

Preface

The present plan is the Sixth in the series of planned development of the country. This summary of the draft plan has been prepared to enable the panchas and the intellectuals along with the people at large to know more about the plan within a short span of time. Special care has, therefore, been taken to include the salient features of the plan in this summary.

Although periodic plans of the past have succeeded in laying down the basic infrastructures needed for the socio-economic development, problem relating to poverty, backwardness, unemployment and low productivity are still present as so many challenges. Caught in the pincer movement of the economic development, which is moving ahead at a slow paste, and the pressure of population, which is increasing sharply, the complex problem of development are being compounded.

For this reason, while drafting the Sixth Plan, the basic objectives have been to raise production, to widen the employment opportunities and to fulfill the minimum requirement of the broad masses. It is hope that they duly reflect the needs and aspiration of the people and also will be further strengthening the National economy. Besides, attempts have been made to make the present plan more practice and realistic on the basis of the experiences gained in the implementation of the past plans, development potentials and economic capability. Time demands that the present slow growth rate of our economy be quickened in speed. If the country fails in its attempts to bring about concrete improvements in the economic situation within the next five or ten years, the socio-economic consequences may turn out to be very grave, it seems.

Attempt has been made in the present plan to reflect these compulsions also. It, therefore, requires that the entire attention and efforts of the country should be centered on accelerating the economic growth rate. To this end are required national determination, firmness and discipline of a higher order than now.

The draft of the Sixth Plan has been drawn up with cooperative of the different Ministries, Departments and Corporation of His Majesty's Government and other Governmental, Semi-Governmental, and non-Governmental agencies along with the officials of the National Planning Commission and those intellectuals who were invited to give their suggestion. To all of them the National Planning Commission owes a deep debt of gratitude. It is hoped that useful suggestions will be coming forward from all concerned in the process of finalizing the plan.

Singha Durbar, Kathmandu

October ,1980.

National Planning Commission.

1. The Review of the Fifth Plan

In the course of the all-round development of the country, Nepal has so far completed five periodic plans. The Fifth Plan came to an end in the fiscal year 1970/80 and the Sixth Plan became operative in 1980/81. In this context, it might be quite appropriate to evaluate the fifth plans had been done in connection with the earlier plans so that the coming Plan can be made more effective both in formulation and execution.

The Fifth Plan was drafted with a view to increasing production of mass-consumption goods, maximizing the use of manpower and promoting regional a balance and the integration. To achieve these targets, a policy frame was developed within which emphasis was placed on mobilization of domestic resources, modification in the investment and production patterns, industrial management, development and diversification of trade etc. Against this background, a review is presented here about the economy, population, employment materials and development activities.

(a) Economic Situation

National Income, Production investment and saving: by the end of the fourth Plan, Nepal's gross domestic product stood at Rs. 16,571 million, yielding a per capita income of Rs. 1,302 whereas the GDP in the final year of the Fifth Plan (1970/80) rose to Rs. 15-8,510 million at the constant prices of 1974/75, lowering the per capita income to Rs. 1,298. During the Fifth Plan period, GDP registered an increase of 2.2 percent, not 4 to 5 percent per annum as targeted. Combined with population growth of 2.3 percent, it had, in effect, reduced the per capita income to some extent.

The gross domestic savings which was 4.8 percent of the GDP at the end of the Fourth Plan (1974/75), rose to 8.2 percent by the end of the Fifth Plan period. Similarly, the total domestic investment, which constituted 9.3 percent of GDP in 1974/75 rose to 13.5 percent in the final year of the Fifth plan period. As proportions to gross domestic products, the public and private sector investments, which stood at 4.1 and 5.2 percent respectively in 1974/75, also went up to 5.9 and 7.6 percent respectively in 1979/80.

Public Finance: During the Fifth Plan period, the total development expenditure amounted to Rs 7,823.7 million at the constant prices of 1974/75. As it exceeded both the minimum and maximum outlay targets of Rs. 6,170 million respectively, it showed an increase in the absorptive capacity of the economy.

During the fifth plan period, development expenditure went up 13.5 percent annually at the constant prices of the 1974/75. Similarly, regular expenditure showed an annual increase of 9.3 percent and revenue surplus 5.2 percent. Since the rise in regular expenses was not proportionately matched by the rise in tax and other revenues, revenue surplus expanded at a slower rate. In other words, the major portion of the development expenditure appears to have been borne out of the foreign aid.

Monetary and credit situation: Money supply expanded at an annual rate of 16.2 percent during the fifth plan period. Increase in the net foreign asset and expansion in the domestic credit were the major expansionary factors influencing the money supply. Time deposits rose at a faster rate by 27.6 percent per annum and the emerged as an important contractionary factor.

Loans and advances extended by the commercial banks totaled Rs. 1.85 billion during the plan period. Similarly the loans and investments made by the Agriculture Development Bank and Nepal Industrial Development Corporation totaled Rs. 978.6 million and 233.6 million respectively.

Price situation: The National urban consumer price index prepared by the Nepal Rastra Bank showed an annual price rise of 5.2 percent during the period of five years ending 1979/80. Food prices advanced by 4.5 percent annually and non-food prices by 6.8 percent. With the fall in the farm output and the deteriorating external price situation, the inflationary pressures became particularly pronounced in the final year of the plan period, pushing up the price index by 9.8 percent.

Foreign Trade and Balance of Payment Situation: Although the overall balance of payment position of the country remained favorable during the Fifth Plan period as indicated by the net accumulation of the foreign assets amounting to Rs. 1.10 billion in the banking sector, the foreign trade account continued to deteriorate. Import expanded at an annual rate of 14 percent whereas export growth remained sluggish at 5 percent. In real terms, exports have perhaps actually declined. The annual foreign deficits, which were at the level of Rs.925 million in 1974/75 swelled to Rs. 2.37 billion in 1979/80. The Fifth Plan period, however witnessed a remarkable success in trade diversification. With the third countries, export share went up from 16 percent to 55 percent and import to third countries mainly resulted from the diversion of exports away from India. Instead of augmentation in the total exports as such. Favorable position in the in the services and transfer accounts and expanded volume of foreign assistance were the factors offsetting the widening trade gap and creating a balance of payments surplus.

Sectoral and regional Allocation of Development Expenditures: The Fifth plan aimed at disbursing a maximum of Rs. 7,545 million and minimum of Rs. 6,170 million. But as a result of most of the sectors incurring more expenses than were provided for in the plan, actual Plan expenditures outstripped the original estimate. As

regards sectorial allocation, although top priority was accorded was the highest on power followed by administrative reform, planning and agriculture, the increase in expenditure being of the order of 56.9, 42.3 and 18.4 percent respectively while the social services and others recorded an increase of 11.8 and 10.7 percent respectively. Such increase were partly offset by the fall in the expenditure on industry, mining and other economic services like commerce, labor, tourism, water resources and meteorology to the extent of 4.7 and 8.7 percent.

In conformity with the development policy of regional balance and integration what should have been done was to make continued efforts of step up investment in the Western and Far-Western Development Religions. To do so had not been possible for the plain and simple reason that the ongoing large-scale capital projects in the Central Development Region obligated that a high proportion of the development expenditure be allocated to their completion in that period.

(b) Population, Employment and Construction Material

Population: Nepal's population had doubled in sixty years between 1911 and 1971. Birth rate being higher than the rate of mortality; the population growth rate is now 2.3 percent. If this growth rate is to continue, the population is estimated to double itself within the next 30 years.

The Fifth Plan aimed at bringing down fertility rate from 40 to 38 per thousand. And, as family planning services were made available to 800,000 married couples, the birth rate was estimated to have declined by 2.7 per thousand. Various studies made within that period, however revealed that the population curve tended to grow up instead of dipping down.

Employment: As for the employment situation, leaving aside other studies, the survey conducted by National Planning Commission itself in 1977 on employment, income distribution and consumption pattern, showed that 5.6 percent of the population were unemployed and family wise 63 percent of the rural working days and 44.7 percent of the urban working days were spent in a state of under-employment. For want of any appreciable increment of the employment opportunities in the agriculture fields in the Plan period, the majority of the national labor force had to live with unemployment or under-employment.

Technical manpower: The revised technical manpower requirement for the Fifth Plan was of the order of 24,868 persons as against the total supply of 19,975—a shortfall of 4,893 persons causing a setback in implementation of development projects.

Construction Materials: During the Plan period, the supply of construction materials like cement, structural steel and bricks lagged far behind the demand. The supply of cement stood at 700,000 metric tons, which was more than 83 percent of the minimum requirement, while that of iron rods was 85,000 metric tons. The worst case was that of bricks. Their production was sufficient to meet just 35 percent of the total requirement. As far as mineral oil was concerned, the total demand was estimated and certain at 643,100 metric tons. However, owing to certain projects not being implemented and certain other projects starting late, the actual supply was 462 thousand only. In the case of chemical fertilizer, the total intake was 51.7 percent of the estimated requirement of 160,000 metric tons. Similarly, the supply of coke and coal was 28 percent of the demand, which was expected to total 164,000 metric tons.

(C) Development Activities

Agriculture, Irrigation, Land Reforms, Forest and Medicinal Herbs: In order to raise gross domestic product by 5 percent the Fifth Plan aimed at increasing the agriculture output by 19.2 percent. In the agricultural sector itself, foodgrain production was to go up 16.7 percent as against the cash crop, which was to go up 16.7 percent as against the cash crop, which was estimated to increase by 68.1 percent. In reality, however, foodgrain production seems to have been handicapped by factors such as dependence on the vagaries of weather, limitation of irrigation land and the modernization and development process of agricultural sector falling behind schedule. Irrigation facility was extended to 95,425 hectares only while the target set by the plan was 146,000 hectares. As regards the target was to plant trees on 20,000 hectares and the percentage achieved was just 48 percent. In the case of land reforms, savings and loans recoveries, was deposited with the Agricultural Development Bank. Permanent tenancy title deeds were distributed in 39 districts. Sale and distribution of land seems to have fallen behind schedule. Survey of 681,556 hectares of land had been completed in 41 districts. At the same time, 711 Sajha institutions had been set up to cover 97 districts and the number of membership was increased to a new height of 1,193,000.

Industry, Commerce, Mining and Power: The target set for the Fifth Plan was to expand the output of the persistent power shortages and labour strikes in the latter part of the period, the industrial output recorded an annual expansion of 6.7 percent during the Plan period. In the field of cottage industries, Rs. 332,285 worth of goods were produced in the government sector as against the plan target of producing Rs. 4,500,000 worth of goods. The number of persons receiving training in cottage industries was not to good production, promotional services, data collection, import of different commodities, construction of warehouses and the like. Tourist arrivals were up 75.5 percent, leading to a 237 percent increase in foreign exchange earnings during the first four years of the Plan.

According to the Fifth target, power production was to go up 58,945 kw or 31.8 percent of the minimum target. Such a serious shortfall was accounted for by the major projects falling behind schedule, shortage of construction materials and inadequacy of manpower among other things.

Transport and communications: During the Fifth Plan period construction of 490 kms of black-top road, 580 kms of gravel road and 137 kms of fair weather road, totaling 1,2707 kms. Was envisaged. The actual achievement was, however, 719 kms of blacktop and gravel road or 67.2 percent of the minimum programme. As per the construction of the fair weather road, achievement exceeded the target by 765 percent. Most of the highways like Hetauda-Narayangarh, Butwal-Kohalpur-Surkhet, Dharan-Dhankuta and so on fell far short of the target and the construction programme of black-top and gravel roads as a whole suffered a set back.

In the field of communication, 32 post offices and 319 agency post offices were set up postal services were extended to 15 places as scheduled. Additional telephone connection numbering 4,750 were established as against the plan objective of establishing 15,150 lines.

Social Service: The Fifth Plan aimed at making primary education available to 64 percent of the 1,151,851 primary school-going children. This target was over-fulfilled during the plan period when 210.0 percent of the target or 88.3 percent of the total school-going children were enrolled in primary schools. In the same way, 120.8 percent and 63.9 percent of the targeted enrolled in the lower secondary levels respectively were achieved during the Plan period. In the fields of higher education, graduate level courses were conducted in agriculture, medicine and engineering institutes.

As regards health, 232 health posts were set up compared with the target of setting up 459 health posts and 12 hospitals were brought into operation as against the Plan objective of establishing one 15 bed hospital each in 15 to 24 districts.

While the Fifth Plan aimed at supplying piped drinking water to 12/2 percent according to the minimum programme and 13.1 percent according to the maximum programmed, the actual achievement by the end of the Plan period was 10.9 percent of the population with 139 million liters per day.

Planning and Statistics: Studies were made in employment, income distribution, consumption pattern, savings, investment and so on at the national level. Mid-term regional surveys relating to population studies in connection with the nature, number and production of industrial establishments, national income estimates etc. were successfully concluded, apart from computer survey, data proceeding and result publication of 32 offices.

2. Main Objective and Strategies of the Sixth Plan

When the country took the first faltering steps along the path of the planned development in 1956/57, the minimum pre-requisites essential to any meaningful economic development were conspicuous by their the bulk of the investment up to the Fifth Plan had to be devoted to the creation of the infrastructures needed for development. In proportion to creating such minimum economic, social and administrative foundations, which are so essential to the economic development. But in spite of those achievements, the national income could not show any substantial increase with the result that the standard of the living of the people did not much improve.

The greatest problem facing the country today is the critical economy of the mountainous region where the majority of the people live at subsistence level. As production could not keep pace with the growth of population, the trend toward converting pasturage and forest into arable land was intensified. In consequence, the ecological balance was upset, productivity was reduced and the forest of Tarai were mercilessly ravaged by the immigrants in their reckless quest for employment and food. Such depredations have now left little scope for the expansion of cultivable land in the Tarai. It has, therefore, become imperative that the mountain economy should be consolidated and strengthened, if food and work are to be provided to the fast-growing population.

Another outstanding problem is unemployment and widespread under-employment problem, which is compounded by a rapid population growth. Owing to the slow rate of economic growth, it has not been possible to increase employment opportunities to the required or desired extent. Keeping this background in view and realizing fully well that the development targets should be realistic and practical, the objectives of the Sixth Plan have been set as hereunder.

1. *To Increase Production at a Faster Rate:* It is most essential that the rate of production be speeded up, if the problems of poverty, unemployment and under-employment, so widely prevalent in the country, are to be solved. Rise in production will not only help meet the basic necessities of the people but will also invigorate the economic activities, leading to creation of more job openings. For this purpose, emphasis will be laid in the maximum utilization of the infrastructures already in existence and on the implementation of such programs as are directly conducive to rapid increment of production.

2. *To Increase Productive Employment Opportunities:* Expansion of employment opportunities is important from the point of view of equitable distribution of national income and production. It will increase production through the effective utilization of the huge manpower now going waste and will help generate employment for those who are unemployed or under-employed. For this reason the Sixth Plan aims to make available to the people a wide scope for productive employment.

3. *To Meet the Minimum Needs of the People:* Another objective of the Sixth Plan is to provide to the people such basic minimum requirements like food grains, fuel (firewood), drinking water, basic health services, primary, vocational adult education, and basic transport facilities. During the Sixth Plan period, efforts at governmental or collective levels will be made to set in motion such programmes as are connected with these basic needs and facilities, with particular emphasis on bringing them within the reach of the low-income rural community.

The three objectives enunciated above are complementary to one another. To achieve these objectives, the entire financial, physical and human resources at the disposal of the nation will be deployed to the limit within the Sixth Plan period.

Development Strategies: The following development strategies will be adopted to achieve the objectives laid down by the Sixth Plan namely to increase production, to widen the employment scope and to enable the low-income group of people to enjoy the fruits of development.

1. *To Accord Priority to Agricultural Development:* Since agriculture is the principal occupation of the majority of the people, the main physical assets for the production processes of the country and the prime impetus for augmenting the income and employment of the masses, the Sixth Plan has assigned topmost priority to the development of agricultural sector. As a result of the stagnation in the agricultural production of the mountainous region, pasture and forestland have been brought under cultivation with adverse impact on ecology. The problems of landslide and soil erosion have assumed an alarming proportion. In the Tarai belt also, the pressure of population has led to widespread deforestation and it now holds little or no scope for the expansion of cultivable land. As production has gone out as expected, the exportable surplus of foodgrain has proportionately dwindled. Hence, the Sixth Plan has placed special emphasis on increasing foodgrains production in the hills, while in the Tarai the policy shall be to boost agricultural production by the maximum utilization of the infrastructures already brought into being.

2. *To Lay Stress in the Development of Cottage and Small Industries:* Prime place will be given to the development of cottage and small industries in the Sixth Plan in order to afford wide employment opportunities to the people in the lower income bracket and enabling them thereby to very nature are labour-intensive, will

create abundant job opportunities and will help narrow down the inequitable distribution of income and property by decentralizing the source of income and ownership of property.

3. *To Lay Stress on Export Trade and Tourism Development:* To remove the imbalances that have been evident in the foreign trade over the past few years and to enable the economy to service the foreign debt that will go on increasing in the years to come, it has become essential that a string and dynamic export sector be created. Under the present circumstances agricultural products and labour-intensive goods of the export market. The Sixth Plan will, therefore, lay stress in the export trade, which has the additional benefit of boosting production and employment

Much in the same way, special emphases will be laid on the promotion of tourism industry as it adds to the development of tourism-related industries and helps develop the remote areas.

