24 The multiplicity and diversity of the constraints to Hill development pose a special challenge. Prior to implementing the requisite programs, a number of technological problems must be resolved. Irrigation development, for example, must cope with the unstable geological and fluvial conditions which aborted many of the Hill irrigation efforts in the 1960s. There is a need to develop suitable varieties of foodgrains and horticulture products for the diverse micro-ecological systems in the Hills. Research on all aspects of livestock development, particularly in disease control and animal nutrition, is lacking. Solving these technical problems will not, however, obviate the need to strengthen manpower planning and the administrative system. Present levels of staffing within Hill extension preclude rapid action to reach large numbers of farmers effectively and quickly; large-scale training programs are thus a high priority. Similar shortages exist with respect to veterinary doctors, irrigation engineers, surveyors and other trained staff. There is also a need to improve the general administrative system through better coordination among the many agencies involved, removing managerial constraints, and improving worker incentives. ^{1/} These technical and administrative constraints will prove difficult to resolve. Ironically, however, the task is eased somewhat by the past neglect of the Hills which has created a backlog of opportunities to be exploited. Moreover, despite overwhelming disadvantages, current yields are significantly higher in the Hills than in the Terai, reflecting both the pressures that the Hill population face in eking out a living and their energetic and enterprising response to these harsh conditions. Such pressures make it all the more likely that well-conceived, production-oriented programs in the Hills will meet with an enthusiastic response.

2.25 The organizational basis for Hills development appears to hinge on integrated rural development programs. This reflects two fundamental considerations; first, the dispersal of the Hills population and resulting difficulties in gaining easy access to them from any centralized location and, second, the variety of activities that have to be strengthened in order to establish economically viable household units. There is strong interest on the part of the Nepal Aid Group in assisting in these projects; eight projects in various stages of preparation and implementation, involving development of some 30 Hill districts, are currently underway. Among the earlier projects, the IDA financed Rasuwa-Nuwakot project is beginning to show some encouraging progress. Perhaps the most impressive achievement so far has been the three-fold increase in yield levels for wheat, of up to three tons per ha in certain areas. This has been due primarily to provision of adequate supplies of inputs, specifically seeds and fertilizers, highlighting the importance of distribution bottlenecks as a key constraint to productivity increases. However, inter-district and inter-farm variations in performance continue to be large, and a final judgment can not yet be reached.

^{1/} See Nepal Agricultural Sector Review, op. cit., Chapters 3 and 4 for a detailed discussion of these points. Further analysis of Nepal's agricultural manpower needs and policy options is currently being conducted by the World Bank in conjunction with HMG.

Marketing and Distribution System

2.26 Of the many supporting resources that are vital to agricultural development in Nepal, perhaps the most critical to the implementation of the medium-term strategy enunciated here is the marketing and distribution system. A good marketing system is essential to: (a) ensure that producers get adequate incentives; (b) meet the food needs of the Hills; (c) channel the surplus to export markets; and (d) promote the necessary inter-regional as well as intra-regional linkages which will encourage greater agro-climatic specialization in the long run.

(a) Pricing Structure

2.27 The marketing system has a direct bearing on the foodgrain pricing structure in Nepal. Partly because there is no sizable commercial movement of foodgrains from the Terai to the deficit regions, and partly because of the strong transport and communication links between the Terai and India, foodgrain prices in the Nepalese market have been largely determined by similar prices in adjoining Indian markets. A comparison between average production costs of wheat and paddy and the minimum support price is given in Table II-2.

Table II-2: PRODUCTION COSTS, PADDY AND WHEAT, 1976/77
(Rs/quintal) /a

	<u>Average Cost of Production</u>	<u>Range</u>	<u>Minimum Support Price</u>
		<u>Paddy</u>	
Terai	60	27-89	112.5
Hills and Mountains	68	53-93	112.5
		<u>Wheat</u>	
Terai	108	56-153	150.0
Hills and Mountains	113	83-200	180.0

/a 1 quintal = 100 kgs.

Source: Compiled from Production, Costs and Returns, Agricultural Marketing Services Department, His Majesty's Government, March 1978.

2.28 Although, as expected, production costs are higher in the Hills than in the Terai, the minimum support price seems, in theory, quite adequate and more than covers this difference. However, these minimum support prices may not exist in practice, since there is no government agency which is prepared to buy all the grains offered by producers at that price. Furthermore, wide fluctuations and regional variations in prices also exist due mainly to poor market integration. Prior to 1976/77, strong demand from India and

the Hill regions have generally led to market prices that were higher than support prices. There is, however, no certainty that this trend will continue in the future, particularly with the foodgrain surpluses that have emerged in India.

(b) Marketing Structure

2.29 The uncertainties and variations in prices that exist are due in part to the inability of HMG, through its procurement and marketing of food-grains, to guarantee support prices. Much of the marketing activity which has developed, reflects the trade links between the Terai and India. Most farmers sell their produce in the primary or village assembly markets, some take it to secondary wholesale markets, but very few take their produce directly to the terminal market where most rice mills are concentrated. The primary markets are dominated by private traders and millers, who act not only as purchasers of grains, but also as money lenders. Partly because of lack of storage facilities and partly out of necessity to repay the loans, farmers often sell their produce to the traders and millers immediately after harvest when prices are generally lower. ^{1/} In the Hills, moreover, which lack traditional markets and where the constraint of inaccessibility exists, traders are few and surplus grain is sold directly by producers, who carry them to the nearest market or down to the Terai for sale during their seasonal migrations. By improving credit services to farmers and providing adequate storage, possibly through the Sajha (cooperatives), HMG could reduce the pressures for farmers to sell immediately after the harvest, thereby enhancing their bargaining power and in turn, prices received.

2.30 The main government institutions involved with agricultural marketing are the National Food Corporation (NFC), the eight Rice Exporting Companies, and the Food, Agricultural Marketing Services Department (FAMSD) of the Ministry of Food, Agriculture and Irrigation. NFC is concerned primarily with the distribution of foodgrains to food deficit areas. It procures directly from farmers and traders (and in the past through a levy on the Rice Exporting Companies). FAMSD collects price information and analyzes trade patterns. It is also responsible for establishing wholesale markets in the Hills, urban public markets, grading standards, and public slaughterhouses. While efforts are under way to establish wholesale and retail markets, relatively few are presently in operation. The Rice Export Companies compete with private traders on the free market for export, procuring between 130-200,000 tons in recent years. In the past, as a condition for being allotted their share of the export quota, an annual levy, last set at 20% of exports, was sold at a concessionary price to NFC. Current thinking is to assign a greater role to cooperatives or Sajha to purchase surplus grain production. However, this would appear to place a burden on Sajha which it is not currently capable of handling, especially since the demands on manpower and expertise are beyond the resources of most cooperatives.

^{1/} Independent traders and agents purchase between 75% and 80% of the marketable surplus. Forty-nine percent of the grain is marketed immediately after harvest during the months of November-January and 85% by April. Only 15% is sold during the off season, i.e., May-October.

2.31 It is apparent that the development of marketing facilities has lagged behind needs. This has impeded the implementation of pricing policies and hindered HMG's ability to foster greater distributional linkages between the Hills and Terai. It is HMG's policy to extend the market infrastructure into regions previously uncovered in order to develop a national system. Among the problems that merit immediate attention are: (a) locating and developing a number of strategic markets in the Hills and Terai; (b) constructing feeder roads in the Terai as well as improving tracks and trails in the Hills to improve access to markets; (c) standardizing methods for grading and weighing; (d) developing a market information service; (e) improving storage facilities; and (f) strengthening and formalizing the links among NFC, FAMSD, Agricultural Input's Corporation, Agricultural Development Bank and Sajha.

(c) Public Distribution of Foodgrains

2.32 Even if intensive efforts are made to develop the Hills during the next few years, demand for additional food is likely to exceed availabilities, thus necessitating substantial increases in public distribution of grains to these areas at subsidized rates. The system of levy procurement and subsequent distribution to deficit areas by NFC has not worked effectively thus far. With the decrease in volume of exports (para 1.08), levy procurement accordingly declined and stood at only 12,000 tons at the end of 1977/78 as against NFC's total operation of 40,000 tons. In addition, the levy system has further aggravated the already weak financial position of the Rice Exporting Companies. Consideration, therefore, has been given to abolishing the levy system and purchasing directly at the market price for distribution to deficit areas.

2.33 With respect to the levy system, if NFC's transport, milling, administrative and interest costs were taken into account, the total amount of consumer subsidy would be much higher than indicated by the margin between the levy and retail prices. For instance, NFC estimates that a kilogram of rice delivered to the remote Hill districts of Humla and Dolpa costs Rs 22.46 and Rs 10.46 respectively, compared to the retail price of Rs 3.20. At the present level of operation, which meets no more than one-third of the distribution needs of the food deficit areas of the Hills, the loss to NFC has been estimated at Rs 48 million per year.

2.34 In the coming years, the demand for public distribution to the deficit areas will become more acute which, in turn, will raise the annual cost of the subsidy. Therefore, unless adequate resources were to be provided for this purpose and management of the entire distribution system significantly improved, foodgrain supplies to the deficit areas would be short of requirements. There are several ways in which both the cost of the subsidy could be reduced and the distribution system more efficiently managed. For instance, the operations of NFC could be considerably improved through better planning and management, particularly in the areas of finance, transportation, and distribution 1/. As for distribution, the present system of allocating about

1/ National Food Security Committee, Food Security Programme Implementation, March 1979.

50% of the subsidized grain to Kathmandu Valley where transportation facilities are adequate, at the expense of less well served areas needs to be reassessed.

2.35 Ensuring adequate food supplies for the Hills can be facilitated by other programs designed specifically for this purpose. In this context, the Government is considering a food security program, under the auspices of the World Food Program. Under this scheme, 5,000 tons would be maintained as a reserve stock and another 10,000 tons as minimum operational stock to meet unforeseen emergencies. These stocks are part of a much broader program which will: (a) examine consumption, production and distribution policies as means of ensuring adequate food supplies; (b) reduce post harvest losses through improved marketing services; and (c) construct and maintain storage facilities to serve deficit areas. In addition, serious consideration should be given to rural construction work (feeder roads, minor irrigation facilities and water supplies) which as the basis for a food for work program could simultaneously address the twin problems of unemployment and food deficits in the Hills, while also meeting its legitimate infrastructure needs.

2.36 In planning food distribution programs, special care needs to be exercised to: (i) ensure that farmer incentives are not unduly damaged in the process; and (ii) minimize the opportunities for abuses in the system. The first concern argues in favor of concentrating distribution in the less accessible Hill areas, where food deficits exist and commercial movement of grains from the Terai is difficult. As to the second concern, HMG and donors will need to monitor the institutions and officials involved in distribution to ensure that food assistance reaches the intended groups. Heavy involvement of middle level managerial personnel might avoid some of these difficulties, but this would place a strain on the administrative capacities of HMG and donors. These problems are likely to be avoided only if popular participation becomes a reality and the contractors and officials are kept under close public scrutiny at the local level.

B. Industry

2.37 Prior to 1950, there was practically no industry in Nepal. As might be expected, the first industries to be established, albeit on a very rudimentary basis, were agro-based (rice husking, oil seed extraction, jute and tea processing, and lumber mills). Beginning in the late 1960s, a very limited range of import substitution industries arose, predominantly in the public sector, producing such consumer goods as beverages, cigarettes, and textiles as well as simple agricultural tools and building materials.

2.38 These initiatives, however, did little to change the basic structure of the Nepalese economy. At present, the industrial sector, according to several sources, accounts for less than 10% of GDP, and even approximately half of this is attributable to the various cottage industries that make up the informal sector. The other half comes mainly from the public enterprises, and to a lesser extent, from some 3,500 mostly small-scale private

firms in the formal sector. ^{1/} However, the formal sector employs only about 60,000 persons, or 1% of the total labor force, while it is estimated that cottage industries engage over one million persons, mostly on a part time basis.

2.39 The composition of Nepal's industrial output is typical of a very early stage of industrialization. For example, the share of food processing industries, is about double the average for other developing countries. In total, about 70% of production is derived from processing agricultural commodities, primarily rice, wheat, sugar, and cash crops such as jute and tobacco. Fourteen percent of industrial output is accounted for by textiles, clothing and leather goods, while wood related industries account for 8%.

2.40 Because of the relative ease of marketing and access to agricultural inputs, most industries in the formal sector are located in the corridor from the Kathmandu valley to the Indian border in addition to a few other areas in the Terai. Cottage and village industries, though heavily concentrated around Kathmandu, are more widely dispersed throughout the Hills.

Constraints to Industrial Development

2.41 The minor role that the industrial sector has played in Nepal reflects the serious constraints that exist. While for some of these there are no easy remedies, in other cases, the problems can and must be resolved if industry is to play a major role in Nepal's development. The two most formidable problems are the small size of the Nepalese market and the country's landlocked position. Despite a population of 13 million, the effective market for manufactured products is extremely small. The cash incomes of the majority of the inhabitants are less than US\$50 per annum, and in the hill regions, most transactions are by barter. The market for consumer goods is therefore largely confined to the small percentage of the population living in towns or in the more accessible parts of the Hills and Terai. Moreover, not only is domestic demand small, but Nepalese goods must also compete for this demand with Indian goods which, through economies of scale, are generally cheaper and of better quality. The long open border makes protection of domestic production difficult. Nepal's landlocked position has further exacerbated these problems. Transshipment costs add a significant margin to the export prices of Nepalese manufactured goods and to the intermediate imports needed for domestic production. In addition, the frequent delays in delivery seriously impede production and marketing.

2.42 These constraints to industrial development have not been offset by Nepal's large and seemingly low cost labor force, since these wages reflect skills that are probably close to the lowest of all developing countries. Nor has Nepal been able to rely on any easily exploitable natural resources that might have been a stimulant to growth.

^{1/} The formal sector is defined as including only registered firms. The Ministry of Finance defines cottage and village industries as those with fixed investment of less than Rs 200,000, but for the cottage industry census, they were defined as those industries employing less than ten workers and not utilizing commercial power.

2.43 Against this background, it is not surprising that private entrepreneurship is scarce and the amount of private investment in industry meager. To date, private interests have concentrated on other sectors of the economy, notably trade, tourism and real estate, where returns on investments are more assured and attractive. Moreover, private initiative in industry has received little encouragement from HMG compared to the privileged access to foreign exchange and finance enjoyed by public sector enterprises.

Government Objectives, Strategy, and Policies

2.44 Throughout the 1970s, the Government's stated objectives did not differentiate among the three general approaches to industrial development: import-substitution, basic materials production, and export processing. In practice, however, most of the policies that were implemented, such as allocation of foreign exchange licenses, granting of fiscal incentives, and allocation of resources in the public investment program, were clearly geared towards the promotion of import-substitution industries in the form of relatively capital-intensive, public manufacturing enterprises. In doing this, the Government attempted to follow the policies and experience of many other developing countries, where an import-substitution strategy has frequently led to an initial rapid expansion of domestic industry. This trend, however, did not occur in Nepal. The open border with India has made it virtually impossible to protect domestic industry, while the limited domestic market has not permitted firms to utilize their capacities efficiently.

2.45 Together with the broad objectives of employment creation, development of cottage industries, and promotion of export industries, more recent statements of the HMG's industrial policies have emphasized the need to encourage private investment and to improve the performance of public enterprises. However, within these broad objectives, no clear cut priorities have been established to determine the allocation of resources in the industrial sector. Indeed, the bulk of public investment in the medium term has been set aside for two large-scale joint ventures with India in cement and paper production which are economically efficient. However, it is unclear how the Government intends to satisfy its multiple objectives with the few resources that remain.

2.46 In the medium term, Nepal does not have a clear choice between distinct types of industrial strategies. The low level of industrial development in Nepal does not reflect a failure to exploit clearly available opportunities, but rather the absence of such opportunities. On the other hand, as proposed in Chapter IV, in the long term, Nepal cannot continue to rely on agriculture as the sole basis of its economy. The multiplicity and complexity of the constraints to industrial development thus discourage any generalized approach which might be characterized as import substitution or export oriented. Rather than attempting to establish a diversified industrial base, Nepal would be well advised to adopt a very selective approach to industrial development.

Improving the Efficiency of Existing Industries

2.47 In the medium term, there is a need to upgrade the efficiency and productivity of existing industries. A major effort to improve the performance

of public enterprises and to promote cottage and village industries could yield substantial benefits at relatively low cost.

(a) Public Enterprises

2.48 The poor performance of public sector enterprises, which account for over 70% of value-added in the formal sector, has been a chronic disappointment. Productivity is extremely low due to inefficient use of labor, low levels of technical and managerial expertise, and frequent closures due to shortages of raw materials and spare parts. A recent survey indicates that the average capacity utilization rate is below 60%.

2.49 Erratic government involvement in day-to-day operations has led to poor management decisions as well as to frequent overstaffing. Inconsistent government pricing policies have also created marketing problems. For example, both the Birganj Sugar Factory and the Raghupati Jute Mills have suffered from paying excessively high procurement prices, and as a result, were priced out of their export markets. In several cases, improvements could have been achieved quickly and cheaply simply by revising pricing policies or management decisions. A good example is the experience of the Shoe and Leather Factory which, following several years of losses, became profitable after management was given the authority to reduce prices to dispose of huge accumulated inventories.

2.50 The former Corporation Coordination Council (CCC) ^{1/} has made specific and detailed recommendations regarding appropriate pricing policies and wage incentives, more efficient management, reduction of excess capacity and excess employment as well as divestiture of certain smaller enterprises to the private sector. Recent studies done jointly with the Industrial Services Center (ISC) have analyzed ways of improving the efficiency of individual public enterprises. However, improvements cannot be expected until the Corporation Coordination Division in the Ministry of Finance or some other appropriate body obtains support from the highest levels in implementing these recommendations.

(b) Promotion of Cottage and Village Industries

2.51 The development of village and cottage industries could assist in raising the incomes of the Hill population. There is potential for traditional crafts and textiles for exports, for products complementing the agricultural effort, such as processed foods and agricultural tools and also for handlooms for the domestic market. Some possibilities also exist for subcontracting relationships with the tourist industry, the larger public sector enterprises, and with foreign contractors.

2.52 However, producers need better access to credit, raw materials, tools and improved technical assistance and training if they are to meet required quality standards and delivery schedules. Presently, finance is

^{1/} The CCC was made into a division of the Ministry of Finance in March 1979. The functions of the new division are still being formulated.

provided by commercial banks and the Agricultural Development Bank, while extension services are provided by the Department of Village and Cottage Industries. Present institutional arrangements will need to be improved. Existing private and public organizations should be significantly upgraded or new ones properly designed to provide effective assistance for promising product lines. For those lines with immediate export potential, such as handicrafts, the emphasis should be on providing sufficient incentives to private exporters and wholesalers to establish networks linking clusters of cottage industries to export markets, and on securing sufficient credit for producers from commercial banks.

Efforts to Expand the Productive Base

2.53 For the longer term, there is a need to identify the few industrial subsectors in which Nepal could either (a) successfully compete and trade with other countries, particularly India, or (b) which could serve as a means of increasing the skill level of Nepal's industrial manpower.

(a) Specialized Subsectors - Competing with Neighbors

2.54 For both import-substitution and export oriented industries, the Government should emphasize those specific product lines which can compete efficiently with India and other countries. Where feasible, joint ventures could be undertaken with India on a mutually beneficial basis. One example is the recently agreed joint venture to produce cement for both Nepal and India using Nepalese limestone deposits. The plant will allow Nepal to benefit from economies of scale despite its small domestic market. Another way of competing successfully with Indian goods in the domestic market is to find specialized production processes that fit specific local requirements.

2.55 These examples, however, shrink in significance when compared to the enormous difficulties that Nepal faces in competing with India. The recent Trade Treaty provides Nepal with free access to the Indian market for all manufactured articles containing at least 80% Nepalese or Indian materials (para 1.11). However, very few non-traditional goods manufactured in Nepal contain such a high degree of indigenous raw materials, and experience has shown that Nepal's ability to sell manufactured goods to India depends to a great extent on India's industrial policies. Thus, there is much that India can do to facilitate Nepal's industrial expansion, and the few examples of successful joint ventures demonstrate that India can, at very little if any cost to itself, encourage the growth of the Nepalese industrial sector.

2.56 Nepal, however, cannot afford to depend solely on its neighbors and must continue its own efforts to diversify exports to third countries. There are good prospects in Europe and USA for specialized products such as metal crafts, Tibetan carpets, woolen goods, and jute sacking. If the technical expertise of Nepal's industrial labor force could be improved significantly, there are also long-run prospects for exporting products with a high value-to-weight ratio, such as jewelry, electronic components and

manufactured perfumes and toiletries. Also, in the long term, the potential of agro-based industries will be constrained by the prospects for food crop production unless these industries diversify into processing cash crops and horticultural products.

(b) Energy-based Industries

2.57 Hydro-power represents Nepal's most important natural resource and, in the long term, there might be possibilities for industrial development based on its exploitation. Lower-cost energy could reduce the margin between Nepal's costs of production and those of India and other countries. But whether energy would in fact be inexpensive for Nepal, would in turn depend on the construction and financing costs of the hydro-plants (para 2.73). Industries that could become attractive with abundant hydro-power as a major source of energy are heavy industries such as foundries and steel mills and mineral-based industries. While for the foreseeable future, a steel mill could not be economically efficient in Nepal, the potential for other mineral-based industries has yet to be assessed. Easily accessible minerals, other than magnesite, gems and zinc, have not yet been located on a large scale. While the Government is contemplating comprehensive mineralogical surveys, it will be many years before the findings become available.

(c) Increasing the Productivity of Industrial Manpower

2.58 Because the labor force is largely unskilled, Nepal has not been able to emulate countries like Sri Lanka, which have begun to take over such labor-intensive export activities as sophisticated textiles, hosiery, light engineering, and assembly work in mechanical and precision instruments from countries like Singapore and Hong Kong which, as their wage levels increase, are moving into more sophisticated production lines. However, to participate in this process, Nepal would have to upgrade significantly the skills of its manpower, while also accepting relatively low wages to compensate for the high marketing costs due to its landlocked position. Besides increasing the general level of education, HMG could promote certain industries that improve labor skills even if initially these industries were not sufficiently competitive. An example is light engineering which is closely related to both the process of learning and the growth of indigenous technology, and can be organized on a small scale with labor-intensive techniques. In addition, engineering has strong linkages to virtually all other industries. At present, the engineering subsector in Nepal consists of one public enterprise producing agricultural tools and implements and a few private firms. The next logical steps might be to establish more sophisticated workshops for the maintenance of imported machinery and equipment and to develop skills in the use of imported tools and semi-processed materials. At a later stage, Nepal could start manufacturing simple equipment for use in agriculture, food processing, transport, and construction.

Improving the Industrial Policy Framework

2.59 The benefits of the above measures will not be fully realized unless the policy environment that the private sector faces is considerably improved. The investment climate for private industry has been far from favorable.

Businessmen have been uncertain about the role the Government attaches to the private sector and they are apprehensive of competition from public enterprises which have generally received preferential treatment. Meanwhile, the Government has provided no guidance to the private sector about profitable industrial opportunities. It is therefore not surprising that Nepalese private entrepreneurship is very sparse and foreign investment virtually non-existent.

2.60 The Industrial Policy Statement and the Industrial Enterprises Act of 1974 allowed for an extensive system of incentives for the private sector including generous income tax exemptions, duty free imports of raw materials and spare parts, exemption from excise duties and sales taxes, and preferential interest rates for backward areas. ^{1/} However, the implementation of these facilities has been limited and few incentives were actually utilized.

2.61 If the private sector is to be encouraged to participate more actively in investment activities, more attractive incentives are required. The Ministry of Industries is presently drafting a revision of the Industrial Policy Statement. To make the system of incentives effective, better coordination is needed between the Ministry of Industry and the Ministry of Finance; in addition, many other factors need to be considered including:

- (a) simplifying the system of fiscal incentives. At the same time, the present extensive income tax exemptions for industries which have enjoyed high growth in the past (e.g., tourist industries, distilleries, and rice mills) could be eliminated;
- (b) streamlining the procedures for obtaining industrial licenses from the Licensing Board and industrial loans from the National Industrial Development Corporation (NIDC);
- (c) promoting and identifying potential industrial projects. The considerable confusion and duplication between ISC and NIDC in promotional activities prevent either institution from devoting adequate efforts to this task;

^{1/} Tax policies have been formulated mainly to promote import-substitution industries. Fiscal incentives for such industries include (a) exemption from income tax for three to ten years, (b) reduction of custom duties to only 1% for intermediate imports, (c) exemption from sales tax on imports of machinery, spare parts, electrical equipment, and raw materials, and (d) reduced excise duties for eligible industries during their first three years of operation. The licensing policy for rural and cottage industries has recently been liberalized so that those businesses with a fixed capital investment of less than Rs 200,000 are no longer required to obtain licenses from the Ministry of Industry and Commerce. Excise duties and sales taxes have also been abolished on the products of most small-scale industries with a fixed capital of less than Rs 200,000.

- (d) encouraging foreign investment by new measures such as (i) increasing the percentage of profits allowed to be repatriated from the present 25% and (ii) providing long term guarantees against nationalization;
- (e) liberalizing the extensive price control system which has reduced price incentives, discouraged private investment, and fostered inefficiency among public enterprises;
- (f) rationalizing the existing tariff system; and
- (g) promoting exports by upgrading the Trade Promotion Centre to provide better guidance in identifying export marketing constraints and ensuring quality standards. Temporary fiscal incentives for new export activities should be considered in order to compensate for their additional costs of entering foreign markets.

C. Tourism

2.62 Nepal has been relatively successful at utilizing the tourist potential offered by its magnificent landscape and rich cultural heritage. Tourist arrivals have been growing by more than 16% per year, rising from 46,000 in 1970 to 160,000 in 1978. Tourism has also emerged as Nepal's largest single foreign exchange earner; in 1977/78, gross foreign exchange earnings from tourism amounted to US\$30 million, equivalent to one-third of merchandise exports.

2.63 Despite its good growth potential, tourism can only play a limited role in Nepal's medium-term development. Perhaps its most useful function will be as a leading source of foreign exchange earnings. A recent study estimated that net foreign exchange earnings from tourism (after deducting imports of goods and services used by tourists) amounted to nearly two-thirds of gross earnings. However, this proportion could be higher if the domestic value added were increased by expanding the subcontracting relationships between the hotel industry and other local industries. These links already exist for food processing, but most other industries such as construction materials, tiles, furniture and textiles, would need to improve their operating efficiency in order to meet the quality standards and tight delivery schedules required. Only through such linkages can tourism make a significant contribution to employment generation, since contrary to experience in other countries, tourism in Nepal is three times as capital intensive as manufacturing. 1/

1/ A survey conducted in 1974/75 found that the average amount of private capital investment required to create one new job in tourism was about Rs 40,000. If public investment for tourism infrastructure is included, the capital/labor ratio would rise to Rs 58,000:1.

2.64 Tourism in Nepal is seasonal with arrivals concentrated during the months of October through March. In 1978, the ratio between the highest month and the average was 1.6; this has been a factor in the average capacity utilization of hotels in Kathmandu being as low as 35%. ^{1/} The seasonality in tourist arrivals is primarily because winter is the optimal time to view the mountains, but more aggressive promotion of the off-peak season for those more interested in Nepal's cultural heritage would help to reduce seasonality. Encouraging tourists to visit other areas of Nepal could lessen the peak season pressures on Kathmandu as well as spread the economic benefits to other regions. However, additional investment to improve domestic transport links to such secondary centers as well as to upgrade other facilities would be required. For the medium term, Nepal's existing hotels together with already planned construction should be more than sufficient to accommodate the overall growth in tourist arrivals.