4. *To Lay Stress on the Conservation of Natural Resources and Wealth and Development of Water Resources:* Prominent among the natural resources available in the country are water and forest. Hence, if we are to promote agricultural and industrial development and utilization of the unlimited water resources available in the country is a must, At the same time, provision of safe drinking water to the people also hinges in the development of water resources. Haphazard deforestation has become a serious problem facing the country. Hence, in order to maintain proper balance between nature, population and environment, the Sixth Plan will lay special emphasis on the control of soil erosion and the conservation and development of forest wealth, apart from maximum utilization of water resources for irrigation, power and drinking purposes.

5. *To Emphasize Full Utilization of Infrastructure Already Credited:* To boost the productive capacity of the economy and to provide services and facilities to the people, efficient and maximum utilization of the infrastructures already in existence is quite essential. Hence, during the Sixth Plan period more emphasis will be placed on such supplementary investments as are calculated to maximize the efficient use of the infrastructures already in existence and accelerate the pace of production than on making additional investments in creating new infrastructures.

6. *To Increase the Absorptive Capacity of The Economy:* Economic prosperity requires that the national economy be able to mobilize more resources and utilize them effectively. From the past experience of the development efforts it has become clear that the economy lacks the capacity to efficiently utilize the available resources. Hence, in order to expand the absorptive capacity of the economy, the following measures will be taken:

a) *To Decentralize the Process of Economic Decision-Making:* To intensify the present economic speed of the country, it is essential to further activate the private, panchayat and semi-governmental sectors, Governmental efforts alone are not sufficient for economic development. Hence, during the Sixth Plan period, private sector will be encouraged to play a leading role in productive fields like agriculture and industry and in commercial activities. Similarly, necessary arrangements will be made to enable the semi-governmental corporations to function ably and effectively on a commercial basis. Effort will be made to remove unnecessary governmental interference and control in the decision – making process related to the economic affairs of the corporation and private sectors. Similarly the local panchayat will be vested with the task of formulating, executing and maintaining such development projects which are to be based on local leadership and people's participation and which are geared to meet the essential requirements of the village household through the mobilization of local resources, skill and labour. Such projects will also receive governmental grant and technical assistance.

b) *To Develop Institutional Frame work Conductive for Encouraging Higher Production:* Real cultivators will not be inspired to invest capital and labour as part of the effort to raise productivity so long as the tenant and land owner exercise dualistic control over the land. Hence it is essential that the land reforms programme be effectively implemented if substantial increase is to be made in agricultural production. To encourage the tenant who work hard in the field, the rental laws will be effectively enforced during the Sixth Plan period in those districts where cadastral surveys have been completed. Necessary steps will be taken to ensure fair prices for agricultural product as an incentive to the peasant for increasing production and encourage improved farming method, farm implements and other inputs will be made so that the small peasants can take advantage of such facilities. In the area of industry, special efforts will be made to promote cottage and small industries.

c) *To Strengthen Development Administration:* Since public sector occupies a place of pre-eminence in the economic development of the country, it is most essential that the governmental machinery programmes be capable and strong. In the course of the Sixth Plan necessary steps will be taken to activate development administration and decentralize the decision-making process in conformity with development activities. Special attention will be centered on strengthening the planning cells located in the ministries. Similarly, tax administration will also be strengthened as it has a direct bearing on the mobilization of resources to meet the increasing development needs of the country.

d) *To develop Trained manpower:* In the process of bringing about sharp increase in investment, shortage of trained manpower and technical experts has started becoming a formidable obstacle. In the Sixth Plan, the

need of mid-and low-level technicians will be fulfilled to a great extent. Shortage will, however, be felt in the sphere of high level technical personnel. Special priority will, therefore, be given in the field of education to increase the output of trained administrative and technical personnel.

e) *To Raise the supply of Construction Materials:* In the expansion of the development works uncertainties in the supply position of construction materials have emerged as a grave problem. Hence during this Plan period, emphasis will be laid on the development of a technology which can produce and utilize such construction materials as are not capable of being produced indigenously or whose production cost will be prohibitive should they be manufactured at home.

(7) *To Control Population Growth:* If the population growth rate, which has already assumed a problem of grave proportion, is not checked in time, the hope of meeting the basic minimum needs of the people will recede. Birthrate will be extensively put under way during the Sixth Plan period.

3. Economic Growth Rates and Targets

In spite of more than two decades of development efforts, the country has not been able to make any significant progress in raising domestic output. During the Third (1965-70) and Fourth (1970-75) Plan periods gross domestic product could increase annually by 2.2 percent only. During the Fifth Plan period (1975-80) also, it seems the annual growth rate was limited to 2.2 percent. Against this background or now the existing economic and social consequences will be quite serious.

The sixth plan aims at raising gross domestic product by 4.3 percent per annum during the plan period. To achieve the overall growth target, the agriculture sector would have to grow by 3.2 percent and the non-agricultural sector by 5.6 percent per annum at the minimum. Under the assumption of an incremental capital-output ratio (ICOR) at 4.5:1, to achieve the overall economic growth target the total development outlay required is estimated at Rs. 33.94 billion, of which Rs. 25.75 billion will have to be invested in fixed capital formation, representing 18.5 percent of the aggregate gross domestic product of the Plan period. To maintain this aggregate investment ratio, investment rate will have to be stepped up by 16.1 percent annually by pushing the annual average investment ratio from 13.1 percent to 22.5 percent of GDP by the terminal year of the Plan period.

It is expected that foreign savings amounting to Rs. 15.05 billion or 10.8 percent of the aggregate GDP will be available for financing the investment. Therefore, the total domestic savings required will be of the order of Rs. 10.70 billion or 7.7 percent of the aggregate GDP. To maintain this aggregate saving ratio, domestic savings will have to be increased by 6.5 percent per annum by raising the annual average savings ratio from 7.3 percent to 8.1 percent of GDP by 1984/85. Thus the country will have to achieve marginal savings ratio of 1.5 percent over the Plan period. The ratio of foreign savings to GDP will have to be more than double from 5.9 percent in 1974/75 to 14.5 percent in 1984/85. It would imply an annual increase of 24.8 percent in the foreign savings inflow into the country.

Table-1
Growth Targets for the Sixth Plan Period (1980-85)
(At constant 1979/80 prices)

Economic Sector	1979/80	1980-85	Annual Growth Rate (Percent)	(In million Rupees)	
				As Percent of GDP 1979-80	1980/85
Agricultural Sector*	13521	15827	3.2	55.4	52.5
Non-Agricultural Sector	10898	14313	5.6	44.6	47.5
Gross Domestic Product*	24419	30140	4.3	100.0	100.0

* Because of the drought and the consequent fall in the agricultural output, agricultural sector GDP is estimated to have declined by 4.8 percent and overall GDP by 1.4 percent in 1979/80. For the purpose of projection the agricultural GDP and overall GDP are normalized to reflect normal production conditions. The actual (provisional) GDP data for 1979/80 at current prices are:

Agricultural Sector	- Rs. 12,969 million
Non-Agricultural Sector	- Rs. 10,898 million
Gross Domestic Product	- Rs. 23,867 million

Table-2
Gross Domestic Product, Investment and Savings Estimates

For the Sixth Plan Period (1980-85)

(At 1979/80 constant prices)

(In million Rupees)

	1979/80	1984/85	Annual Growth Rate (Percent)	5-year Total 1980-85
1. Consumption	22644.8	27709.9	4.1	128080.0
2. Investment ¹	3215.6	6793.7	16.1	25750.0
Governmental Sector	(1400.9)	(3398.3)	(19.4)	(12300.0)
Non-Governmental Sector ²	(1814.7)	(3395.4)	(13.3)	(13450.0)
3. Foreign Balance	-1441.4	-4363.2	24.8	-15052.2
Imports of Goods and <i>NFS</i> ³	(4333.2)	(7789.9)	(12.4)	(31217.1)
Exports of Goods and <i>NFS</i> ³	(2891.8)	(3426.6)	(3.5)	(16164.9)
4. Gross Domestic Product	24419.0 ⁴	30140.4	4.3	138777.8
5. Domestic Savings	1774.2	2430.5	6.5	10697.8

¹ Fixed capital formation only

² Includes public sector enterprises, Panchayats and private sectors.

³ Excludes factor services and transfers.

⁴ Because of the drought and the consequent fall in the agricultural output, GDP in 1979/80 is estimated to have declined by 1.4 percent and reached at Rs. 23,867 million at current prices. For the purpose of projection, the 1979/80 GDP is normalized to reflect normal production condition.

Table – 3 Balance of Payments Projection for the Sixth Plan Period (1980-85)

(At 1979/80 constant prices)

(In million Rupees)

	1979/80	1984/85	Annual Growth Rate (Percent)	5-year Total 1980-85
1. Trade Balance	<u>-2391.2</u>	<u>-5072.6</u>		<u>-19131.4</u>
Exports, F.O.B.1	1140.8	1292.2	2.5	6363.7
Imports, C.I.F.1	3532.0	6364.8	12.5	25495.2
2. Service Income. Net	<u>949.8</u>	<u>709.4</u>	<u>-5.7</u>	<u>4079.2</u>
Service Receipts	(1751.)	(2134.4)	(4.0)	(9801.2)
Travel	648.5	1044.4	10.0	4355.2
Other	1102.5	1090.0	-0.2	5446.0
Service Payments	801.2	(1425.0)	(12.2)	(5722.0)
Travels	306.3	4296	7.0	1884.7
Others	494.9	995.4	15.0	3837.3
3. Investment Income, net	<u>149.6</u>	<u>100.1</u>	<u>-7.7</u>	<u>625.7</u>
Receipts	190.3	210.1	2.0	1010.1
Payments	40.7	110.0	22.0	384.4
4. Transfers, net	<u>431.9</u>	<u>457.1</u>	<u>1.1</u>	<u>2086.5</u>
Receipts ²	444.7	470.5	1.1	2152.4
Payments	12.8	13.4	1.0	65.9
5. Current Account Balance	<u>-859.9</u>	<u>-3806.0</u>	<u>23.4</u>	<u>-12340.0</u>
6. Foreign Aid, net	<u>1335.6</u>	<u>3821.2</u>		<u>13050.0</u>
Foreign Grants	758.4	1852.3		6786.0
Foreign Loans, net	577.2	1968.9		6264.0
Foreign Loans, gross	(597.9)	(2013.4)		(6474.0)
Amortization	20.7	(44.5)		(210.0)
7. Other Capital Items, net	<u>-446.4</u>	<u>15.2</u>		<u>-280.0</u>
8. Overall Surplus of Deficits (-)	<u>29.3</u>			<u>430.0</u>

1. Customs data with coverage adjustments.

2. Including Indian excise refund.

Of The aggregate development expenditures of Rs. 33.94 billion fixed for the Sixth Plan period, Rs 20.49 billion (60.4 percent) is allocated for the Public sector, Rs. 1.80 billion (5.3) for the Panchayat sector and Rs. 11.65 billion (34.3) percent for the private sector as follows:

Table-4

Allocation of Total Development Expenditure

(At constant 1979/80 price)

	Public Sector¹	Panchayat Sector	Private Sector	Total	Percent
Agriculture, Irrigation and Forest	6,260	490	3,820	10,570	31.1
Industry, Mining and Power	5,280	30	3,500	8,810	26.0
Transport and Communications	4,230	540	1,100	5,870	17.3
Social Services ²	4,720	740	3,230	8,690	25.6
Total	20,490	1,800	11,650	33,940	100.0

¹ Of the total development expenditure of Rs. 21.75 billion to be incurred in the public sector, the sum Rs. 1.26 billion which is to go to other sectors as financial assistance, has been included in the sectors concerned instead of lumping it up with the public sector expenses. Of the net development outlay of Rs. 12.30 billion, is estimated to be spent in the form of investment.

²The amount shown under the head social services also includes expenses relating to residential housing construction and other miscellaneous development expenditure also.

From the study of the panchayat sector project proposals, submitted to the National Planning Commission, it appears that the ratio between the grants to be made available by HMG and the local resources to be tapped by the panchayats themselves stands at 1:2. In other words, if HMG furnishes grant of Rs. 600 million, the local panchayats will match it with Rs. 1,200 million. Thus, the total investment in the panchayats sector will amount to Rs. 1,800 million.

It is estimated that in the private sector the amount to be invested will be Rs. 11.56 billion. It includes the financial assistance to the Agricultural Development Bank (Rs. 340 million), Nepal Industrial Development Cooperation (Rs. 200 million) and cottage industries (Rs 120 million). As a result of the magnetization of the economy, expansion of the banking system and the liberal economic and industrial policies to be adopted during the Sixth Plan period, the private sector is expected to invest Rs. 10.99 billion out of its own savings. On this account the private sector investment has been placed at a higher level than in the previous plans.

Table-5
Some of the Principal Physical Targets of the
Sixth Plan (1980-85)

	Unit	Situation as of the final year of the Fifth Plan 1979/80	Sixth Plan Target 1980-85	Situation as of the Sixth Plan 1984/85
1. Major Agricultural Products:	% Annual	-2.0*	3.0	
a) foodgrains	Growth	(-2.8)*	2.8	431,963
b) Cash Crops	'	(1.6)*	3.9	213,269
2. Industrial Production	'	6.7	10.0	2716
3. Irrigated Area	'	198,481	233,482	1,339
4. Distribution of Improved Seeds	Hectare	12,212*	25,725	2,835
	M.T.	84,133*	215,402	-
5. Distribution of Chemical Fertilizer	M.T.	978.6*	1,744.1	41
	Rs.	9,569*	42,872	37,120
6. Distribution of Agricultural Credit (ADB)	Million	68.346	144,923	1,838
	Hectare	233.6*	502.7	32.4
7. Afforestation	KW	2,044	672	1,649,000
8. Power (Installed Capacity) ¹	Rs.	564	775	287,000
9. Distribution of Industrial Credit (NIDC)	Million	3,332	503*	277,000
	Km	61*	300*	75.0
10. Road:	Km	39	2	40.0
a) Black-top	Km	13,670	23,450	30.0
b) Gravelled	Number	1,358	480	46,369
c) Fair Weather	Number	24.3	900,000	(10,509)
11. Suspension Bridges	Number	300,000	344,506	(19970)
12. Airports	Number	1,304,494	139,255	(15,890)
13. Telephones Lines	Percent	147,745	156,162	98
14. Post Offices	Number	120,838	21,244	4,020
15. Literacy Rate	Number	66.4	(5,892)	1,050
16. Adult Education	Number	23.0	(9,347)	413.4
17. Student Enrollment	Number	14.6	(6,005)	30.0
a) Primary	% of Age	25,125	25	(25.8)
b) Lower Secondary	Groups	(4,617)	1,434	(87.2)
c) Secondary	6-10 yrs.	(10,623)	-26	40
18. Student Enrollment Percent	11-12 yrs.	(9,885)	467	17
a) Primary	13-15 yrs.	73	50	5.8
b) Lower secondary	Number	2,586	274.3	130
c) Secondary	Number	26	900,000	
19. Higher Education New Enrollments ⁴	Number	583	200,000	
	Number	85	700,000	
a) Technical	Number	139.1		
b) Professional	Number	10.9		
c) General	Number	(6.4)		
20. Hospital and Health Center	Number	(83.1)		
a) hospital	Number	801,580*		
b) hospital beds	Million	81,415		
c) health centre	Lt/day % of	720,155		
d) health post	Population	42		
e) ayurvedic Service center	'	19		
21. Drinking Water	'	6.3		
	Couples	150		

22. Access to piped Drinking Water	Couples Couples Per 1000			
a) rural				
b) urban				
23. Family Planning Service	per women (age 15-49)			
a) Sterilliation	Per 1000			
b) Temporary Contraception				
24. Crude Birth Rate				
25. Crude Death Rate				
26. Total Fertility Rate ⁵				
27. Infant Mortality Rate				

¹ Excluding captive power generation.

² In addition, the panchayat sector plans to construct 6,544 kms. Of mule trails and foot tracks and 1,208 kms. of wheel-tracks (motorable roads).

³ Leaving aside the numberof suspension bridges as shown in the table above, there are plans for constructing 6,156 bridges and culverts in the panchayat sector.

⁴ Data on school enrollments relate to students studying whereas on higher education enrollmants they relate to new enrollments only.

⁵ During the Sixth Plan period total fertility rate of the married couples is to be reduced from 6.7 to 6.2. Achieve during the Fifth Plan period (1975-80).

4. Development Programme and Financial Allocation in the Public Sector

The development programmes to be launched in the public sector under the Sixth Plan aim at supporting private sector in the task of augmenting agricultural and industrial output and creating minimum economic infrastructures and facilities needed for the development of the remote and backward areas of the country. The Sixth Plan has earmarked Rs. 21.75 billion for the development of the remote and backward areas of the country. The sixth Plan has execution of the kind of development programmes outlined above it may be enabled to achieve the target of raising the gross domestic product at the rate of 4.3 percent per annum.