D. Energy

2.65 Nepal's energy use reflects the rural nature of its economy and the small size of its modern industrial and commercial sectors. Traditional sources of fuels (primarily fuelwood) account for about 90% of Nepal's energy use. Commercial energy sources - coal, petroleum and electricity - supply the remainder, meeting mainly the needs of the industrial, transport and commercial sectors, as well as urban residential requirements. The energy problem in Nepal is two-fold. Rural areas rely almost entirely on fuelwood for energy, and the growing population has placed the forests under heavy pressure. The other aspect of the problem is to ensure that the growth of electric power (generating capacity and transmission lines) is sufficient to meet the needs of the modern sector.

The Rural Energy Problem

2.66 Rural energy needs are almost entirely met by the fuelwood collected by villagers from communally exploited woodland. However, the growing population has put pressure on supplies, both by increasing the demand for fuelwood and by converting forest acreage into cultivated land. Trees are also a source of fodder for livestock, and their defoliation further diminishes available supplies of wood. The average family now spends 11 man-days per month collecting fuelwood. Demands on the forests are well beyond sustainable levels and recent studies indicate that continued encroachment into forests is inevitable. Without large scale afforestation programs, the accessible forests in the Hills will have largely disappeared by 1990 and those in the Terai by the year 2000. The increased run-off of the seasonal precipitation due to deforestation contributes to soil erosion as well as to a reduction in the infiltration of water into the soil, leading to the drying up of springs in many Hill areas.

^{1/} The breakeven occupancy rate for most hotels is usually about 40%.

2.67 Destruction of accessible forest areas would force the rural population to burn increasing quantities of plant and animal wastes. So far, relatively little of these alternative fuels are used, but at present rates of forest destruction, some time between 1985 and 1995 the burning of these wastes will reach a level where the loss in agricultural productivity from not recycling them as fertilizer could reduce foodgrain production by more than one million tons (equivalent to over 25% of current production).

2.68 HMG is beginning to develop rural afforestation programs designed to ensure that ultimately each village has a well established woodlot to cover its needs for fuelwood and fodder. Community woodlots will be established utilizing some local labor. In this way, it is hoped that the community will be motivated to protect the woodlot and agree to its rational exploitation. Some limitation of the numbers of livestock in the Hills would also diminish the destructive demand for fodder. In the Terai, it is also intended to regulate the commercial exploitation of certain forest areas so that wood supplies for industrial purposes can be assured on a permanent basis.

2.69 A number of ways to reduce fuelwood demand have been proposed. One promising approach is the development of more efficient wood burning stoves. The efficiency of existing stoves has been estimated to be in the range of 10 to 15%, whereas stoves with 30 to 40% efficiency are technically and economically feasible. Another approach is to make use of those micro-hydro plants being built to create some cash inflow for rural communities through establishing or expanding cottage and small-scale industries. The community's demand for fuelwood can be reduced by providing some households with power for low wattage electric cookers during off peak hours.

2.70 The rural dependence upon fuelwood reflects not only the traditional use of forests as a source of energy, but also the lack of purchasing power, particularly in the Hills, to buy alternative fuels or better stoves. Ultimately, the energy crisis will be eased if rural incomes rise sufficiently to make it possible for households to purchase fuels such as electricity and kerosene and if the opportunity cost of the labor involved in collecting fuelwood from remote locations, exceeds the price of alternative fuels.

Electric Power Generation

2.71 The Nepalese electricity supply system is very small, with an aggregate generating capability of about 50 megawatts (MW). Forty-two MW are connected to the Central Nepal System (Kathmandu-Hetauda-Birganj) and are operated by the Nepal Electricity Corporation. The run-of-river hydro plants at Trisuli (21 MW) and Sunkosi (10 MW) produce the bulk of this power. Hydro-power projects presently under construction will give the Central System a generating capability of 142 MW by the mid-1980s. 1/

1/ The projects are: Gandaki (15 MW, to be completed during 1979), Kulekhani (60 MW, to be completed in two stages, 30 MW in 1981/82 and 30 MW in 1982/83), Devighat (14 MW, to be completed in 1984/85). A 10 MW diesel generator currently is also being installed.

2.72 Demand for power has been growing by about 20% per year since the mid-1960s, but in recent years, supply constraints have necessitated suppressing part of that demand through selected power reductions at peak periods and limiting the growth in new connections. However, one complicating feature in assessing Nepal's power needs is the nearly 30% loss in power, due partly to transmission losses, and partly to unauthorized use by customers. Although some losses must be expected in a country with as low a level of per capita income as Nepal, the size of the loss suggests that a more rigorous enforcement policy is advisable.

2.73 Recent forecasts indicate that by 1990, Nepal will need additional generating capability of between 100 to 150 MW, thus increasing total capability to 250-300 MW. Given the 4 to 5 year lag between the start of a hydro project and its completion, two or three new projects, each on the order of 50 MW will need to be started during the next few years. The costs of this construction program (including transmission lines) would amount to about US\$300 million. Such a construction program will also place heavy demands on supplies of both manpower and materials, but these constraints must be overcome if Nepal's industrial and commercial growth is not to be retarded. The power projects to be started from 1980 onwards have not yet been finalized, but feasibility studies have been carried out for a number of projects including Marsyangdi (50 MW), Kulekhani II (33 MW), and Gandaki Loop (60 MW). HMG should give very high priority to the preparation and implementation of these projects at suitably phased intervals during the 1980s. There is also a possibility of very large-scale hydro-plants; but these would far surpass Nepal's needs, and to be economically viable a large proportion of the energy generated would have to be exported to India. In this connection, the many complex legal, financial, and political issues between Nepal and India are yet to be resolved.

2.74 The Ministry of Water and Power is responsible for small-scale hydro development (under 300 KW) to provide power for rural communities for cottage and small-scale industries and for lift-pump irrigation. Projects have been identified in 40 districts, but implementation will depend upon the response of the local communities and their willingness to provide labor and other requisite resources, as well as engineering support from the Government. HMG plans to undertake about 10 to 15 such projects per year. At present the tariff policy for small-scale projects is intended to ensure that user charges cover operating and maintenance costs, but some imaginative pricing policies are called for if these projects are also to be used for reducing the demand for fuelwood.

E. Transport

2.75 Historically, transport in Nepal has depended on porters, and even today a network of 15,000 to 20,000 km of trails provides the primary means of access for the two-thirds of the population that live in the Hills. Prior to 1953 there were virtually no motorable roads outside the Kathmandu Valley, reflecting the rugged terrain and the large number of rivers and streams, which together with the heavy monsoons, have made road construction and

maintenance very expensive. The first four development plans gave high priority to constructing a basic highway network that would integrate the various regions, and during this period, this absorbed the major share of the development budget. Highways were constructed from Kathmandu to India and China, and an East-West highway was also started in the Terai. With a large part of this network completed, Nepal now has 4,700 kilometers of roads of which one-half are either paved or gravelled.

2.76 Nevertheless, the difficulties and expense of road construction have encouraged the search for alternatives. Civil aviation has been developed to provide quick access to many parts of Nepal, and in 1978 there were 26 regular airfields in the country and 35 STOL ^{1/} airfields in the Hills. For local transport needs, the alternative has been to upgrade the existing network of trails and to construct suspension bridges. Ropeways have also been proposed, but no construction has been undertaken in recent years.

2.77 Except for the section between Kathmandu and India, much of the basic highway network was not intended to improve existing transport links, but to create new ones. Thus, it is not surprising that traffic densities have remained low. In general, roads have been a more important means for moving people than for moving goods. This is due to absence of marketing traditions in the area, the paucity of marketable agricultural surpluses in the Hills, and the fact that social and economic exploitation of roads inevitably take time. Moreover, in some instances, this has been aggravated by a lack of coordination with other development activities. The relatively low economic returns to past construction is particularly disappointing in view of the 23% of the development budget absorbed by the road program during the first four years of the Fifth Plan.

Table II-3: ROAD PROGRAM - DEVELOPMENT EXPENDITURES /a
(Rs million)

	1974/75-		Distribution of Road Expenditures	
	1974/75- 79/80 (Estimated)	1980/81- 84/85 (Proposed)	1974/75- 79/80	1980/81- 84/85
Highways	1500	2270	65.2	47.1
East-West Highway	760	430	33.0	8.9
Mid-Hills Highway	80	1570	3.5	32.6
North-South Roads	660	270	28.7	5.6
Feeder Roads	270	1700	11.7	35.3
Miscellaneous	530	850	23.0	17.6
TOTAL	2300	4820	100.0	100.0

/a Not necessarily consistent with Ministry of Finance budget numbers.

Source: HMG Long Term Road Program 1975-85.

1/ Short takeoff and landing.

2.78 Recognizing these problems, HMG has in recent years begun to shift the emphasis of the program towards constructing roads that follow existing or potential traffic flows. During the Fifth Plan period, nearly 30 percent of expenditures have been for North-South roads running from the Hills to the Terai to link up with the East-West highway (Table II-3). For the period 1980/81-1984/85, the construction of feeder roads is planned to absorb about one-third of the program's expenditures. These are welcome developments that may generate greater returns to the road system as a whole. Moreover, where traffic densities are anticipated to be low, construction costs could be reduced by using lower highway design standards such as one-lane roads and jeepable trails. However, HMG is also considering including sections of the Mid-Hills East West highway in its medium-term plan; expenditures on this project would be about one-third of the proposed construction budget. This road would be very expensive to construct and its traffic potential may be quite limited; it would thus be wise to proceed cautiously.

CHAPTER III: DEVELOPING HUMAN RESOURCES

3.01 As awesome as the tasks of developing the directly productive sectors are, Nepal faces perhaps no less pressing human resource development needs. There are two complementary sides to the problem: on the one hand, the rapidly growing population places severe demands on the resource base; on the other, the productivity of the labor force is constrained by low education achievement and poor health. The first section of this chapter addresses the quantity of human resources -- size and distribution, now and in the future -- and policies to affect quantity. The other two sections deal with its quality; one discusses the progress to develop intellectual abilities and skills, the other addresses the issues involving physical development and health.

A. Population

Current Situation

3.02 Nepal's demographic situation is among the worst in the world and is deteriorating steadily. The rate of population growth is now estimated at 2.6% per annum and population density with respect to cultivable land far exceeds that of Pakistan, Bangladesh, and India. Moreover, the average density for Nepal masks huge regional differences, with the Hills over three times as densely populated as the Terai. Even though demographic pressures already strain the capacity of the land to provide minimally adequate supplies of food, all reasonable projections point to an inevitable and steadily worsening situation through the turn of the century and beyond. In contrast to its neighboring countries, there appear to have been no fertility reductions in Nepal that would suggest movement towards eventual control of the situation. Not only is Nepal's current total fertility rate of 6.5 the highest in the recent World Fertility Survey, but it is also the only country participating in the survey for which there has been no reduction in total fertility over the past several decades.

3.03 The rapid growth of population has also had a pronounced influence on its geographical distribution. The population share of the Hills and Mountains has fallen from over 67% to about 62% during 1961-71 (although the absolute numbers have increased). The virtual eradication of malaria after World War II dramatically increased agricultural production in the Terai and explains a large part of the migration from the Hills and from India that occurred during this decade. The more recent migration reflects the increasing food shortages in the Hills, compounded by deteriorating ecological conditions, although employment opportunities in the Terai are becoming scarcer. Dramatic increases in migration appear unlikely, however, unless modernization of Terai agriculture proves successful enough to increase substantially the demand for landless labor or unless nonfarm employment expands at a hitherto unprecedented pace.

Demographic Outlook

3.04 Nepal's low life expectancy and high death rates are obvious concerns and the highest priority attaches to programs which have an impact on these indicators. Yet a major reduction in mortality would be a hollow victory unless fertility declined simultaneously, for the consequence would be an acceleration in population growth. The following projections contrast the impact of a successful program to reduce fertility over the next 50 years against a prolongation of present trends:

Scenario I - No population program (total fertility remains unchanged).

Scenario II - Effective population program (total fertility declines such that net reproduction rate (NRR) is one by the year 2030. With NRR=1, each woman is expected to have, over the course of her child-bearing years, exactly one surviving daughter. This assumption was used for Nepal in the 1979 World Development Report).

3.05 Under both scenarios, life expectancy at birth will increase at the rate normally assumed in World Bank projections, rising from 45 years at present to 63 years by 2030. 1/ As derived from Table III-1, these contrasting trends in fertility will have serious implications for three important population characteristics: (i) the dependency burden measured as a ratio of the population below 15 to the total population; (ii) the size of the labor force (aged fifteen to sixty-four); and (iii) the density of population measured in relation to cultivable land.

1/ While this increase is unlikely to occur in the presence of the population pressures that would result under Scenario I, the projections following from Scenario I illustrate the consequences of population growth not being limited by either fertility control or high mortality.

Table III-1: THE SIZE AND AGE DISTRIBUTION OF NEPAL'S POPULATION:
ALTERNATIVE SCENARIOS
(in millions)

<u>Year</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2030</u>
Scenario I (no program)						
<u>Total</u>	14.5	19.2	25.9	35.8	50.6	72.5
0-14	6.2	8.6	11.7	16.5	23.6	34.1
15-64	7.9	10.0	13.4	18.3	25.6	36.4
65 +	.4	.6	.8	1.0	1.4	2.0
Scenario II (effective program)						
<u>Total</u>	14.5	18.4	22.8	27.6	32.4	36.7
0-14	6.2	7.8	8.8	9.9	10.4	10.4
15-64	7.9	10.0	13.2	16.7	20.6	24.3
65 +	.4	.6	.8	1.0	1.4	2.0

Scenario I - Fertility continues unchanged.

Scenario II - Net reproduction rate declines to one by 2030.

Source: Baseline data come from the Population Division of the United Nations and are based on the 1971 Census of Nepal.

3.06 The first important consequence of an effective population program is the decreased dependency burden which in 20 years under Scenario II would result in having 25% fewer children and in 50 years, 70% fewer. This would significantly reduce the pressures on consumption expenditures (food, clothing, and education) enabling a much larger share of national income to be channeled into investment. The second consequence, which would become noticeable in about 30 years, is the smaller labor force. In fifty years, Scenario II's population would require one-third fewer jobs to be generated, thus enhancing the prospects of fuller employment. Moreover, with a smaller labor force and a larger capital stock (a consequence of the higher levels of past investment), productivity of labor would also be enhanced. Finally, in 50 years, Scenario I's population would be twice the size of Scenario II's. The high fertility population would overwhelm Nepal's resource base; its density measured in persons per hectare of cultivated land would exceed thirty, compared to six at present.

3.07 It is perhaps even more illuminating to examine the impact of reduced fertility on per capita incomes. At the minimum, the direct effect is that the per capita income in Scenario I would be one-half that in Scenario II in 50 years. In addition, there is the indirect effect that population growth will have had on incomes. As a rough estimate, a simulation has been carried out incorporating the impact that population growth has on consumption expenditures and, in turn, investment. This is then related to income by projecting expected productivity of new investment. Table III-2 shows their aggregate effect expressed in terms of the per capita income under Scenario I as a percentage of that achieved under Scenario II.

Table III-2: PROJECTED INCOME PER CAPITA
(Scenario I as a percent of Scenario II)

<u>After Year -</u>	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>
Direct Effect	100	96	88	77	64	50
Indirect Effect	100	97	88	71	61	54
Total	100	93	78	58	46	36

The effects accrue gradually with per capita income under Scenario I being 22% lower after twenty years, with the difference widening until its per capita income is only one-third as large as under Scenario II in 50 years.

3.08 These projections illustrate the well founded tenet that the dynamics of population growth are slow yet powerful. There is little that can be done to counter its effects in the current generation, yet it is in this generation that patterns of population growth in future generations are determined. It is imperative that population policies look beyond the traditional five-year planning horizon. Failure to do so is an enormous mistake, for in countries like Nepal where fertility is high and mortality declining, rapid population growth could nullify much of the development effort.

Policies and Programs

3.09 HMG has begun to recognize the importance of controlling population growth. The Fifth Plan discussed population issues and included as an explicit target the reduction of the crude birth rate. As evidence of continuing concern with population issues, HMG established in 1978 a high-level National Commission on Population (NCP), chaired by the Minister of Home and Panchayat. The NCP is chartered both to devise national population policies and to oversee their implementation. In addition to the concern among central planners, there also appears to be an emerging awareness within operating ministries of the economic implications of population growth and migration.

3.10 Yet despite these encouraging steps, population issues remain inadequately treated in national economic planning. Key posts within the NCP remain unfilled and its staff allocation is small. Nor is it clear that the NCP will evolve into an institution capable of influencing major economic and social policy decisions. The Basic Principles reflects this lack of a systematic mechanism for including population issues in national planning. It contains virtually no reference to population growth and only passing reference to the problem of Hills-to-Terai migration.

3.11 Table III-3 depicts rather vividly how much needs to be done with provision of family planning services. In 1976, only 4% of Nepal's married women had ever practiced contraception; 78% of them had never heard of a contraceptive method. In part, inaccessibility to contraceptives causes these low levels of awareness. World Fertility Survey questionnaires for all countries except Nepal asked how many hours (or minutes) it would take a woman to go from her house to a contraceptive outlet; in Nepal the question had to be phrased in terms of days.

Table III-3: KNOWLEDGE AND USE OF CONTRACEPTIVES:
NEPAL AND OTHER ASIAN COUNTRIES

<u>Country</u>	<u>Percentage of ever-married women who heard of a contraceptive method</u>	<u>Percentage of ever-married women who have used a contraceptive method</u>	<u>Unmet Demand (%) /a</u>
<u>Nepal</u>	<u>22</u>	<u>4</u>	<u>91</u>
Bangladesh	82	14	86
Republic of Korea	97	57	44
Malaysia	92	46	48
Pakistan	75	10	85

/a Figures in this column give the percentage of exposed (i.e. currently married, non-pregnant and fecund) women who desire no future births and use no contraceptives.

Source: "The World Fertility Survey: Current Status and Findings", by Sir Maurice Kendall, Population Reports, July 1979, Tables 13 and 19.

3.12 Despite the low level of awareness and usage of contraceptives in Nepal, there has been measurable progress in recent years. HMG administers its family planning program through the Family Planning/Maternal and Child Health (FP/MCH) project of the Ministry of Health. The main objectives of the FP/MCH projects are to assist Nepalese couples both in spacing their children and in ceasing to have additional children. Contraceptive techniques such as the pill, condom, IUD, and Depo-provera are made available to couples wishing to space their children; vasectomies and laproscopies (female sterilization), both of which are irreversible, are made available to those wishing to cease having children. Though the recent levels of achievement are low, reflecting in part the program's poor coverage of much of the country, the growth rates show substantial progress (Appendix Table 8.5). The FP/MCH program operates through 212 outlets as well as sterilization camps and special campaigns; however, this number of clinics reaches only 7% of the panchayats, and there are insufficient staff to meet the demand for sterilization camps. Initial experiments with providing family planning through integrated health services have had promising results, and future expansion of family planning is intended to rely heavily on these services.

3.13 The growth in Nepal's family planning program has been accompanied by a much faster growth in expenditures (about 40% per year for the four years ending in 1976). Nevertheless, Nepal's annual expenditures per capita on family planning of \$0.11 exceeded only those of Tanzania and Uganda among 30 developing countries for which data were recently available. In contrast, India spent \$0.28 and Pakistan \$0.34. 1/ These figures suggest that, despite

1/ Population and Family Planning Programs, by D.L. Nortman and E. Hofstatter, 1978 (New York: Population Council).

problems of absorptive capacity, much more could be effectively spent on family planning programs; the volume of unmet demand supports this conclusion. The UNFPA envisages a total of \$30 to \$40 million of external support for population control activities (broadly defined) over the next five years compared with an annual average of \$1.5-2.0 million in the Fifth Plan. This volume of external assistance is consistent with the high priority that should be attached to such programs.

3.14 The choice confronting Nepal is whether its population fifty years from now will be 73 million or 37 million. Obviously, this is not a choice which can be left to future generations since they will find that the outcome has already been determined for them. It is understandably hard for policy-makers to focus on issues which are as distant as these in deciding how fast to proceed on a population planning program. However, for a country like Nepal where so many adverse factors conspire to blemish the quality of life, there is probably no more potent combination of policies which could be pursued to ameliorate the present and, at the same time, safeguard the future.

B. Education

3.15 The Rana regime, which governed Nepal until 1950, actively opposed general education. In 1950, the last year of its rule, there were fewer than 10,000 children attending school, fewer than 100 students who completed secondary school, and literacy was less than 2%. Education has been a development priority ever since, and rapid progress has been made - by the late 1970s literacy had been increased to almost 20%, and over half the primary age children were attending school. Nevertheless, as indicated in Table III-4, Nepal still lags far behind neighboring countries in terms of education achievement.

Table III-4: EDUCATION INDICATORS - SELECTED COUNTRIES (1976)

	<u>Enrollment as Percentage of Age Group</u>			<u>Adult Literacy Rate (%)</u>	<u>Public Expenditures on Education as % of GDP</u>
	<u>Primary, Males</u>	<u>Primary, Females</u>	<u>Secondary</u>		
<u>Nepal</u>	<u>95</u>	<u>25</u>	<u>12</u>	<u>19</u>	<u>1.5</u>
Bangladesh	106	60	23	22	1.8
Burma	83	78	22	67	1.7
India	94	63	28	36	3.2
Pakistan	68	31	17	21	2.1
Sri Lanka	80	73	55	78	3.1
Average, Low Income Countries	89	59	24	36	n.a.

Source: World Development Report, 1979, (World Bank) and mission estimates.

3.16 The present education system was established under the New Education System Plan (NESP) of 1971 (Charts I and II). Under the NESP, formal schooling is divided into three cycles: a 3-year primary cycle aimed at providing at least minimal levels of literacy and numeracy to a large proportion of the children; a 4-year lower-secondary cycle that gives increased mathematics, language, and science training; and a 3-year upper secondary cycle. There are several different upper secondary programs depending on whether students are to be prepared for university or vocational training. Higher education is under the Tribhuvan University which is organized into 5 general institutes and 5 technical institutes spread across 79 campuses.

3.17 The education sector has been one of the most successful areas of achievement under the Fifth Plan. The primary school enrollment rate was to be raised from 43% in 1974/75 to 64% by 1979/80, and enrollments in lower secondary schools were to increase from about 38% to 50% of primary school enrollments. Enrollments in upper schools were to remain at about 40% of lower secondary school levels, and the technical institutes of Tribhuvan University were to produce about 15,300 graduates. In fact, primary enrollments have significantly exceeded projections; according to official estimates, enrollments doubled between 1974/75 and 1978/79, and the enrollment rate reached 78%. 1/ This faster than anticipated rise is to a large degree attributable to a decision made in 1975 to cover 100% of teacher costs at the primary school level, as well as to provide free textbooks to all enrolled students in 25 remote districts and 15% of the students in other districts. 2/ Some 1,110 new primary schools and 900 new secondary schools (mainly lower secondary) were constructed between 1975-78, and the pace of expansion is being sustained. Enrollments in lower and upper secondary schools have also grown rapidly during the Fifth Plan - by 73% and 50% respectively, while enrollments in the technical institutes of Tribhuvan University have increased by 40% to almost 13,000. This rapid growth on all education fronts is reflected in the budget, where education expenditures (regular and development combined) have increased by 18% annually during the Fifth Plan.

Development Issues

3.18 The Sixth Plan education strategy is still in a very preliminary stage, and the Basic Principles provides only the most general guidance. In primary education, HMG aims at achieving an 85-90% enrollment rate, while at the same time seeking to reduce the number of dropouts, increase female enrollments, and improve the relevance of the curriculum. In response to the shortages of trained technical manpower, there will be increased emphasis on technical and vocational training; however, specific targets have not yet been established.

1/ Since many enrolled students are overage (and, in Grade 1, some may be underage) a 78% 'apparent' enrollment ratio implies that a smaller percent of children of primary-school age are actually in school. These 'actual' enrollment ratios are unavailable at present.

2/ From 1979 on, the Ministry of Education is providing free textbooks to all primary students.

3.19 The rapid progress made during the Fifth Plan has brought Nepal much closer to its objective of universal primary education. In many ways, however, the system is overextended. The number of dropouts is still very high, many teachers are underqualified, and in general the quality of education is low. At the same time, the country's development programs continue to be constrained by shortages of middle and higher level technical manpower. The task ahead for Nepal would appear to be one of consolidation at the primary level, and expansion and rationalization at the higher and technical education levels. Along these lines, preliminary Planning Commission estimates reflect an intention to cut average annual expenditures to below 1978/79 levels. However, this would be excessive; a more realistic target would be to aim at maintaining the same relative share of education expenditures as achieved during the Fifth Plan, which would still represent a large increase in absolute terms. (Relative outlays on primary education could reasonably be expected to decline as expansion slows down, while those on secondary and higher education would be expected to grow.) The issues involved in consolidating the education system fall conveniently into three, to some extent interrelated categories: efficiency, quality and equity.

(a) Efficiency

3.20 Strong efforts must be made to improve the efficiency of the education system, both to reinforce its impact as well as to contain future education costs. Due to the large number of dropouts and repeaters, it presently takes more than 6.5 student years to produce a single graduate over the three-year primary cycle. Some 45% of all students fail to make it beyond Grade I. As a result, perhaps as much as half of the expenditures on primary education are being wasted. Similarly, at the secondary level, only 30-40% of Grade 10 students in recent years have passed the School Leaving Certificate (SLC), again indicating a significant waste of resources. Numerous causes can be identified including the poor quality and perceived irrelevancy of the education provided, the sub-standard health and nutritional condition of many students, and the high opportunity cost to child labor.

(b) Quality

3.21 The very rapid expansion of the education system in recent years has to a certain degree forced HMG to compromise education quality. At the primary level, the rapid expansion has led to a severe shortage of properly qualified teachers; at present, only about 60% of the teachers have the full 10 years of education (SLC) and 1 year of teacher training. At the secondary level, because of a lack of educational materials and teachers, HMG has decided to reduce the number of vocational schools from 116 to about 30. ^{1/} Learning at the primary level is also handicapped by inadequate buildings and shortages of furniture and supplies. However, textbook availability is relatively high by international standards. The relatively low impact the

^{1/} A vocational school is an upper secondary school that has 40% of its curriculum vocational, instead of the 20% vocational in the general secondary schools.

education system has had so far could be strengthened by improving the curriculum and making it more relevant to students' needs, by including subjects like nutrition, environmental health, and agriculture. In an attempt to improve the quality and focus of education, the seven existing teacher training programs are to be reduced by more than half. But perhaps a more fundamental reason for the poor quality of the education received by the students who graduate from the primary cycle is the short duration of the cycle itself; four or five years is usually considered the minimum adequate amount of time. At the secondary level, the large number of SLC failures is due not only to poor education quality, but also to the built-in pressures in the system to promote students, irrespective of their accomplishments. This tendency stems from the fact that parents are reluctant to pay even a portion of the education costs unless they feel that their children are making progress and being promoted.

(c) Equity

3.22 Despite the very rapid expansion of the education system, considerable inequities remain that should be specifically addressed in the next phase of education development. The most important inequity is the distribution of educational resources by sex. Female enrollment in Grade 1 is less than 35% that of male enrollment; from Grade 2 through Grade 10 it is only 20-25% (Chart III). Recent research in the Terai suggests that there may be deeply engrained traditional attitudes against female education, and that the opportunity cost of female help in the household may be higher than that for males. On the other hand, the potential benefits to the country as a whole of female education are very large. Female literacy has been found to be a prerequisite to a drop in the birth rate in other countries, as well as the most effective means of introducing improvements in health practices and nutrition. The Government should therefore carefully study this complex problem to find better means of attracting females into school.

3.23 A second area of inequity is the great variation in district-to-district enrollment ratios. While the average primary enrollment rate is about 78%, according to a government study, 26 districts have rates of less than 60%, while 17 have enrollment rates of 90% or higher. More than half of those districts with less than 60% enrollment are surprisingly in the Terai, while there is only one with an enrollment rate of 90% or more. The highest enrollment rates were in the Kathmandu Valley and in the Western Development region around Pokhara.

3.24 Finally, inequity also exists in the distribution of education expenditures. While primary education is free, and at the secondary level about 50% subsidized, higher education is also free. Not only does subsidized higher education concentrate the benefits of public investment on already favored groups, but higher education already consumes about one-third of the education budget, a proportion which could rapidly increase as enrollments in this presently small sub-sector of education expand. Tuition charges should be introduced, together with a system of selective grants-in-aid for needy candidates.

C. Health and Nutrition

3.25 The prevalence of diseases and nutritional deficiencies in Nepal is among the highest in the world. Life spans are short; infant and child death rates are high and illness is a conspicuous feature of daily life. Though health conditions in Nepal are poor indeed, both absolutely and comparatively (Table III-5), they have been steadily improving--due largely to improved nutrition and successful malaria and smallpox campaigns. Between 1960 and 1977, life expectancy at birth increased from 37 to 45 years and infant death rates declined from around 200 to 154 per thousand. Despite recent progress, however, declining nutritional standards--combined with the consequences of overpopulation--will challenge the public health system even to maintain present standards in the Sixth Plan period.

Table III-5: HEALTH INDICATORS: SELECTED COUNTRIES /a

<u>Country</u>	<u>Life Expectancy at Birth (years)</u>	<u>Child Death Rate /b</u>	<u>Population per Physician</u>	<u>Percentage of Population with Access to Safe Water</u>	<u>Calorie Supply as % of Requirement /c</u>
<u>Nepal</u>	<u>45</u>	<u>23</u>	<u>38,700</u>	<u>9</u>	<u>95 /d</u>
Bangladesh	47	23	11,400	53	92
Burma	52	15	5,400	17	103
India	51	18	3,100	33	89
Pakistan	51	17	3,800	29	93
Sri Lanka	69	2	6,200	20	91
Average, 37 lowest-income countries	50	19	10,300	28	91

Source: World Development Report, 1979 (World Bank), Annex Tables 21 and 22.

/a Selected years, 1974-77.

/b Number of deaths per thousand per year among children aged 1 to 4.

/c Calories available as a percentage of calories required for normal levels of activity and health given the age, sex, and weight distribution of the population and the environmental temperature.

/d Table I-3 indicates a calorie surplus in the Terai; hence, for the 60% of the Nepalese population living in the Hills and Mountains, the calories supply as a percentage of requirements is substantially lower than 95%.

Health Problems

3.26 Nepal's high rates of mortality and morbidity result far more from underlying economic and environmental factors than from a lack of curative facilities--though, as Table III-5 has indicated, the availability of physicians (and nurses) is very low. The sources of Nepal's health problems fall into four categories--overpopulation, malnutrition, environmental pressures, and communicable diseases.

3.27 Closely related to the problems of poverty, illness, and malnutrition is the problem of overpopulation. Improved health eventually tends to reduce population growth and family size, allowing higher nutritional and environmental health standards, and more rapid growth in per capita incomes. Close child spacing and large numbers of children reduce per capita food availability and shorten the period of relatively good nutrition and immunological benefits that breastfeeding provides. Crowding aggregates problems of environmental sanitation and facilitates the spread of communicable diseases. While slowing population growth can thus facilitate improvement in health standards, the reverse is also true; reducing child mortality results in a decreased demand for children. The provision of adequate maternal and child health (MCH) and curative services in a community creates the proper environment for the use of contraceptive and sterilization services.

3.28 Malnutrition stemming from general inadequacy of food intake--protein-energy malnutrition (PEM)--is a serious problem in Nepal. A nutritional status survey has found severe PEM in 5-15% of the children. 1/ According to a recent WHO study, this level of malnutrition is among the worst of any developing country. 2/ As Table III-5 shows, aggregate calorie availability in 1976/77 only barely met normal subsistence needs for the country as a whole while there were substantial shortfalls in the Hills and Mountains region. Unfortunately, there is virtually nothing that the health care system can do about aggregate food supply and its regional and inter-family distribution. What can be done is principally health education to improve distribution within families to ensure that those most at risk--children in the 6 month to 3 year age range--receive adequate nutrition. Also, agricultural extension could emphasize the importance of vegetable production on small family plots.

3.29 The second aspect of the nutritional problem is that of specific micro-nutrient deficiencies. The two most significant in Nepal are iron and iodine deficiencies. Iron deficiency (anemia) results in listlessness and susceptibility to disease. Iodine deficiency, the more important of the two, results in inadequate functioning of the thyroid gland, frequently leading to goiter and causing retardation of physical and mental growth as well as listlessness. Extreme cases result in cretinism and deaf-mutism, both of which are prevalent in Himalayan villages having high levels of goiter. Perhaps as much as 50% of the Nepalese population suffer moderate iodine deficiency, or worse, and in some areas (principally mountainous areas) the prevalence is 80 to 100%. Iodine deficiency does, however, have the advantage of being relatively easy to alleviate; because of this and its high prevalence, increased provision of iodized salt and oil should be a top public health priority in Nepal.

1/ E.W. Brink et al., Bulletin of the World Health Organization, 1976, pp. 311-318.

2/ As cited in the Nepal National Nutrition Coordination Committee's National Nutrition Strategies, 1978, p. 4.

3.30 Environmental health conditions in Nepal are poor; only 9% of the population have regular access to safe water. In the Hills, people often spend several hours a day carrying water up the valleys to the villages, which tend to be on ridges and high slopes to conserve farmland. This lack of convenient access to water makes hygiene difficult and facilitates transmission of water-borne diseases. 1/

3.31 Another environmental factor contributing to poor health is lack of ventilation from open cooking fires; the resulting smoke can enhance susceptibility to respiratory disorders. A study in Kathmandu Valley found that 14% of the population over 20 years old suffer from chronic bronchitis and another 5% have other more serious cardio-pulmonary disorders. This was several times higher than for other major communicable diseases. Prevalence in the mountains would almost certainly be higher. Curing these disorders is either impossible or prohibitively costly, but use of stoves with chimneys is a relatively low cost preventive measure that has, in addition, important advantages for efficiency of firewood use (para 2.69).

3.32 Nepal has suffered from high prevalence of a number of major communicable diseases -- malaria, smallpox, leprosy, and tuberculosis (TB) being prominent among them. As part of a vigorous international campaign, HMG has succeeded in completely eliminating smallpox. Nepal has also made tremendous progress in containing malaria in the Terai, again as part of an international effort. Unfortunately, in Nepal as elsewhere, DDT-resistant strains of mosquitos are spreading, and public health authorities no longer speak of malaria eradication, only of control. Perhaps 1% of the population now suffers from malaria.

3.33 The other major communicable diseases are leprosy and TB. An estimated 1% of the population suffers from leprosy, for which no specific preventive measures exist. About 1% or 2% suffer from TB in the rural Terai; the prevalence is higher in the crowded conditions of Kathmandu (and probably other urban centers), and it may be somewhat lower in the mountains. Treatment of TB is prohibitively costly; however, an effective immunization (BCG) exists, which perhaps 20% of the population has received.

Delivery Systems

3.34 Health planning and the provision of health services have played important roles in HMG's development activities from the time of the First Plan (1956-61), when curative services were initiated and malaria control emphasized. The Second and Third Plans expanded the range of preventive

1/ One important consequence of poor hygiene is that parasites carried through feces (of which hookworm and ascaris are the most important in Nepal) become highly prevalent. Another consequence is a high prevalence of diarrheal disease; this is an important cause of child mortality, and, in addition, it reduces the efficiency with which the body utilizes available food supplies.

activities to include substantial "vertical" programs ^{1/} for control of TB, leprosy and smallpox, and continued activity against malaria. The Fourth and Fifth Plans continued these vertical programs, including the Family Planning and Maternal and Child Health (FP/MCH) Program, and began developing a community health system for rural areas. The objective is to provide simple (but potentially highly effective) curative and preventive services utilizing middle-level manpower and, ultimately, community members themselves. More serious cases are referred upwards through the system to the hospital level.

3.35 Annex II provides a brief overview of the public health system, of which the foundation is the Integrated Community Health Program (ICHP). The program centers around the Health Post which covers about 15,000 persons over 3-4 village panchayats, and is manned by middle level staff. Each unit employs 3-4 Village Health Workers (VHWs) to live in the communities served by the health post to handle simple cases. Within each village panchayat, it is intended to engage residents to work closely with the VHWs in providing on-the-spot care and health and nutrition education. By 1978/79, 533 health posts and 68 hospitals had been constructed. Even including the VHWs, only about 40% of the population is within a half a day's walk of public health services.

3.36 So far, vertical programs--because they are well established, more easily managed, and enjoy the support of donors--have probably had a more substantial influence on health trends than has the system of Health Posts. However, in order to provide cost-effective health and family planning services, particularly in remote areas, greater reliance will need to be placed on the ICHP in the future.

3.37 The ability to expand public health services is limited by shortages of trained manpower; while at the same time, the effectiveness of established health posts is constrained by lack of medicines. Many posts exhaust their annual supply of drugs within 3 months. Not only does this seriously affect the delivery of curative services, but because medicines are also the most effective means of drawing people to these posts, preventive health education by the health post personnel is thus being impaired. As a result, people are being forced to make relatively large health outlays on their own. Surveys estimate that individuals spend about Rs 30 per capita from their own resources on health services, primarily medicine, considerably higher than the average per capita Ministry of Health expenditures of Rs 20 per year. This suggests that perhaps one of the most effective public health measures the Government could take would be to ensure widespread availability of basic drugs, not only through the public health system, but also through retailers.

Directions for the Future

3.38 The principal goal during the Sixth Plan period is to expand integrated health services to cover the entire country. It is intended that all 75 districts will have at least one hospital (compared with 34 districts at present), and that a total of 1,050 Health posts will have been established.

^{1/} Vertical programs are centrally directed, focus on one or a few targets, and often operate (at least in part) in a campaign style.

In addition, there is to be a VHW in every village panchayat, requiring about 3,000 in total. Nutrition improvement programs will also be established in 12 needy districts. Comprehensive environmental health and sanitation programs are to be introduced into 21 districts, and 54% of the village panchayats covering 40% of the population are to be provided with safe drinking water.

3.39 This is a very ambitious program which the Ministry of Health will find difficult to implement. Even if the required financial resources are made available, it is likely that the shortages of medical manpower, managerial skills, and medicines required for the task will prove to be the binding constraints. ^{1/} Manpower shortages, for instance, are the principal reason that only about 50 health posts are added each year, as opposed to 90 as originally intended during the Fifth Plan. The Sixth Plan period will therefore also have to embark on a major expansion in training programs for all medical, but especially paramedical manpower.

3.40 An important strategic issue that has arisen in the process of preparing the Sixth Plan is that of the respective roles of integrated and vertical health delivery systems. Under the Sixth Plan, it is intended to absorb all vertical programs (with the possible exception of malaria) into the ICHP. The purpose is to eliminate potential inefficiencies arising from overlapping delivery systems, as well as to provide more comprehensive and continuous health services. However, the ICHP at present is still in its early stages of development; it reaches only about 40% of the population, and accounts for only about 7% of the Ministry of Health's budget. The transition will thus necessarily have to be slow to ensure that the population is not deprived of essential health services in the process. This will also give health planners adequate time to determine in greater depth what the appropriate and ultimate role of the vertical programs will be.

D. Conclusions

3.41 This chapter has highlighted Nepal's deep-rooted and pervasive human resource constraints. The top priority is to curb population growth. At the same time, the population suffers from very low education and health standards. While these problems deserve addressing in their own right, perhaps the more important consequences are felt in the way they contribute to the low productivity of labor in general, and shortages of trained manpower that constrain development activities in particular.

3.42 As Chapter II showed, in the absence of a large, readily exploitable natural resource base, economic growth will have to rely heavily upon increasing labor productivity, especially in agriculture and industry. Much of this improvement must come about through more and better education. Studies in the Terai have established that there are strong links between education and agricultural productivity; even a very basic education was shown to

^{1/} The Ministry of Health has consistently underspent on its budget, averaging 86% of its allocations during the Fifth Plan.

improve farmer receptivity to extension advice and new technologies. Basic literacy is also important in helping people meet the demands of development in a more general sense--such as making use of banking services, reading instructions, and understanding taxes. Moreover, by increasing the general awareness, education has also been shown to improve receptivity to health, nutrition, and environmental hygiene advice. Debilitating health and nutrition deficiencies are one of the worst facets of life in Nepal, and badly affect productivity and learning ability. The education of females assumes special importance in this regard, as it is the most effective means of introducing such practices into the household. But perhaps even more important, the education of females, together with improved health and nutrition standards, has been shown to be one of the most critical factors leading to reductions in the birth rate.

3.43 The extent of Nepal's deficiencies in the social sectors presents a difficult choice between the priorities that they should receive relative to programs designed directly to accelerate growth. The strategy that emerges from this report relies on increasing productivity in agriculture and is consistent with a more general basic needs approach. A development strategy favorable to basic needs achievements is one that generates incomes among the poor to enable them to buy essential goods and services while also generating appropriate supplies of such goods and services. In Nepal, the basic need at present is food, and the best means of ensuring its availability, in view of the marketing difficulties, is to increase foodgrain productivity of the countless small farmers in both the Hills and Terai. Moreover, the higher incomes generated by growth in agricultural productivity will increase people's access to those basic needs that are distributed through the market place.

3.44 As to basic needs goods not generally provided by the market, most notably education and health, their relative priorities within the national budget should reflect not merely a preference between social concerns and the desire to accelerate growth through more directly productive investments. Rather, in the Nepalese context, increased allocations to education and health will be made partly at the expense of programs, which directly or indirectly, aim at increasing food production. The conflict, therefore, is not only between expenditures for basic needs and those for growth related investment, but to some extent also among the various types of basic needs themselves.

3.45 The challenge to Nepal is thus not so much to increase the delivery of social services to meet these basic needs, but to do so in a way that is consistent with the at least as pressing requirement to raise production and, thereby incomes. Chapter I stressed the urgency of the need to break the vicious circle of poverty Nepal is caught in, and how much more difficult this task will become, the longer concerted efforts to do so are postponed. In fact, unless investment and thereby economic growth can be accelerated now, the very resources needed to sustain those social services in the future might not be available. The consequences of this could be deprivation of social services as well as economic stagnation. Nepal may therefore find itself forced to take a somewhat more deliberate approach to improving social standards than present conditions would appear to dictate. In practice, this may

imply concentrating resources on what are deemed to be the more development-related social services, utilizing cost-effective means of delivering services, and adopting flexible and imaginative approaches to charging consumers for the sizable recurrent costs that typically arise. In planning such programs, basic needs considerations should not be allowed to obscure the fact that the provision of social infrastructure to many unusually remote and sparsely populated areas can never be economically viable. In these cases, it would be unwise to squander Nepal's meager resources for programs that would delay, but not put off, the migration which will inevitably occur.

CHAPTER IV: A MEDIUM-TERM MACRO-FRAMEWORK

4.01 Despite the ambitious planning targets, impressive resource mobilization efforts, and the strong commitment of policy makers to more rapid development, four successive development plans have brought about little in the way of material progress for the majority of the Nepalese people. With the Fifth Plan drawing to a close with similarly disappointing results, it would seem opportune to assess prospects for the medium term (1979/80-1983/84). This Chapter presents a macro-framework to examine the potential for more rapid growth and its implications for investment levels, increased domestic and external resource mobilization, the prospects for alleviating poverty, and the need to ultimately restructure the economy. This analysis is not intended to serve as a forecast of the future, but rather to lend perspective to the discussion of several development issues and to the scope of actions required.

Growth Potential

4.02 Although the growth rate of GDP during the 1970s barely exceeded that of population, there are several reasons for believing that the medium-term potential is more promising. Accounting for over 60% of GDP, the agricultural sector is the key to improved overall performance. Despite the lack of growth in recent years, there is an unutilized potential to raise production. Present yields are low, not only compared to other developing countries, but also in relation to Nepal's better managed farms. The average fertilizer use of 16 kg/ha is low even by South Asia standards and is far below the economic optimum level of over 100 kg/ha. Only one-fourth of the irrigation potential has been developed so far, and that too has been utilized inefficiently. Thus, even though the supply of arable land is rapidly being exhausted, considerable scope exists for multiple cropping which presently occurs on only 30% of the cultivated area.

4.03 There are, however, numerous problems to be resolved before agriculture's full potential can be realized, including the time consuming tasks of establishing irrigation facilities and training adequate manpower for a suitable extension system. In recent years, average yields of foodgrains, when adjusted for the effects of weather, have grown by less than 1% per annum. While the programs currently underway may ultimately have an appreciable impact on productivity, in the medium term, yields are unlikely to increase faster than 1.5% annually. Given the scarcity of arable land as well as bleak export prospects, cultivated acreage under foodgrains is likely to grow during the next five years no faster than the past rate of 1% per annum. Combining acreage and yield growth, it seems possible that annual growth of foodgrain production in the next few years will be about 2.5%. Although the performance of cash crops is likely to be superior to that of foodgrains, their minor role in total agricultural output ensures that in the medium term, the overall growth of the agricultural sector is not likely to exceed 3% per annum. Although as a target, such a growth rate may seem conservative, it should be viewed against the 0.3% achieved during the first 4 years of the Fifth Plan, over which it would represent a substantial improvement.

4.04 The prospects for growth in the non-agricultural sectors cannot be estimated with any degree of precision. In part this is due to the unreliable statistical base which suggests that, as a whole, growth during the 1970s has probably been 4-5% per annum, while other evidence indicates that performance might have been significantly worse. Although the prospects for many of these sectors are closely tied to that of agriculture (for example about 70% of industrial output is based on agricultural processing) thus constraining their potential for growth, certain other sectors such as tourism and electric power generation may fare better. However, for the non-agricultural sector as a whole, it is assumed that the medium-term growth potential is 5.5%.

4.05 Aggregating the sectors, real GDP has the potential to grow at 4% per year (Table IV-1). Considered in isolation, this may not be a very high rate, but if achieved, it would represent a major improvement over the performance of the 1970s when growth averaged less than 2.5% per year, and would result in a small but nevertheless positive growth in per capita income.

Investment Requirements

4.06 Although public sector investment has expanded rapidly during the past five years, this achievement will need to be sustained for Nepal to realize the higher growth potential indicated above. Rough estimates are that investment increased from 7% of GDP in 1974/75 to 12% in 1978/79 (Table IV-1). 1/ No reliable estimates exist of the ICOR for recent years, but for the future at least, it is unrealistic to expect it to be low. The difficulties and expense of importing many investment-related goods, and the exceptionally severe logistical problems in undertaking infrastructure projects in Nepal have contributed to the relatively high ratio of investment costs to value of output. Moreover, the major investments in irrigation and roads will bear fruit only after other aspects of development are met. For these reasons, an ICOR of 4 is used in determining investment requirements.

1/ No official investment series is available, since Nepal's national income data is calculated only for GDP by sector of origin. However, a rough estimate can be made from public development expenditures and investments made in the organized sector of the economy.

Table IV-1: NATIONAL PRODUCTION AND EXPENDITURES, 1978/79-1983/84
(Rs million, in constant 1978/79 prices)

	<u>1978/79</u>	<u>1983/84</u>	<u>1978/79-1983/84</u> (Per annum growth rate)	<u>1978/79</u>	<u>1983/84</u>
				(As percentage of GDP)	
GDP (market prices)	21,110	25,684	4.0	100.0	100.0
Agriculture	(12,735)	(14,763)	(3.0)	(60.3)	(57.5)
Non-agriculture	(8,375)	(10,921)	(5.5)	(39.7)	(42.5)
Private Consumption	18,821	22,248	3.4	89.2	86.6
Public Consumption	818	1,438	12.0	3.9	5.6
Gross Domestic					
Capital Formation	2,571	4,531	12.0	12.2	17.6
Private	(521)	(918)	(12.0)	(2.5)	(3.6)
Government	(2,050)	(3,613)	(12.0)	(9.7)	(14.1)
Balance on Goods and Non-factor Services	-1,100	-2,533		-5.2	-9.9

Source: Mission estimates.

4.07 With this ICOR, a GDP growth rate of 4% per year will require investment to amount to 18% of GDP by 1983/84. To achieve this, the annual growth of total investment would need to be about 12%. While this is comparable to the rate achieved by public investment in recent years, it would represent a substantial improvement in the performance of the private sector.

Government Current Expenditures

4.08 Current expenditures have been increasing as a proportion of GDP due to the operating and maintenance costs associated with the increasing development budget. Such pressures will continue, particularly to meet the needs of the irrigation and transport infrastructures, as well as to allow for inevitable civil service pay raises. Indeed, whereas the Basic Principles implies curbing the growth of current expenditures to 3.8% per annum, the proposed growth in investment makes it desirable that, at least for the medium term, such expenditures continue to rise fairly rapidly. A reasonable goal would be for public consumption to expand as fast as investment, which together with slower growth in transfer payments, would require current expenditures to grow at about 11% per annum, a rate close to that experienced during the Fifth Plan. They would then grow from their present 5% of GDP to 6.6% by 1983/84 (Table IV-2).

Table IV-2: GOVERNMENT BUDGET, 1978/79-1983/84
(Rs million in constant 1978/79 prices)

	1978/79	1983/84	1978/79-1983/84 (Per annum growth rate)	1978/79 (As percentage of GDP)	1983/84
Current Revenues <u>/a</u>	1,812	2,541	7.0	8.6	9.9
Current Expenditures	992	1,686	11.2	4.7	6.6
(Consumption)	(818)	(1,442)	(12.0)	(3.9)	(5.6)
(Transfers)	(174)	(244)	(7.0)	(0.8)	(0.9)
Development Expenditures	2,050	3,613	12.0	9.7	14.1
Overall Deficit	-1,230	-2,758	.	-5.8	-10.7
Financing:					
Net Foreign Financing					
(grants and net loans)	1,019	2,050	15.0	4.8	8.0
Bank Financing	211	450	16.4	1.0	1.8
Public Enterprise Surpluses	--	258	.	--	1.0

/a Revised estimate for 1978/79.

Source: Mission estimates.

Budgetary Prospects 1/

4.09 The scenario outlined above would require total budgetary expenditures to grow at an annual rate of nearly 12%; for this to be financially sustainable, a major effort would be needed to increase resource mobilization, both domestic and foreign. The Government has had great success in mobilizing domestic resources over the last decade and half. During the period 1963/64-1978/79, revenues grew roughly twice as fast as GDP, increasing from 2% of GDP in 1963/64 to nearly 9% by 1978/79 (Table IV-2). 2/ If these efforts continue into the medium term, revenue growth could be on the order of 7% per annum, but this will be difficult to achieve since much of the past success was due to

1/ The public sector consists of the central government, local governments and public enterprises, but comparative data is available only for the central government. However, the central government receives the bulk of revenues, while local government expenditures and public enterprise investments are largely covered by loans and grants from the central government.

2/ On the face of it, Nepal's revenue effort of nearly 9% of GDP in 1978/79 appears low; corresponding ratios for developing countries with comparable levels of per capita income are about 12%. Nepal's lower level is attributable to its extraordinary high dependence on agriculture, most of which is subsistence oriented, and offers only limited opportunity for taxation. About three-fourths of revenues come from taxes on goods and services, more or less evenly distributed between domestic-based taxes (mostly sales taxes and excise duties) and taxes on international trade, mostly import taxes. The taxation of the modern sector is probably not far behind other South Asian countries.

discretionary revenue measures and improvements in tax administration. (The underlying tax elasticity has been estimated to be around unity). Additional discretionary measures will, therefore, be necessary. The potential for further increases in international trade related taxes is limited by the open border with India, but one area where scope exists for raising revenues is that of agricultural land taxation. Receipts from this tax have declined from 1.7% of agricultural GDP in 1967/68 to 0.7% in 1977/78; during this period, its share in total revenue fell from nearly 30% to 6%. Renewed efforts should concentrate on the Terai since the extreme poverty of the Hills precludes any major tax drive there. In the Terai, it should be possible over a period of years to restore the ratio of land tax revenues to production close to that achieved in 1967/68. By 1983/84, this could raise an additional Rs 150 million.

4.10 Aside from agricultural taxes, the possibilities for other discretionary increases in tax rates are limited, and efforts to raise revenues will have to focus on the difficult task of improving tax administration. Many potential taxpayers remain outside the income tax base, and coverage could be made more effective by streamlining the tax department's working procedures and building up the number of skilled tax administrators, perhaps through establishing a unified revenue service to avoid frequent staff transfers. Certain changes in the legal codes would also help speed up assessment and collection procedures. With improved tax machinery, there could be scope for further increases in income and urban property taxes. Moreover, the task of resource mobilization should be eased with faster economic growth, in contrast to the past, when this would have meant squeezing disposable incomes to an intolerable extent.

4.11 Even with revenues growing at 7%, the revenue-expenditure gap will continue to widen, reaching 11% of GDP in 1983/84, thus placing an increasing burden on the other major resources available to the Government, principally foreign assistance. Foreign grants and more recently loans have supported much of the development program, growing by about 20% per annum in real terms during the Fifth Plan so far and now accounting for nearly 50% of development expenditures. But this very rapid growth rate is deceptive, as public investment was and still is small in proportion to GDP. A more realistic prospect is that disbursements might increase by 15% annually in real terms, rising from Rs 1.0 billion in 1978/79 to Rs 2.1 billion in 1983/84, comprising 57% of the development budget by then. Even this growth will require a major effort by donors and HMG, if disbursements are to increase as needed.

4.12 During the 1970s, domestic financing (mainly from the banking system) became a significant source of funds and in 1978/79, met 17% of the budget deficit. The medium-term prospects for domestic financing depend upon the growth of the economy and the extent of monetization since these two factors determine the potential expansion of the money supply and the rate at which domestic borrowing can grow. In addition, improving the financial performance of the public enterprises, which have borrowed heavily from the banking system to cover their losses, would in turn reduce their need for credit, thereby making additional finance available for the Government. Overall, it may be

feasible for bank borrowing to rise from 1.0% of GDP in 1978/79 to 1.8% of GDP in 1983/84. 1/

4.13 Despite the optimistic assumptions concerning the growth in revenues and foreign and domestic financing, there will remain a need for further funds to balance the budget, amounting to Rs 258 million or 1.0% of GDP by 1983/84. One currently untapped source is the potential surpluses that public enterprises could be generating. The budgetary prospects outlined here reinforce the need to improve the performance of public enterprises to ensure that they earn an adequate rate of return on their assets (para 2.48). It is not possible to give an up-to-date financial picture of public enterprises because of the regrettable lack of a comprehensive accounting system, but in recent years, the bulk of the dividends received by the Government have come from the financial enterprises, while other public enterprises have made only minimal contributions. The asset value of public enterprises is estimated to be of the order of Rs 3,000 million at 1978/79 prices, and with improved performance could generate net returns sufficient to cover the financing required. The implied dependence on this new source of finance assumes even greater importance in view of the possibility that the growth in tax revenues may not materialize as envisaged and the uncertainties that are attached to greater reliance on foreign assistance programs.