Of the amount mentioned above 30.4 percent will be spent in agriculture, irrigation and forest, 25.8 percent in industry, mining and power, 24.4 percent in social services, and 19.4 percent in transport and communications. The table below shows how the development outlay in public sector is to be distributed:

Table -6
Allocation of Development Expenditure in the Public Sector

	Fifth Plan period 1975-80 (at current price)		Sixth Plan period 1980/85 (at 1979/82 constant price)	
Agriculture, Irrigation and Forest	<u>2,349.7</u>	<u>26.5</u>	<u>6,600.0</u>	<u>30.4</u>
a) Agriculture	969.4	10.9	2,300.0	10.6
b) Irrigation	864.0	9.7	3,060.0	14.1
c) Land Reform and Co-ops	53.6	0.6	60.0	0.3
d) Cadastral Survey	120.0	1.4	160.0	0.7
e) Forest	342.7	3.9	850.0	3.9
f) Meteorology	-	-	70.0	0.3
g) Resettlement	-	-	100.0	0.5
Industry, Mining and power	<u>1,679.2</u>	<u>18.9</u>	<u>5,600.0</u>	<u>25.8</u>
a) Industry	538.0	6.1	1050.0	4.8
b) Cottage Industry	1,049.9	11.8	500.0	2.3
c) Mining and Geology	91.3	1.0	1050.0	0.7
d) Power	<u>2,380.6</u>	<u>26.8</u>	3,800.0	17.5
e) Commerce	(,299.4)	(25.9)	20.0	0.1
f) Labour	1,794.8	20.3	20.0	0.1
g) Tourism	132.5	1.4	60.0	0.3
Transport and communications	372.1	4.2	<u>4,230.0</u>	<u>19.4</u>
Transport	(81.2)	(0.9)	(3,800.0)	(17.8)
a) Road, Rail and Ropeway	8.2	0.1	2,470.0	11.4
b) Suspension and other bridges	73.0	0.8	630.0	2.9
c) Aviation	1,027.7	11.6	780.0	3.5
Communication	474.0	5.3	(350.0)	(1.6)
a) Postal Services	258.7	2.9	30.0	0.1
b) Telecommunication	336.8	3.8	320.0	1.5
Social Services	131.9	1.5	1,660.0	7.6
a) Education	47.7	0.6	1,060.0	4.9
b) Health	5.7	0.1	1,000.0	4.6
c) Drinking Water	26.9	0.3	1,090.0	5.0
d) Panchayat	15.1	0.2	250.0	1.1
e) Housing and town planning	184.3	2.1	100.0	0.5
			160.0	0.7
			20.0	0.1
			80.0	0.4
			60.0	0.2
			-	-

f) Information and Broadcasting				
g) <u>Administrative Reforms and Planning</u>				
1) Administrative Reforms				
2) Planning				
3) Statistics				
h) Miscellaneous				
Total	8.870.6	100.0	21,750.0	100.0

- 1) Includes Rs. 340 million financial assistance to the Agricultural Development Bank.
- 2) Includes Rs. 200 million financial assistance to the Nepal Industrial development Corporation.
- 3) Includes financial assistance of Rs. 120 million to be extended to cottage industries.
- 4) Inclusive of the development grant of Rs. 600 million to be given to the panchayats.

The public sector outlay of Rs. 21.75 billion will be allocated to the different development regions as follows: Central Development Region 16.2, Far Western Development Region 10.9, and the Fifth Development Region 7.6 percent. The balance of 11.1 percent will be spent on such projects as are of national level or are not capable of being identified with any of the regions in particular.

To meet the public sector development expenditure of Rs. 21.75 billion or 18.5 percent of the GDO mobilization of resources on a very large scale is called for. During the Sixth Plan period Rs. 12.24 billion will be generated from the normal increase in revenue, Rs. 1.29 from additional taxes and improved tax administration and Rs. 400 million from the additional profits made by the corporations, making a total of Rs. 13.963 billion. When regular expense of Rs. 7.18 billion calculated on the revenue surplus, annual increase in regular expenditure must be pegged down to 10 percent. To this end general and unproductive administrative expenses may have to be strictly controlled and such unpopular actions like strict control over the practice of employing excess administrative staffs to be resorted to.

In order to meet the shortfall in the amount to be mobilized from internal sources domestic loans (net) of Rs. 1.60 billion will be floated and Rs. 350 million will be collected from minting, and utilization of cash balance to make a total of Rs. 1.95 billion. In this way, the internal resources will be tapped to account for Rs. 8.70 billion or 40 percent of the development expenditure.

In the field of foreign aid, bilateral and multilateral assistance programmes have started including the amount needed to meet local expenses. Moreover, the aid-giving countries and institutions have reached an international understanding that the aid quantum to be made available to the developing countries should be gradually increased. Accordingly, HMG is expected to get a bigger amount of foreign aid, which is estimated to total Rs. 13.05 billion or 60 percent of the estimated development expenditure in the public sector.

Out of the total amount of Rs. 21.75 billion, Rs. 340 million will be given to the Agricultural Development Bank, Rs. 200 million to the Nepal Industrial Development Corporation, Rs. 120 million to the cottage industries and Rs. 600 million to the panchayats for assistance in local development works. When these amounts, totaling Rs. 1.26 billion are deducted, the net development expenditure to be incurred in the government sector will stand at Rs. 20.49 billion.

Table 7
Sources of Financing Public Sector Development Expenditure
 (At 1979/80 Constant Prices)

<u>Development Expenditures Financing Sources:</u>		<u>21,750</u>
<u>Of which: Domestic Resources</u>	(13,930)	<u>8,700</u>
a) Revenue Surplus (1-2)	12,240	6,750
1) Revenue	1,290	1,600
i. At 1979/80 Tax Rates	400	350
ii. Additional Taxes	(7,180)	<u>13,050</u>
iii. Additional surpluses from public Enterprises	(1,980)	
2) Regular Expenditures	6,790	
2. Domesmestic Loan, net	6,260	
i. Domestic Loans, gross	(6,470)	
ii. Principal Payments	(-210)	
c) Other /sources		
<u>Of which: Foreign Aid, net</u>		
a) Foreign grants		
b) Foreign Loans, net		
i. Foreign Loans, gross		
ii. Principal Payments		

1. Excluding receipts from mint
2. Excluding principal payments on domestic and foreign loans
3. Composing of receipts from mint and use of cash balances

Table -8
Government financial Resource Projection for the Sixth Plan Period
 (at 1979/80 Constant Prices)

	1979/80	1984/85	Annual Growth Rate (percent)	5-year Total (1980-85)
Revenues	1,960	3,450	12.0	13,930
Regular Expenditures	1,070	1,730	10.0	7,180
Development Expenditures	2,350	6,160	21.3	21,750
<u>Sources of financing</u>	<u>1,010</u>	<u>2,340</u>	<u>18.3</u>	<u>8,700</u>
<u>Development expenditures</u>	890	1,720	<u>23.3</u>	6,750
Domestic Resources	110	550		1,600
Revenue Surplus	(180)	(650)		(1,980)
Domestic Loans, net	(70)	(100)		(380)
Domestic Loans, gross	10	70		350
Principal Payments	<u>1,340</u>	<u>3820</u>		<u>13,050</u>
Other Sources	790	1850		6,790
<u>Foreign Aid, net</u>	550	1970		6,260
Foreign Grants	(570)	(2010)		(6,470)
Foreign Loans, net	(20)	(40)		(210)
Foreign Loans, gross	<u>100.0</u>	<u>100.0</u>		<u>100.0</u>
Principal Payments	43.0	38.0		40.0
<u>Sources of financing (in percent)</u>	57.0	62.0		60.0
Domestic Resources				
Foreign Aid				

1. Owing to the unusual economic situation in 1979/80, actual revenues could not exceed more than Rs. 1,860 million. For the purpose of projection it is assumed that actual revenues that actual revenues would have been Rs. 1,960 million in 1979/80 if normal conditions had prevailed.
2. Excluding receipts from mint.
3. Excluding principal payments on domestic and foreign loans.

4. Includes receipts from mint and use of cash balances.

5. Provision of construction Materials and Technical Manpower

Construction Material

Of the 1,742,600 tonnes of cement needed for the Sixth Plan 380,000 tonnes expected to be locally available. Similarly, of the estimated 288,643 tonnes of Iron rods. During the plan period, 1,593.29 million bricks, 819,418 c/ms of wooden planks and 5,566 tonnes of polythene pipes are the estimated requirements. Development goods that have to be imported from abroad include 215,402 tonnes of chemical fertilizers, 994,525 and 7,143 tonnes each of writing and printing papers, and newsprints respectively. As for explosives, the plan period is estimated to require 6,000 tonnes of gelatines 4,752,600 units detonators and 6,720,300 metres of fuse wires.

Cement, Iron and steel goods, writing and printing papers, newsprints and other development commodities required for the public sector will be supplied by the National Trading Ltd. And private traders will be encouraged to meet their own needs.

For the above mentioned commodities needed during the Sixth Plan period the expenditure to amount to Rs. 12.13 billion at the price level of 1979/80. Of this the amount required for imports will be Rs. 10.48 billion and the balance will be accounted for by local producer on commodities.

Technical Manpower

As regards the projection of technical manpower requirement implementing development programmes in the government sector, it is estimated that, if the shortfall of 4,493 during the Fifth Plan and the addition requirement of 14,594 for the Sixth Plan are to be fulfilled the projected demand for trained personnel will be as much as 19,487. Regarding the supply to technical manpower on the basis of the public sector requirement alone, 15,234 persons to be produced by national educational institutes and 949 students to return home after completing their training abroad will add up to 16,183 trained personnel. But, since the total plan requirement is 19,487 and the total supply is 16,183 there 3,304 persons of whom 1,309 will be high-level, and 2,688 basic level, but surplus of 673 med.-level technicians.

For the 949 persons who are to receive high-level technical education abroad the expenditure is Rs. 91.14 million of which the bulk will be borne out of foreign aid. Similarly, to make up for the shortage of 1,317 high-level technicians excluding 8 surplus scientist an expenditure of Rs. 138.18 million may have to be incurred. If the shortage of high-level technical manpower cannot be met by training programmes launched under foreign aid and by increasing the enrolment at national technical study institutions, then government agencies concerned will conduct their own training courses. To remove the shortage of basic-level technicians, arrangements will be made for producing such manpower through the agencies associated with the projects themselves.

6. National-Level Policies

To achieve the objectives mentioned in the Sixth Plan and to set the key note for development efforts of the future it has become desirable that appropriate policies be formed vis-à-vis the different problems cropping up in the country. In the absence of suitable publicly-frames, development efforts will hardly bear fruit, no matter how clear and well-defined the plan objectives may be. An attempt has, therefore, been made here to enunciate the policies governing different matters.

1. *Employment Policy* : If the manpower available in the country is effectively harnessed to the development work in order to meet the targets envisioned by the plan, it will be a great help in raising the production as well as standard of living. In the Fifth period, because of shortage in the supply of construction materials, decline in farm production and other factors, employment generation target do not seem to have been realised in such activities like agriculture, industry, transport and other private sector activities which were calculated to generate vast employment opportunities. Presently, unemployment has assumed the form of a knotty problem. It is therefore, quite apparent that new employment avenues should be opened up to absorb the plan and the additional labour force to come into existence during the plan period.

From the standpoint of employment, agriculture holds a premier position. From its development new employment opportunities are created and the consequent rise in the foodgrain productions helps widen the employment scope in other sectors as well. Since the individual efforts of the private farmers are also to lead the same consequence, it shall be the policy of the government to extend the hand of co-operation to keep alive their spirit of enterprise. Such co-operation will include propagation of modern farm techniques and other methods of raising farm output. Irrigation being one of the obvious means of promoting agricultural development, the Sixth Plan will lay emphasis on the implementation of such irrigation schemes which generates employment, which requires less generation period and which do not involve high cost. In order to enhance the income and employment of the rural families, traditional cottage industries will be revived and strengthened and establishment of new industries will be encouraged.

During the Sixth Plan period mechanized farming will be discouraged as far as practicable and labour-intensive methods will be encouraged. Similarly, with a view to creating new vistas of employment, setting up of labour-incentive industries will be given a fillip. It will also be the government's policy to use the manpower available in the country for the exploitation of existing natural resources. Pursuant to the goal of equitability distributing employment opportunities in all regions, agricultural programmes to be executed under the Sixth Plan will be governed by the policy of distribution according to geographical divisions. To ensure the success of development works and to widen the employment scope manpower will be mobilized on the basis of popular participation and through the medium of private and social service organization.

To reduce the impact of educated unemployment, which has begun to appear in the urban areas, the policy of stimulating self-employment by means of vocational and technical education will be maintained. In pursuit of the objectives of providing equal employment opportunities to the womenfolk, they will be given job-oriented skill and training and be kept informed about job opening.

2. *Price policy*: Price policy has an important bearing on influencing the factor of production to move towards the targeted sectors in a smooth manner, and increasing the volume of production.

Without controlling price rise, any policy which seeks to cut the consumption standard of the people belonging to the low-income bracket to generate more savings for investment, is repugnant to the fundamental principle of the plan. Even in view of the fact that there is no alternative but to invest more, appropriate fiscal and monetary measures will have to be taken without fail, if the price-line is to be prevented from going higher than the desired level. Under the fiscal policy care will be taken in particular to reduce the impact of deficit financing on internal prices and to mobilize the internal resources to the maximum extent possible in order to undercut the need for excessive deficit financing.

One of the main principles to be adopted will be to economically strengthened the production unit which are engaged or are going to engaged in productive work and to make them increase the production of essential goods. To prevent the worsening of the price-rise caused by a temporary shortage of internal supplies, the import level of such goods will be raised.

As for other commodities, their production will be boosted to strengthen the supply position, and they will be freely sold at a competitive price nationwide.

To expand the production of principle food crops like paddy, wheat, maize and lentils along with cash crop like cotton, oilseeds, jute, tobacco, sugarcane and cardamom, minimum purchase prices will be fixed and the policy of purchasing some of them that are exportable and import-substituting will be gradually enforced.

The practice of subsidizing the sole price of chemical fertilizers will be gradually abandoned. Instead, the policy will be to sell them at cost price. The price of petroleum products will be determined by the cost factor and, so far as such essential items like diesel and kerosene oil are concerned, the policy will be to partly waive the customs and sales tax, as and when the situation demands. To increase the supply of other development and

construction goods in response to internal demands, the policy will be to attract greater investment from the private sector and let the prices be determined by free competition. Government-owned corporations will also be required to conduct their business on the basis of prices fixed in competition with the private sector.

3. *Foreign Trade Policy:* In the context of economic development, foreign trade has a pivotal part to play in the cast of increasing production and employment and maximizing the mobilization of internal resources. The country has been turning necessary attention to promote export trade since 1961. Trade imbalance with India has been on the increase in recent year. It has now become highly essential that the successes achieved in the diversification of trade both country wise and commodity wise be consolidated and that the growing trade imbalance with India be narrowed down, step by step. Of the country's export trade operation, 51.1 percent is accounted for by India and export trade with the third countries is just 42.9 percent.

In the Sixth Plan period, policy objectives of the foreign trade will be to increase the production of exportable goods, to enlarge and diversity the commercial activities, to improve the balance of payments position, to maintain stability and goodwill in foreign trade, to supply development and construction materials, and to control the import of such goods as are likely to have an adverse effect on the national economy. Manufacture of goods with export potential will be given impetus, commodities essential to the masses and to development activities will be supplied at a fair price. Control will be exercised on the import of sub-standard and luxury goods along with those that are likely to have an inhibiting effect on indigenous industries. In pursuance of the policy guidelines mentioned above necessary steps will be taken towards promoting and ensuring transit safeguard, free movement of goods within the country, establishment of new markets and qualitative improvement of the national products. At the same time, necessary steps will be taken to update the laws and regulations governing trade and commerce, to introduce timely reforms and harmonies in the fiscal, monetary, economic, agricultural and commercial policies and to enhance the capability of the organization engaged in trade matters.

4. *Government-owned Corporation policy:* in the task of carrying our socio-economic development of the country at an accelerated rate the public sector occupies the pride of place. There are at the moment 59 corporations in operations. Government investment in them had gone on increasing until it peaked to Rs. 2 billions in 1977/78. The reason why the existing government-owned corporations have not been able to function satisfactorily might partly be attributed to the fact that the past plans sorely lacked a definite policy in relation to collective targets, roles, activities and performance auditing. Hence the main objectives of the Sixth Plan consists of allowing the government-owned corporation to effectively function within their prescribed limits on the basis of commercial principles. Corporations discharging similar functions will be handed over to private sector and emphasis will be laid on giving appropriate autonomy to the corporation so they can function on commercial terms. Anomalies and incongruities observed in such matters like the structure, capital formation, control, direction and internal working arrangement of the different corporation will be done away with. To strengthen the management of the corporation the board of directors will be made more active and effective, while arrangement will be made for inducting relevant professional and specialists to the board. The appointment to the executive head will be the function of the suitable qualification and ability to provide leadership. Improvements will be made upon the accounting system of the corporation so the balance sheet and profit and loss account can be produced in time, while due thought will be given to the question of whether the division in the Finance Minister, charged with supervising and evaluating the performance of the corporation, should not be converted into a high level organisation.