Balance of Payments Prospects

4.14 The medium-term potential for exports is mixed, with the poor prospects for agricultural exports (nearly 80% of merchandise exports) being only partly offset by the good prospects for tourism. As mentioned previously, the outlook for rice exports to India is not good, and transshipment problems tend to limit exports to third countries. Nevertheless, if agricultural growth averages 3% it seems likely that some rice will continue to be exported, while exports of cash crops will also continue to rise. The prospects for tourism are more favorable, and if tourist arrivals maintain the 16% growth averaged so far during the 1970s, the potential for overall export growth may be close to 7% per annum in real terms (Table IV-3).

1/ Although the authorities could try to generate a higher rate through inflationary financing, its success would be limited since not only are domestic prices closely linked to prices in India, but with the free convertibility between the Nepalese and Indian rupees and a fixed exchange rate, inflationary financing would instead result in international reserve losses.

Table IV-3: BALANCE OF PAYMENTS, 1978/79-1983/84
(Rs million, in constant 1978/79 prices)

	<u>1978/79</u>	<u>1983/84</u>	<u>1978/79-1983/84</u> (Per annum growth rate)	<u>1978/79</u> (As percentage of GDP)	<u>1983/84</u> (As percentage of GDP)
Balance on Goods and Non-factor					
Services	-1,100	-2,533	.	-5.2	-9.9
(Exports)	(2,600)	(3,647)	(7.0)	(12.3)	(14.2)
(Imports)	(-3,700)	(-6,180)	(10.8)	(-17.5)	(-24.1)
Transfers and Factor Services	457	612	6.0	2.1	2.4
Current Account Balance	-643	-1,921	.	-3.1	-7.6
Foreign Grants and Loans	1,019	2,050	15.0	4.8	8.0
Errors and Omissions	-309	--	.	.	.
Overall balance	67	129	.	.	.

Source: Mission estimates.

4.15 With the modest growth in exports and considering likely commitments and disbursements of foreign assistance, it may be necessary to monitor growth in imports to guard against the external deficit from becoming too large. A growth rate for imports of nearly 11% per annum in real terms could satisfy investment requirements without unduly restricting growth in consumption imports. But even with the growth in total imports, the deficit on the balance of goods and non-factor services would rise from 5% of GDP in 1978/79 to 10% in 1983/84. Private and public transfers as well as the interest earned on Nepal's international reserves will offset this to some extent; the current account deficit will nevertheless rise to nearly 8% of GDP in 1983/84.

4.16 For the period 1979/80-1983/84, foreign assistance is needed not only to finance the current account deficit but also to increase international reserves. Although the absolute level of reserves will need to grow during this period, it would seem reasonable to aim for a coverage of 5 months imports by 1984 compared to the present 6.5 months. While 5 months is relatively conservative coverage, it is justified given Nepal's dependence on a few export markets and the nature of its exports.

Private Consumption

4.17 An analysis of Nepal's medium-term prospects would not be complete without referring to their implications for private consumption. This has been relegated to the end not only because in this macro-framework, private consumption is a "residual," but also because the implications are so sobering. The above scenario results in medium-term growth for private consumption of 3.4% per annum, which combined with population growth, permits per capita consumption to grow by only 0.8% per annum. Although this would be an improvement over the recent stagnation, it can hardly be considered satisfactory.

A Long-term Perspective

4.18 When evaluated against a much longer time perspective, GDP growth of 4% also offers little prospect of any rapid alleviation of poverty in Nepal (Table IV-4). At present, about 60% of Nepal's population is estimated to be in absolute poverty compared with 50% for all low income developing countries, and based on projections in the World Development Report 1979, it would appear that Nepal's relative position will worsen. ^{1/} By the end of the century, nearly 50% of its population will still remain in absolute poverty, twice as high as for low income countries as a whole. This reflects not only Nepal's lower GDP growth rate, but also its more rapid population growth.

Table IV-4: PROJECTED DECLINE IN PERCENTAGE OF POPULATION IN ABSOLUTE POVERTY

Present		Year 2000	
Nepal	Low Income Countries	Nepal	Low Income Countries
60	52	47 ^{/a}	22-26 ^{/b}

^{/a} Corresponds to GDP growth of 4.0% and population growth of 2.6%.

^{/b} Corresponds to GDP per capita growth rates of 2.7% for the "Base" scenario and 2.0% for the "Low" scenario.

Source: World Development Reports 1978 and 1979, World Bank and mission estimates.

4.19 Considering these trends, a medium-term development strategy, which is based upon accelerating agricultural growth alone, would appear to result in little more than mere survival over the longer term. For Nepal to keep pace with other low income countries in reducing the proportion of its population suffering from absolute poverty, would require substantially faster growth. For example, reducing the proportion under absolute poverty by one-half (to 30%) by the year 2000 would require GDP growth in excess of 6% per annum, a rate seemingly beyond Nepal's means. Even if the requisite physical and financial resources were available, absorptive capacity constraints would put a limit on the pace that investment could accelerate in the foreseeable future. The implied time horizon required to substantially reduce the extent of absolute poverty is clearly unacceptable, and presents a complex dilemma. In addressing this predicament, it must be recognized that the more investment is accelerated to spur economic growth, the more consumption levels have to be squeezed to provide the requisite domestic resources. In the meantime, however, this would further lower living standards, a tradeoff that would be difficult to justify given their present unsatisfactory levels.

^{1/} Absolute poverty in Nepal corresponds to being below the minimum subsistence income of US\$40 per person needed to purchase the minimum food required for survival plus minimum levels of other basic necessities.

4.20 In this context, present economic policies and investment programs appear to represent an uphill struggle merely for economic and ecological survival; moreover, it is unclear whether such policies would lead to the type of restructuring of the economy required to establish a basis for more rapid, long-term growth. At the risk of oversimplification, a long-term view must begin by assuming that population growth is likely to overwhelm Nepal's natural resource base. While further migration to the Terai is possible, simple arithmetic extrapolation leads to the conclusion that, in a generation's time, Nepal cannot support what presently amounts to over 90% of her population in agriculture. Moreover, it is very likely that within a decade, foodgrain surpluses will disappear. It is difficult therefore to visualize how Nepal can continue to rely on agriculture as practically the sole basis for its economy. Hydro-power exports represent a potentially substantial foreign exchange earner in the long run, but even if the many serious legal, financial and political issues were to be resolved with Nepal's neighbors, the power sector could never be a substantial generator of employment. Tourism is another potentially large foreign exchange earner, but this sector also cannot solve the employment problem. All of this reflects a paradox; specifically, that while Nepal's present comparative advantage lies with agriculture, in the long-run, as far-fetched as it might seem, Nepal's future hinges on the development of a substantial industrial sector, particularly one based upon labor-intensive techniques.

4.21 At this early stage of development, a sizable investment in industry would be premature; nevertheless, attempts should be made to promote those industrial initiatives that are presently feasible. Efforts should also begin towards fulfilling the formidable preconditions needed before substantial and diverse industrial investments are possible. First, an immediate acceleration in agricultural productivity is required to generate the surpluses for development and the rural incomes needed to purchase industrial goods. It is essential that such efforts are undertaken now, since in the longer run, population pressures and ecological considerations will render it nearly impossible to secure adequate agricultural surpluses for development. Second, in order to permit the establishment of labor intensive industries which could compete internationally, Nepal must improve considerably the productivity of its labor force, not only through selective education and training programs, but also through better health and nutrition. Third, Nepal should move as soon as possible to create the climate for industrial growth--through establishing the right kind of financial incentives, through research in the areas in which Nepal might be able to develop a comparative advantage, through studies of the financial, technical and marketing requirements for ventures in such areas, and through consultation with governments of neighboring countries to improve the access of Nepalese goods to these markets.

4.22 The international community has been considerate and supportive of Nepal's development programs to date; however, it is likely that the scope and nature of their future assistance will have to be reviewed and possibly altered. Conventional wisdom justifies foreign aid on the grounds that it permits a country to rapidly accelerate its growth in the near to medium term in order to achieve self-sufficiency at an acceptable level of income and within a reasonable period of time. Judged against the above discussion, this premise would seem only partially relevant in the case of Nepal, through

no particular fault of its own. Unfortunately, Nepal has not yet reached the stage where a major breakthrough in accelerating the growth rate is possible, and even with generous project assistance, large numbers of Nepalis will remain in poverty for generations to come. While Nepal has no choice but to strive for more rapid growth, no matter how elusive the goal, it should not have to compromise already unacceptable consumption levels in the process. As recent events have shown, unless living standards are enhanced within a tolerable time span, the ensuing discontent makes it all the more difficult to mobilize the peoples' energies in a development effort that promises only distant benefits. There is thus a strong case for the donor community to examine the desirability of additional external assistance to ease the pressures on consumption demands in the interim--particularly those relating to basic needs.

4.23 As hard pressed as donors are to meet such near-term exigencies, it is also essential that they, as well as HMG, begin to reflect on the types of programs needed to gradually restructure the economy. There are no obvious solutions to the long-term issues that have been raised here and, in turn, effective programs will be difficult to formulate. However, there is a sense of urgency surrounding the task that lies ahead; although follow-up actions may not be costly, they would undoubtedly entail a long gestation period. Unless these efforts are undertaken soon, Nepal and the donor community may find themselves, several decades hence, still searching for a vehicle to move the economy beyond subsistence.

CHAPTER V: EXTERNAL ASSISTANCE NEEDS

Review of External Assistance

5.01 Nepal's development plans have all relied heavily on external assistance, but the dependence has dropped sharply over time. During the First Plan 1956/57-1960/61, external assistance financed 100% of development expenditures and about three-quarters of total government expenditures; by the Fourth Plan these shares had fallen to 45% and 28% respectively. Over this period, disbursements grew at about 10% annually in current prices, and ranged between 2.5% and 3.0% of GDP. But since 1974/75, this growth has accelerated to 28% annually in current prices with aid disbursements now comprising over 5% of GDP. At the same time, aid commitments have also grown rapidly -- at about 25% annually in current prices. At present, Nepal's donors include 10 major bilateral sources and 4 multilateral agencies, and the level of assistance exceeds US\$100 million annually. In 1976, the Nepal Aid Group was formed to provide a forum to help coordinate the growing levels of assistance in line with HMG's development priorities. ^{1/} The Aid Group now accounts for about 60% of total aid disbursements.

5.02 The above performance would suggest that absorptive capacity has recently improved, enabling faster disbursements and inducing donors to increase their assistance to Nepal. The foreign aid records compiled by the Ministry of Finance do not, however, permit in-depth analysis of aid trends. First, the official aid estimates significantly underestimate the total level of development assistance to Nepal, as most technical assistance is not budgeted for or recorded. There is also considerable uncertainty surrounding the levels of food and commodity aid. Table V-1 below attempts to estimate total aid disbursements in 1977/78.

Table V-1: ESTIMATED TOTAL AID DISBURSEMENTS - 1977/78
(US\$ million)

	<u>Amount</u>	<u>Percent</u>
Project Aid ^{/a}	63.5	56.9
Technical Assistance ^{/b}	42.8	38.3
Food Aid ^{/a}	3.0	2.7
Commodity Aid ^{/b}	2.3	2.1
Total Disbursements	<u>111.6</u>	<u>100.0</u>

^{/a} Source: HMG, Ministry of Finance.

^{/b} Source: UNDP, Annual Report on Development Assistance to Nepal, Kathmandu, February 1979.

^{1/} The Aid Group comprises: Austria, Canada, France, Federal Republic of Germany, Japan, Switzerland, United Kingdom, United States, ADB, IDA, IMF and the UNDP.

This estimate of total disbursements exceeds the estimate according to the budget definition by more than 60%. Moreover, the records pertaining to aid commitments are sketchy and probably incomplete, especially for years prior to 1976/77, and hence do not permit proper estimation of disbursement rates and commitment requirements. ^{1/} However, the IDA case has probably been typical: average annual commitments increased from \$6.4 million for the 1970/71-1974/75 period to \$42.3 million for 1975/76-1978/79; at the same time the disbursement rate increased from 5.4% in 1974/75 to 13.1% in 1978/79. ^{2/} While the overall disbursement rate for foreign aid is probably higher, it probably is less than 20%, which is still low by international standards.

5.03 The area of most rapid growth in aid disbursements has been that of multilateral loans, which have been growing at 45% annually since 1974/75, or at almost twice the rate of grants. According to official estimates, disbursements in 1978/79 by the multilateral aid agencies accounted for an estimated 44% of total aid disbursements, excluding technical assistance. Due to the highly concessional terms of these loans, however, the grant element of total aid is still considerably in excess of 90%. And even though total external debt (disbursed) at the end of 1977/78 stood at US\$81.0 million, debt service payments amounted to only US\$3.1 million, equivalent to less than 2% of exports of goods and services. Medium-term prospects are also good; by 1981/82 total service on existing debt is expected to amount to only US\$5.1 million, still less than 2% of projected goods and services exports.

5.04 But perhaps the most significant trend in aid disbursements in recent years has been the changing sectoral composition of aid disbursements. Despite considerable year-to-year fluctuations, Table V-2 suggests that there has been a noticeable shift in disbursements towards agriculture, power and

Table V-2: SECTORAL DISTRIBUTION OF AID DISBURSEMENTS (1974/75-1978/79)
(in percent)

	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u>
Agriculture	14	25	18	17	24
Industry & Commerce	11	12	16	8	2
Power	2	5	5	24	23
Transport & Communications	63	41	47	35	35
Social Services <u>/a</u>	<u>10</u>	<u>17</u>	<u>14</u>	<u>16</u>	<u>16</u>
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

/a Including rural development.

Source: Ministry of Finance.

^{1/} A further complication arises from the fact that commitments data include technical assistance, while disbursements data do not.

^{2/} Disbursements as a percentage of undisbursed commitments at the beginning of the year.

the social services, and away from transport and industry. The largest projects in agriculture and irrigation are the IDA assisted Birganj, Bhairawa-Lumbini, and Sunsari-Morang Irrigation Projects, and the ADB assisted Chitwan and Kankai Irrigation Projects. Donor support, particularly by members of the Aid Group, has been especially strong for rural development projects in the Hills (para 2.25). Disbursements in the power sector are dominated by the Kulekhani project (IDA, UNDP, Japan, Kuwait Fund, EEC, and OPEC Special Fund). The Indian Government is assisting the Devighat project. Assistance in the transport sector is still dominated by disbursements in the East-West Highway (India), although North-South roads in the Hills are beginning to receive greater priority (IDA, UK, Switzerland, USAID). Major investments in the industrial sector are the ADB and West German financed cement factories and the Chinese textile mill in Hetauda. The largest investments in the social sectors are the two IDA-supported water supply projects, which cover the major urban centers. The pattern of aid commitments suggests, moreover, that the trend towards the more directly productive investments and the social services indicated by aid disbursements will continue.

5.05 The growing volume and diversity of foreign assistance require appropriate coordination if the aid is to be used as effectively as possible to meet Nepal's development needs. One aspect of this is to ensure that HMG and donors operate on the basis of shared knowledge of development activities on a sector by sector basis. For example, by clearly identifying the extent of the shortage of trained agricultural manpower and its implications for agricultural development, HMG can focus donor attention on ways of increasing supplies of such manpower as well as insisting that projects be designed to allow for these shortages. Another instance is where policies and programs for individual projects within a sector are being formulated independently. An example is the eight integrated rural development projects in the Hills, which have components covering a variety of activities and must deal with several government agencies. Proper coordination, in this case, can facilitate the sharing of valuable insights gained in the process of implementation and minimize the demands placed on HMG's administrative capacity. The Government also plans to introduce a uniform system of agricultural extension throughout the Terai, which will require a flexible response by donors who have agricultural projects in all but two of the Terai districts. A possible approach to many of these issues is to hold regular local meetings between HMG and donors to coordinate respective views on specific problems or sectoral programs. Past experience has shown that such meetings are particularly useful.

Priorities for External Assistance

5.06 The primary role for external assistance in Nepal is to support domestic savings as a means of increasing public investment. Foreign aid has not had to assume an important role in balance of payments support, although to the extent donors have been financing local costs, aid disbursements have also helped Nepal to accumulate international reserves. This role of supporting the balance of payments could, however, become more important in the coming years given the unfavorable export prospects. At least as important as these functions is the contribution technical assistance is making in strengthening the project preparation and implementation efforts of the line ministries.

5.07 In Chapter IV it was estimated that the target of 4% real growth for GDP could be achieved if external assistance grew by 15% annually in real terms. Due to the rapid growth in commitments in recent years, disbursements from the existing aid pipeline should be broadly consistent with requirements during the next few years; however, in later years this is unlikely to be the case. Ongoing projects will be winding down, and the present disbursements backlog will have declined, while the sectoral distribution of disbursements will increasingly reflect the recent shift in commitments towards agriculture, rural development, power, and the social services. Given the tendency of many of these projects to disburse more slowly than transport infrastructure projects, the disbursement rate may not continue to improve as rapidly as it has been. At the same time, the limited prospects for domestic resource mobilization make it likely that savings on the regular budget will also decelerate. Under these circumstances, sustaining the required growth in development expenditures will depend upon increased foreign aid. Based on the current level of disbursements and the estimated disbursement rate, absorptive capacity constraints, the need for significant levels of local cost financing, and assuming the present blend between technical assistance and project aid remains unchanged, this implies average commitments of about \$225 million annually for 1979/80-1981/82. This compares with an average of \$160 million for 1976/77-1978/79.

5.08 Given the urgent need to support increased investment, especially in areas directly related to production, the most desirable form of assistance is project aid. There are attractive opportunities for major irrigation projects in the Terai, and minor schemes in the Hills in conjunction with other types of investments. Agricultural support services -- including research, extension, credit and marketing -- will also need strengthening. Hydropower development also warrants support in order to meet the needs of the modern sector. Assistance to the roads sector should be selective, concentrating on lower standard agricultural feeder roads in the Terai and penetration roads into the more populated areas of the Hills. There is also a very strong case for increasing donor support in the social services, especially in the areas of training, health, and family planning.

5.09 There is, however, a limit to the volume of project assistance that Nepal can absorb in the coming years. Moreover, additional project aid creates demand for counterpart domestic resources; these resources will be very difficult to mobilize without cutting back on equally important programs in other areas. Donors can mitigate these problems somewhat by financing higher proportions of local costs than at present and by implementing their projects through the existing institutional structure, along the lines of several rural development projects currently underway. The longer period required to implement such projects is to some extent compensated for by the greater development impact on the concerned institutions. Donors could also provide sector credits to support programs of small investments such as suspension bridges, schools, and health posts. Individually, these investments would be too small to warrant support on a project-by-project basis, but combined with technical assistance to the concerned ministries, such sector credits could prove effective in increasing foreign aid and strengthening the line ministries. However, despite these more flexible approaches to increasing the level of project aid, it is likely that a significant portion of future

financial assistance to Nepal will have to take the form of non-project assistance.

5.10 It is unlikely that Nepal will be able to increase its resource mobilization efforts sufficiently to finance the domestic costs of both an accelerated investment program and the country's pressing recurrent expenditure requirements, particularly in the social sectors. There is, therefore, substantial scope for increasing commodity aid in addition to the annual average \$225 million required solely to sustain investment in the near term. Nepal presently receives very low levels of such assistance (Table V-1), comprising less than 5% of total aid flows. These levels are inadequate considering Nepal's extreme poverty and isolation, which could be used to justify higher than normal levels of such assistance. Such aid has the advantage of being relatively quick-disbursing, thereby giving donors greater flexibility to adjust the level of their assistance to Nepal's overall requirements; also, by providing general revenue support it would help the Government in allocating its resources according to development priorities. Commodity aid would help meet vital development material needs such as cement and steel. Similarly, a fertilizer program would ensure that the irrigation potential that has been constructed at great cost both in the Hills and the Terai is realized.

5.11 As long as Nepal continues to be a food exporter, satisfying the nutritional demands in the Hills is most efficiently tackled through donor assistance for financing distribution of internal food surpluses. The role of food assistance as a component of a commodity aid program should, however, be given serious consideration if Nepal is ever forced to import part of its food requirements, a situation which is likely to emerge in the coming year due to the recent poor harvest. Any food assistance program must cope with the serious logistical difficulties that have impeded the internal movement of food from the Terai to the Hills. The public distribution system has provided only a partial solution to this predicament in view of the prohibitively large government subsidies required for a more comprehensive program. Thus, if donors are to render food assistance, it should include the coincidental financing for distribution from the port to the Hills; in fact, these distribution costs are likely to exceed the value of the food itself. Food assistance in the near term would help Nepal to gain experience in coping with the many administrative complexities and adverse economic consequences that might arise. These include, for example, ensuring that: (a) programs are focused on the needy; (b) production incentives are not eroded; (c) corruption is avoided; and (d) waste is kept to a minimum (para 2.36). In addition to food aid, donors might also consider providing other types of commodity assistance which would help Nepal to meet directly some of its other pressing basic needs, such as educational materials and medical supplies. There is strong justification for such assistance given their likely beneficial impact in mobilizing the peoples' energies in a development effort that very often promises only distant benefits (para 4.22).

Food Balance Projections 1976/77 - 1989/90I. Hills and Mountains

	<u>Population</u> ^{1/}	<u>Gross</u> ^{2/} <u>Production</u>	<u>Net</u> ^{3/} <u>Production</u>	<u>Consumable</u> ^{4/} <u>Production</u>	<u>Daily Calorie</u> ^{5/} <u>Equivalent</u>	<u>Total</u> ^{6/} <u>Available</u> <u>Calories</u>	<u>Days of</u> ^{7/} <u>Minimum</u> <u>Subsistence</u>	<u>Days of</u> ^{8/} <u>Normal</u> <u>Subsistence</u>
	('000)	('000 tons)	('000 tons)	('000 tons)			per year	per year
1976/77	8,071	1,612	1,419	1,107	1,255	1,569	260	238
1977/78	8,224	1,622	1,427	1,113	1,238	1,548	257	234
1978/79	8,382	1,631	1,435	1,119	1,222	1,528	254	231
1979/80	8,544	1,641	1,444	1,126	1,206	1,508	250	228
1980/81	8,707	1,651	1,453	1,133	1,191	1,489	247	226
1981/82	8,886	1,661	1,462	1,140	1,174	1,468	244	222
1982/83	9,069	1,671	1,470	1,147	1,157	1,446	240	219
1983/84	9,255	1,681	1,479	1,154	1,141	1,426	237	216
1984/85	9,433	1,691	1,488	1,161	1,126	1,407	233	213
1985/86	9,638	1,701	1,497	1,168	1,109	1,386	230	210
1986/87	9,850	1,711	1,506	1,175	1,092	1,365	226	207
1987/88	10,070	1,722	1,515	1,182	1,074	1,343	223	203
1988/89	10,299	1,732	1,524	1,189	1,056	1,320	219	200
1989/90	10,535	1,742	1,533	1,196	1,039	1,299	216	197

II. Terai

1976/77	5,065	2,362	2,079	1,622	2,930	3,447	629	569
1977/78	5,197	2,393	2,106	1,643	2,893	3,404	621	562
1978/79	5,331	2,424	2,133	1,664	2,856	3,360	613	555
1979/80	5,466	2,456	2,162	1,686	2,823	3,321	606	548
1980/81	5,607	2,487	2,189	1,707	2,786	3,278	598	541
1981/82	5,760	2,520	2,218	1,730	2,748	3,233	590	534
1982/83	5,896	2,553	2,247	1,753	2,721	3,201	584	529
1983/84	6,077	2,586	2,276	1,775	2,673	3,145	574	519
1984/85	6,244	2,620	2,306	1,799	2,637	3,102	566	512
1985/86	6,413	2,654	2,336	1,822	2,600	3,059	558	505
1986/87	6,588	2,688	2,365	1,845	2,563	3,015	550	498
1987/88	6,768	2,723	2,396	1,869	2,527	2,973	543	491
1988/89	6,954	2,758	2,427	1,893	2,491	2,931	535	484
1989/90	7,147	2,794	2,459	1,918	2,456	2,889	527	477

III. All Nepal

1976/77	13,136	3,974	3,497	2,728	1,900	2,317	398	363
1977/78	13,421	4,015	3,533	2,756	1,879	2,291	394	359
1978/79	13,713	4,055	3,568	2,783	1,857	2,265	389	355
1979/80	14,010	4,097	3,605	2,812	1,837	2,240	385	351
1980/81	14,314	4,138	3,641	2,840	1,816	2,214	380	347
1981/82	14,646	4,181	3,679	2,870	1,793	2,187	376	342
1982/83	14,965	4,224	3,717	2,899	1,773	2,162	372	338
1983/84	15,332	4,267	3,755	2,929	1,748	2,132	367	334
1984/85	15,687	4,311	3,794	2,959	1,726	2,105	362	329
1985/86	16,051	4,355	3,832	2,989	1,704	2,078	357	325
1986/87	16,438	4,399	3,871	3,019	1,681	2,050	353	321
1987/88	16,838	4,445	3,912	3,051	1,658	2,022	348	316
1988/89	17,253	4,490	3,951	3,082	1,635	1,994	343	312
1989/90	17,682	4,536	3,992	3,114	1,612	1,966	338	308

Notes: Gross production figures from gross production estimates in parts I and II.

Food Balance Projections - Notes

- 1/ Source: National Planning Commission, Nepal Population Projections 1971-1986. Estimates extrapolated to 1989/90 on the same assumptions as the projections until 1986. Annual migration of 0.5% of the Hills population to the Terai is assumed. This is equivalent to approximately 40,000 in 1976/77, about the average for the past ten years.
- 2/ Includes cereals and potatoes. Growth extrapolated at average annual growth rate 1966/67 - 1976/77 for total cereals, separately for Hills and Terai. Average annual growth for the Terai was 1.3%; for the Hills, 0.6%.
- 3/ Assumes seed requirements of 2% and waste of 10% of total production.
- 4/ Calculated to be 78% of net production. Based on 1974/75 - 1975/76 production-weighted average of consumable portion of each crop.
- 5/ Calorie content of 3.34 calories/gram. Based on 1976/77 production-weighted average of calorie contents of individual crops.
- 6/ Non-cereal foodstuffs assumed to comprise percentage of total calorie intake as follows:
 - Terai - 15%
 - Hills and Mountains - 20% (due to greater consumption of livestock products)
 - All Nepal - 18% (1976/77 population-weighted average of above).
- 7/ Based on minimum per capita daily subsistence needs as follows:
 - Terai - 2,000 calories
 - Hills and Mountains - 2,200 calories
 - All Nepal - 2,122 calories (This is a 1976/77 population-weighted average of the regional requirements.)
- 8/ Based on normal per capita daily subsistence needs (to allow for normal productivity) established as follows:
 - Terai - 2,210 calories (South Asia standard)
 - Hills and Mountains - 2,410 calories
 - All Nepal - 2,332 calories.

As in 7/ above, an increment of 200 calories has been added to compensate for higher requirements in the Hills and Mountains.