5. *Regional development Policy:* The factors chiefly responsible for the diversity in the economic situation of the different regions are the differences of resource endowments in the Himalayan, mountainous and Tarai regions and the disproportionate distribution of the population. Enhancement of national production is a question of as much paramount importance as proportional regional development. Regional imbalances are present not only in the north-south geographical region but in east-west region as well. Hence, gradually remove regional imbalances, to improve the economic condition of the different regions and to usher in economic integration, emphasis will be placed on increasing food production in all food scarcity areas including the hills. As non-agricultural sector too have the capacity to generate employment, priority will be assigned to develop cottage and small industries. The Tarai will be set out as the area, which is most suited for the production of food and cash crops. While selecting projects, due note will be taken of removing regional, economic and social inequalities besides technical and economic properties. To promote exchanges among the Himalayan, hilly and Tarai regions, primacy will be given to increasing economic investment in the backward areas on the basis of feasibility surveys, and necessary studies will be mounted to determine appropriate investment patterns.

6. *Power and energy policy:* Among the natural resources available in the country water is one of the important basis for development and pure drinking water and electricity can be brought within the reach of all, only if a sound water and energy policy is implemented. With this in a view priority will be given to a [power projects, which are design to meet the short term and mid-term power needs top of the country along with the implementation of multi-purpose hydel projects, covering power supply, irrigation, drinking water and flood

controls far as practicable. At the same time, transport system will be gradually electrified to cut down the rural industries in the mountainous region, small and micropower projects will be played implemented. In the case of the latter, the principal role will be played by mass participation, and local material will be used to the maximum. Since firewood will continue to remain the main source of energy in the rural areas for many more years, emphasis will be laid on three plantation an forest management. In cases were hydro-electricity os not readily available for industrial development, power will be generated by diesel or other means as a stop-gap arrangement. During this plan period studies will be mounted on production and use of technology involved in bio-gas, solar energy, wind power and natural gas.

7. *Environment and Land Use Policy:* Natural calamities like soil erosion, landslide and flood have been on the increase in the country year by year, owing chiefly to such activities which are involved in settling the increasing population, expanding cultivable land areas, encroaching upon the forest property to meet the energy needs, carrying out agricultural operation on hill side slopes, and similar other depreddations against nature. Similarly, unplanned and haphazard urbanization and industrialization have also contributed to polluting the atmosphere.

In the Sixth plan environmental programmes currently underway will be strengthened and soil erosion in the principal catchments areas of training and other effective actions to maintain the policy of preventing further deterioration of the already worse situation. Priority will be given to conservation and expansion of water resources, forest and rare animals in the interest of ecology. The policy under sixth plan will be to prevent the diversion of cultivable land to unproductive use and to develop forest and meadows in lands, which have no agricultural use. While preparing development and construction plan, environmental aspects will be taken into consideration as a matter policy. Legislative and administrative steps will be taken the urban atmosphere free from pollution. Suitable legislations and regulations will be framed to forestall atmospheric pollution that might result from urbanization and industrialization. A unit in charge of environmental development will be constituted to bring about coordination among different agencies engaged in ecological preservation and improvement to maintain harmony at the regional and national levels and to issue directives on the right way of doing things.

8. *Development Administration Policy:* Although the ability to systematize development process has gone up considerably, the administrative units need still be made more development-oriented, if the gap between planning and implementation, as seen in the course of earlier plans, is to be plugged. To this end the Sixth Plan will follow the policy of establishing close rapport and harmonious atmosphere between the national planning commision, on the one hand, and the Ministry of Fibnance and other ministries concerned, on the other. In the formulation of development project the system of programme butgeting will be enforced. Concrete steps will be taken to make the planning and evaluation unit in each ministry more effective. Preliminary action will be initiated toward adopting the principle of right man in the right place so thedevelopment administration can be development –oriented in the true sense of the term. Recruitment of technical cadre will be decentralized and in the matter of transfer, promotion, punishment and reward of the government employees the deciding factor will be their performanxce record. The policy will to gradually revise pay-scale and daily allowance opn the basis of consumer price index. In the center the arrangement whereby departments are subordinated to the Ministries concern will be discouraged. Wherever necessary, redional directories themselves will be strengthened. Necessary action will be takemn to secure delegation of authority along with responsibility. Legislation and regulations governing contract and land acquisition will be reviewed and amended in favour of speedy and effective implementation. In view of the adverse influence cast by the existing diversities in the organization, facilities and concessions on the implementation aspect, a policy will be adopted to introduce uniformity. In the implementation of development project the policy will be to maximize the use of local skills and technology and the efficiency inherent in them. Local administration will extend necessary support to local development. Co-operation will be extended towards developing the capability of private constancy groups and institutions in view of the fact that they too can contribute a lot to conducting surveys and studies, drawing up designs and preparing cost estimates. From the very inception of the planning exercise adequate room will be provided for expression of advice, opinion and reaction, apart from attending to all aspects of the problem, and, at the evaluating and review stage, stress will be put on maintaining and atmosphere of cooperation and harmony in seeking solutions to the problems that have become apparent. To make revenue administration stronger, more popular and effective, institutional and reformative measure will be set afoot and the agencies charged with executing the policy lines laid down above will be consolidated.

9. *Policy relating to Increasing Mass Participation in Development:* People's participation and local development have come forward as an effective catalyst in bringing about beneficial changes in the socio-economic life of the country. Local development has been institutionalized since the advent of the Panchayat Democracy, facilitating local development processes on the basis of popular involvement. As success in securing wider participation of the people in the process of farming, executing and evaluating local populace, the sixth Plan will adopt the policy of assigning a bigger role to panchayat sector in order to make the development

process people-oriented and to decentralise the process people-oriented and to decentralise the process of plan formulation, implementation and evaluation.

Selection of local development projects will be based on how long the delivery period will be, whether they are capable of being implemented, repaired and maintained at the local level and whether they are to lend to higher production and wider employment opportunities in response to the local needs. The formulation, implementation and review of such project, will be left to care of local panchayats. They will be coordinated with and dovetailed into the district and national-level projects and will be implemented as supplementaries to one another. To secure popular participation in the projects to be implemented at the district and panchayat levels. By expanding social service programmes under local development scheme, the private sector will be mobilised to bring benefit to the greatest number of the people. And to make such programmes intensive and effective the public sector will also make due investment.

10. *Policy to Promote Women's Participation in Development Work:* Women are estimated to constitute 48.9 percent of the population. But owing to lack of education, poverty, ignorance and the like, they have not been able to participate wholly in development works. It is, therefore, imperative that the womenfolk be given necessary education and training so they can pull their weight in the great task of nation-building.

Although the role of the women in such economic activities like agriculture and cottage industry has been quite significant, the number of women who are economically active constitute, as a matter of policy, be gradually expanded and the scope of their participation also be widened as much as possible.

As is but natural in the predominantly agricultural country attempts will be made to impart training in farm development to most of the women to enable them to participate in agricultural development programmes. Facilities like training, capital and marketing will be made available through cooperative institutes to enable such of the womenfolk who are living in state of semi-employment to turn their hands to cottage and village crafts. In the task of promoting the use of family planning appliances the policy will be to associate the women in large numbers. If existing laws do in effect, impede women's participation in development works, they will be suitably amended to enable them to play a bigger role in development efforts and to a wider horizon of employment for them.

11. *Policy of Integrated Rural Development:* Viewed in the background of Nepal a predominantly agricultural country and the bulk of the population living in the villages and depending on agriculture for their livelihood, the concept of development will remain lop-sided and incomplete, if due attention is not turned to rural development. During the sixth plan period the organizational aspects of the agricultural sector will be improved upon through the medium of integrated rural development. Agricultural credit, inputs and extension services will be brought within the reach of the majority of peasants. Priority will be given to those projects and programmes which are designed to meet the minimum needs of the maximum people and which are likely to promote local production and employment. The principle mechanism for putting the integrated rural development programmes into effect will be local Panchayats and the Sajha (Co-operative) movement. While selecting projects relating to integrated rural development, the policy will be accord priority to such projects as are likely to fulfill the minimum needs of the people and to increase production and employment.

7. Agriculture, Irrigation, Land Reforms, Forest and Medicinal Herb

A. Agriculture and Food

Today the country is embarking on the sixth Plan after completing five plans. But in spite of the priority given to the agricultural sector in the execution of those five plans, there are still many things which have to be done in this direction. Since agriculture contributes 62 percent to the gross domestic product, generates 90 percent of the employment and produces 80 percent of the export, it becomes quite obvious that agriculture is a prominent source of increasing production and employment. Theoretically, the agricultural sector was given top-most priority during the past plan periods. But of the national investment and allocation were to be objectively analysed, the fact would stand out quite clearly that the level of investment made in the agricultural sector was not much higher than in other areas. Farm improvement techniques and expansion do not appear to have effectively penetrated into the village community. Moreover, it seems to have been overlooked that any meaningful improvement in agriculture would hardly be possible, unless agricultural credit, agricultural inputs, irrigation, co-operative, land reforms and such other programmes as are closely related to agricultural development were not taken up in a co-ordinated manner from the very beginning of the planning exercise.

The important deserving the careful consideration of the government is how to bring about changes in the decision-making process of the peasantry and how to bring about changes in the decision-making process of the peasantry and how to develop in them production-oriented thinking rather than the arithmetical calculation of how to increase production through the implementation of the investment programme. Hence while laying down the objectives and policies of the agricultural sector for the Sixth Plan period, due place will be given to the task of increasing production of all farmlands and foresting the productive zeal and enthusiasm of the small farmers, the true sons of the soil. Increase in agricultural production will help improve the consumption level of agricultural product at the national level.

The long-term objectives in relation to agriculture as enumerated below will simply act as guidelines in determining periodic targets:

- 1 To increase production of foodgrain, fruits and animal-based foodstuff in proportion to the nutritional need of the growing population.
- 2 To increase agricultural production so as to create surplus needed for capital formation in other sectors of the economy and to increase production of exportable commodities so as to maintain the country's balance of payments.
- 3 To provide raw materials for the agro-based industries and to provide employment to the growing number of the unemployed.
- 4 To launch agricultural development programmes in the mountainous region in a greater number in order to remove the inter-sectorial and inter-regional imbalances, while putting the hill economy on a firm footing.

Although the Fifth Plan had envisaged to increase agricultural production by 19.2 percent of the foodgrain and potato has dropped 14.4 percent as compared with fiscal year 1974/75. Similarly, production of cash crops like tobacco, jute, sugarcane and oilseed, which should, have gone up 67.8 percent, is registered an increase of 43.40 percent only. As regards fruits, production went up 8.1 percent, exceeding the target of 6.44 percent as planned. In case of vegetables however, their production went up by 19.12 percent as against the plan target of 59.0 percent. Similarly, shortfall has marked the production of livestock, and the distribution of agricultural inputs and agricultural credit. None of them have measured up to the target.

Factors Causing Shortfall in Agricultural Sector

- 1 **Shortage of Irrigation Facility:** The target set for the fifth plan was to extend additional irrigation facility to 146,000 hectares. The actual achievement, however, is estimated at 95,425 hectares, and fifty percent of them came under irrigation in the final year of the fifth plan only. As a result, irrigation facility could not be available for increasing farm output.
2. **Lack of Coordination:** While farming agricultural policy, coordination among all relevant sectors was deemed quite essential. But coordination approach was conspicuous by its absence, when the time came for drawing up programmes. So, chief among factors retarding the growth of agricultural sector was the lack of coordination among agricultural credit, agricultural input, agricultural extension, cooperative and land reform programmes.
3. **Disharmony between Agricultural Research and Extension, on the one hand, and the Regional Potential and Popular Need, on the other:** As planned, development of livestock farming, horticulture and food crop in the Himalayan, mountainous and Tarai regions respectively could not be implemented firmly. Similarly

the shortage of mid-level technicians like JT's and JTA's had a regressive effect in the agricultural development. And the unfortunate part of it was that whatever skill and means were available could not be put to proper use.

4. Ecological Imbalance: Haphazard destruction of forest caused landslides on hills slopes and cultivable land, reducing soil fertility.
5. Short Supply of Improved Agricultural Inputs: During the plan period the demand for chemical fertilizers was 162,875 tones, while the supply was 84,133 tone. Similar was the case of improved seed where the supply was 12,212 tones as against the demand fir 19,135 metric tons.
6. Natural Calamity: during this plan period whether gods were not propitious, as a result of which the country had to face severe droughts.

Sixth Plan Objectives

1. *To Improve Consumption Standard by Increasing Agricultural Production:* Food consumption standard in Nepal is computed at 2,181 calories and 56.6 grams of protein per day, which is well below the requirement of 2,256 calories and 60 grams of protein. The Sixth Plan aims to raise the consumption level to 2,266 calories and 59.8 grams of protein, taking into account the growth of population during the plan period.
2. *To Credit Productive Employment:* Agricultural sector ha somehow or other, been providing employment to those not getting opportunities in others sectors. This process will be continued in the Sixth Plan also.
3. *To Maintain Export:* Although the long-term plan has been to make continued efforts to increase foreign exchange receipt, the present level of foodgrain production seem to make it no longer a viable proposition. The position is further complicated by the fact that the main objective of the plan is to divert increased production to internal consumption. Hence, the Sixth Plan has to content itself with maintaining the export levels at about 200,000 tonnes per year.
4. *To Supply Raw Material to Agro-Based Industries:* As supply of raw materials have to be maintained for those agricultural and agriculture affiliated industries that are in operation today and the are to come into operation tomorrow, production of such raw materials will be increased.

Policy

1. Since Some years past the gap of inter-regional investment has been narrowing down. This trend will be further accelerated until per capita consumption level becomes equal.
2. Intensive cultivation, multi-crop system and such other measures designed to raise farm output and soil productivity will be introduced and extended in the plan period.
3. Cottage Industry, family planning, tree planting, irrigation, canal construction, roads, provision of drinking water and the like form of constituent element of village development. Hence, agricultural development projects will be implemented as part of the total village development package and in a mutually inter-linked manner.
4. Since agriculture is the main sector, which can absorb the growing population, emphasis will be laid on labour-intensive technology, which will form part of the improved farm technology, raising per unit productivity of land and labour.
5. The use of infrastructures already created to increase foodgrain production will be optimized. In the mountainous region irrigation facility will be provided and agricultural development programmes will be launched in an integrated form in the water-scarce but cultivable lands. To this end, agricultural research, improved farming techniques, and credit and marketing facilities will be placed at the disposal of the farmers.
6. In the mountainous areas also intensive food and cash crop production programmes will be launched. In these areas having transport facilities programmes will be undertaken to develop horticulture on a commercial scale. Similar approach will be taken in the case of livestock development programmes in the high mountainous region.
7. Emphasis will be given to the agricultural development programmes, which assist small farmers to raise their income. Special programmes will be launched to increase production of agricultural commodities for exports and for import substitution and market development, and price support and stabilization programmes will be introduced.

Working Policy

- Production will be enhanced through the optimum application of production inputs. Irrigation facilities, improved seeds and saplings, improved tools, local animal wastes and compost manures will be used to the maximum. Similarly, the breed of calves, bulls, buffaloes, goats, sheep, chicken, fish, fingerlings and soon will be improved naturally or artificially and such breed- improving technology will be widely disseminated.
- In some context of crop development, production inputs will be fully concentrated in such areas where irrigation facilities are available and the inputs left over will be used in other areas.
- Most of the holdings in the possession of peasant are small fragmented and scattered. As a result, they are under-employed and the level of income is also proportionately low. Hence, attention will be given to develop a programme which is suited to the geographic conditions of the region and which can yield an additional income for them.
- Available manpower, technical knowledge and resources will be decentralized to make district-level organizations and institution well-organized and well-equipped. Only small units will be functioning at the center for policy determination and coordination.
- With a view to ensuring maximum popular involvement in the programmes designed to boost agricultural production, administrative and technical support will be extended to achieve at the people's level. In the case of public sector, however, it would not be wise to widely disperse the financial resources technical capability administrative strength available to agricultural improvement programmes. Such a strategy might even be counter-productive, making the whole programme itself ineffectual. So instead of scattering the scarce resource at random, the objective will be to concentrate particular programmes in particular places because only thus can we sit back in anticipation of good results.
- Productive or applied research will be given due encouragement and the extension service, technical support and other facilities needed for such research will be made available in an integrated form. In almost all cases research will have direct relevance to local problems. To bring all research works on the development of technology to the notice of the public in an effective manner, such research will be conducted by a firm or center that has direct interest in the subject. Research projects that have proved unprofitable so far or that are yet to get off the ground will not be included in the sixth Plan.
- While launching programmes connected with animal husbandry, horticulture, fish farming and cash crops, the determining factors will be such basic pre-requisites like transport, market and local consumption, rather than sectorial interests.
- The programmes of agencies like the Agricultural Development Bank, Agricultural Inputs Corporation, Irrigation Department, and Agricultural Extension will be hammered out in such a manner as to bestow highest possible benefit on the small and backward peasants. Financial institutions shall not agree to extend credit for labour-displacing mechanizations. Moreover, the Sajha (cooperative) which is to be entrusted with sale and purchase of agricultural inputs and products, will be required to fix the buying price of the farm products well in advance of the sowing season
- Crops which directly help export and supply raw materials for indigenous industries will be cultivated as a special programme. Crops like cardamom, ginger, pulses, sugarcane, jute and tobacco fall within the province of this policy.

Priority

- 1 Development of food crops.
- 2 Development of the cash and other special crops.
- 3 Development of livestock.
- 4 Development of horticulture.
- 5 Fish farming.
- 6 Processing of farm products.