HEALTH-RELATED PROGRAMS OF HMG

Vertical Health Programs (Ministry of Health)

Malaria Control (Nepal Malaria Eradication Organization - NMEO)
Tuberculosis Control Project
Leprosy Control Project
Immunization (Expanded Program of Immunization - EPI)
Family Planning/Maternal and Child Health Project (FP/MCH)

Integrated Health Program (Ministry of Health)

Integrated Community Health Program (ICHP), responsible for establishing integrated community health posts throughout the country 1/
National Diarrheal Diseases Control Program

Community Water Supply and Sanitation

Water Supply and Sewerage Board (Ministry of Water, Power and Irrigation) - large urban projects
Department of Water Supply and Sewerage - small urban projects
Local Development Department (Ministry of Home and Panchayat) - village-level projects

Pharmaceutical Supply

Department of Medicinal Plants (Ministry of Forest) - development of herbal medicines and operation of Royal Drug Research Laboratory
Royal Drug Ltd. - commercial production of pharmaceuticals

Manpower Training

Institute of Medicine, Tribhuvan University - provides training to many types of health workers at all levels up to community physician
Training Cell (Ministry of Health) provides limited additional training

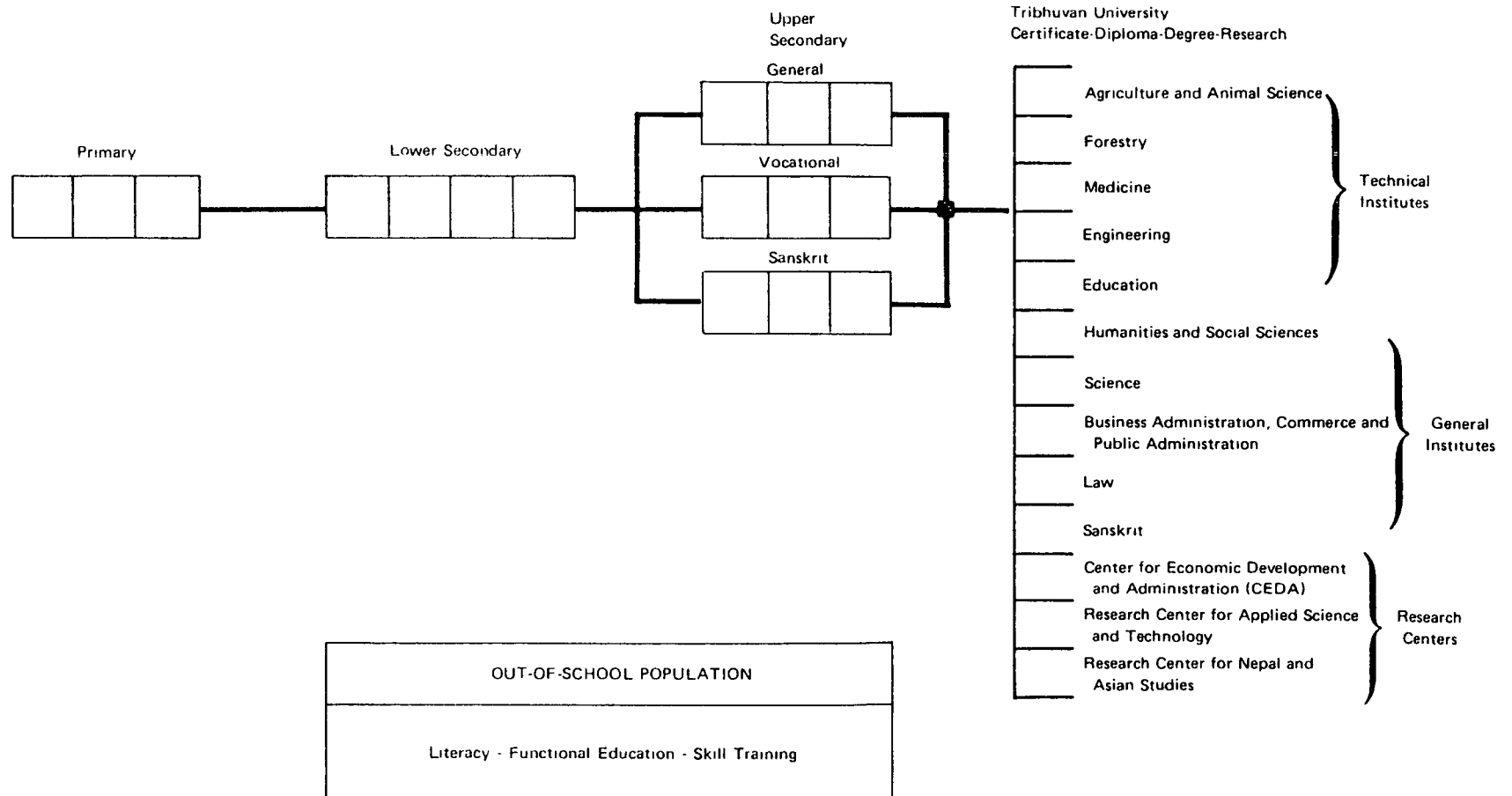
Nutrition

Nutrition Cell (Ministry of Health)
Nutrition Cell (Food Research Laboratory, Ministry of Food and Agriculture)
Nepal Children's Organization (semi-official)

1/ The Integrated Community Health Program is now administratively one of the 'vertical' programs.

CHART 1
NEPAL
STRUCTURE OF THE EDUCATION SYSTEM, 1979

AGE	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
GRADE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



Source: Prepared by the Mission from data furnished by the Ministry of Education and Tribhuvan University

CHART 2
ADMINISTRATIVE STRUCTURE OF THE MINISTRY OF EDUCATION, 1979

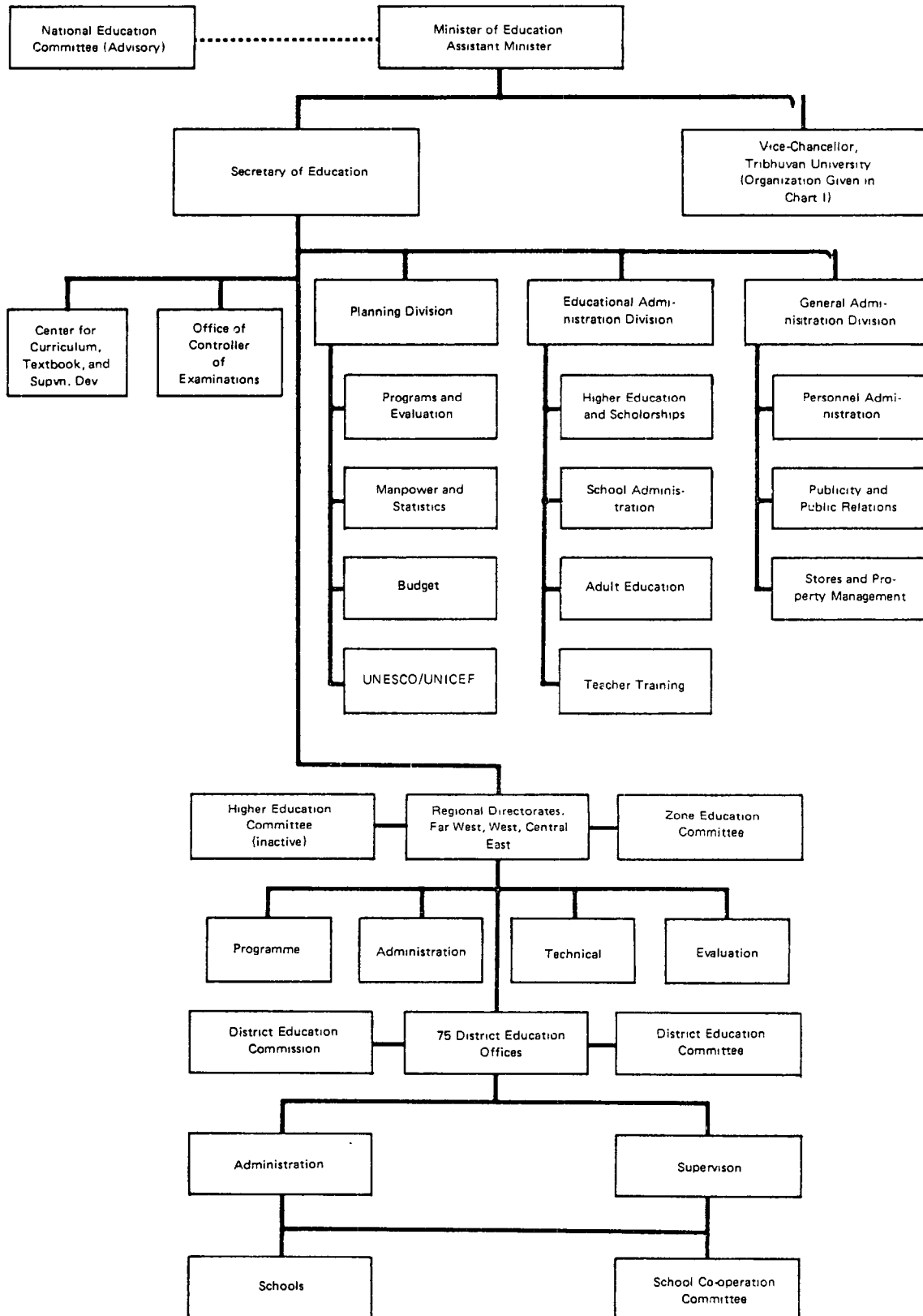
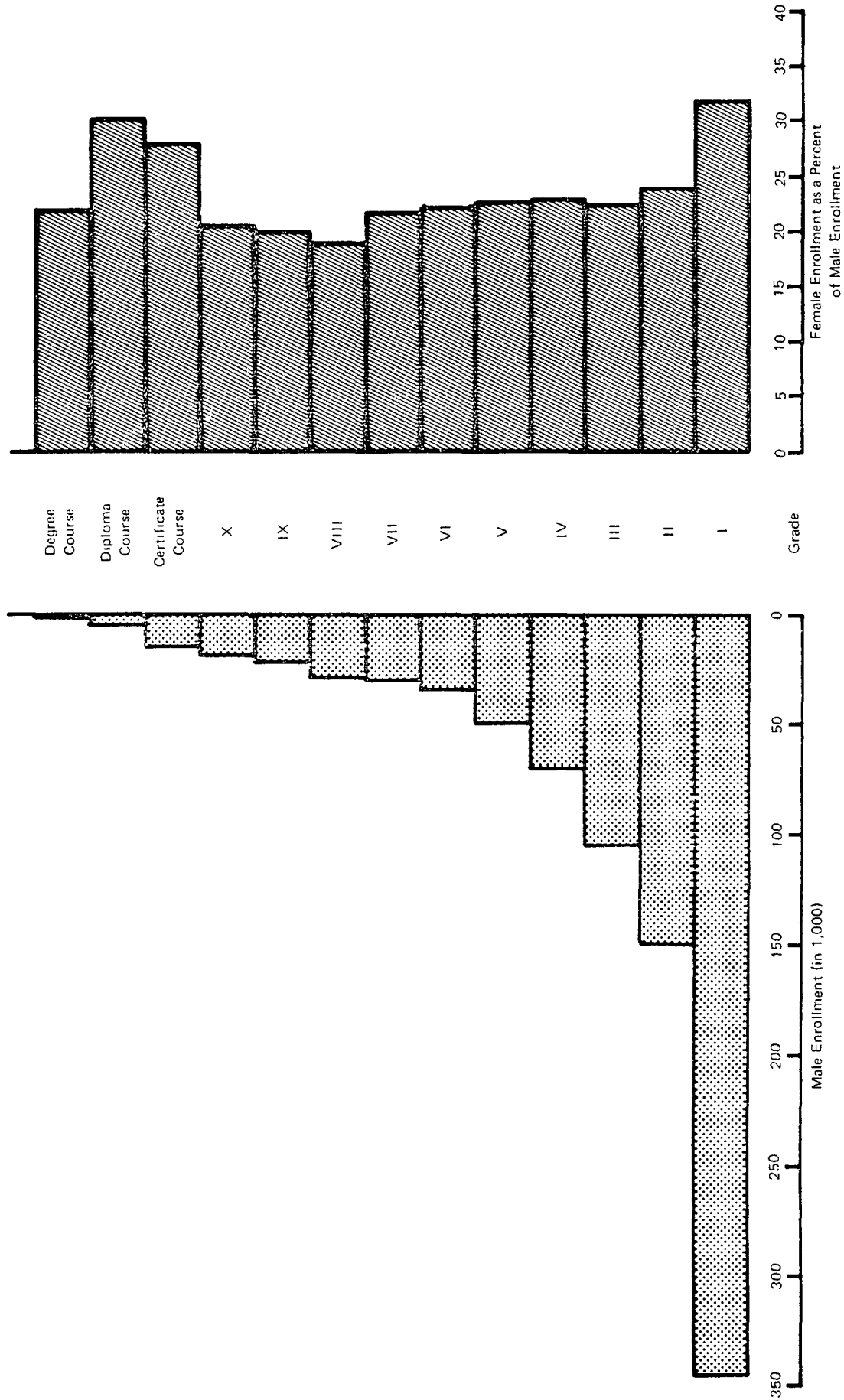


CHART 3
THE EDUCATION PYRAMID: NEPAL, 1977/78



World Bank - 20758

Source . Compiled from data supplied to Mission by the Ministry of Education

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Table 1.1
POPULATION ESTIMATES AND PROJECTIONS ^{1/}

<u>Year</u>	<u>Population (thousand)</u>	<u>Average Annual Growth (%)</u>
1911	5,639	
1920	5,574	-0.1
1930	5,533	-0.1
1941	6,284	1.2
1953	8,257	2.3
1961	9,413	1.6
1971	11,556	2.07
1976	12,857	2.16
1981	14,315	2.18
1986	16,051	2.30

^{1/} More recent estimates indicate population growth rate has increased to 2.6 per cent per annum by 1978.

Source: Central Bureau of Statistics, Population Projections for Nepal, 1971-1986, May 1974.

Table 1.2

IMPLICATIONS OF POPULATION PROJECTIONS

	<u>1971</u>	<u>1976</u>	<u>1981</u>	<u>1986</u>
Density (persons per Km ²)	82	91	102	114
Males per thousand females	1,014	1,013	1,013	1,012
Life expectancy at birth (years)	42.5	45.0	47.5	50.0
Crude birth rate	42.87	40.00	38.59	38.64
Crude death rate	22.80	19.84	18.41	18.34

Source: Central Bureau of Statistics, Population Projections for Nepal, 1971-1986, August 1974.

Table 1.3

REGIONAL DISTRIBUTION OF POPULATION
(Percentage)

	<u>1971</u>	<u>1976</u>	<u>1981</u>	<u>1986</u>
Eastern Region	24.21	23.94	23.70	23.44
Hills and Mountains	12.20	11.84	11.51	11.17
Terai	12.01	12.10	12.19	12.27
Central Region	33.45	33.66	33.88	34.10
Hills and Mountains	18.13	18.09	18.04	17.99
Terai	15.32	15.57	15.84	16.11
Western Region	21.33	21.24	21.07	20.90
Hills and Mountains	16.19	15.98	15.79	15.59
Terai	5.14	5.26	5.28	5.31
Far Western Region	21.01	21.16	21.35	21.56
Hills and Mountains	15.88	15.68	15.49	15.30
Terai	5.13	5.48	5.86	6.26
Total Hills and Mountains of which Kathmandu District	62.40 (5.00)	61.59	60.83	60.05
Total Terai	<u>37.60</u>	<u>38.41</u>	<u>39.17</u>	<u>39.95</u>
	100.00	100.00	100.00	100.00

Source: Central Bureau of Statistics, Population Projections for Nepal 1971-1986, August 1974.

Table 1.4

AGE COMPOSITION OF POPULATION
(Percentage)

<u>Age Group</u>	<u>1971</u> Percent of Total	<u>1976</u> Percent of Total	<u>1981</u> Percent of Total	<u>1986</u> Percent of Total
0 - 4	14.4	15.5	15.3	15.5
5 - 9	14.0	12.9	13.1	12.9
10 - 14	11.5	12.3	11.3	11.5
15 - 19	9.3	10.1	10.9	9.9
20 - 30	16.1	15.3	15.8	16.9
30 - 40	13.2	12.7	12.0	11.3
40 - 50	9.3	9.7	9.7	9.2
50 - 60	5.8	6.0	6.4	6.7
60 - 70	4.1	3.4	3.5	3.7
70 - 80	1.2	1.7	1.8	1.6
80 and above	<u>0.1</u>	<u>0.2</u>	<u>0.3</u>	<u>0.4</u>
<u>Total</u> 1/	100.0	100.0	100.0	100.0

1/ May not add up due to rounding.

Source: Central Bureau of Statistics, Population Projections for Nepal 1971-1986, August 1974.

Table 1.5

ECONOMICALLY ACTIVE POPULATION CLASSIFIED BY
INDUSTRY, OCCUPATION, AND EMPLOYMENT STATUS, 1971

<u>Industry</u>	<u>Persons Engaged (thousand)</u>	<u>Percentage Distribution</u>
Agriculture, hunting, etc	4,579	94.4
Services	138	2.8
Trade and commerce	67	1.4
Manufacturing	52	1.1
Transport, storage, etc.	10	0.2
Construction	5	0.1
Electricity, gas, etc.	2	-
 <u>Occupation</u>		
Farming and related	4,580	94.4
Production workers	106	2.2
Sales and related	60	1.2
Clerical	47	1.0
Services	34	0.7
Professional and technical	25	0.5
Administration	1	-
 <u>Employment status</u>		
Self employed	4,170	85.9
Employee	453	9.3
Unpaid family workers	208	4.3
Employer	22	0.5

Source: Central Bureau of Statistics, Population Census 1971, Abstracts, 1975.

Table 2.1

GROSS DOMESTIC PRODUCT AT CURRENT MARKET PRICES: OLD SERIES
(In Million Rupees)

<u>Sector</u>	<u>1964/65</u>	<u>1965/66</u>	<u>1966/67</u>	<u>1967/68</u>	<u>1968/69</u>	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>
Agriculture	3,654	4,794	4,292	4,883	5,357	5,922	6,034	7,106	6,578	8,851	9,949
Mining	1	2	1	1	5	4	1	2	3	3	3
Manufacturing	83	98	104	137	212	195	215	285	312	397	463
Construction	123	111	118	134	144	192	135	149	153	163	172
Transport & Communications	91	93	102	120	141	192	234	285	347	422	453
Cottage Industry	365	479	429	488	536	592	603	711	659	885	995
Financial Institutions	69	80	82	86	106	128	139	145	163	183	306
Ownership of Dwelling	654	669	683	698	714	729	745	762	779	796	813
Public Administration & Defense	82	101	143	147	166	177	215	230	228	250	332
Electricity	4	5	8	10	16	18	20	23	29	28	34
Wholesale and Retail Trade	306	301	245	249	353	363	318	339	336	374	738
Services	<u>170</u>	<u>177</u>	<u>204</u>	<u>219</u>	<u>235</u>	<u>256</u>	<u>279</u>	<u>332</u>	<u>382</u>	<u>456</u>	<u>544</u>
<u>Total:</u>	<u>5,602</u>	<u>6,909</u>	<u>6,411</u>	<u>7,173</u>	<u>7,985</u>	<u>8,768</u>	<u>8,938</u>	<u>10,369</u>	<u>9,969</u>	<u>12,808</u>	<u>14,802</u>

Note: The National Planning Commission discontinued this series after 1974/75.
Source: National Planning Commission.

Table 2.2

TOTAL AGRICULTURE AND NON-AGRICULTURE GDP AT CURRENT AND CONSTANT PRICES
(In Million Rupees)

<u>Year</u>	<u>-----At Current Market Prices-----</u>			<u>-----At 1964/65 Prices-----</u>			<u>Share of Agriculture ----- (%) -----</u>
	<u>Agriculture</u>	<u>Non- Agriculture</u>	<u>Total</u>	<u>Agriculture</u>	<u>Non- Agriculture</u>	<u>Total</u>	
1964/65	3,654	1,948	5,602	3,654	1,948	5,602	65
1965/66	4,794	2,115	6,909	4,082	1,912	5,994	68
1966/67	4,292	2,119	6,411	3,914	1,992	5,906	66
1967/68	4,883	2,290	7,173	3,935	2,008	5,943	67
1968/69	5,357	2,628	7,985	4,053	2,155	6,208	65
1969/70	5,922	2,846	8,768	4,193	2,193	6,386	66
1970/71	6,034	2,904	8,938	4,219	2,163	6,382	67
1971/72	7,106	3,263	10,369	4,250	2,261	6,511	65
1972/73	6,578	3,391	9,969	4,294	2,347	6,641	65
1973/74	8,851	3,957	12,808	4,592	2,473	7,065	65
1974/75	9,949	4,853	14,802	4,530	2,435	6,965	65

Note: See Table 2.1.

Source: National Planning Commission.

Table 2.3

GROSS DOMESTIC PRODUCT AT CURRENT PRICES: REVISED SERIES^{1/}
(In Million Rupees)

<u>Sector</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>
Agriculture	11,550	11,611	10,811
Mining and Quarrying	7	6	7
Manufacturing	463	537	716
Construction	172	194	289
Transport and Communications	453	799	1,201
Cottage Industry	1,155	1,161	1,081
Financial Institutions	312	278	277
Ownership of Dwellings	813	831	849
Public Administration and Defense	332	351	394
Electricity	34	39	45
Wholesale and Retail Trade	736	838	850
Services	<u>544</u>	<u>749</u>	<u>824</u>
<u>Total:</u>	<u>16,571</u>	<u>17,394</u>	<u>17,344</u>

1/ Preliminary.

Source: National Planning Commission.

Table 2.4

SAVING, INVESTMENT, OUTLAY, AND PRODUCTION
DURING THE FIFTH PLAN

(In Million Rupees)

	1975 to 1980	
	<u>Minimum</u>	<u>Maximum</u>
Gross Domestic Product ^{1/}	80,160	81,579
Average Annual Growth (%)	4	5
Total Development Outlay	9,197	11,404
Public sector	6,170	7,545
Private sector	2,096	2,672
Panchayat sector	931	1,187
Public Sector Outlay	6,170	7,549
Domestic resources	3,394	4,150
External assistance	2,776	3,395
Total Investment	7,963	9,895
Public sector	4,936	6,036
Private sector	2,096	2,672
Panchayat sector	931	1,187
Domestic Savings	5,187	6,500
Average Saving Rate (%)	6.4	7.9
Marginal Saving Rate (%)	27.8	37.4
Average Investment Rate (%)	9.9	12.1

^{1/} The base year 1974/75 GDP is estimated at NRs 14,326 million.

Source: National Planning Commission, Fifth Plan in Brief, 1975.

Table 3.1

SUMMARY BALANCE OF PAYMENTS
(In US\$ Million)

	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
<u>Trade Balance</u> ^{1/}	-108.9	-58.0	-73.0	-120.9
Exports, f.o.b.	80.1	98.3	93.9	88.8
Imports, c.i.f.	189.0	156.3	166.9	209.7
<u>Services (net)</u>	26.1	23.2	39.4	47.6
Receipts	(64.4)	(61.0)	(74.5)	(93.4)
of which, Tourism	(15.7)	(17.1)	(23.0)	(30.2)
Payments	(38.3)	(37.8)	(35.1)	(45.8)
<u>Transfers (net)</u>	28.5	26.6	30.8	25.1
Receipts	(31.6)	(28.1)	(32.6)	(26.4)
of which,				
Private Remittances	(18.9)	(18.7)	(21.5)	(18.3)
Indian Excise Refunds	(9.6)	(7.9)	(9.3)	(8.1)
Payments	(3.1)	(1.5)	(1.8)	(1.3)
<u>Current Account Balance</u>	-54.3	-8.2	-2.8	-48.2
<u>Official Grants</u>	19.3	21.1	18.5	23.9
<u>Official Capital (net)</u>	8.3	12.1	16.3	22.7
<u>Private Capital (net)</u> ^{2/}	-14.6	9.6	-10.3	-10.4
<u>Overall Balance</u>	<u>-41.3</u>	<u>34.6</u>	<u>21.7</u>	<u>-12.0</u>

^{1/} On payments basis.

^{2/} Includes errors and omissions.

Source: Nepal Rastra Bank.

Table 3.2

RECEIPTS AND PAYMENTS OF CONVERTIBLE FOREIGN EXCHANGE
(In Million Rupees)

	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
<u>Receipts</u>									
Merchandise Exports	108.0	87.4	89.4	151.6	130.3	154.1	296.9	385.7	557.6
Services:	100.4	106.4	130.5	153.7	236.2	299.1	354.5	447.9	570.7
Remittances	46.5	48.8	65.7	42.7	52.9	90.7	97.7	125.4	120.1
Tourist Expenditures	13.2	16.7	22.0	53.2	95.3	120.7	189.9	244.2	342.6
Interest Receipt	40.7	40.9	42.8	57.8	88.0	87.7	66.9	78.3	108.0
Diplomatic Missions	8.5	11.4	16.5	18.8	25.3	22.4	27.9	54.2	104.9
Foreign Aid	22.4	7.8	22.4	36.4	43.4	26.5	132.1	161.0	211.0
Miscellaneous	<u>40.6</u>	<u>43.4</u>	<u>44.1</u>	<u>39.0</u>	<u>29.2</u>	<u>65.3</u>	<u>49.4</u>	<u>46.8</u>	<u>18.4</u>
<u>Total Receipts</u>	280.7	255.4	302.9	399.5	464.4	564.7	860.8	1,095.6	1,462.6
<u>Payments</u>									
Merchandise Imports	134.7	79.3	113.4	197.5	177.3	567.8	435.4	521.3	743.0
Services:	11.7	13.6	20.4	32.5	73.6	79.9	98.1	82.4	163.5
Interest Payments	1.7	6.5	2.6	3.2	5.2	17.5	12.3	22.2	80.7
Others	10.0	7.1	17.8	29.3	68.4	62.4	85.8	60.2	82.8
Diplomatic Missions	14.3	13.7	16.4	16.3	18.5	16.0	18.2	18.9	28.5
Miscellaneous	<u>28.3</u>	<u>64.7</u>	<u>103.7</u>	<u>52.8</u>	<u>26.5</u>	<u>239.7</u>	<u>61.8</u>	<u>26.6</u>	<u>789.5</u>
<u>Total Payments</u>	189.0	171.3	253.9	299.1	295.9	903.4	613.5	649.2	1,724.5
<u>Surplus or Deficit (-)</u>	91.7	84.1	49.0	100.4	168.5	-338.7	247.3	446.4	-261.9

Source: Nepal Rastra Bank.

Table 3.3

COMPOSITION OF TRADE
(In Million Rupees)

	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
Exports, f.o.b.	<u>489.5</u>	<u>400.6</u>	<u>519.8</u>	<u>631.5</u>	<u>685.6</u>	<u>889.6</u>	<u>1,185.8</u>	<u>1,164.8</u>	<u>1,046.1</u>
Food and live animals	296.4	264.2	280.8	364.0	387.1	517.5	804.0	599.5	405.3
Tobacco and beverages	2.2	0.8	0.9	0.9	1.2	0.4	4.0	12.3	11.2
Crude materials, inedibles, except fuels	20.5	80.3	150.8	173.8	201.2	213.3	226.3	377.8	441.2
Mineral fuels and lubricants	-	-	-	-	-	1.5	1.6	0.5	0.2
Animal & vegetable oils & fats	1.6	1.0	0.4	0.7	0.9	2.4	1.8	5.3	6.0
Chemicals and drugs	1.3	0.8	0.5	0.9	0.8	0.9	9.3	10.6	3.6
Manufactured goods, classified chiefly by materials	48.0	40.3	63.1	73.9	76.2	28.1	104.7	123.9	123.3
Machinery and transportation equipment	0.2	-	0.1	0.1	0.1	0.1	3.6	1.6	2.7
Other manufactured products	19.0	6.8	17.1	17.1	18.0	38.3	23.0	27.8	51.2
Other	0.2	0.4	0.2	0.1	0.1	12.1	7.3	5.6	1.5
Imports, c.i.f.	<u>864.6</u>	<u>699.1</u>	<u>888.3</u>	<u>983.8</u>	<u>1,163.2</u>	<u>1,814.6</u>	<u>1,981.7</u>	<u>2,008.0</u>	<u>2,470.6</u>
Food and live animals	158.3	133.0	153.2	163.2	194.7	243.1	291.1	249.3	323.1
Tobacco and beverages	11.1	7.9	9.5	13.3	23.3	18.9	42.4	20.2	44.2
Crude materials, inedibles, except fuels	52.6	36.4	38.0	44.7	57.9	63.8	88.7	36.4	53.1
Mineral fuels and lubricants	88.6	71.7	130.2	139.6	143.3	182.7	211.7	249.0	251.3
Animal & vegetable oils & fats	8.3	6.9	8.8	14.7	18.4	7.0	7.4	8.3	30.8
Chemical drugs	65.6	60.7	50.2	60.6	61.3	179.5	190.1	224.5	254.9
Manufactured goods, classified chiefly by materials	342.7	267.0	361.8	396.3	463.7	509.5	545.9	660.6	819.2
Machinery and transportation equipment	79.5	74.8	78.8	87.7	93.9	270.1	413.4	375.5	483.1
Other manufactured products	57.3	46.5	54.8	59.7	106.3	198.1	168.4	145.8	201.0
Other	0.6	1.5	3.0	4.0	0.2	29.9	22.7	38.4	9.9

Note. Based on Customs data.

Source: Nepal Rastra Bank.

Table 3.4

DIRECTION OF FOREIGN TRADE
(In Million Rupees)

	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>First</u> <u>Eight Months</u>	
				<u>1977/78</u>	<u>1978/79</u>
<u>Total Exports</u>	<u>1,185.8</u>	<u>1,164.8</u>	<u>1,046.1</u>	<u>629.9</u>	<u>617.3</u>
To India	893.7	779.6	498.0	303.1	271.7
To Third Countries	292.1	385.2	548.1	326.8	345.6
<u>Total Imports</u>	<u>1,981.7</u>	<u>2,008.0</u>	<u>2,470.6</u>	<u>1,448.6</u>	<u>1,840.2</u>
From India	1,227.1	1,343.5	1,556.3	993.6	1,096.2
From Third Countries	754.6	664.5	914.3	455.0	744.2
<u>Trade Balance</u>	<u>-795.9</u>	<u>-843.2</u>	<u>-1,424.5</u>	<u>-818.7</u>	<u>-1,222.9</u>
With India	-334.4	-563.9	-1,058.3	-690.5	-824.5
With Third Countries	-462.5	-279.3	-366.2	-128.2	-398.4

Note: Based on Customs data.

Source: Nepal Rastra Bank.

Table 3.5

COMPOSITION OF TRADE WITH INDIA
(In Million Rupees)

	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
<u>Exports, f.o.b.</u>	<u>746.8</u>	<u>893.7</u>	<u>779.6</u>	<u>483.3</u>
Food and live animals	493.3	721.6	540.6	201.4
Tobacco and beverages	0.4	3.5	1.5	0.1
Crude materials, inedibles, except fuels	174.7	136.1	207.1	223.6
Mineral fuels and lubricants	1.5	1.0	0.5	0.2
Animal and vegetable oils and fats	2.3	1.4	5.1	5.7
Chemicals and drugs	0.5	5.8	10.3	3.1
Manufactured goods, classified chiefly by materials	10.8	14.5	7.2	8.6
Machinery and transportation equipment	0.2	1.4	0.3	2.6
Other manufactured products	12.6	3.1	2.3	2.5
Other	5.6	5.3	4.7	35.4
<u>Imports, c.i.f.</u>	<u>1,475.7</u>	<u>1,227.1</u>	<u>1,343.5</u>	<u>1,560.6</u>
Food and live animals	234.1	258.2	228.4	248.4
Tobacco and beverages	16.6	31.9	18.9	27.1
Crude materials, inedibles, except fuels	46.7	31.1	34.8	38.9
Mineral fuels and lubricants	179.9	95.3	116.4	113.3
Animal and vegetable oils and fats	6.7	5.5	7.4	23.1
Chemicals and drugs	134.7	114.9	141.7	163.6
Manufactured goods, classified chiefly by materials	425.1	409.5	499.8	520.6
Machinery and transportation equipment	156.6	158.1	173.6	202.1
Other manufactured products	144.9	105.4	92.5	119.0
Other	21.9	17.3	30.0	104.5

Note: Based on Customs data.

Source: Nepal Rastra Bank.

Table 3.6

COMPOSITION OF TRADE WITH COUNTRIES OTHER THAN INDIA
(US\$ '000)

	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
Export Total	11354	8418	12011	15301	12209	11493	23352	28597	40873
Raw Jute	4219	3299	6653	5809	526	1495	6379	7716	9565
Jute Cuttings	-	268	207	1382	326	804	470	765	1636
Jute Goods	2271	2279	3422	4859	4774	3744	4252	3998	5734
Bristles	1655	789	230	230	152	52	384	266	171
Hides and Skins	702	348	363	918	921	705	1338	3064	4441
Curio Goods	397	185	120	329	428	1290	1397	916	2205
Carpets	110	75	100	170	173	331	524	2044	1786
Medicinal Herbs	160	130	141	240	314	685	506	336	1362
Big Cardamom	39	249	155	404	384	564	2194	1609	1586
Dry Ginger	-	-	29	159	132	375	700	1644	415
Rice	-	7	-	-	2799	350	1541	485	6004
Pulses	-	-	-	5	324	233	1158	2425	507
Oil Cakes	-	-	-	22	309	155	69	722	1746
Timber and Timber Logs	172	18	181	-	75	131	27	42	-
Miscellaneous	1629	771	410	774	571	579	2413	2565	3715
Import Total	12084	8346	16748	14759	13682	43949	18919	35124	N.A.
Machinery and Spare Parts	1209	462	4823	733	1556	12722	3234	3074	
Raw Materials	2877	491	1137	1105	915	8451	3530	8562	
Building Construction, Electrical and Household Materials	576	589	1181	486	528	3666	1719	5521	
Transport Equipment	351	728	1125	997	1299	2741	839	961	
Radymode Garments Cloths, Socks and Carpets	1155	2574	2639	2210	2879	4632	4240	7094	
Radio, Transistors, Record Players, etc.	223	84	88	97	109	94	136	144	
Beverages and Tobacco	180	212	411	201	166	703	137	300	
Medicine and Medical Goods	308	154	468	150	202	569	1932	990	
Agricultural Tools and Implements, Fertilizers and Other Materials	453	146	766	2720	494	7178	307	1627	
Stationery Goods	57	222	364	223	587	1206	435	878	
Laboratory equipment	973	152	180	354	212	89	39	62	
Food and Food Articles	246	83	1702	3095	219	919	794	770	
Watch and Watch Materials	17	22	4	10	36	19	7	22	
Photographic Goods	91	40	108	140	171	106	117	83	
Miscellaneous	3368	2387	1752	2238	4309	854	1453	5036	

Note: On Payments Basis.

Source: Nepal Rastra Bank, Quarterly Economic Bulletin.

Table 3.7

INTERNATIONAL RESERVES
(In US\$ Million)

<u>Mid-Month</u> ^{1/}	-----Official Reserves-----						<u>Commercial Bank Assets</u>
	<u>Total Official Reserves</u>	<u>Gold</u>	<u>SDRs</u>	<u>Reserve Position at the Fund</u>	<u>Foreign Exchange</u>	<u>Of Which Indian Rupees</u>	
1969 - July	79.7	8.2	-	2.4	69.1	23.0	9.6
1970 - July	91.5	8.2	-	2.4	80.9	22.3	8.3
1971 - July	102.3	4.9	1.1	2.7	93.6	18.7	8.5
1972 - July	110.9	5.2	2.4	3.1	100.2	12.7	18.6
1973 - July	123.6	5.5	2.7	3.7	111.7	13.3	17.1
1974 - July	131.1	5.5	2.7	3.7	119.2	10.5	21.4
1975 - July	112.5	5.5	2.7	3.7	100.7	8.7	24.8
1976 - July	120.3	5.5	2.5	-	112.3	12.5	31.8
1977 - July	145.3	5.6	2.4	-	137.4	8.6	34.0
1978 - July	140.6	6.2	1.7	-	132.7	14.5	38.4
1979 - April	157.0	6.3	3.9	3.2	144.1	17.6	n.a.

Note: Totals may not add up due to rounding.

^{1/} Except SDR holdings and Gold Tranche position valued at end of month.

Source: Nepal Rastra Bank.

Table 3.8

AID COMMITMENTS
(In Million Rupees)

	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
<u>AID GROUP</u>			
Austria	-	-	-
Canada	9.2	53.0	28.6
France	-	-	-
Federal Republic of Germany	108.4	159.4	72.1
Japan	132.5	40.2	17.1
Switzerland	17.3	-	33.3
United Kingdom	-	346.7	4.7
United States	96.8	8.4	40.8
ADB	306.6	568.8	221.1
IDA	425.0	350.0	831.5
UN Group	<u>79.7</u>	<u>210.0</u>	<u>99.8</u>
<u>Sub-Total</u>	1,175.5	1,736.5	1,349.0
<u>NON-AID GROUP</u>			
India	-	3.0	646.2
China	-	168.0	-
Other	<u>240.3</u>	<u>53.8</u>	<u>98.8</u>
<u>Sub-Total</u>	240.3	224.8	745.0
<u>TOTAL COMMITMENTS</u>	<u>1,415.8</u>	<u>1,961.3</u>	<u>2,094.0</u>

Source: Ministry of Finance and World Bank.

Table 3.9

AID DISBURSEMENTS^{1/}
(In Million Rupees)

	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u> ^{2/}
<u>AID GROUP</u>				
Austria	-	-	-	-
Canada	-	0.5	2.0	6.7
France	-	-	-	-
Federal Republic of Germany	4.5	43.2	17.8	19.9
Japan	9.8	11.0	18.3	1.2
Switzerland	2.0	5.9	19.7	3.9
United Kingdom	25.2	30.8	35.4	73.9
United States	30.3	84.7	42.8	66.6
ADB	51.4	88.1	64.1	80.1
IDA	20.6	34.8	74.2	165.6
UN Group	<u>20.4</u>	<u>42.7</u>	<u>45.7</u>	<u>92.0</u>
<u>Sub-Total</u>	164.2	341.7	320.0	509.9
<u>NON-AID GROUP</u>				
India	113.0	103.9	117.6	117.8
China	54.9	49.4	105.9	76.2
Kuwait	-	-	4.0	56.1
OPEC Fund	-	-	-	52.0
Other	<u>9.9</u>	<u>10.6</u>	<u>9.4</u>	<u>36.4</u>
<u>Sub-Total</u>	177.8	163.9	236.9	338.5
<u>TOTAL DISBURSEMENTS</u>	<u>342.0</u>	<u>505.6</u>	<u>556.9</u>	<u>848.4</u>
<u>Memorandum Items:</u>				
Grant Aid	282.8	359.7	392.6	466.6
Loan Aid	59.2	145.9	164.3	381.8
Multilateral Aid	92.4	174.9	186.0	391.7
Bilateral Aid	249.6	330.7	370.9	456.7

1/ Not including technical assistance and fellowships.

2/ Revised estimates.

Table 3.10

FOREIGN GRANT DISBURSEMENTS
(In Million Rupees)

<u>Source</u>	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>
India	139.6	125.4	130.6	84.9	123.8	131.5	100.8	115.0
Peoples Republic of China	48.5	47.2	53.2	24.3	33.6	54.9	49.4	105.9
United States	43.7	59.7	48.0	41.3	29.7	30.3	84.7	42.8
United Kingdom	5.1	17.4	17.0	14.8	20.5	12.6	28.8	35.4
USSR	4.5	2.8	5.0	-	-	-	-	-
Others, including UNDP	<u>2.4</u>	<u>18.3</u>	<u>15.3</u>	<u>14.9</u>	<u>15.0</u>	<u>53.5</u>	<u>96.0</u>	<u>93.5</u>
<u>Total Grants:</u>	<u>243.8</u>	<u>270.8</u>	<u>242.1</u>	<u>180.2</u>	<u>226.6</u>	<u>282.8</u>	<u>359.7</u>	<u>392.6</u>

Source: Ministry of Finance.

Table 4.1

EXTERNAL PUBLIC DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1978
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

TYPE OF CREDITOR CREDITOR COUNTRY	D E B T O U T S T A N D I N G			I N A R R E A R S	
	DISBURSED	UNDISBURSED	TOTAL	PRINCIPAL	INTEREST
SUPPLIERS CREDITS					
UNITED KINGDOM	722	-	722	-	-
TOTAL SUPPLIERS CREDITS	722	-	722	-	-
MULTILATERAL LOANS					
ASIAN DEV. BANK	30,605	116,087	146,692	-	-
IDA	32,511	143,131	175,642	-	-
IMF TRUST FUND	7,561	-	7,561	-	-
OPEC SPECIAL FUND	4,150	3,000	7,150	-	-
TOTAL MULTILATERAL LOANS	74,827	262,218	337,045	-	-
BILATERAL LOANS					
DENMARK	3,342	587	3,929	-	-
INDIA	781	16	797	-	-
JAPAN	1,763	14,677	16,440	-	-
KUWAIT	6,163	12,233	18,396	-	-
UNITED STATES	135	-	135	-	-
USSR	-	4,087	4,087	-	-
TOTAL BILATERAL LOANS	12,184	31,600	43,784	-	-
TOTAL EXTERNAL PUBLIC DEBT	87,733	293,818	381,551	-	-

NOTES: (1) ONLY DEBTS WITH AN ORIGINAL OR EXTENDED MATURITY OF OVER ONE YEAR ARE INCLUDED IN THIS TABLE.
(2) DEBT OUTSTANDING INCLUDES PRINCIPAL IN ARREARS BUT EXCLUDES INTEREST IN ARREARS.

Source: External Debt Division, Economic Analysis & Projections Department

Table 4.2

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1978
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS

(IN THOUSANDS OF U.S. DOLLARS)

YEAR	TOTAL		TRANSACTIONS DURING PERIOD					OTHER CHANGES	
	DEBT OUTSTANDING AT BEGINNING OF PERIOD		DISBURSED ONLY	INCLUDING UNDISBURSED	COMMITMENTS	DISBURSEMENTS	SERVICE PAYMENTS	CANCEL-LATIONS	ADJUST-MENT *
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1974	19,536	81,749	24,947	7,606	489	292	781	-	1,932
1975	27,129	108,139	16,830	9,252	1,219	454	1,673	1,000	-2,910
1976	33,740	119,840	117,521	11,897	1,075	632	1,707	-	205
1977	44,278	236,491	62,399	30,500	1,387	810	2,197	2,359	6,094
1978	72,742	301,238	106,667	26,532	1,576	1,110	2,686	30,761	5,984
1979	87,733	381,552							

* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *

1979	87,733	381,552	-	46,717	1,925	1,370	3,295	-	-723
1980	131,803	378,904	-	58,393	2,182	1,841	4,023	-	2
1981	188,016	376,724	-	59,400	2,436	2,348	4,784	-	-
1982	244,981	374,288	-	47,237	2,971	2,773	5,744	-	3
1983	289,250	371,320	-	32,506	3,893	3,053	6,946	-	3
1984	317,866	367,430	-	22,461	5,377	3,234	8,611	-	-
1985	334,951	362,053	-	15,203	5,488	3,323	8,811	-	1
1986	344,667	356,566	-	8,695	7,162	3,347	10,509	-	2
1987	346,201	349,406	-	2,346	8,741	3,304	12,045	-	-1
1988	339,806	340,664	-	843	9,313	3,210	12,523	-	-1
1989	331,335	331,350	-	15	9,511	3,099	12,610	-	1
1990	321,840	321,840	-	-	9,605	2,983	12,588	-	5
1991	312,240	312,240	-	-	9,530	2,868	12,398	-	-1
1992	302,709	302,709	-	-	9,466	2,759	12,225	-	3
1993	293,246	293,246	-	-	9,580	2,643	12,223	-	1
1994	283,667	283,667	-	-	9,988	2,533	12,521	-	-1
1995	273,678	273,678	-	-	10,109	2,416	12,525	-	2
1996	263,571	263,571	-	-	10,923	2,299	13,222	-	-
1997	252,648	252,648	-	-	11,075	2,177	13,252	-	2
1998	241,575	241,575	-	-	11,104	2,061	13,165	-	2

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THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

Table 4.2

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1978
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

YEAR	TYPE OF CREDITOR		MULTILATERAL LOANS					OTHER	CHANGES
	DEBT OUTSTANDING AT BEGINNING OF PERIOD		TOTAL	TRANSACTIONS	DURING PERIOD				
	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMITMENTS	DISBURSEMENTS	SERVICE PAYMENTS			CANCEL-LATIONS	ADJUST-MENT *
	(1)	(2)	(3)	(4)	PRINCIPAL	INTEREST	TOTAL	(8)	(9)
1974	7,378	57,703	16,800	5,956	163	192	355	-	1
1975	13,171	74,341	16,830	6,940	743	330	1,073	1,000	-
1976	19,368	89,428	90,300	10,714	571	451	1,022	-	-
1977	29,512	179,157	62,399	23,977	805	597	1,402	6	71
1978	52,753	240,816	97,591	23,089	1,368	918	2,286	345	351
1979	74,827	337,045							

* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *

1979	74,827	337,045	-	36,213	1,617	1,116	2,733	-	-
1980	109,423	335,428	-	48,754	1,874	1,447	3,321	-	1
1981	156,302	333,555	-	52,081	2,128	1,835	3,963	-	-
1982	206,257	331,427	-	44,333	2,512	2,194	4,706	-	3
1983	248,081	328,918	-	31,889	2,723	2,467	5,190	-	2
1984	277,250	326,197	-	22,153	3,978	2,664	6,642	-	-
1985	295,425	322,219	-	15,049	4,089	2,773	6,862	-	1
1986	306,386	318,131	-	8,541	5,011	2,822	7,833	-	1
1987	309,916	313,121	-	2,346	6,590	2,811	9,401	-	-
1988	305,673	306,531	-	843	7,162	2,751	9,913	-	-1
1989	299,353	299,368	-	15	7,360	2,675	10,035	-	2
1990	292,010	292,010	-	-	7,454	2,593	10,047	-	5
1991	284,561	284,561	-	-	7,530	2,509	10,039	-	-2
1992	277,029	277,029	-	-	7,618	2,429	10,047	-	2
1993	269,413	269,413	-	-	7,883	2,339	10,222	-	1
1994	261,531	261,531	-	-	8,291	2,251	10,542	-	-1
1995	253,239	253,239	-	-	8,412	2,158	10,570	-	2
1996	244,829	244,829	-	-	9,273	2,063	11,336	-	2
1997	235,558	235,558	-	-	9,425	1,962	11,387	-	2
1998	226,135	226,135	-	-	9,454	1,868	11,322	-	1

* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

Table 4.2

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1978
 DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
 (IN THOUSANDS OF U.S. DOLLARS)

YEAR	TYPE OF CREDITOR		BILATERAL LOANS			OTHER CHANGES			
	DEBT OUTSTANDING AT BEGINNING OF PERIOD	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMITMENTS	DISBURSEMENTS	TRANSACTIONS DURING PERIOD			
	(1)	(2)	(3)	(4)	S E R V I C E P A Y M E N T S			(8)	(9)
					PRINCIPAL	INTEREST	TOTAL		
					(5)	(6)	(7)		
1974	11,333	23,221	8,147	1,650	326	100	426	-	1,922
1975	13,124	32,964	-	2,312	476	124	600	-	-2,794
1976	13,654	29,694	27,221	1,183	504	181	685	-	319
1977	14,162	56,730	-	6,523	582	213	795	2,353	5,950
1978	19,312	59,745	9,076	3,443	208	192	400	30,416	5,588
1979	12,184	43,785	-	-	-	-	-	-	-
* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *									
1979	12,184	43,785	-	10,504	308	254	562	-	-1
1980	22,380	43,476	-	9,639	308	394	702	-	1
1981	31,714	43,169	-	7,319	308	513	821	-	-
1982	38,724	42,861	-	2,904	459	579	1,038	-	-
1983	41,169	42,402	-	617	1,170	586	1,756	-	1
1984	40,616	41,233	-	308	1,399	570	1,969	-	-
1985	39,526	39,834	-	154	1,399	550	1,949	-	-
1986	38,281	38,435	-	154	2,151	525	2,676	-	1
1987	36,285	36,285	-	-	2,151	493	2,644	-	-1
1988	34,133	34,133	-	-	2,151	459	2,610	-	-
1989	31,982	31,982	-	-	2,151	424	2,575	-	-1
1990	29,830	29,830	-	-	2,151	390	2,541	-	-
1991	27,679	27,679	-	-	2,000	359	2,359	-	1
1992	25,680	25,680	-	-	1,848	330	2,178	-	1
1993	23,833	23,833	-	-	1,697	304	2,001	-	-
1994	22,136	22,136	-	-	1,697	282	1,979	-	-
1995	20,439	20,439	-	-	1,697	258	1,955	-	-
1996	18,742	18,742	-	-	1,650	236	1,886	-	-2
1997	17,090	17,090	-	-	1,650	215	1,865	-	-
1998	15,440	15,440	-	-	1,650	193	1,843	-	1

* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

Table 4.2

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1978
 DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
 (IN THOUSANDS OF U.S. DOLLARS)

YEAR	TYPE OF CREDITOR		SUPPLIERS CREDITS TOTAL			TRANSACTIONS DURING PERIOD			OTHER CHANGES
	DEBT OUTSTANDING AT BEGINNING OF PERIOD								
	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMITMENTS	DISBURSEMENTS	SERVICE PAYMENTS			CANCELATIONS	ADJUSTMENT *
	(1)	(2)	(3)	(4)	PRINCIPAL	INTEREST	TOTAL	(8)	(9)
1974	825	825	-	-	-	-	-	-	9
1975	834	834	-	-	-	-	-	-	-116
1976	718	718	-	-	-	-	-	-	-114
1977	604	604	-	-	-	-	-	-	73
1978	677	677	-	-	-	-	-	-	45
1979	722	722	-	-	-	-	-	-	-
* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *									
1979	722	722	-	-	-	-	-	-	-722

* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

Source: External Debt Division, Economic Analysis & Projections Department

Table 5.1

Central Government Budgetary Performance
(In Million Rupees)

	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u> ^{1/}	<u>1979/80</u> ^{2/}
<u>Revenue</u>	<u>459.5</u>	<u>455.1</u>	<u>546.6</u>	<u>608.4</u>	<u>759.0</u>	<u>1,000.0</u>	<u>1,097.2</u>	<u>1,302.2</u>	<u>1,559.3</u>	<u>1,688.0</u>	<u>2,090.5</u>
Tax Revenue	411.3	395.6	466.7	521.1	642.4	843.7	912.0	1,101.8	1,247.5	1,398.0	1,734.8
Non-Tax Revenue ^{3/}	48.2	59.5	79.9	87.3	116.7	156.3	185.2	200.4	311.8	290.0	355.7
<u>Expenditure and Net Lending</u>	<u>676.7</u>	<u>760.9</u>	<u>881.4</u>	<u>974.3</u>	<u>1,200.3</u>	<u>1,491.0</u>	<u>1,878.7</u>	<u>2,270.5</u>	<u>2,607.9</u>	<u>3,041.2</u>	<u>4,057.4</u>
Regular ^{4/}	215.0	293.6	320.7	363.5	446.5	530.4	654.1	784.1	815.0	991.5	1,104.4
Development	464.7	465.0	564.6	618.6	751.5	967.2	1,238.9	1,498.3	1,808.0	2,060.4	2,969.6
Net Lending ^{5/}	-3.0	2.3	-3.9	2.2	2.3	-6.6	-14.3	-11.9	-15.1	-10.7	-16.6
<u>Deficit (Revenue less Expenditure)</u>	<u>-217.2</u>	<u>-305.8</u>	<u>-334.8</u>	<u>-365.9</u>	<u>-441.3</u>	<u>-491.0</u>	<u>-781.5</u>	<u>-968.3</u>	<u>-1,048.6</u>	<u>-1,353.2</u>	<u>-1,966.9</u>
<u>Financed By:</u>											
Foreign Grants	243.7	270.7	242.0	180.3	222.6	282.8	359.7	392.6	466.6	586.4	968.3
Net Foreign Borrowing ^{6/}	-21.0	28.9	36.1	44.7	81.3	92.8	129.8	145.5	364.1	432.9	884.5
Net Domestic Borrowing ^{7/}	-5.5	6.2	56.7	140.9	137.4	115.4	292.0	430.2	217.9	333.0	114.1
(of which: From Banking System) ^{8/}	(0.4)	(55.9)	(65.0)	(122.5)	(97.7)	(145.8)	(194.1)	(270.0)	(215.7)	-	-

^{1/} Preliminary actuals.

^{2/} Budget estimates.

^{3/} Repayments of loan principal by companies and corporations excluded.

^{4/} Loans and investment and repayments of government debt are excluded.

^{5/} Loans and investments less repayments of loan principal.

^{6/} Gross foreign borrowing less principal repayments as recorded by Rastra Bank.

^{7/} Calculated as a residual but would correspond to net domestic borrowing and use of cash balance items in Ministry of Finance classification.

^{8/} Change in net credit to government as given in monetary survey data, Rastra Bank Quarterly Economic Bulletin.

Source: Ministry of Finance, Budget Speech, several years.