Primary will be given to the following programmes according to geographic regions:

Mountainous Region

1. Keeping the remote districts, growing population and local demands in view, foodgrain production programmes will be varied out in the areas concerned and, while conducting such programmes, the aim in the areas concerned and while conducting such programmes, the aim will be to help meet the minimum requirements of mitigate quantitative and qualitative decline.

2. Due emphasis will be placed on programmes that are calculated to reduce losses before and after harvesting and mitigate quantitative and qualitative decline.
3. Exportable commodities like red pepper, garlic, turmeric, cardamom and silk will be cultivated in the mountainous region where there will be added advantage of increasing the scope employment and size of income.
4. Livestock farming and horticulture will be undertaken in an integrated form and priority will be given to such subsidiary occupations and industries as are connected with them.
5. In the urban area vegetables, fruits, meat and milk which are required to meet these of the rising population, will be produced in greater quantity.
6. Water Resources locally available will be harnessed individually or collectively for carrying out minor irrigation projects.
7. For the provision of seeds, seed processing, preservation and distribution will be managed at the district level and such areas special emphasis will be laid on the manufacture and use of local manures.

Tarai Area

1. In the Tarai region, where irrigation facilities are available intensive cultivation of more crops will be varied out and paddy, the principal crop of the region as a whole, will be improved both qualitatively and quantitatively.
2. Apart from nutrients, efforts will be made to meet the domestic needs of such products like sugarcane, tea and cotton, and to increase the exportable quantum of such products like jute, tobacco, oilseeds, ginger and fruits.
3. Incentives will be provided to private sector in producing, processing and marketing vegetables, milk, eggs, meat, fish, and fruits at a level which is adequate to meet the needs of the urban area.

National Targets

With the objectives and policies mentioned above in full view, the targets of different production fields under the Six Plan have been fixed as follows:

1. *Food Crops:* Making due allowances for the seeds and losses, foodgrains will shoot up by 9.9 percent in the hills and 17.6 percent in the Tarai to make a total of 14.9 percent, which includes foodgrains like paddy, maize, wheat, and millet.
2. *Cash and other Special Crops:* Cash crops like tobacco, sugarcane, jute, oilseed, cotton and tea, which constitute the main source of raw materials needed for the domestic industries and the principal items to be exported to the international market, are calculated to go up 42.9 percent, 66.4, 2, 9.5, 3733.3 and 250 percent respectively. Similarly in the Sixth Plan period production of special crops like ginger, cardamom, garlic and red pepper will be 23,000 tonnes and, in the case of silk, its production will peak to 26,000 tonnes and, in the final year of the plan.
3. *Meat, Milk and Milk Products:* Under this plan the total meat production in fiscal year 1984/85 will be higher by 20.7 percent as compared with FY 1979/80. Similarly, milk, milk processing and milk products are estimated to be up 24.6 percent, 73.6 percent and 54.25 percent respectively.
4. *Vegetables and Fruits:* In the Sixth Plan production of vegetables will be increased by 49 percent, potato by 16.8 percent and fruits by 31.4 percent.

National Target Regarding Agricultural inputs

To meet the national target, inputs needed for the principal crops will be provided.

1. *Development of Technology:* For ensuring higher production, technologies suitable to local soil, climate and altitude will be developed.
2. *Improved Seed, Chemical Fertilizer and Pesticide:* Over the plan period 25,725 tonnes of improved seeds will be made available through institutionalized means. Making use of the same mechanism, 215,402 tonnes of chemical fertilizer and a requisite amount of pesticides will also be provided.
3. *Foreign trade and credit:* Small farm implements worth Rs. 10.7 million will be made available, where needed. Similarly, in the case of agricultural credit a total of Rs. 1744.1 million will be made available for disbursement as long-term, mid-term and short-term loans.
4. *Irrigation:* By the end of the fifth plan period irrigation facility was to be extended to 198,481 hectares, and the additional areas, to be brought under irrigation coverage would be 233,482 hectares to form a total command area of 412,936 hectares.

- 5 *Reclamation of Land Reform and marketing Service:* Under this programme, agricultural production inputs will be set aside for distribution among landless peasants.
- 6 *Institutional Mechanism, Land Reforms and marketing Service:* Under this programme, agricultural production inputs will be made available according to need, and fair prices will be provided to agricultural products through proper attention to marketing service. Other targets under this programme include the organizing of tenants and small and backward peasants into a group so they can work together to boost production.

Details of Principal Programmes

Development of Food Crop:

1. *Paddy Crop:* As there is little scope for the expansions of the area under paddy cultivation, this plan will aim at increasing productivity to induce an additional output of 2,740,375 tonnes by the end of plan period, representing a rise of 14.0 percent. To achieve this target special intensive programmes are planned for the irrigated areas of the Tarai and special "pocket" programmes in the irrigated hilly region of the country. In other areas of the Tarai and hills, where there is no irrigation facility to speak of, ordinary programmes will be set a foot. As for seeds and saplings, guaranteed and certified products will be delivered in the hilly regions also at the level of the peasants themselves through agricultural farms and centers.
2. *Maize Crop:* The production of maize, which is the second principal crop, has been on the decline over the past few years. Its productivity, which stood at 1.9 tonnes per hectare in FY 1970/71, is estimated go down to 1.62 in FY 1979/80. The Sixth Plan aims to raise it to 1.78 tonnes per hectare. As the area under maize cultivation cannot be expanded during this plan period, winter maize production is programmed for 10815 additional hectares in the Tarai. Besides, nothing will be left undone to add to the volume of maize production.
3. *Wheat Crop:* Wheat is the third principal food crop. The area under harvest of 454,000 tonnes. The sixth Plan aims to raise the area to 443,000 hectares and production to 579,090 tonnes. The supply of Improved seed will be taken care of by the agricultural farms and centers, which will produce certified seeds and distribute them at the peasants level.
4. *Other Food Crops:* Improved millet seed will be made available through agricultural farms to secure a 7.5 percent raise in millet production during the plan period. As regards leguminous plants, common pulses will be increased by 16 percent and soybean cultivation will be raised by 37 percent to bring the production t 79,780 and 14,977 tonnes respectively in FY 1984/85.

Development of Cash and Other Special Crops

1. *Tobacco:* According to the programme of emphasizing cash crop production in support of agro-industry, tobacco production will be raised from 7,000 tonnes in 1979/80 to 10,000 tonnes in 1984/85 a rise of 42.9 percent.
2. *Sugarcane :* In FY 1977/78 sugarcane was cultivated in 22,800 hectares of land, yielding 386,000 tonnes. In 1984/85 the final year of the Sixth Plan, however, the area under sugarcane cultivation will be expanded to 27,580 hectares and production raised to 463,700 tonnes.
3. *Jute :* Among the various industries of the country, which are based on agricultural raw materials, jute has been considered most important and outstanding. Jute cultivation will, therefore, be developed and expanded as much as necessary. Accordingly, jute roductin, which stood at 68,000 tonnes in FY 1978/79, will be raised to 85,000 tonnes in FY 1984/85, which marks the final year of the Sixth Plan.
4. *Oilseeds :*In FY 1979/80, the last year of he fifth plan, the area under oilseed cultivation was estimated to be of the order of 147,920 hectares, yielding an estimated crop of 94,640 tonnes. The sixth Plan aims to raise the area and yield of oilseed by 4.9 and 10.1 percent respectively to bring the area to the total of 155,220 hectares and production to 104,220 tonnes.
5. *Cotton:* Tn the final year of the fifth plan, 1979/80, the area undercotton cultivation is estimated at 200 hectares, production of cotton seeds 140 tonnes and cotton fibre 60 tonnes. The sixth Plan aims at meeting the annual requirement of the textile factory already established at Hetauda. For this purpose, cotton will be cultivated in Banke, Bardia, Dang, Deokhuri, Kailali and Kanchanpur under different programmes, which are estimated to cover an area of 7,800 hectare, yielding 5,400 tonnes of cotton seed and 2,300 tonnes of cotton.

- 6 *Tea*: in the fiscal year of the fifth Plan, 1979/80, tea cultivation was estimated to cover an area under tea cultivation and its production will be raised 45.8 and 216.7 percent respectively to bring the total area to 2,380 hectares and total production to 1,400 tonnes.

Special Crops

- (a) *Coffee*: At present coffee plantation is limited to Gulmi, Argakhanchi and some parts of Palpa. By the end of the plan coffee plantation will be spread over 42 hectares to fulfill the plan objective of reducing its import by degrees.
- (b) *Spices*: Cultivation of spices like Ginger, turmeric, garlic, chilli and cardamom will be concentrated in specific areas instead of scattering it here and there as at present. The Sixth Plan aims to produce 13,000 tonnes of ginger, 3,250 tonnes of turmeric, 3,250 tonnes of garlic, 2,500 tonnes of chilli and 1,000 tonnes of cardamom in the fiscal year of the plan.
- (c) *Silk*: Silk farming will be conducted in some districts of the mountainous region in a special way. In the setting up of mulberry nursery and cocoon production the peasants will be associated collectively, Special arrangement will however, be made for financial and technical assistance.
- (d) *Bee-Keeping*: Bee hives will be produced and distributed to the peasants. Honey will be processed and marketed. Arrangements will be made for testing, evaluating and collecting different species of bees in an effort to develop high-yield insects for distribution among the peasants.

Livestock Development

According to the statistics of 1978/79, the number of domesticated animals amounted to 15,300,000 of which cattle accounted for 43 percent, buffaloes 25 percent, goats and sheep 30 percent and others 2 percent. Till now most of the peasants look upon animal husbandry as a side job. Hence, to step up animal farming in the Sixth Plan private sector will be urged to come forward and practical and timely research will be conducted to improve the breed in a scientific manner.

Livestock Development and Production Programme

1. *Cow, Buffalo, Yak*: Under this programme, statistics of animals will be collected, herd registration established, improved feed developed, veterinary and managerial services provided along with provision of training for peasants. Such programmes will be started in 48 districts consisting of those districts that are to come within the purview of integrated rural development projects and other feasible districts.
2. *Goats and Sheep*: Sheep development programmes will be launched in high mountainous regions and sheep and goat development programme will be started in such feasible districts where integrated and intensive animal development programmes are in operation. At the same time, livestock farms will provide extension, supervision and training of sheep and goat farming as part of their contribution to the development of animal husbandry within their respective areas.
3. *Pig*: Pig farming programme will be put underway in an integrated manner in the urban areas and district nearby, along with those districts where mixed fish farming is to be opened up.
4. *Poultry*: Consistent with the programme of the present plan, which calls for a more effective poultry farming, the private sector will be encouraged to develop poultry farming, the private sector will be encouraged to develop poultry farming in the urban area will be distributed among the peasants, living in remote, mountainous regions, for whom poultry farming will be a supplementary occupation, well-suited to raise their income level.

Horticultural Development

The mountainous regions of Nepal hold out little promise for the development of food and cash crops. Their terrain features, require that crops of a type that retain much soil be cultivated. Hence, horticultural development programme will be conducted, keeping those regions fully in view. Such a programme may be conducive to the economic balance of the peasants and may to a certain extent help restore the ecological equilibrium too. During the Sixth Plan period 25 farms in the public sector and 22 in private sector will be kept busy producing fruit saplings to the tune of 21,327,000 will be distributed to bring the fruit cultivation area to 42,000 hectares in the Sixth Plan period. This will raise fruit production from 244,526 to 321,518 tonnes, bringing about a net rise of 76,992 tonnes of 31.5 percent. In the Final year of the Sixth Plan citrus fruit cultivation will go up from 30,000 to 39,000 tonnes to register a 30 percent gain. The plan aims at producing a total of 600,000 citrus fruit saplings from both government farms and private nurseries within the next five years.

1. *Potato*: Grown in the total area of 50,920 hectare, potato forms the staple food of 30 percent of the Nepalese people. In the Sixth Plan the potato-growing area may go up to 51,340 hectares, needing 55,023 tonnes of seed. On the production side, 288,150 tonnes, production in the fifth plan period, may

reach 336,525 tonnes of 16.8 percent. Production of 225 tonnes of original seed, required for this plan period, will be handled by the seven existing farms.

2. *Vegetable:* The programmes set forth in the Sixth Plan calls for a total of 494 tonnes of vegetable seeds. To meet this requirement, 10 different government farms will be engaged in producing original seeds to the tune of 16.4 tonnes. Multiplication of improved seeds from the four development regions.

Fish and Duck Farming

Besides the eleven governmental fisheries, private sector will also be tapped to produce and sell 46,670,000 fingerlings and 407,000 ducklings as part of the effort to develop fish and duck farming as an integral part of the effort part of the agricultural development. XBv

Production, Collection and Pasturisation of Milk and Milk Products, Sale of Milk-Products in the Urban Area: Milk collection from suburban areas served with transport lines will be brought to the urban consumers after processing it in pasteurizing plants that are already in existence or are to come into existence in future. For this purpose, collection centers will be expanded, chilling plants will be developed as a regular feature of milk supply scheme and a national milk collection grid will be brought into being. Under the joint milk production arrangement, milk collected at Hetauda from different outlying areas will be transported to Kathmandu after vapourization. In addition to the cheese factory now in operation in the northern region, more such units will be commissioned in five different places.

Details of Supplementary Programmes

1 Research: As agricultural research works mounted till now, have been almost ineffective, efforts in that direction will be made afresh with a change of emphasis. The emphasis this time will be on the development of practical production technology that has immediate relevance to the problems confronting the farmers.

Increase in agricultural production being unthinkable except in terms of a new technology, research programmes that are likely to solve the problems of the peasant will be stressed. Launching of such programmes will be guided by the long term policy of matching production to geographical compulsions of the different areas. For this purpose, research centers will be set up in different places of the Kingdom. Research for the sake of research will be de-emphasized. Practical results obtained from research will be spread through extension worker and farmer training programmes.

(a) Crop Research and Development

1 Crop Development: Suitable research will be conducted to develop improved farming techniques as a means of upgrading the income-level of the peasantry and to preserve the fertile property of the soil. Research will be centered on principal food crops, without overlooking the need of testing mixed cultivation and crop rotation. To hold weeds under control, lentil, soyabean and other quality seeds will be multiplied.

2 Agro-Botany: Seed testing, crop and inspection seed certification works will be widened with emphasis on high-yield and nutritious food crop and vegetable cultivation.

3 Soil Science and soil Chemistry: A fertility development programme will be launched under which the fertility of the soil samples collected from different parts of the Kingdom will be tested and determined. Similarly, tests will be conducted to find out which fertilizer will be suited to the chemical composition and fecundity of a particular soil

4 Entomology: To protect different crops from the ravages of insects a wide range of appropriate chemicals will be provided and scientific warehouses will be developed for storing foodgrains. In the same way, bee-keeping and sericulture will be commercialized and strengthened.

5 Plant Pathology: Different kinds of research works will be conducted to counteract and control diseases affecting principal food crops, vegetable and fruit plants. Training courses will be conducted to impart to the peasants proper knowledge about plant diseases. Mushroom farming will be encouraged to broaden employment opportunities. Agricultural quarantine will be introduced to screen out diseased plants.

6 Agricultural Implements: Implements and equipments useful in boosting farm output will be made available to the peasants after careful testing.

(b) Food Research

For the proper utilization and preservation of agricultural produce research-related programmes will be initiated as under:

1 Food Technology: Processing and storage methods will be improved upon to raise the quality of foodgrains.

2 *Foodgrain Technology*: Processing and storage methods will be improved upon to raise the quality of foodgrains.

3 *Nutritional Research*: Nutritional research will be launched in some selected districts by health, education, agriculture and other agencies in a coordinated fashion.

4 *Quality Control and Standardisation*: Under the provisions of the food Act 1956 and Food Rules 1970 agriculture and other agencies in a coordinated fashion.

C) **Fruit and Vegetable Research**

Different kinds of fruits and vegetables will be subjected to close scientific scrutiny and those that pass the test will be allowed to proliferate. This programme will include propagation of prophylactic methods.

(d) **Animal Research**

to induce fertility in the cows the local variety will be crossed with imported stud bulls as part of the fertility research. Chouri Development farms will be set up in solokhumbu and Dolpa to breed better Chouris (long-haired, bushy-tailed high-altitude cattle), similar treatment will also be given to buffaloes, sheep and goats. Different experiments will be conducted and pastures developed to improve the quality of animal feed.

Agricultural Extension Programme

Good rapport will be maintained between the peasants and governmental agencies to maintain a two-way traffic between them so the end-results of research can be placed before the peasants and the problems confirming the farmers can be brought to the laboratory.

Information Service: Through field demonstration, charts and radio broadcasts farmers will be initiated into new technologies.

3 **Special programme**

a *Intensive Mountainous Region Development programme*: This programme will include crop development, vegetable and fruit development, livestock development, irrigation and soil erosion.

b. *Mountainous Area agricultural Development Project*: Five year projects will be launched in Gorkha, Lmajung, Tanahu and Syangja, which will emphasis foodgrain, potato and grass cultivation with low-cost technologies.

c. *Mountainous Agricultural Production Methods*: Under this programme district-level research and extension work will be rendered more effective and supply of farm credit, irrigation canals, seed and manures will be improved.

4 **Integrated Rural Development**

Within this project will fall the village development projects of Rasuwa-Nuwakot, Rapti-Koshi Mountainous Area, Bheri, Karnali, Sagarmatha and Mahakali and under it crop development, horticultural development, livestock development, fisheries development, and grazing ground development will be undertaken in an intensive manner.