Table 5.2

Expenditure of the Central Government
(In Million Rupees)

	Third Plan Total 1965/66-1969/70	Fourth Plan Total 1970/71-1974/75	1974/75	1975/76	1976/77	1977/78	1978/78 Preliminary Actuals	1979/80 Budget Estimates
I. Regular Expenditure	896.7	1,954.7	530.4	654.1	784.1	815.0	991.5	1,104.4
General Public Services	590.0	1,018.6	269.0	335.6	389.2	416.6	521.5	568.3
General Administration	112.6	266.1	60.9	71.2	86.7	98.0	115.7	120.7
Revenue Administration	66.0	76.0	18.4	20.7	23.3	24.8	30.3	35.9
Judiciary Services	23.5	40.9	9.8	10.6	12.1	13.0	15.5	16.3
Police and Jail	118.9	216.2	62.5	73.8	79.7	85.3	105.2	123.9
Foreign Services	55.6	84.0	20.3	24.7	25.1	27.6	43.4	44.5
Defence	213.4	367.3	97.1	134.6	162.3	167.9	211.4	226.5
Social Services	129.2	419.0	121.1	141.5	136.2	148.6	178.1	190.6
Education	67.5	196.2	60.9	77.1	67.9	69.1	83.0	84.0
Health	37.4	96.2	28.2	33.2	34.5	41.5	52.5	60.3
Drinking Water	n.a.	5.9	0.9	0.9	1.1	1.4	2.0	2.9
Panchayat	11.3	66.3	14.0	16.3	16.1	17.9	21.0	22.6
Other	12.2	54.5	15.1	14.0	16.7	18.7	19.6	20.8
Economic Services	116.8	265.8	70.6	72.4	91.0	91.7	100.9	112.3
Agriculture	3.9	31.1	9.8	5.3	6.2	6.7	7.6	8.1
Irrigation	n.a.	7.6	1.8	1.7	2.2	4.3	4.4	3.2
Land Reform	-	23.3	5.8	10.1	11.3	12.2	13.0	13.7
Cadastral Survey	0.6	6.8	1.8	2.0	2.4	2.8	3.3	3.9
Forest	20.7	19.7	4.6	5.5	8.8	3.6	3.9	4.9
Industry, Mining and Commerce	3.8	7.8	1.7	2.0	2.4	2.4	2.6	2.9
Communications	32.2	56.4	20.2	19.3	25.1	26.1	29.0	33.6
Transportation	12.9	69.0	19.5	20.4	23.2	26.9	33.0	36.1
Electricity	1.4	19.1	5.1	5.1	8.2	5.7	3.0	4.0
Other	41.2	4.3	0.8	1.0	1.1	1.0	1.1	1.7
Miscellaneous	60.7	271.3	69.8	104.7	169.6	158.1	191.0	233.2
Interest on Public Debt	6.0 ^{1/}	84.4	33.5	47.6	56.3	79.4	98.3	126.9
Pensions, Allowances and Gratuities	21.2	67.1	22.2	42.6	76.8	54.8	67.3	78.3
Contingencies, etc.	33.5	120.0	14.1	14.5	36.5	13.9	25.4	28.0
II. Development Expenditure	1,574.7	3,315.6	967.2	1,238.9	1,498.3	1,808.0	2,060.4	2,969.0
General Public Services	13.0	26.3	3.8	5.0	6.7	3.4	4.6	32.4
Social Services	291.3	615.5	226.5	320.8	420.0	464.8	530.7	608.2
Education	113.5	271.1	93.3	152.3	185.6	201.2	218.1	264.8
Health	90.9	168.7	59.7	93.3	92.6	96.3	96.1	132.8
Drinking Water	8.9	55.4	25.6	29.4	61.2	46.9	81.0	82.6
Panchayat	57.6	76.6	21.0	29.5	55.5	94.9	101.6	93.5
Other	10.6	43.5	26.9	16.3	25.0	25.5	33.9	34.5
Economic Services	1,234.5	2,610.3	718.4	892.1	1,033.4	1,300.3	1,474.1	2,279.0
Agriculture	112.5	320.0	88.6	207.3	181.9	189.5	190.2	262.9
Irrigation	61.2	264.7	74.0	98.1	127.4	142.1	235.3	326.6
Land Reform	47.2	20.5	8.1	9.8	11.1	10.8	10.7	13.2
Cadastral Survey	25.7	40.6	12.4	13.2	20.4	23.6	27.6	28.7
Forest	29.9	74.5	24.1	37.0	44.8	76.3	81.4	153.2
Industry, Mining and Commerce	-	321.7	86.4	113.6	149.4	115.9	55.9	216.5
Communications	29.4	48.7	8.0	9.4	12.9	13.2	13.9	22.7
Transportation	463.3	1,315.6	359.5	337.0	423.0	471.8	532.5	744.1
Roads	(407.3)	(1,002.8)	(284.7)	(203.1)	(365.8)	(416.7)	(455.4)	(513.6)
Bridges	(8.2)	(58.9)	(30.7)	(31.0)	(27.9)	(15.9)	(22.1)	(39.5)
Other	(47.8)	(253.8)	(44.1)	(102.9)	(29.4)	(39.3)	(55.3)	(190.7)
Electricity	158.0	160.3	37.0	48.6	48.8	243.1	305.0	490.8
Other	225.7	43.9	20.3	18.1	13.9	14.0	21.3	20.5
Miscellaneous, Contingencies, etc.	35.9	62.4	18.5	21.0	38.1	39.3	51.0	51.0
Net Lending	-0.8	-5.9	-6.6	-14.3	-11.9	-15.1	-10.7	-16.6
Loan Payment	6.0 ^{1/}	30.9	1.7	4.2	8.8	7.6	5.3	14.2
Loan Repayment	-6.8	-36.8	-8.3	-18.5	-20.7	-22.7	-16.0	-30.8
Total Expenditures and Net Lending	2,470.6^{1/}	5,264.4	1,491.0	1,878.7	2,270.5	2,607.9	3,041.2	4,057.4

^{1/} For Third Plan period (1965/66-1969/70) interest payment on public debt and loan payments are mission estimates.

Notes: Totals and sub-totals may not add up due to rounding.

Source: Ministry of Finance, Budget Speech, several years.

Table 5.3

Current Revenue of the Central Government
(In Million Rupees)

	<u>Third Plan Total</u> <u>1964/65-1969/70</u>	<u>Fourth Plan Total</u> <u>1970/71-1974/75</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u> <u>Preliminary</u> <u>Actuals</u>	<u>1979/80</u> <u>Budget</u> <u>Estimates</u>
I. Tax Revenue	1,471.0	2,953.6	843.5	912.1	1,101.8	1,247.5	1,398.0	1,734.8
<u>Taxes on Net Income and Profit</u>	<u>65.0</u>	<u>139.2</u>	<u>47.1</u>	<u>88.6</u>	<u>135.3</u>	<u>140.4</u>	<u>90.7</u>	<u>218.5</u>
Income Tax	62.9	139.2	47.0	87.2	133.3	137.0	88.5	217.5
House Rent Tax	2.1	-	0.1	1.4	2.0	3.4	2.2	1.0
<u>Taxes on Property and Property Transfer</u>	<u>383.0</u>	<u>539.6</u>	<u>128.6</u>	<u>137.7</u>	<u>144.7</u>	<u>147.8</u>	<u>118.0</u>	<u>174.6</u>
Land Revenue	351.5	424.2	90.9	94.8	97.9	88.6	55.0	118.3
Urban House and Land Tax	2.5	5.2	1.7	3.3	4.1	5.1	6.0	6.3
House and Land Registration Fee	29.0	108.4	36.0	39.6	42.7	54.1	57.0	50.0
<u>Taxes on Goods and Services</u>	<u>299.6</u>	<u>970.7</u>	<u>310.2</u>	<u>293.9</u>	<u>435.7</u>	<u>500.8</u>	<u>594.0</u>	<u>653.3</u>
Sales Tax	144.4	497.5	190.5	161.9	222.0	273.1	338.4	399.1
Excise Duties	127.7	386.3	119.7	132.0	166.1	164.4	195.0	204.0
Rakhsi Contract	(31.2)	(104.3)	(33.2)	(32.0)	(30.0)	(26.2)	(25.9)	(11.9)
Industrial Production	(75.7)	(267.9)	(83.1)	(96.7)	(131.1)	(138.2)	(169.1)	(192.1)
Agricultural Production	(12.1)	(6.6)	(3.4)	(3.3)	(4.9)	(-)	(-)	(-)
Miscellaneous	(2.7)	(7.4)	-	-	-	-	-	-
Taxes on Services	16.5	54.7	29.1	33.4	32.8	44.3	43.9	30.5
Entertainment Tax	(9.2)	(19.5)	(5.8)	(7.0)	(8.7)	(9.9)	(9.5)	(10.0)
Road Cess	(4.8)	(21.6)	(6.9)	(7.6)	(14.5)	(15.8)	(16.2)	(-)
Air Flight Tax	(1.6)	(5.9)	(2.3)	(2.7)	(4.8)	(8.3)	(7.0)	(8.0)
Hotel Tax	(0.9)	(7.9)	(2.8)	(3.5)	(4.8)	(10.3)	(11.2)	(12.5)
Taxes on the Use of Goods or Property or Permission of Activities	11.1	32.2	11.3	12.6	14.8	19.0	16.7	19.7
<u>Taxes on International Trade</u>	<u>722.1</u>	<u>1,206.6</u>	<u>328.5</u>	<u>358.5</u>	<u>386.2</u>	<u>458.8</u>	<u>593.4</u>	<u>688.4</u>
Import Taxes	606.0	1,073.4	290.0	316.5	333.1	419.5	549.2	632.4
Customs Duties	(437.2)	(676.8)	(182.3)	(204.5)	(215.9)	(334.1)	(509.1)	(582.3)
Indian Excise Refund	(168.8)	(396.6)	(107.7)	(112.0)	(117.4)	(85.4)	(40.1)	(50.1)
Export Duties	110.6	114.8	30.9	37.7	47.6	38.7	43.7	55.4
Miscellaneous	5.5	18.3	7.6	4.3	5.4	0.6	0.5	0.6
<u>Other Taxes</u>	<u>1.3</u>	<u>97.4</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
II. Non-Tax Revenue	198.4	510.5	156.3	185.1	200.4	311.8	290.0	355.7
<u>Revenues from Departmental Enterprises</u>	<u>28.2</u>	<u>61.1</u>	<u>15.8</u>	<u>19.7</u>	<u>30.2</u>	<u>41.7</u>	<u>40.9</u>	<u>57.8</u>
Irrigation	0.9	1.0	0.3	0.3	0.6	0.9	0.5	5.0
Water	3.0	5.7	0.1	0.2	0.3	0.5	0.3	0.3
Electricity	-	8.0	2.2	3.3	6.7	12.1	6.0	6.0
Post Office	21.8	32.2	9.2	9.5	14.3	22.4	27.9	30.0
Aviation	2.3	9.2	2.6	4.3	6.4)	5.8	6.2	16.5
Railway and Ropeway	0.1	5.2	1.4	2.1	1.9)	-	-	-
<u>Administrative Charges and Miscellaneous</u>	<u>25.3</u>	<u>76.3</u>	<u>16.4</u>	<u>19.2</u>	<u>27.3</u>	<u>88.8</u>	<u>100.3</u>	<u>83.2</u>
<u>Dividends and Interest</u>	<u>37.2</u>	<u>169.1</u>	<u>67.8</u>	<u>107.1</u>	<u>77.3</u>	<u>110.9</u>	<u>101.0</u>	<u>151.2</u>
Dividends	35.6	151.1	62.2	93.6	68.2	99.8	85.0	116.0
Interest from Companies and Corporations	0.1	15.4	5.3	13.3	8.5	10.0	12.3	40.2
Interest from Government Employees	1.5	2.6	0.3	0.2	0.6	1.1	1.7	5.0
<u>Royalties</u>	<u>0.8</u>	<u>9.1</u>	<u>0.8</u>	<u>4.8</u>	<u>13.0</u>	<u>6.8</u>	<u>7.8</u>	<u>8.5</u>
<u>Forest Revenue</u>	<u>96.0</u>	<u>167.6</u>	<u>45.0</u>	<u>24.0</u>	<u>43.6</u>	<u>63.6</u>	<u>40.0</u>	<u>45.0</u>
Lumber	88.3	158.0	38.9	21.3	39.8	n.a.	n.a.	n.a.
Other	7.7	9.7	6.1	2.7	3.8	n.a.	n.a.	n.a.
<u>Current Revenue (I + II)</u>	<u>1,669.4</u>	<u>3,464.1</u>	<u>1,000.0</u>	<u>1,097.2</u>	<u>1,302.2</u>	<u>1,559.3</u>	<u>1,688.0</u>	<u>2,090.5</u>

Note. Totals may not add up due to rounding.

Source. Ministry of Finance, Budget Speech, several years.

Table 5.4
TOTAL ALLOCATION OF THE FIFTH PLAN OUTLAY
(in Rs. million)

	Public Sector		Panchayat Sector ^{1/}		Private Sector		Total	
	Amount	Percentage Distribution	Amount	Percentage Distribution	Amount	Percentage Distribution	Amount	Percentage Distribution
Minimum Program:								
Agriculture, Irrigation, Forestry, and Land Reform	1,839.7	29.8	279.3	30.0	1,048.0	50.0	3,167.0	34.4
Industry, Commerce, and Power	1,380.7	22.4	-	-	419.2 ^{2/}	20.0	11,799.9	19.6
Transport and Communication	1,432.8	23.2	465.5	50.0	628.8 ^{3/}	30.0	2,527.1	27.5
Social Services (Health, Education, Drinking Water, etc.)	1,516.8	24.6	186.2	20.0	-	-	1,703.0	18.5
Total	6,170.0	100.0	931.0	100.0	2,096.0	100.0	9,197.0	100.0
Maximum Program:								
Agriculture, Irrigation, Forestry, and Land Reform	1,278.7	30.2	356.1	30.0	1,336.0	50.0	3,970.8	34.8
Industry, Commerce, and Power	1,506.0	20.0	-	-	534.4	20.0	1,040.4	17.9
Transport and Communication	1,990.3	26.4	593.5	50.0	801.6	30.0	3,385.4	29.7
Social Services (Health, Education, Drinking Water, etc.)	1,770.0	23.4	237.4	20.0	-	-	2,007.4	17.6
Total	7,545.0	100.0	1,187.0	100.0	2,672.0	100.0	11,404.0	100.0

^{1/} Including Government development grant.

^{2/} Including loan for investment from Government sources.

^{3/} Including construction.

Source: National Planning Commission, Fifth Plan in Brief, 1975

Table 6.1

MONETARY SURVEY
(In Million Rupees)

	<u>Amounts Outstanding at Mid-July</u>									
	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u> ^{1/}
Foreign Assets (net)	1,007.2	1,047.6	1,179.1	1,383.0	1,451.5	1,029.1	1,575.0	1,875.2	1,783.3	2,167.0
<u>Domestic Credit</u>	<u>96.8</u>	<u>212.8</u>	<u>361.8</u>	<u>597.3</u>	<u>970.2</u>	<u>1,637.8</u>	<u>1,763.3</u>	<u>2,125.0</u>	<u>2,905.3</u>	<u>3,565.7</u>
Claims on Government (net)	-201.2	-145.3	-80.3	-42.2	139.9	285.7	479.8	749.8	965.5	1,154.2
Claims on Public Enterprises	39.1	37.3	41.8	96.1	128.6	568.7	567.3	511.0	868.7	1,107.5
Claims on Private Sector	258.9	320.8	400.3	459.0	701.7	783.4	716.2	864.2	1,071.1	1,304.0
<u>Liquidity</u>	<u>975.3</u>	<u>1,072.3</u>	<u>1,261.8</u>	<u>1,529.2</u>	<u>1,911.0</u>	<u>2,064.4</u>	<u>2,524.0</u>	<u>3,223.0</u>	<u>3,772.1</u>	<u>4,516.6</u>
Money	763.3	793.4	857.7	1,015.8	1,281.1	1,337.7	1,452.5	1,852.9	2,060.6	2,006.5
Time Deposits	212.0	278.7	404.1	513.4	629.9	726.7	1,071.5	1,370.1	1,711.5	2,510.1
Other Items (net)	128.7	188.3	279.1	451.1	510.7	602.5	814.3	777.2	916.5	1,216.1

^{1/} Provisional.

Source: Nepal Rastra Bank.

Table 6.2

MONETARY AUTHORITIES' ACCOUNT
(In Million Rupees)

	<u>Amounts Outstanding at Mid-July</u>								
	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Foreign Assets	924.4	1,037.9	1,119.9	1,288.7	1,368.1	1,173.2	1,498.2	1,809.3	1,673.0
Claims on Government	111.6	158.5	183.5	217.9	317.6	431.9	533.5	437.7	792.7
Claims on Non-financial Public									
Enterprises	-	-	-	-	-	1.5	3.0	3.0	5.0
Claims on Private Sector	7.2	5.3	8.5	9.4	19.7	21.6	22.6	39.5	33.5
Claims on Other Financial									
Institutions	11.8	18.9	34.4	53.8	43.7	134.7	113.1	175.2	254.4
Claims on Commercial Banks	21.0	10.8	1.3	7.3	151.0	368.9	24.1	55.4	174.1
Other Assets	54.7	62.2	57.0	84.7	100.6	124.2	144.9	114.8	140.0
Reserve Money	707.2	700.3	740.4	885.6	1,117.2	1,178.9	1,278.5	1,594.8	1,849.7
Of which:									
Currency Outside Banks & Government	531.4	576.1	601.2	694.7	878.6	916.5	963.6	1,193.2	1,351.9
Foreign Liabilities ^{1/}	-	52.9	37.6	54.9	102.9	275.3	152.6	111.0	107.9
Government Deposits ^{1/}	294.2	306.8	324.9	276.6	276.0	246.7	173.3	167.8	178.7
Capital & Reserves	82.0	106.6	189.7	306.5	271.0	289.8	409.8	459.2	526.0
Other Liabilities	47.3	127.0	112.0	138.2	233.6	265.3	325.2	302.1	410.4

^{1/} Includes currency held by Government.

Source: Nepal Rastra Bank.

Table 6.3

ASSETS AND LIABILITIES OF COMMERCIAL BANKS
(In Million Rupees)

	<u>Amounts Outstanding at Mid-July</u>								
	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Reserves	<u>78.9</u>	<u>128.9</u>	<u>134.8</u>	<u>140.5</u>	<u>92.7</u>	<u>151.5</u>	<u>190.3</u>	<u>417.1</u>	<u>348.4</u>
Cash	20.7	26.9	30.2	32.5	38.0	48.0	52.0	58.8	74.9
Balances with Rastra Bank	58.2	102.0	104.6	108.0	54.7	103.5	138.3	308.7	372.5
Foreign Assets	<u>92.6</u>	<u>76.5</u>	<u>118.5</u>	<u>167.6</u>	<u>209.2</u>	<u>238.8</u>	<u>372.5</u>	<u>423.4</u>	<u>456.8</u>
Claims on Government	17.9	17.2	65.8	100.9	98.3	100.4	119.6	479.9	351.5
Claims on Non-financial Public Enterprises	20.5	16.5	0.8	33.0	79.9	346.3	338.7	256.3	473.6
Claims on Private Sector ^{1/}	251.7	315.5	391.8	449.6	682.0	845.6	804.2	898.9	1,235.3
Claims on Other Financial Institutions	6.8	1.9	6.6	9.3	5.0	2.4	1.9	2.3	38.0
Other Assets	50.8	50.0	72.6	84.8	118.0	146.2	174.1	235.2	394.0
<u>Assets = Liabilities</u>	<u>519.2</u>	<u>606.5</u>	<u>790.9</u>	<u>985.7</u>	<u>1,285.1</u>	<u>1,831.2</u>	<u>2,001.3</u>	<u>2,663.1</u>	<u>3,197.6</u>
Demand Deposits	<u>142.4</u>	<u>166.6</u>	<u>189.2</u>	<u>233.0</u>	<u>290.2</u>	<u>340.4</u>	<u>387.6</u>	<u>519.8</u>	<u>577.2</u>
Fixed and Savings Deposits	<u>196.2</u>	<u>261.5</u>	<u>382.7</u>	<u>477.3</u>	<u>568.9</u>	<u>689.2</u>	<u>1,001.4</u>	<u>1,292.3</u>	<u>1,599.5</u>
Foreign Liabilities	<u>9.8</u>	<u>13.9</u>	<u>21.7</u>	<u>18.4</u>	<u>22.9</u>	<u>107.6</u>	<u>143.1</u>	<u>246.5</u>	<u>238.6</u>
Government Deposits	<u>36.4</u>	<u>14.2</u>	<u>4.7</u>	-	-	-	-	-	-
Credit from Rastra Bank	<u>20.9</u>	<u>10.8</u>	<u>1.3</u>	<u>7.4</u>	<u>151.0</u>	<u>368.9</u>	<u>24.0</u>	<u>55.4</u>	<u>174.1</u>
Capital and Reserves^{2/}	<u>15.5</u>	<u>15.7</u>	<u>15.7</u>	<u>18.3</u>	<u>18.9</u>	<u>23.3</u>	<u>35.9</u>	<u>51.8</u>	<u>57.9</u>
Other Liabilities	<u>98.0</u>	<u>123.8</u>	<u>175.6</u>	<u>231.3</u>	<u>233.2</u>	<u>301.8</u>	<u>409.3</u>	<u>497.3</u>	<u>550.3</u>

^{1/} Includes credit to rice exporting companies since their establishment in November 1974.

^{2/} Includes net profits.

Source: Nepal Rastra Bank.

Table 6.4

AGRICULTURAL DEVELOPMENT BANK -
RESOURCES AND UTILIZATION OF FUNDS
(In Million Rupees)

	<u>Amounts Outstanding at Mid-July</u>								
	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979 4/</u>
Paid-up Capital	22.9	33.1	44.8	58.2	66.0	96.8	107.7	114.0	119.4
HMG	19.8	29.7	38.7	48.7	54.3	64.5	74.5	79.5	84.5
Nepalese Rastra Bank	2.5	2.5	5.0	8.3	10.0	30.0	30.0	30.0	30.0
Individual & Cooperatives	0.6	0.9	1.1	1.2	1.7	2.3	3.2	4.5	4.9
Deposit in the Bank	5.3	4.8	5.0	6.3	7.4	9.3	51.4	49.1	47.7
Current	3.6	4.2	4.6	6.0	7.1	8.6	29.7	19.1	16.5
Savings	0.2	0.2	0.2	0.2	0.1	0.4	19.6	29.4	28.7
Fixed	0.0	0.2	0.1	0.1	0.2	0.3	2.1	0.6	2.5
Others	1.5	0.2	0.1	0.0	-	-	-	-	-
Reserve Fund	1.8	1.9	2.4	16.1	17.7	20.6	23.3	23.3	5.1
Borrowings	8.0	7.5	22.3	49.4	122.0	88.1	132.6	220.2	282.3
Nepal Rastra Bank	6.6	6.5	12.5	24.6	98.2	50.8	89.4	127.4	189.1
Foreign	-	-	8.8	21.9	21.5	36.8	42.3	46.0	43.2
Others	1.4	1.0	1.0	2.9	2.3	0.5	0.9	46.8	50.0
Compulsory Savings	-	-	-	50.3	58.9	88.8	74.2	58.2	47.9
Other Liabilities	1.5	2.4	5.1	32.7	23.8	25.9	35.7	48.5	79.9
<u>Liabilities = Assets</u>	39.5	49.7	79.6	213.0	295.8	329.5	433.4	513.3	582.1
Loans Outstanding	31.4	41.3	56.7	121.0	226.7	221.9 3/	290.6	360.3	401.9
Agricultural Production & Farm Improvement	15.9	23.1	36.4	58.2	76.7	101.9	N/A	N/A	N/A
Agzoindustries	12.8	14.8	16.0	20.6	36.0	40.0 3/	N/A	N/A	N/A
Credit to AIC 1/	-	-	-	15.1	82.9	35.3	N/A	N/A	N/A
Credit to NFC 2/	-	-	-	-	-	8.7	N/A	N/A	N/A
Investments	2.1	2.1	2.1	41.5	20.5	21.8	19.0	24.2	27.1
Shares	-	-	-	0.4	4.1	4.5	4.5	4.8	4.9
Government Securities	2.0	2.0	2.0	16.4	16.4	16.3	13.3	13.2	13.2
Fixed Deposits	0.1	0.1	0.1	20.7	-	1.0	1.2	6.2	9.0
Cash and Bank Balances	2.8	2.3	6.6	9.2	8.4	13.9	18.0	15.1	11.4
Other Assets	3.2	4.0	14.2	41.2	40.2	71.0	97.3	113.7	141.7

1/ Agricultural Inputs Corporation

2/ Nepal Food Corporation

3/ Excluding Rs. 3.0 million, classified as "bad debts."