Veterinary Service

Under this programme activities listed below will be put into effect:

- 1 Control of infectious diseases
- 2 Control of rabies.
- 3 Control of parasitogenic diseases
- 4 Control of rinderpest.
- 5 Extension Service.

Distribution of Agricultural Inputs

(1) *Fertilizer, Seed and Implements etc*: Seeds, chemical fertilizer, therapeutic and insectidal chemicals and improved farm tools, needed for different crop development programmes, which are to be conducted at the peasants' level, will be marketed through the Agricultural Inputs Corporation. A warehouse with the capacity of 18,000 tonnes will also be built to provide storage facility.

(2) *Agricultural Credit*: Agricultural credit to the tune of Rs. 1,740 million will be provided during the Sixth Plan period, which will suffice to meet long-term needs of agricultural developments ranging from the provision of improved seed and irrigation facility.

Food Management

With such factors as geographical situation, population distribution and purchasing power in view, foodgrains will be purchased in excess areas of Tarai and highland for transport, Storage and sale in scarce, remote and mid-mountain regions, which are handicapped still more by lack of transport facilities. In addition, an emergency stock of 5,000 tonnes will be maintained and operated, on top of a food fund of 10,000 tonnes which will be drawn upon regularly to meet scarcity situations. At the same time, foodgrains will be provided at a subsidized rate in the remote areas as a matter of policy.

Warehouse Constructuon Programme

The The storage capacity of 58,050 tonnes, which was at the disposal the Nepal Food Corporation at the end of the fifth plan, will be increased by the construction if additional warehouses with the total capacity of 47,500 tonnes in the Sixth Plan period.

Marketing Servic, Agricultural Census, Economic Survey and Evaluation

(1) *Farm Products Marketing Service and Price Arrangement* : Under this programme activities relating to price fixation of agricultural produce, search for suitable market, development of marketing system and market centers and propagation of price information's will be conducted.

(2) *Collection and Publication of Agricultural Data*: Prior to the Sixth Plan the data that were put across covered annual crops alone. During this plan statistics connected with production of livestock, fruits and vegetables will also be gathered and brought out.

(3) *Economic Analysis, Survey and Evaluation*: Additional steps will be taken to know whether the peasants have the right sort of knowledge needed for the sources of agricultural growth, how relevant agricultural education is and what their economic status is.

Provision of Means for Programme Implementation

Manpower: Training programmes will be launched for peasant leaders and contact-farmers because agricultural development programmes stand no chances of success unless production and productivity are raised at the peasant level. Ample provision will also be made for basic technical skills and equipments.

Expenditure: In this way Rs. 2,300 million has been allocated for the implementation of agricultural development programmes in the public sector during the Sixth Plan period.

B. Irrigation

Against the background of 203,056 hectares of land, which were provided with irrigation facility in the fourth plan, the fifth plan aimed at extending irrigation facility to 146,000 hectares. But the actual achievement is estimated to have been 95,425 hectares to make an estimated total of 198,481 hectares.

Sixth Plan Objectives

1. To develop minimum irrigation facility required for the fulfilment of the agricultural production targets.
2. To improve completed irrigation schemes, where necessary.
3. To enlist maximum mass participation in the field of irrigation development from private sector and local institutionalized media in order to help boost production growth.
4. To create infrastructures in the field of the science of meteorology so its capability to gather important data and make projection can be maintained and that available data and forecast can be put to good use.

Policy

- 1) Irrigation projects to be launched in the Tarai will be completed at double-quick time to avoid unnecessary delay in the take-off of agricultural development programme.
- 2) In the hilly regions, areas suitable for irrigation will be determined and in such areas irrigation projects will be started. Emphasis, in this connection, will be laid on bringing water to the high and dry lands. Irrigational feasibility in the hilly region will not be judged on the basis of what is deemed right for the Tarai. Prime consideration will be given to the food-supply problem of the area under study.
- (3) Emphasis will be placed on irrigation and canal works, which are designed to benefit small and marginal peasants.
- (4) In the field of irrigation governmental efforts will suffice by no means. Attempt will, therefore, be made at drawing up and carrying out local-level projects by local participation as far as practicable.
- (5) In the implementation of irrigation schemes local labour, skill and material will be put to maximum use except where their use is considered impracticable and improper on technical grounds.
- (6) While examining the feasibility of irrigation projects, due alternation will be given to drinking water and power generation potentials as well.
- (7) In the field of meteorology an atmosphere of coordinated co-operation will be maintained among the various agencies concerned, with a view to ensuring that the data collected by them with the help of facilities already in existence and to be expanded later can be used to the benefit of agricultural development programme, and electric power and energy projects.
- (8) Law, permitting summary action against those who attempts to cause damage to the irrigational structures, will be enacted.
- (9) Necessary legal provisions will be made to exercise proper control over the utilization of water resources, which constitute a precious national property.
- (10) While selecting projects that are designed to benefit the peasants living below the absolute line of poverty, irrigation projects with the unit cost of Rs. 15,000 per hectares in the Tarai and Rs. 25,000 in the hills will be included.
- (11) An irrigation profile will be drawn up to give a clear picture of the irrigation facilities available in the kingdom as a whole.

National Targets

In the Sixth Plan period additional irrigational facilities will be provided to 233,482 hectares of land. Of this 23,261 and 200,221 hectares will be accounted for by the hill and Tarai regions respectively. The balance of 10,000 hectares are not amenable to identification by region.

(1) *Current Irrigation Development Programmes:* These include Kankai, Sunsari-Morang, Koshi West Canal, Kamala, Bagmati, Narayani, Chitwan, Gandak West Canal, Marchawar, Gwar, Khutiya, Mohana, Manusmara, and Sagarmatha Integrated Rural Development Irrigation Projects, which are calculated to provide irrigation facility to an additional 144,746 hectares of land.

(2) *Current Underground Irrigation Programmes:* From the first stage construction works on Bhairahawa-Lumbini underground project and Kailali-Kanchanpur tubewell irrigation project under construction, as estimated 6,230 hectares of farm land will have irrigation facility in this plan period. In addition, the Sagarmatha Integrated Rural Development Project will bring water to 16,500 hectares of additional land to make a total of 22,730 hectares, which will be provided with irrigation facility during the Sixth Plan period.

(3) *New Irrigation Development Programmes:* These include Babal, Sikta and Mahakali, district-level plans and the small irrigation projects of the Tarai. Together they are estimated to irrigate an additional 32,745 hectares of land in the Tarai region.

(4) *Mountainous Region Irrigation Programmes :* Projects under construction like Narpa, Rampur Tar, Labdu Dhikure, Gadkhar Argenti Chhap Chaur, Bhimsen Kulo, Suranaiya Gad, Agade Gad, Pokhara water utilization and Phewa Dam will continue to be under construction. New projects like district-level plans, labour-oriented hill plans, RCUP, Mahakali and Rapti integrated rural development programmes, in addition to small

hilly area irrigation projects, will be put under way to meet the target of bringing water to a total of 23,261 hectares of mountainous land.

(5) *Implementation of Feasible Projects and Feasibility Studies:* Under this the aim is to irrigate 10,000 hectares of land in different districts within the Sixth Plan period by implementing those projects that are found feasible. The feasibility study programmes include study on non-governmental construction plans also, besides big and small irrigation projects that are under consideration. Feasibility studies of 35 to 40 proposals are being programmed for each year of the Sixth Plan.

(6) *Programme Relating to /supervision, control, Maintenance and Improvement of Completed Projects:* This programme, which will be kept up in the Sixth Plan also, is designed to assist in maintaining the capacity of the Irrigation projects already completed.

(7) *Development of Underground Water:* Under this programme investigations will be made regarding the feasibility of underground water resources in Mahottari, Nawalparasi, Kapilvastu and Dang districts during the sixth Plan.

(8) *Water Resources Development Programme:* Under this programme various data needed for the water resources development will be collected and published. It also aims to make a scientific study of glaciers, lakes and flood.

(9) *Development of Meteorology :* Under the Sixth Plan topmost priority will be given to the task of weather forecasting, which will be done well in advance so necessary precautions can be taken.

(10) *Central Workshop Programme:* A workshop will be set up in the Sixth Plan period to keep the various irrigation equipments in perfect working order.

(11) *Hydraulic Laboratory programme:* This programme will be started in the Sixth Plan to bring down the costs involved in irrigation structures.

(12) *River Training Programme:* The Sixth Plan aims to undertake feasibility studies under this programme and those found feasible will be implemented, besides the projects now under execution.

Expenditure

Implementation of irrigation, water resources, meteorology and river training programmes, outlined above, is estimated to involve a cost of Rs. 3,130 million as shown below:

Programme	Cost in thousands
1. Current projects	1,203,400
2. New projects	653,700
3. Hill projects (current and new)	348,900
4. Underground project and underground water survey	288,000
5. Execution of feasible projects, feasibility studies and constructional improvement of the private sector	366,800
6. Improvement and renewal of old projects	65,000
7. Hydrology and Meteorology	74,200
8. River Training	100,000
9. Overseer training	<u>30,000</u>
Total	3,130,000

C. Land Reform, Cooperation and Survey

Land Reform Objectives of the Sixth Plan

- (1) Peasants, tilling the land of others for a prescribed period, will have their tenancy rights secured to provide them with a sense of permanency.
- (2) All kinds of farming requisites will be provided to the farmers in an integrated fashion, and rentals will be fixed to ensure increased production and higher standard of living to them.
- (3) Dual ownership of land will be gradually dismantled and the tillers themselves will be given permanency.

Policy

- (1) Land Act, 1964, will be amended to fix the rental due to the landlord, and irrigation, agricultural extension, agricultural credit, agricultural input and cooperated cooperative movement, so vital to the amelioration of the economic lot of the marginal peasant, still be operated in a coordinated manner.
- (2) To make the peasants affluent from the economic point of view, Landless labourers, depending on land, will be drawn toward non-agricultural occupations to an increasing extent and effective steps will be taken to liberate the peasants, living in the hills, from the crushing burden of indebtedness.

Brief Outline of the programme

- (1) Programmes which are to be conducted under land reforms will be divided into four categories: intensive programme will be started in areas where irrigation facilities are extensively available. Campaign programme will be launched in the remaining 13 districts of the Tarai. Integrated programme will be devised for midmountain regions where integrated rural development programmes are under way, while what may be called normal programmes will be set afoot in the remaining districts. By the end of the Sixth Plan intensive programmes will be launched in all districts except those of the Himalayan belt.
- (2) Under the intensive programme list of tenants will be maintained for the purpose of conferring tenancy rights, rental will be fixed to raise their production and productive capacity, while under the integrated programme, all necessary services and facilities will be brought within easy reach of the farmers.
- (3) The institutional set-up and manpower of the Land Reform Department will be recognized to accomplish the above-mentioned programmes.
- (4) Pilot projects will be launched in some areas for the eventual abolition of the dual ownership system in land.

Expenditure

For the implementation of land reform programmes the amount of investment needed during the Sixth Plan period is completed at Rs. 40.7 million at the constant price of 1979/80.

Sajha (Cooperative Development)

Sixth Plan Objectives

During the Sixth Plan period the aim will be to provide to the peasants basic facilities like agricultural credit, agricultural input and consumer goods, to boost the production and productivity of the peasants in the case of rural area and of the small entrepreneurs in the case of urban areas for the sake of their economic betterment.

Policy

- (1) There will be only one agency to lay down the policies and carryout supervision works in relation to Sajha institution and the Cooperative Department will be recognized as HMG's agency in operative Department will be recognized as HMG's agency concerned.
- (2) Districts, where Sajha programmes are already in operation, will be classified as below:
 - (a) 7 districts of the Tarai blessed with irrigation facilities.
 - (b) Remaining 13 districts of the Tarai.
 - (c) 20 districts of the mountainous region where integrated rural development programmes are also under execution.
 - (d) The remaining 20 districts of the mountainous region.
 - (e) 15 districts of the Himalayan region.
- (3) Consumer goods and other daily necessities will be supplied to the rural area through the Sajha, and as many warehouse will be constructed as necessary.
- (4) In the first phase, intensive programme in category (a), campaign programme in category (b), integrated programme in category (c), and normal programmes in category (d) and (e) districts will be undertaken. Districts where intensive programmes are to go into action, will also have separate Sajha institutions consisting of small peasants.
- (5) Sajha institutions functioning at the grassroots level will be organized separately for the small and other peasants. Management of this institutions will be intrusted to the sub-inspectors the cooperatives until people at the local level become fully able to bear the managerial and other responsibilities. Following the same line of approach, the organizations functioning at the district level will have Sajha officers or senior inspectors as secretaries who will discharge specified functions.

Intensive programme: Intensive programmes are those programme that will be conducted among small and poor peasants, who are organized in separate institutions, as complements to one another.

Campaign Programmes: this is an additional programme under which details of the irrigated area will be compiled and number of small peasants will be determined to facilitated the creation of the pre-requisites for the districts where intensive programmes are to be brought in to effect.

Integrated Programme: Under this programme the existing Sajha institutions will be strengthened and, where feasible, new ones will be opened in those districts in which integrate rural development projects are in operation.

Normal Programme : Sajha institutions that are functioning in all the hill and Tarai districts with the exception of those referred to above constitute the normal programme.

Principal Programmes

- (1) *Sajha Development :* The sixth Plan aims to undertake the following programmes in connection with the development of Sajha Cooperatives:
 - (a) *Samll Peasants Sajha Institution :* This programme will be initiated to bring economic benefits to the small and backward farmers.
 - (b) *Sajha Reorganisation :* While launching intensive and campaign programmes in irrigated areas and integrated programmes in districts where integrated rural development programmes are in force, Sajha institutions will be reorganized on the basis of feasibility and in keeping with the promotion of the economic prospects of the peasants, who are scattered from one end of country to another.
 - (c) *Sajha Warehouse Construction:* Warehouse construction programme will be set in motion to provide storage facilities for agricultural inputs and consumer goods that are to be sold and distributed through the medium of Sajha.
- (2) *Training*
 - (a) Inspector, Assistant Inspector and Manager training.
 - (b) Auditor, Assistant Auditor, Accountant, Salesman and the like.
- (3) *Population Education through Sajha:* Sajha will be called upon to assist in and carry on population education to be started in Nepal shortly, as it is felt that Sajha would prove to be an effective agency.

Expenditure

During the Sixth Plan period the aim is to spend Rs. 19.3 million on Sajha development programme.

Survey

Sixth Plan Objectives : Surveys will be conducted in those districts which have been left out so far, to identify tenants and landowners. Authoritative maps will be prepared in different scales.

Policy

Stress will be put on geodetic and topographic surveys.

- (1) *Cadastral Survey:* 515,260 hectares of land spread over 12 districts, which consists of those that are to be taken in hand during the Sixth Plan, will be surveyed and title-deeds distributed to the landowners.
- (2) *Geodetic Survey:* During the Sixth Plan period trigonometric points will be established in 16 districts, while in other districts the work of setting up trigonometric points will either be continued or initiated. Apart from this, the plan aims to do 30,500 card inking, to set 3,500 kilometers of benchmark, to observe 1,500 stars and to establish 250 gravity points.
- (3) *Topographic Survey:* The Sixth Plan, which lays stress on territorial survey on a large scale, aims to complete survey on 150,000 hectares of land at the rate of 30,000 hectares a year.
- (4) *Survey Training:* Under the Sixth Plan 400 surveyors, 300 junior surveyors and 36 special cartographers will be run for 50, 36 and 29 trainees respectively.

Expenditure

In this way the Sixth Plan has set for itself the task of incurring an expenditure of Rs. 160 million on conducting survey works.

D. Forest, Medicinal Plant, Soil-Conservation and Resettlement

Sixth Plan Objectives

- (1) *To Meet Indigenous Needs:* Meeting the forest product requirements of the public at large has been designated a matter of supreme importance.
- (2) *Conservation of Natural Resources:* To undertake ways and means of stalling natural disasters such as soil-erosion, flood and landslides, to protect the fertility of soil, to safeguard the rivers and rivulets that are on the point of drying up-activities like these are kept in the form of the second most important objectives.
- (3) *Derivation of Economic Benefit Out of Forest Products:* The third most important objective will be to meet internal needs and will also be exported with as much as processing as possible. Medicinal plants will be exported in the semi-processed form wherever possible, without in any way compromising the minimum requirements relating to forest conservation.

Policy

- (1) To preserve, promote and develop forest and forest resources and enlist community involvement in this endeavor to the maximum extent possible.
- (2) To give high priority to works relating to soil and catchments area conservation and scientific land use to conduct such works with special emphasis on local participation.
- (3) To lay stress on production and processing of medicinal plants.
- (4) To produce drugs internally that are required for domestic consumption.
- (5) To prohibit sale of drugs that are likely to have a deleterious effect on public health, the department, newly set up in the field of drug administration, will be placed on a firm footing and its working level efficiently will be heightened.
- (6) Forest products, needed by the people, will be made available with the minimum of fuss.
- (7) Forest products will be exported in a processed or semi-processed form. Medicinal plants will also be exported in the semi-processed form. While doing so, care will be taken that the ecological balance is not disturbed.
- (8) Work will be continued on the management side of wild-life sanctuaries and national parks to derive economic benefits through tourism.
- (9) Projects will be so drawn up as to create maximum number of jobs, and emphasis will be laid on labour-intensive technology.
- (10) A National environment preservation policy will be framed to maintain long-term balance between man and his environment, and reforms will be made in the existing institutional arrangement to give priority to environmental aspects.
- (11) While formulating and implementing development and construction projects, the tradition of considering their likely impact on the environment will be built up and legal provisions will be made under which development and construction works that tend to have unfavorable effect on the environment will be prohibited. Effort will also be made to make the people aware of the disastrous consequence, issuing from ecological disequilibrium.