4/ Mid-January

Source: Nepal Rastra Bank

Table 6.5

NEPAL INDUSTRIAL DEVELOPMENT CORPORATION
RESOURCES AND UTILIZATION OF FUNDS
(In Million Rupees)

	<u>Amounts Outstanding at Mid-July</u>									
	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978 1/</u>	<u>1979 1/ 2/</u>
Paid-up Capital	34.4	37.4	79.9	99.3	119.3	129.3	139.3	157.8	157.8	157.8
Reserves and Surpluses	1.3	1.8	2.2	2.2	3.7	2.1	2.6	4.9	8.1	14.5
Subsidies and Grants	0.5	0.2	0.4	0.4	0.3	0.3	0.4	0.9	0.4	-
Borrowings in:	<u>28.0</u>	<u>40.0</u>	<u>39.1</u>	<u>39.2</u>	<u>42.0</u>	<u>52.9</u>	<u>70.4</u>	<u>86.7</u>	<u>130.1</u>	<u>131.6</u>
Rupees	-	2.8	3.3	2.3	2.0	1.7	7.4	30.5	72.2	74.7
Foreign Currencies	28.0	37.2	35.7	36.9	40.0	51.2	63.0	41.7	57.9	56.9
Other Liabilities	16.9	7.4	9.3	8.1	10.5	10.9	15.9	34.7	46.4	41.4
<u>Liabilities = Assets</u>	81.1	86.8	130.9	149.9	175.8	195.5	228.6	285.0	342.8	345.3
Financial Assistance:	<u>51.2</u>	<u>61.5</u>	<u>67.1</u>	<u>76.0</u>	<u>100.6</u>	<u>149.3</u>	<u>182.7</u>	<u>223.5</u>	<u>274.8</u>	<u>291.6</u>
Direct loans	42.4	52.0	51.1	57.6	76.5	127.1	152.8	179.8	221.3	237.4
Guarantees for loans	4.0	4.1	4.4	4.6	4.9	1.1	1.9	11.0	19.6	19.4
Stock participation	4.8	5.4	11.6	13.8	19.2	21.1	28.0	32.7	33.9	34.8
Investment in Industrial Estate	8.8	8.8	9.6	9.6	9.6	9.6	9.4	9.4	9.4	9.4
Investment in Government Securities	-	-	-	-	-	2.3	2.3	2.4	3.1	2.4
Cash Balances	2.5	7.0	12.5	25.2	27.6	15.6	0.5	16.6	14.0	6.0
Other Assets	18.6	9.5	41.7	39.1	38.0	8.7	33.7	33.1	41.5	35.9

1/ Provisional

2/ Mid-January

Source: Nepal Industrial Development Corporation

Table 6.6

NEPAL INDUSTRIAL DEVELOPMENT CORPORATION

DISTRIBUTION OF INDUSTRIAL LOANS
(Percentage)

<u>Type of Industry</u>	<u>FY74</u>	<u>FY75</u>	<u>FY76</u>	<u>FY77</u>	<u>FY78</u>	<u>FY79 1/</u>
Hotels and Tourism	31.9	33.7	37.1	41.9	42.5	45.2
Transportation	8.3	4.1	1.8	.7	3.9	2.7
Power	3.7	2.3	1.9	1.0	2.1	1.5
Manufacturing	54.3	58.4	57.6	54.0	48.1	47.8
Cement	21.4	19.1	14.0	9.1	7.1	5.3
Food <u>2/</u>	18.0	23.6	28.3	31.0	31.2	34.4
of which sugar	(8.3)	(4.9)	(0.2)	(0.2)	(0.1)	(0.7)
Brewery	1.9	0.9	0.7	0.3	0.3	0.06
Textiles (including jute)	0.3	3.9	4.7	3.9	4.2	3.8
Saw milling & wood products	2.3	1.7	1.5	0.9	1.2	0.6
Straw Board	0.2	0.1	-	0.3	-	-
Printing & publishing	0.2	0.3	0.2	0.7	0.6	0.5
Chemicals	3.6	4.4	2.3	5.7	1.9	1.6
Stone Products	0.2	0.3	0.6	0.2	0.1	0.1
Light machinery	2.9	1.9	3.6	1.3	1.0	0.0
Icemaking & cold storage	3.3	2.2	1.7	0.6	0.5	0.4
Miscellaneous	<u>1.8</u>	<u>1.5</u>	<u>1.6</u>	<u>2.4</u>	<u>3.4</u>	<u>2.8</u>
TOTAL	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

1/ As of January 15, 1979

2/ Mostly rice mills

Source: Nepal Industrial Development Corporation, Kathmandu, Nepal

Table 7.1

ARLA, PRODUCTION AND YIELDS OF MAJOR CROPS

	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
FOODCRAINS:														
Paddy:														
Area	1,101	1,111	1,100	1,154	1,172	1,173	1,122	1,204	1,142	1,227	1,240	1,256	1,262	1,264
Production	2,201	2,241	2,007	2,027	2,178	2,241	2,304	2,358	2,010	2,416	2,452	2,605	2,386	2,282
Yield	2.00	1.99	1.82	1.75	1.86	1.91	2.05	1.95	1.76	1.97	1.97	2.07	1.89	1.81
Maize:														
Area	437	451	450	412	421	433	445	435	446	453	458	452	445	445
Production	854	856	824	735	765	795	833	730	822	814	827	748	797	740
Yield	1.95	1.90	1.83	1.78	1.81	1.83	1.86	1.67	1.84	1.80	1.80	1.66	1.79	1.66
Wheat:														
Area	100	118	126	192	208	226	228	247	259	274	291	329	348	366
Production	126	147	159	204	233	265	193	225	312	308	331	387	362	411
Yield	1.26	1.25	1.26	1.07	1.13	1.17	0.84	0.91	1.20	1.24	1.13	1.17	1.04	1.12
Barley:														
Area	24	27	27	23	26	26	27	28	27	28	28	26	25	26
Production	26	28	28	23	22	24	25	25	25	26	26	25	21	22
Yield	1.08	1.04	1.04	0.92	0.85	0.92	0.93	0.89	0.93	0.93	0.92	0.93	0.83	0.88
Millet:														
Area	96	100	100	102	109	112	115	115	121	125	125	126	123	121
Production	63	120	120	113	121	125	125	130	134	142	143	143	138	130
Yield	0.66	1.20	1.20	1.11	1.11	1.12	1.30	1.13	1.11	1.14	1.14	1.13	1.13	1.07
CASH CROPS:														
Sugar Cane:														
Area	9	13	10	11	12	13	14	15	15	16	15	15	18	23
Production	126	192	147	169	189	216	236	245	246	267	251	253	311	387
Yield	14.0	14.77	14.70	15.36	15.75	16.62	16.86	16.33	16.40	16.69	16.54	16.76	17.30	16.90
Jute:														
Area	32	32	32	47	46	52	55	60	54	33	34	33	40	47
Production	39	39	38	46	43	49	53	59	55	40	41	41	45	56
Yield	1.22	1.22	1.19	0.98	0.93	0.94	0.96	0.98	1.02	1.21	1.23	1.21	1.36	1.40
Oilseed:														
Area	108	96	98	97	101	103	106	111	122	114	112	113	108	133
Production	51	51	58	52	54	57	55	57	60	65	65	68	61	78
Yield	0.47	0.53	0.59	0.54	0.53	0.55	0.52	0.51	0.49	0.57	0.57	0.60	0.57	0.59
Tobacco:														
Area	8	8	8	9	9	9	9	9	9	5	7	7	7	8
Production	-----	-----	-----	n.a.	-----	-----	-----	7	7	4	5	5	5	6
Yield	-----	-----	-----	n.a.	-----	-----	-----	8	0.78	0.80	0.71	0.71	0.74	0.75
Potato:														
Area	29	42	43	43	43	46	49	51	51	53	54	53	52	50
Production	186	277	300	245	250	263	273	294	294	306	307	304	269	271
Yield	6.41	6.60	9.98	5.70	5.81	5.72	5.57	5.77	5.76	5.77	5.72	5.88	5.15	5.36

Note: Area in '000 ha. Production in '000 m ton. Yield in m ton/ha.

Source: Ministry of Finance, Economic Survey, various issues.

Table 7.2

ANNUAL CONSUMPTION OF AGRICULTURAL INPUTS

	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
Chemical Fertilizer (million tons)	15,861	17,797	25,153	32,555	36,778	36,361	31,131	38,000	44,000
High-Yielding Seeds: (million tons)									
Paddy	210	102	265	160	414	328	468	359	299
Wheat	411	326	814	1,873	1,366	1,555	1,559	1,812	2,098
Maize	40	47	56	50	46	51	301	102	145
Agricultural Tools ('000 Rupees)	1,145	1,578	1,358	3,186	2,925	1,859	4,723	3,220	n.a.
Plant Protection Materials ('000 Rupees)	218	93	505	305	243	610	869	1,322	n.a.

Source: Agricultural Inputs Corporation.

Table 8.1

PRODUCTION OF PRINCIPAL INDUSTRIES

<u>Type of Industry</u>	<u>Units ('000)</u>	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
Sugar	Metric tons	16.2	14.5	7.6	11.0	14.0	12.0	11.0	16.0	27.0
Cigarettes	Million	1.47	2.08	2.24	2.40	2.52	3.00	2.45	1.77	1.63
Matches	Gross	515.8	491.3	526.7	587.0	662.0	649.0	679.0	658.0	667.0
Jute Manu- facturers	Metric tons	10.5	13.5	12.9	14.0	13.0	12.0	16.0	17.0	n.a.
Liquors	Liters	87.9	80.4	125.9	188.0	206.0	224.0	580.0	522.0	687.0
Soaps	Kg.	----- n.a. -----				952.0	891.0	970.0	1,855.0	n.a.
Leather Goods:										
(a) Shoes	Pairs	42.0	65.6	70.0	83.0	82.0	70.0	59.0 ^{1/}	55.0 ^{1/}	59.0
(b) Leather	Kg.	138.9	152.0	170.8	187.0	80.0	55.0	665.0 ^{1/}	1,096.0 ^{1/}	n.a.
Agriculture implements	Kg.	142.7	65.1	114.3	150.0	150.0	300.0	92.0 ^{1/}	287.0	313.0
Tea	Kg.	20.0	20.5	24.4	36.0	44.0	47.0	328.0	401.0	405.0
Stainless steel utensils	Kg.	933.4	356.5	132.5	245.0	209.0	156.0	175.0	157.0	173.0
Straw board	Kg.	357.7	104.1	775.3	705.0	937.0	1,022.0	900.0	1,301.0	749.0
Brick & tile	Thousand in number	23.5	24.9	27.9	26.0	23.0	26.0	25.0	24.0	n.a.
Beer	Liter	-	-	137.4	403.0	542.0	688.0	816.0	630.0	788.0
Fertilizers	Kg.	-	-	----- n.a. -----		560.0	441.0	576.0	446.0	n.a.
Textiles	Meters	2,354.0	984.4	476.0	-	-	-	3,896.0	5,234.0	n.a.
Cement	Metric tons	-	-	-	-	-	-	27.0	43.0	n.a.
Plastic goods	Kg.	-	-	-	-	-	-	-	46.0	44.0
Biscuits	Kg.	-	-	-	-	-	-	-	723.0	n.a.

^{1/} Thousand pieces.

Source: Economic Survey, Ministry of Finance.

Table 8.2

CAPACITY UTILIZATION OF SELECTED INDUSTRIES^{1/}

<u>Industry</u>	<u>Unit</u>	<u>Capacity</u> ('000 units)	<u>Capacity Utilization^{2/} (in percentage)</u>			
			<u>1976/77</u>	<u>1977/78</u>	<u>First Nine Months</u>	
					<u>1977/78</u>	<u>1978/79</u>
Sugar	Tons	22 ^{3/}	73	95	86	86
Cigarettes	Sticks	3,082,500	71	65	46	61
Tea	Kgs.	550	58	62	52	54
Beer	Liters	1,200	25	66	48	70
Matches	Gross	1,170	56	58	43	46
Leather Shoes	Pairs	78	71	76	56	53
Leather Tanning	Pieces	2,103	46	62	46	44
Cotton Textiles	Meters	1,295	37	30	21	14
Jute Goods	Tons	18	78	78	67	67
Cement	Tons	48	65	75	63	25
Bricks & Tiles	Pieces	20,500	93	97	72	66

1/ Includes public corporations and registered private firms in the formal sector.

2/ Output expressed as a percentage of capacity.

3/ The capacity of the sugar industry was increased to 28 thousand tons in 1977/78.

Source: Department of Industries, Kathmandu, Nepal.

Table 8.3

HIGHWAY NETWORK
(Kilometers)

	<u>Paved</u>	<u>Gravel</u>	<u>Earth</u>	<u>Total</u>
1955	295	n.a.	365	660
1965	289	147	1390	1826
1970	961	392	1308	2661
1974/75	1575	416	1182	3173
1975/76	1666	428	1350	3444
1976/77	1751	556	1829	4136
1977/78	1851	593	2151	4595
1979(April)	1890	608	2154	4652

Source: Roads Department,
Ministry of Public Works and Transport.

Table 8.4

TOURIST ARRIVALS AND EXPENDITURES

<u>Year</u>	<u>Number of Tourists</u>	<u>Annual Growth Rate</u>	<u>Convertible Currency Expenditures Per Tourist</u> -----US\$-----
1963	7,275	-	-
1964	9,526	30.9	22
1965	9,388	-1.4	42
1966	12,567	33.9	63
1967	18,093	44.0	47
1968	24,209	33.8	38
1969	34,901	44.2	38
1970	45,970	31.7	23
1971	49,914	8.6	44
1972	52,930	6.0	97
1973	68,047	28.6	133
1974	89,838	32.0	115
1975	92,440	2.9	122
1976	105,108	13.7	173
1977	129,329	23.0	152
1978	156,123	20.7	178

Source: Department of Tourism and Nepal Rastra Bank.

Table 8.5

FAMILY PLANNING PROGRAM ACHIEVEMENT

<u>Methods</u>	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
IUD Acceptors (new)	1,109	711	1,162	607	862	1,110	1,635	1,149	863
Vasectomy Acceptors	3,888	4,441	3,900	4,161	5,166	3,702	9,169	10,953	12,172
Pill Acceptors (new)	10,263	13,496	15,868	24,056	27,141	26,943	37,640	33,250	44,346
Pill Cycles Distributed	36,329	62,865	86,831	125,178	202,590	197,061	254,311	266,594	315,200
Condom Acceptors (new)	14,800	18,785	22,908	35,713	52,075	63,814	87,876	74,782	107,112
Condoms Distributed	227,636	327,098	479,326	725,016	1,233,624	1,207,731	1,333,425	1,929,975	2,363,588
Laprosopic Acceptors	-	-	-	558	810	662	2,162	5,422	7,923
Depo-provera Acceptors	-	-	-	-	23	81	152	976	1,690
<u>Total Acceptors (new)</u>	<u>29,740</u>	<u>37,433</u>	<u>43,838</u>	<u>65,095</u>	<u>86,079</u>	<u>98,312</u>	<u>138,634</u>	<u>126,532</u>	<u>174,106</u>

Source: Ministry of Health, NFP/MCH Project, Evaluation Division.

Table 8.6

NUMBER OF PUPILS, TEACHERS, AND PUPIL/TEACHER RATIO
BY LEVEL OF EDUCATION

	<u>1970/71</u>	<u>1974/75</u>	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u>
<u>Primary</u>					
Pupils	408,471	401,034	643,835	769,049	875,494
of which, female	64,752	69,331	129,276	169,640	206,117
Teachers	18,674	17,728	20,775	23,395	24,652
of which, trained	4,983	7,287	8,142	8,794	9,605
Pupil/Teacher Ratio	22	23	31	33	36
<u>Lower Secondary</u>					
Pupils	<u>1/</u>	160,258	188,688	226,639	276,580
of which, female	<u>1/</u>	26,179	33,396	41,788	50,763
Teachers	<u>1/</u>	6,062	7,858	8,774	9,416
of which, trained	<u>1/</u>	2,061	3,014	3,432	3,845
Pupil/Teacher Ratio	<u>1/</u>	26	26	26	29
<u>Upper Secondary</u>					
Pupils	120,537	61,325	74,060	82,158	93,651
of which, female	17,265	10,606	12,536	13,598	15,431
Teachers	5,628	3,422	3,439	3,665	3,947
of which, trained	981	1,170	1,720	2,068	2,425
Pupil/Teacher Ratio	21	18	22	22	24

1/ Distributed among primary and higher secondary enrollment.

Source: Ministry of Education.

Table 8.7

NUMBER OF SCHOOLS AND ENROLLMENT RATIO
BY LEVEL OF EDUCATION AND REGION

	<u>Number of Schools</u>				<u>Enrollment Rate (%)</u>			
	<u>1974/75</u>	<u>1975/76</u>	<u>1977/78</u>	<u>1978/79</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1977/78</u>	<u>1978/79</u>
<u>Primary Level^{1/}</u>								
<u>Region</u>								
Eastern	2,031	2,104	2,189	2,267	43.1	56.3	67.8	76.3
Central	2,623	2,384	2,448	2,540	39.5	52.5	59.9	68.2
Western	2,165	2,328	2,375	2,441	64.4	83.6	95.7	104.2
Far Western	<u>1,808</u>	<u>1,952</u>	<u>2,055</u>	<u>2,156</u>	<u>36.8</u>	<u>50.8</u>	<u>61.2</u>	<u>67.5</u>
<u>Total</u>	<u>8,267</u>	<u>8,708</u>	<u>9,067</u>	<u>9,404</u>	<u>43</u>	<u>59</u>	<u>69</u>	<u>77</u>
<u>Lower Secondary Level^{2/}</u>								
<u>Region</u>								
Eastern	497	527	561	613	39.7	30.8	31.6	33.4
Central	505	596	618	698	46.4	34.8	33.5	34.6
Western	576	695	713	749	33.4	27.7	28.8	30.1
Far Western	<u>300</u>	<u>471</u>	<u>508</u>	<u>579</u>	<u>30.6</u>	<u>21.2</u>	<u>21.8</u>	<u>26.8</u>
<u>Total</u>	<u>1,878</u>	<u>2,289</u>	<u>2,400</u>	<u>2,639</u>	<u>38</u>	<u>29</u>	<u>30</u>	<u>32</u>
<u>Upper Secondary Level^{3/}</u>								
<u>Region</u>								
Eastern	122	132	142	153	39.3	42.3	36.7	34.3
Central	162	172	180	193	49.7	45.7	44.3	42.1
Western	125	147	152	159	33.4	31.7	30.6	29.7
Far Western	<u>66</u>	<u>69</u>	<u>78</u>	<u>88</u>	<u>20.5</u>	<u>32.0</u>	<u>28.1</u>	<u>23.7</u>
<u>Total</u>	<u>475</u>	<u>520</u>	<u>552</u>	<u>593</u>	<u>40</u>	<u>39</u>	<u>36</u>	<u>40</u>

^{1/} Enrollment rates apply to primary age group.

^{2/} Enrollment rates apply to primary level leavers.

^{3/} Enrollment rates apply to lower secondary level leavers.

Source: Ministry of Education.

Table 8.8

GOVERNMENT EXPENDITURE ON EDUCATION BY LEVEL
(In Current Prices)

	<u>1970/71</u>		<u>1974/75</u>		<u>1975/76</u>		<u>1976/77</u>		<u>1977/78</u>		<u>1978/79</u>	
	<u>Rs. '000</u>	<u>%</u>	<u>Rs. '000</u>	<u>%</u>	<u>Rs. '000</u>	<u>%</u>	<u>Rs. '000</u>	<u>%</u>	<u>Rs. '000</u>	<u>%</u>	<u>Rs. '000</u>	<u>%</u>
Primary	9,813	19.0	37,443	23.6	52,682	21.4	64,600	25.1	73,000	26.3	88,400	27.4
Secondary	4,253	6.9	34,959	22.0	40,024	16.3	48,731	18.9	54,500	19.6	62,900	19.5
Higher	37,623	74.1	44,120	27.8	100,087	40.7	93,124	36.0	93,947	33.8	117,464	36.4
Others	-	-	<u>43,326</u>	<u>26.6</u>	<u>53,197</u>	<u>21.6</u>	<u>51,491</u>	<u>20.0</u>	<u>56,224</u>	<u>20.3</u>	<u>53,941</u>	<u>16.7</u>
<u>Totals:</u>	<u>51,689</u>	<u>100.0</u>	<u>158,848</u>	<u>100.0</u>	<u>245,990</u>	<u>100.0</u>	<u>257,874</u>	<u>100.0</u>	<u>277,671</u>	<u>100.0</u>	<u>322,705</u>	<u>100.0</u>

Source: Ministry of Education.

Table 8.9

HEALTH INFRASTRUCTURE
(at end of fiscal year)

	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u> ^{1/}
Hospitals	59	61	64	65	68
Hospital Beds	2121	2238	2294	2309	2484
Health Centers	35	31	35	29	26
Health Posts	351	403	433	483	533
Ayurvedic Services Centers	82	82	82	82	85

^{1/} At end of nine months.

Source: Department of Health Services

Table 9.1

KATHMANDU CONSUMER PRICE INDEX
(FY 1972/73 = 100)

<u>Commodities</u>	<u>Weight</u>	<u>Number of Items</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79^{1/}</u>
<u>Food and Beverages</u>	<u>0.6152</u>	<u>56</u>	<u>117.0</u>	<u>135.6</u>	<u>140.6</u>	<u>135.9</u>	<u>155.8</u>	<u>159.0</u>
Restaurant meals	0.0288	6	122.0	140.6	149.1	152.4	161.6	
Grains and cereal products	0.3012	10	109.3	126.6	135.8	121.4	133.5	
Pulses	0.0247	4	109.3	127.5	124.9	130.2	184.9	
Vegetables	0.0851	10	140.4	154.9	157.6	161.0	190.0	
Spices	0.0176	7	132.8	174.0	191.8	194.0	265.9	
Meat, fish and eggs	0.0421	5	119.2	157.3	164.6	165.8	179.8	
Milk and milk products	0.0382	3	103.8	118.4	118.8	118.9	119.4	
Oil and clarified butter	0.0401	3	138.1	151.0	120.7	141.3	201.0	
Sugar	0.0243	2	108.0	122.5	138.4	142.6	139.9	
Beverages	0.0131	6	107.0	125.6	133.3	145.4	154.6	
<u>Non-Food Items and Services</u>	<u>0.3848</u>	<u>114</u>	<u>110.8</u>	<u>131.5</u>	<u>141.9</u>	<u>149.8</u>	<u>156.1</u>	<u>159.8</u>
Cloth, clothing and sewing services	0.1000	38	114.3	130.2	138.3	143.5	152.3	
Footwear	0.0173	7	109.5	133.9	160.9	154.2	154.9	
Housing	0.1200	28	108.4	131.8	143.3	153.1	161.0	
Transport and com- munications	0.0233	7	120.4	161.8	163.3	174.2	174.2	
Medical and personal care	0.0413	19	106.0	121.6	136.5	147.6	148.4	
Education, reading material and recreation	0.0563	11	114.5	131.5	134.0	138.7	152.1	
Cigarettes	0.0266	4	101.4	122.0	142.5	160.6	152.6	
<u>Overall Index</u>	<u>1.0000</u>	<u>170</u>	<u>114.6</u>	<u>134.0</u>	<u>141.1</u>	<u>141.5</u>	<u>155.9</u>	<u>159.2</u>
Domestic goods	0.7844		114.6	132.7	140.4	138.7	154.0	156.7
Imported goods	0.2156		115.7	138.8	142.9	151.8	163.1	168.5

^{1/} Nine month average

Source: Nepal Rastra Bank

Table 9.2

NATIONAL URBAN CONSUMER PRICE INDEX
(FY 1972/73 = 100)

<u>Commodities</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u>
<u>Food and Beverages</u>	<u>122.1</u>	<u>141.4</u>	<u>135.7</u>	<u>136.1</u>	<u>156.4</u>	<u>158.6</u>
Restaurant meals	120.4	138.6	147.4	147.2	152.8	
Grains and cereal products	119.8	138.2	128.2	119.3	132.3	
Pulses	114.8	143.7	124.7	137.6	198.3	
Vegetables	130.3	143.4	145.8	158.4	186.6	
Spices	140.6	184.7	181.8	193.9	271.8	
Meat, fish and eggs	117.4	145.6	155.6	157.1	169.0	
Milk and milk products	117.0	137.9	151.6	159.8	164.6	
Oil and clarified butter	140.3	153.4	118.0	143.6	187.9	
Sugar	104.9	119.1	135.5	139.0	135.6	
Beverages	107.9	124.3	135.2	134.1	160.6	
<u>Non-Food Items and Services</u>	<u>109.5</u>	<u>130.3</u>	<u>139.8</u>	<u>149.6</u>	<u>156.2</u>	<u>169.2</u>
Cloth, clothing and sewing services	111.7	122.6	126.1	131.8	138.4	
Footwear	111.8	130.0	146.6	144.6	145.1	
Housing	108.5	135.7	147.6	161.2	172.3	
Transport and communications	117.7	147.7	155.7	165.1	163.8	
Medical and personal care	106.9	124.6	135.9	146.5	149.2	
Education, reading material and recreation	113.0	129.5	135.2	141.7	152.2	
Cigarettes	104.8	126.5	144.7	159.3	154.1	
<u>Overall Index</u>	<u>118.2</u>	<u>138.0</u>	<u>137.0</u>	<u>140.7</u>	<u>156.4</u>	<u>161.8</u>

Source: Nepal Rastra Bank

Table 10.1
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OUTCOME OF OPERATIONS OF CERTAIN PUBLIC ENTERPRISES
(In Thousand Rupees)

	Paid-up Capital	Profit/Loss (-)				
		1972/73	1973/74	1974/75	1975/76	1976/77
1. Brick and Tile Factory	11,335	-18	-835	-340	757	674
2. Fuel Corporation	1,092	63	235	59	1,983	4,566
3. Agro-Lime Industry	1,650	-	-	105	-75	-113
4. Agricultural Tools Factory	11,140	-582	165	795	-756	217
5. Gorkhapatra Corporation	2,535	40	392	288	123	188
6. Cottage Industries Emporium	n.a.	18	5	n.a.	82	232
7. Janakpur Cigarette Factory	27,226	11,340	13,287	n.a.	13,281	5,329
8. Dairy Development Corporation	12,426	28	-245	326	-83	-173
9. Timber Corporation	6,886	1,188	939	898	n.a.	n.a.
10. Transit and Warehousing Limited	5,500	-32	-414	-114	-114	-83
11. Textile Processing	6,000	n.a.	n.a.	n.a.	n.a.	n.a.
12. NIDC	129,267	385	1,231	872	4,807	2,116
13. Tea Development Corporation	11,087	-720	28	3,102	n.a.	n.a.
14. Electricity Corporation	259,451	630	-784	18,332	-9,118	10,844
15. NCCN	3,000	1,928	3,783	-1,488	4,845	-3,420
16. Vegetable Ghee Industries	1,500	n.a.	n.a.	n.a.	n.a.	n.a.
17. Leather and Shoe Factory	11,568	-805	-539	-1,380	n.a.	n.a.
18. Birgunj Sugar Factory	55,218	4,163	3,900	2,156	-212	246
19. Rastra Recording Corporation	473	55	-1	40	-21	-9
20. Commercial Bank	3,000	745	2,246	-	4,648	2,502
21. Cultural Corporation	1,060	63	-328	n.a.	-115	-223
22. Tobacco Development Corporation	2,200	-162	-223	-4	62	4,149
23. Royal Drug Limited	7,042	227	423	113	1,169	1,237
24. RNAC	42,113	-8,381	1,308	5,916	-1,192	1,699
25. Balaju Yantra Shala	1,828	-	-	607	n.a.	n.a.
26. Film Corporation	14,916	-	-	-944	804	654
27. Electronic Data	1,197	-	-	n.a.	n.a.	n.a.
28. Credit Guarantee Corporation	3,000	-	-	118	n.a.	n.a.
29. Nepal Bank Limited	10,000	-	-	n.a.	n.a.	n.a.
30. National Commercial Bank	3,000	-	-	n.a.	n.a.	n.a.
31. National Insurance Corporation	4,200	-	-	n.a.	n.a.	n.a.
32. Agriculture Development Bank	65,995	-	-	1,697	n.a.	n.a.
33. Transport Corporation of Nepal	41,483	-	-	300	n.a.	n.a.
34. Nepal Telecommunications Corporation	55,643	-	-	52	n.a.	n.a.

Sub-Totals:

Table 10.1
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OUTCOME OF OPERATIONS OF CERTAIN PUBLIC ENTERPRISES
(In Thousand Rupees)

	Paid-up Capital	Profit/Loss (-)				
		1972/73	1973/74	1974/75	1975/76	1976/77
35. Far Western Rice Exporting Corporation	3,260	-	-	1,945	n.a.	n.a.
36. Kosi Rice Exporting Corporation	4,308	-	-	4,289	n.a.	n.a.
37. Mechi Rice Exporting Corporation	3,154	-	-	1,125	n.a.	n.a.
38. Narayani Rice Exporting Corporation	2,885	-	-	5,015	n.a.	n.a.
39. Sagarmatha Rice Exporting Corporation	3,139	-	-	1,634	n.a.	n.a.
40. Lumbini Rice Exporting Corporation	2,241	-	-	3,421	n.a.	n.a.
41. Janakpur Rice Exporting Corporation	3,134	-	-	1,068	-8,432	-20,690
42. Jute Development and Trade Corporation	3,960	-	-	-8,432	n.a.	n.a.
43. Cottage Industries and Handicraft Emporium	1,533	-	-	71	n.a.	n.a.
44. National Trading Limited	2,500	-	-	-6,192	n.a.	n.a.
45. Nepal Oil Corporation	17,770	-	-	3,906	n.a.	n.a.
46. Nepal Food Corporation	25,974	-	-	-180	n.a.	n.a.
47. Agricultural Input Corporation	18,140	-	-	1,388	n.a.	n.a.
48. Eastern Electricity	15,112	-	-	n.a.	n.a.	764
49. Drinking Water and Sewerage	44,492	-	-	-398	177	336
50. Ashahaya Kalyan Kendra	300	-	-	11	353	357
51. Chandeswori Textile	100	-	-	22	n.a.	n.a.
52. Nepal Cheuri Ghee	300	-	-	n.a.	n.a.	n.a.
53. Rastriya Chamal Kharkhana	1,480	-	-	42	n.a.	n.a.
54. Hedauda Textile	1,000	-	-	-101	n.a.	n.a.
55. Balaju Textile	3,000	-	-	-10	n.a.	n.a.
56. Raghupati Jute Mill	7,138	-	-	-921	n.a.	n.a.
57. Himal Cement Factory	15,586	-	-	n.a.	n.a.	n.a.
58. Nepal Livestock Corporation	4,998	-	-	n.a.	n.a.	n.a.
		+20,871	+27,914	+59,661	+28,246	+41,110
		-10,700	-3,397	-20,144	-24,963	-24,711
	999,525	+10,171	+24,517	+39,517	+3,283	+16,399

Note: Profit/Loss data not available for corporations 25 - 58 prior to 1974/75.

Source: Corporation Coordination Council.