Priority

- (1) High priority will be given to the community forest development and afforestation programmes, which are being run in the mountainous region to maintain a steady supply of lumber, firewood, dry twigs and leaves, and fodder, so urgently needed by the people. Similarly, programmes designed to make forest products easily available to the people, will also be given adequate priority.
- (2) Priority will be accorded to programmes which assign an outstanding role to mass involvement in the task of conserving, expanding and developing forest products.
- (3) Adequate priority will be given to programmes connected with production and processing of herbs.

Table-9

Principal Physical Targets

Programme	Unit	Target
Conservation and improvement of forest	Hectare	82,189
Afforestation	Hectare	42,872
Trench improvement	Hectare	218
Ravine control	Number	100
Families to be resettled	Number	30,158
Supply of essential drugs(except serum and vaccine)	Percent	100

Programme

- (1) Under the forest development programme will be launched the projects listed below:
 - (a) *Community Forest Development project:* The Sixth Plan aims to undertake works like nursery establishment, tree plantations in panchayat protected forest, boundary demarcation, improved stove distribution, publicity, extension and soil conservation.
 - (b) *Resource Conservation and Utilization Project:* Designed to properly protect, expand and utilize natural resources, this project, relating to forest development will be executed in Myagdi, Mustang and Gorkha. Establishment of nurseries and panchayat protected forests, distribution of tree saplings and demarcation of boundaries will be some of the target set for the project period.
 - (c) *Choutara Forest Development Project:* It aims at preserving and expanding forest and supplying essential forest products through local mass participation.
 - (d) *Tinau Watershed Management project:* This project is being implemented to preserve and expand the forest of the Tinau catchment area in an orderly fashion. It aims to set up panchayat forest and panchayat protected forest, to produce saplings in the nurseries, to run management courses and to create an expert manpower, among other things.

- (e) *Afforestation Projects:* Under this projects trees will be planted on 30,000 hectares of land and maintenance and protection work will be carried out on 22,044 hectares of land.
- (f) *Integrated Rural Development Projects:* Forest development programmes forming the constituent parts of the Rasuwa-Nuwakot, Koshi hilly region, Sagarmatha, Rapti and Karnali-Bheri integrated rural development projects will be carried out in the different districts.
- (g) *Shibpuri Watershed Management Projects:* This projects aims at preserving the catchment area in a scientific way in order to expand the source and standard of drinking water, to conserve forest wealth and to contain soil-erosion. During the Sixth Plan works deemed essential to achieving those targets will be taken in hand.
- (h) *Kanchanpur Forest, Resettlement and Irrigation Project:* Under this project people settling down in a disorderly manner in the Kanchanpur district will be removed and resettled. The number of families covered by this project will be 4,528.
- (i) *Silviculture Research project:* Under this project nursery technologies will be studied, report on native and exotic seeds now, among other things.
- (j) *Forest Survey and Research Project:* Before deciding on programmes like forest wealth survey, forest work plan, soil survey, analysis and investigation to be launched under the project during the sixth Plan period, works performed till now will first be reviewed.
- (k) *Forest Technician Training programme:* Under this programme technical personnel of the Ministry of Forest, engaged in various projects, will be given in-service training. During the sixth Plan period workshops will be conducted on soil-conservation, forest and wild-life.
- (l) *National Park and Wild-life Conservation Project:* Apart from providing various things for the national parks and wild-life sanctuaries already established during the fifth plan period, hunting resorts and Sedolpa National Park will be set up in the Sixth Plan. Feasibility study will be conducted on soil-conservation, forest and wild-life.
- (m) *Forest Administration and Management Project:* In the beginning of the Sixth Plan the effectiveness of the present set-up will be examined and reviewed as a prelude to taking steps in the direction of making the existing manpower and the organization more result-oriented. After determining how the existing manpower and organizational set-up can be harnessed to the task of doing what is absolutely necessary for the conservation and betterment of forest, work will be started with full responsibility to gain the targets set.
- (2) Under the soil and watershed management programme projects listed below will be undertaken:
 - (a) *Resources Conservation and Utilisation project:* Under this projects works like improvement of trenches, repair of foot-tracks affected or threatened by landslip, preservation of the wellspring, control of landslides, plantation of trees, establishment of panchayat nurseries along with different inventory works will be taken in hand in the upper reaches of the catchment areas Gorkha, Myagdi and Mustang.
 - (b) *Tinau Watershed Management Project:* this project is being implemented to preserve, develop and utilize with people's participation the natural resources existing in this catchment area with a view to ameliorating the economic status and standard of living of the people. During the Sixth Plan period works on the construction of embankment, check-dam, plant production, preservation of irrigation water and control of soil erosion, besides information and training programmes, will be conducted.
 - (c) *Bagmati Watershed Management Preservation project :* Under this project, besides preserving the fertile soil, the fury of landslide and flood will be kept within bounds and uniform flow of water will be maintained throughout the year in the Bagmati catchment area. The sixth Plan aims to plant trees, control fissure formation, raise fruits, plant improved grass, build embankments, control landslides and so on and so forth.
 - (d) *Watershed management and Conservation :* Under it the following two projects will be set afoot:
 - 1) *Watershed Conservation Education and Plan Formulation:* Under this project mass media including broadcasting will be deployed full blast to enlighten the people on the direct and indirect effect of the soil conservation work of national development and ecology, and plan of action will be drawn up after surveying the catchment areas.
 - 2) *Phewatal Watershed Management Projects:* The target set under project include this project include control of fissure formation, conservation of wellsprings, grass planting, plant production, tree plantation and trench repair works.
 - (e) *Integrated Rural Development Projects:* Soil conservation programmes forming part of the Rasuwa-Nuwakot, Sagarmatha, Rapti, Karnali-Bheri integrated rural development projects, and Mahakali rural development project will be carried out in different districts.
 - (f) *Remote Sensing Project:* Under this project data regarding different natural resources will be collected speedily and at low cost by the use of satellite photographs. The Sixth Plan aims to start interpretation work and training.

- (g) *Ecological Impact Study Project*: To maintain balanced relation between man and his environment a national environmental preservation policy will be framed within the sixth Plan period, which will seek to offset the adverse effect of development works and daily activities of the people on the environment. Likely effects on environment of the various projects will be assessed and studies will be made on the adverse effects produced by the development works already completed.
- (3) The following projects will be launched as part of the medicinal plant development programme:
- (a) *Drug Research and Development Project*: Launched to help make the country self-sufficient in drugs and other useful chemicals, this project will carry out research on medicinal and other plants with commercial value and develop technical skill and knowledge in the areas concerned. Other activities will include research and analysis, quality control, development of technology and dissemination of information along with creation of basic facilities needed for research and development.
- (b) *Medicinal Plant Survey and Herbarium Project*: Under this project scientific facts about the medicinal and other plants of commercial value will be brought to light after extensive survey works. During the Sixth Plan period various kinds of medicinal plants abounding in the Far Western Region will be examined, collected and labeled.
- (c) *Botanical Garden Development project*: In furtherance of the main aim of this project, which is to lay the foundation-stone for research, herbs growing in different places and under varied climatic condition will be collected, studied and grown in gardens with suitable habitats. During the Sixth Plan period, works like extending landscape gardens, preventing natural calamities, studying plants, preserving and propagating rare species and enlarging the germplasm centre will be included in the programme.
- (d) *Herb farming and Development Project*: Herbal gardens, set up till now, will be divided into two groups. The first group of gardens will be confined to experimental farming, where as those in the second group will be converted into productive gardens. To lay down policies, to draw up plans and to coordinate implementation, information and research activities, a medicinal centre will be set up in Kathmandu.
- (e) *Herb processing and production Project*: This project, which will be started in the Sixth Plan period, will aim at fully utilizing the medicinal plants, exporting them in the processed form and supplying them as raw materials for the drug industries. With the addition of some more gardens and inclusion of private farms, herb cultivation will be developed on commercial lines.
- (4) *Drug Administration and development project*: This project has been launched to evolve a regular mechanism for the scientific and institutional supervision of and control over the production, import, export, use, research, storage, sale and advertisement in the field of medicine. The Sixth Plan will, besides providing physical, administrative and legal prerequisites and preparing manpower, lay down the procedure for quality control, evaluation, analysis and testing of drugs.
- (5) *Other Activities (Forest, Medicinal Plant, Soil Conservation)*: Additional projects will be included in the Sixth Plan, if directives to that effect are received and if negotiation with aiding countries are concluded satisfactorily.
- (6) *Development Programmes Relating to Government-owned Corporations*:
- (a) *Royal Drugs Ltd.*: This organization has been set up in the public sector to further the objective of becoming self-sufficient in the production of such drugs as are most essential requirement of all the essential drugs (except sera and vaccines) in the field of modern medicine and to manufacture 35 to 40 varieties of herb-based drugs in the field of traditional medicine.
- (b) *The Timber Corporation of Nepal*: This Corporation will continue to supply wood used as construction material, saw logs, clearfell the forest area set aside for resettlement and meet the indigenous demand for firewood in a more effective manner. It will liaise with the Forest Department to produce and sell timber and wood.
- (c) *Forest Products development Board*: The following projects will be launched under this Board;
- (1) *Timber and Wood Sales Project*: This project is geared to meet the domestic needs and export surplus forest products on the basis of scientific management principles.
- (2) *Ratuwami Afforestation*: Under this project trees will be planted on 3,000 hectares of land, besides producing plants, preserving planted areas and the like.
- (3) *Sagarnath Forest Development Project, Sarlahi*: This project will grow in the Sagarnath forest area of the Sarlahi District trees that can be used as firewood within 10 years and as timber within 40 years. In the Sixth Plan period it will set up nurseries on 10.6 hectares of land, grow 2,000,000 plants, plant trees in 4,500 hectares of land, etc.
- (4) *Resin Extraction Project*: Launched under the joint cooperation of HMG/N and the USSR Government, this project will conduct survey, prepare design and collect resin in the sixth Plan period.

- (5) *Fuel Corporation:* This corporation will sell firewood, which is widely used as a source of household energy, supply saw dust, which is used as domestic energy in the urban area in particular, produce and sell stoves, which are specially designed to make an economical use of charcoal, in a simple and easily accessible manner.

Resettlement Programme

Sixth Plan Objectives

- (1) As a supplementary to the target of boosting agricultural growth, the resettlement programme will be used as a means of bringing additional arable land under cultivation in the process of resettling landless peasants.
- (2) Landless peasants, illegally settling down in the Tarai region, will be systematically resettled according to a national policy.
- (3) In the mountainous region too, where there is possibility of organized settlement, resettlement programmes, deemed appropriate from the economic considerations, will be started.

Policy

- (1) As much as land as possible will be made available to the resettlement programme, in so far as it is not inconsistent with the forest development plan.
- (2) With the cooperation of forest and agriculture departments fundamental questions like how much land can be made available and from where, whether lands that are available are farm-worthy or not will be settled before launching the resettlement programme in a coordinated manner.
- (3) The policy of providing land to none else but the landless peasant will be strictly and ruthlessly followed,
- (4) In the systematic resettlement programmes also the participation and co-operation of people concerned will be made compulsory in the creation of basic requisites such as drinking water, fair weather road and primary school.
- (5) To carry out resettlement programmes in an orderly manner necessary legal provisions will be instituted and criteria, rules and procedures concerning resettlement will be continuously refined.
- (6) Feasibility studies on resettlement in the hills will be conducted and steps will be taken in the light of their findings.

Programme

- (1) *Resettlement:* This programme has been set in motion for the exclusive benefit of people who are affected by acts of God, landless peasants who are forced to migrate, and families who, having been expelled from protected forest areas, are awaiting rehabilitation. During the sixth Plan period 9,280 families will be resettled on 12,220 hectares of land by means of 8 projects of kanchanpur, Bardiya, Sarlahi, Nawalparasi, Dhankuta (Jorpati) Kailali and Jhapa besides the central project.

- (2) *Organized Settlement:* Families encroaching upon forest area and settling down haphazardly will be resettled in a systematic way under this programme.

With the help of 8 projects that are to get off the ground in the Sixth Plan 16,350 families will be resettled on 17,985 hectares of lands.

- (3) *Additional Programme Concerning Resettlement:* Resettlement programmes will be put under way in the Sixth Plan period in the hilly regions in particular, which appear feasible from the standpoint of different professions.

Expenditure

In Thousand

1. Forest development, soil and catchment area conservation, medicinal plant development, drug supply and development programme and development programmes of government-owned corporations	Rs. 850,000
2. Resettlement programme	<u>Rs. 100,000</u>
Total:	Rs. 950,000

8. Industry, Commerce, Mining and Power

A. Industry

As development efforts have to embrace all the economic sectors of the country, it is essential that an atmosphere conducive to industrialization be created. If we fail to gradually diversify our economic dependence from agriculture to other fields of human endeavor, the outlook for economic development will be very dim indeed. Development of the industrial sector can make a remarkable contribution to creating employment opportunities for the growing population, solving the problems of unemployment and under-employment besetting the country, earning foreign exchange and balancing the payments position as well.

Industrialization is in an infantile state in the country now. To the gross domestic product 5 percent is the contribution of the industrial sector and it provides employment to just one percent of the active labour force. If cottage industries are to be excluded from the industrial sector, then its share in the economy will be negligible. From this account it is quite obvious that a lot of efforts have to be put in for boosting industrial development.

The progress made by the industrial sector during the fifth plan period could by no means be considered satisfactory. Owing to difficulties in the power supply and labour unrest, the installed capacities of the industry both in the public and private sectors could not be used to the full. The number of new industries established were not many. Among the factors responsible for this inhibition, insufficiency of power supply emerged as a major factor. During the plan period only three industries put in the appearances in the public sector, besides some small ones in the private sector. The annual loan disbursement of the Nepal Industrial Development Corporation could not average more than Rs. 50 million. To secure quality improvement of the industrial products Nepal Standardization Board was brought into existence and Security Marketing Centre was established to develop an organized stock exchange.

The highly involved procedure of administering incentive schemes, paucity of industrial raw materials, low quality of the workforce, shortage of capital, inadequacies of transport and power, limited size of domestic market, open international border, land-locked states of the country and for similar other reasons the pace of industrialization was considerably slowed down. Since industries cannot flourish in the absence of basic infrastructures, a huge amount of investment in electrification and transportation development is distinctly called for. At the same time, rapid development of the agricultural sector is essential for raising the level of purchasing power of the people and

enlarging the size of the domestic market for industrial products. Viewed from this background wisdom seems to lie in developing cottage and small-scale industries, the outlook seems to be bright for agro-based industries plus those that will be based on some of the proven mineral deposits. Besides, attempts at attaining self-sufficiency in the production of construction materials and certain mass consumer items like textile should be continued.

Sixth Plan Objectives

Prominent among the objectives of the sixth Plan for industrial development will be to create industrial employment opportunities and absorb the excess manpower now clinging on to agriculture for want of viable alternatives. To become self-sufficient in daily essentials and some of the building materials, within the shortest possible time, and to develop export-oriented industries, which will have the effect of improving the balance of payments position.

Policy

Policies bearing on current taxation, customs, foreign trade, foreign exchange, wages, prices, industrial investment and others will be reviewed. In much the same way, industrial licensing policy will be revised. To provide protection to domestic industries through the medium of import tariff, a scheme will be developed to control the international border, which will be enforced effectively and gradually. Effective coordination will be worked out among the agencies concerned with industrial development and organizations like the Nepal Industrial Development Corporation and Industrial Promotion Centre, which are directly connected with industrial development, will be strengthened.

Table-10

Principal Industrial Production Programmes to be Undertaken in the Public Sector

Name	Unit	Target
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1. Agricultural Tools Factory (production of different agricultural implements)	Rs, equivalent	45,000,000
	Metric ton	10,000
2. Agricultural Lime Factory	Metric ton	55,000
a) Agricultural Lime	Metric ton	60,500
b) Chemical limestone	Litre	5,300,000
3. Birjung Sugar Factory	Stick (in million)	12,467
a) Sugar	Number	685,000
b) Spirit	Metric ton	1,750
4. Janakpur Cigarette Factory	Sq. ft.	3,700,000
a) Cigarette	Number	132,500,000
5. Bansbari Leather and Shoe Factory	Number	3,000,000
a) Shoes	Number	1,500,000
b) Sole processing	Number	100,000,000
c) Leather	Metre	34,200,000
6. Harisiddhi Brick and tile Factory		
a) Brick		
b) Roofing tile		
c) Flooring tile		
7. Bhaktapur Brick Factory		
a) Brick		
8. Hetauda Textile Mill		

Among the industries to be newly set up Hetauda Cement Factory will go into operation in 1982/83. Similarly, construction of limestone magnesite industry, paper mill, and Ganesh Himal lead and Zinc Industry is estimated to be completed within the Sixth Plan period Preliminary works on the establishment of the Udayapur Cement Factory will be initiated. The proposed factory will have the capacity of producing 1,500 metric tons each of cement and clinkers per day.

As regards industrial promotion, the Nepal Industrial Development Corporation plans to extend financial assistance worth Rs. 502 million to the industries to be set up in the private sector, on the basis of which the latter is estimated to generate its own fund of Rs. 530 million. The Industrial Services Centre intends to offer 39 consultancies and engineering services, prepare 44 industrial proposals, undertake 100 feasibility studies and accomplish 150 promotional acts. Industrial districts already in existence in Dharan, Hetauda, Patan, Pokhara and Nepaljung will have additional physical facilities as required, while those under construction in Bhaktapur and Butaul, will be completed. New industrial areas will be created in Surkhet and Dhangarhi. Nepal standards Board will prepare standards specifications of 100 articles, seek reaction with regards to the standards specifications of 80 articles, finalise specifications of 60 articles and stamp standards mark on 300 articles. The Tobacco Development Company aims to produce 18,100 metric tons of tobacco within the plan period with the help of propagation and promotional activities focused on the tobacco growers.

Expenditure

A sum of Rs. 1,050 million has set aside for carrying out the programmes described above.

Cottage Industry

In the industrialization process of Nepal. Cottage and small industries play a pivotal role. The prospects of big industries coming up are, for the time, being limited, chiefly owing to the fact that the purchasing power of the majority of the people is low and the domestic market is small. Under these circumstances, the need of the scattered local market can be met by setting up small industries. Since these industries are by nature labour-intensive, employment opportunities will be created in profession, domestic products will supplant import of several commodities, and exportable goods will be manufactured to help improve the balance of payments position.

In the absence of baseline data no judgment can be passed on how the cottage industries faced in the fifth plan period. According to a study conducted in the year 1977/78, the number of cottage industries in operation in the kingdom totaled 750,575 employing 1,215,000 men and women, accounting for annual investment of the 341 million and producing everyday goods worth Rs. 713 million. Of these 99 percent are small units functioning in disorganized forms and for short periods of time when there is no farm works to do. Moreover, the products of such industries are not for sale in the market. They are produced to meet the household requirements of the peasants. Most of them are connected with processing farm produce and weaving.

During the past plan period, 6,175 industrial units were registered with the Cottage Industries Department. Capital worth Rs. 410 million is expected to be invested in these industries, creating job openings for 51,720 persons. No information is however, available in hoe many of the industries registered actually went

into production. During the plan period the Cottage Industries Department imparted training to 2,853 persons on various subjects pertaining to cottage industries.

Sixth Plan Objectives

The following objectives will be at the back of the development of cottage industries in the Sixth Plan:

- 1) Employment opportunities will be created and regular source of income will be generated by means of the widespread development of cottage industries for those people, living in both rural and urban settings, who belong to low-income bracket.
- (2) Most of the small articles now imported will be substituted by things produced locally.
- (3) Cottage industry production will be increased with an eye to the export market and the quality of traditional handicraft goods will be improved as an essential pre-condition to the export drive.

Policy

The industrial policy of the sixth Plan is to accord place of eminence to cottage and small industries in the development of the industrial sector. Special arrangements will be made under which necessary financial and technical assistance will be given and marketing facilities will be provided in a planned way to the small entrepreneurs of the village and city. To step up productivity traditional production technology of the cottage industries will be improved and to suit their products to the changing demand pattern of both internal and external markets special emphasis will be put on research works, designed to evolve appropriate production technology, and on promotional activities. Establishment and operation of cottage and small industries will be allowed full freedom of action, keeping governmental interference and control to the minimum. For this purpose existing economic policies, law and rules will be reviewed and amended to the extent necessary.

Working Policy

Problems and difficulties, which have retarded the growth of cottage industries in the past, will be reviewed to change the nature and organizational pattern of the cottage industries development program under the Sixth Plan. According to the purposed new arrangement, districts, where cottage industries development programmes are to be launched, will be grouped into two categories, namely, (a) districts where intensive development programmes are to be set in motion; and (b) districts where general promotional services are to be extended. In order to ensure effective growth of cottage industries, it appears essential that intensive programmes be widely carried out in a planned way, which calls for the provision of a large number of people trained on different faculties and sufficient funds. But as both trained manpower and financial resources are in short supply, it would be hardly possible to introduce intensive programmes in all the 75 districts of the country within a short period of five years of the sixth Plan. That is the reason why from the operational point of view the districts have been divided into two groups.

The number of districts where cottage industries development programmes are to be launched in an intensive form is 45. They consist of those 26 districts where now integrated rural development programmes are under execution, 9 districts of Gandaki and Bagmati zones and 10 other districts. In these districts information, promotion, training and research programmes relating to cottage industries Development Board. To extend credit facilities to cottage industries a refinancing fund, which is to be set up in the Nepal Bank Ltd., Rastriya Banijya Bank and Agricultural Development Bank under a special programme devised for credit disbursement, and new branches of those banks will be opened, if necessary. The services of the cottage and Handicraft Sales Emporium will be decentralized and expanded to make the raw materials needed by the cottage industrialists in those districts available right in time and to market the articles produced by them. A special fund will be created in the Trade Promotion Centre to provide external market service and promote export of those products of the cottage industries which may measure up to the stringent requirements of the international market. Programmes, designed to encourage private traders also to engaged themselves in the promotion of cottage industries, will be chalked out and put into effect.

In the remaining 30 districts of the Kingdom the cottage industries development programmes will be maintained at the present level. Promotional activities will be carried out there through the Cottage Industries Department as at present. However, during the Sixth Plan period, detailed survey and planning works will be undertaken in these districts so they can be brought within the purview of the intensive programme by or within the Seventh Plan.

Main Programmes

In the sixth Plan a total of 28,950 candidates will be trained in the various disciplines of cottage industries under the joint auspices of the Cottage Industries development Board and Cottage Industries Department. Cottage industries feasibility surveys will be mounted in 40 districts, 3 pilot projects will be launched, and technical and managerial cooperation will be extended to 3,000 cottage industry units. Meanwhile, industrial exhibitions will be organized to disseminate information about cottage industries. The cottage and Handicrafts Sales Emporium is programmed to sell raw materials worth Rs. 60 million and buy handicrafts worth Rs. 90 million.

Expenditure

Rs. 500 million has been set aside for the cottage industries development in the Sixth Plan.

B. Mining and Geology

Geology survey, research and investigation of mineral wealth is a process and, as is known to all, the long-term benefits, emanating from it, help promote national economic prosperity. Prospecting for mines is a costly and high-risk investment and no return can be expected within a short time. Over the past few years, however, positive results have been met with. Apart from the increase in the number of industries based on proven mineral deposits, there are signs that some new industries will soon be set up. That a highly sophisticated laboratory, so urgently needed for mineral research works are done by national experts should be viewed as an achievement of no mean order. The aero-magnetic survey conducted in the fifth plan in search of petroleum and natural gas is believed to yield encouraging results. In the Dadeldhura area a sizeable deposit of tin and tungsten is indicated. Mineral deposits required for the establishment of nitrogen fertilizer, cement and iron and steel industries have been proved. A foundry industry has been set up to manufacture spare parts from iron and steel industries wastes and to train people on this line. To carry out a more effective prospecting of mineral investigating projects has been launched with the help of the UNDP.

Sixth Plan Objectives

The main objectives of the sixth Plan will be to exploit mineral wealth of the country in such a way as to make a solid contribution to the national economy.

Policy

It will be the policy of the Sixth Plan to encourage foreign technology and capital in the extraction of mineral deposits and establishment of mineral processing industries on the basis of joint investment, to provide technical services to the mineral-based industries of the private sector, and to revise the existing laws and regulations so as to attract private capital in the development of mining industries.

Working Policy

The working policy under the Sixth plan will be to systematically expand the field of geo-physical and geo-chemical studies, to continue the study and research of metallic and non-metallic ores, to prospect for petroleum and natural gas and to go on making detailed study of the discovered gas and lignite.

Programme

Aero-magnetic surveys in connection with the search for oil and natural gas have been completed. Further research will be made on the basis of the findings of the survey. Geo-physical and geo-chemical surveys will be carried out in the prospective 5,000 sq. miles of the Kingdom. As part of the regional geological study, geological sections of the main rivers will be prepared, geological fissures will be studied and stratigraphic correlation will be established. For the development of water resource, foundation geology and seismic study will be systematically conducted in the Mahabharat and Chure ranges. Preliminary survey will be completed in the Chure range with a view to exploring radio-active minerals. For research on non-metallic and metallic ores, a map will be prepared on the basis of detailed geological studies. Under the mine exploration project search for mines will be continued with greater vigor. Detailed study of cement-grade limestone found in the Surkhet area will be completed by the experts. Necessary equipments will be imported to achieve 50 percent production capacity of the foundry industry and training will be started for the foundry professionals. The laboratory in Kathmandu will be strengthened to expand the research facilities.

Expenditure

A sum of Rs. 150 million has been earmarked for carrying out the programmes enumerated above.

C. Commerce

In a small country like ours foreign trade has a vital role to play. Because of the limited internal market, surplus commodities have to be exported and, because of the limited variety and quantity of available natural resources, things that cannot be manufactured within or that can be manufactured only at a greater cost have to be imported. In the context of economic development the importance of foreign trade to the country is much more significant.

As production could not increase to any appreciable extent in the fifth plan, exports rose 5 percent per annum only, at the current price. On the other hand, imports expanded at the rate of 14 percent per annum at the current price. As a result the size of trade gap continued to increase every year until it amounted to Rs. 2,370 million by the end of the fifth plan, compared with Rs. 930 million of the fifth year of the fourth plan. In particular, the worsening balance of payments situation with India became a matter of serious concern.

During the fifth plan country wise diversification of trade progressed rapidly. Nepal's overseas trade, which accounted for 16 and 19 percent respectively of the total export and import transactions in 1974/75, leapt to 55 and 49 percent respectively in 1979/80. But the rise in overseas export did not represent the a rise in the total export, the rise was due to fact that certain commodities, which were exported to India previously, found their way into the overseas market on account of differences in the foreign exchange rates. There was no diversification worth mentioning in the export-import structure.

In the fifth plan period, among projects connected with trade in the public sector, satisfactory progress was made by the Jute Development and Trading Corporation and Trade Promotion Centre. National Trading Ltd. Exported goods worth Rs. 347.9 million in the first four years of the fifth plan. As part of programme relating to the expansion of transit facilities, work on the construction of an warehouse in Calcutta was completed. During the fifth plan period the programme of building storage tanks in five places of the Kingdom for maintaining reserves of fuel oil was completed with the solitary exception of Bhairahawa.

Sixth Plan Objectives

In Sixth Plan the principal objective of the promotion of export trade will be to increase the output of exportable goods in an effort to provide more income and employment sources to the people. Another important objective will be to widen the narrow limits of the domestic market for the agricultural and industrial products. In the field of import trade, the main thrust will be towards easing the imports of capital goods, construction materials and production inputs, which are essential to the economic development of the country, along with those essential commodities which cannot be produced locally or whose production is not sufficient to fully meet the demand or which can be produced only at a relatively higher cost. This, it is hoped, will help prop up national economy and maintain a smooth flow of consumer goods essential to the people. As regards internal trade the objective will be to develop the small markets scattered all over the kingdom into an integrated and extensive national market to the benefit of the consumers as well as producers, whether in the field of industry or agriculture.

Policy

To enable the economy to derive maximum advantages from foreign trade the policy of the Sixth Plan will be to stimulate exports to those areas where our products can be sold at the highest price and to import from those countries where what we need can be had at the lowest price. As far as internal trade is concerned, the policy will be to maintain free flow of goods from one end of the country to another.

Working Policy

Programmes and policies, which are to lead to the creation of such essential infrastructures which have a vital bearing on the development of a strong and dynamic export trade, will be gradually framed and implemented. Rise in the export capability of the country being possible only on the basis of production growth, emphasis will be laid on boosting production of exportable commodities, both agricultural and industrial. Production of article of low weight but high value like tea, cardamon and dried ginger will be emphasized in the field of agriculture. Similar considerations will prompt production of cottage and handicraft goods at an increased rate in the industrial sector. Foreign capital and technology will be attracted toward increasing the production of mine-based industrial goods as part of the export drive. Exchange rate, custom and other levies applicable to export-import trade along with valuation system will be made fair and impartial. Taxes and valuation formulate currently in force will be reviewed and amended to bring them in line with the foreign trade objectives.

Special efforts will be directed towards improving the existing land transit system with an eye to economizing on the transport cost involved in the overseas trade. Similarly, attention will be given to the development of the transport system that will facilitate trade with the neighboring countries and cut down the transport cost. Export commodities will be gradually standardized to earn international goodwill. In the same way, essential consumer goods sold in the internal market will also be standardized in the interest of public health. To ensure free and unhindered movement of goods from one part of the country to another no administrative barriers or levies will be permitted.

Programme

The scope of the trade Promotion Centre, which is now limited to promoting overseas trade, will be expanded to bring trade with India also within its jurisdiction. In the Sixth plan the export promotion program will be further enlarged. After identifying the exportable commodities, an export promotion plan will be developed on the basis of a detailed study of such goods from the production to the export stage. This plan will be carried out phase-wise during the Sixth Plan period to increase the export promotion will be held from time to time. To expand transit facilities, loading and unloading platform in the Calcutta port of India and warehouse in Raxaul, Joghani and Nepaljung road or Nautanwa will be constructed and the trans-shipment point at Barauni supervision and clearing and forwarding services will be provided. 17 tanks with the capacity of 6,842 kilo litres each will be built in Bhairahawa, Nepaljung and Kathmandu to maintain a reserve of fuel oil. National Trading Ltd. is scheduled to import goods worth Rs. 600 million and export to the tune of Rs. 30 million, besides constructing warehouses and office building with exhibition rooms in Mahendranagar, Dhangarhi, Surkhet, Nepaljung, Pokhara, Dhankuta and Kankar-Bhatta. Under the jute production drive of the Jute Development and Trading Corporation, package programmes will be operated in 140 panchayats to produce 2,071 metric tons of improved jute and 382,000 metric tons of improved jute fiber. Moreover, programmes like setting up of a jute research centre and studying internal jute cultivation and marketing will be put into effect.

Expenditure

For the execution of the programmes set forth above Rs. 20 million has been set aside.

D. Labour

In the view of the unemployment and underemployment situation present in the country, real economic development in the rural areas will not be possible, unless jobs are created in abundance. Programmes relating to the labour assume a greater significance, when it is realized that the standard of living of the people, living below the line of absolute poverty, can be improved, only if the workforce is utilized effectively to achieve desirable progress in national production.

In the fifth plan period 8 programmes were execution in the sphere of labour development. They include the training given to 1,384 workers in population education and the organizing of 49 seminars on population. Under the industrial training project 2,275 persons were trained, besides the training on the basic skills given to 4,098 persons through the labour supply centers set up in different places. Within this period was completed the training of 60 persons on the subject of general mechanic by the Mechanical Training Centre, Balaju, 40 persons on the subject of general mechanics and 87 persons on trade skills by the Vocational Training (hair dressing) Centre, Kathmandu. Although the progress achieved in the training programmes during the fifth plan period was highly encouraging, evaluation of how useful the trainings were and how much they contribute to the supply of the needed manpower, collection of data on the actual requirement of labour, determination of skills and works had not so impressive.

Sixth Plan Objectives

The sixth plan objective will be to make the Nepalese workforce more efficient. To accommodate maximum number of them in the projects and professions available in both the public and private sectors, and to make the labour welfare scheme more and more the benefit of the workers.

Policy

The Sixth Plan will seek to strengthened the relevant legal provisions in such a way as to make the use of indigenous labour compulsory to the extent of its availability, to expand the service of the employment exchange and to institutionalize the labour supply system as a matter of policy.

Working Policy

Steps needed for the gradual enforcement of labour welfare schemes will be taken and the services of the labour supply centers will be expanded to ensure a steady supply of local labour. A system of registered foreign labour will be evolved and enforced.

Programme

Labour Supply Centres: Under this scheme labour supply centers of Hetauda, Nepaljung an Butwal will train 7,500 persons on different basic and professional subjects. In the Sixth Plan period labour supply centers will be opened in Dharan, Mahendranagar, Surkhet, Pokhara and Jhapa,

Under the industrial and vocational training project the target is to train 40 persons on different subjects at the vocational training centre, Biratnagar, and 250 persons on hairdressing at the Vocational Training Centre, Kathmandu.

Under the employment development and research programme data essential to the formulation of labour and employment development schemes will be collected and research conducted with the same end in view.

In the organized sector population education will be continued up to the first year of the Sixth Plan. Under this programme 3 seminars on labour management and women's follow-up will be held, while motivational and intensive training will be conducted 36 times.

Expenditure

A sum of Rs. 20 million has set aside to fund the programmes mentioned above.

E. Tourism

Blessed with geographical, historical and cultural specialties, unique and individual, Nepal has a wide prospect for tourism development. Development of tourism industry leads to multiplication of employment opportunities and contributes a good deal to the foreign exchange earnings. The rich cultural heritage, enchanting diversity of tribes and commodities and heart-warming parade of scenic beauty of to prove that there are more than enough justifications for developing this sector. In the decade between 1965 and 1975 tourist arrivals in Nepal averaged an annual growth of 26 percent, while in the first four years of the fifth plan the growth rate stood at 15 percent per annum. Convertible foreign exchange earnings from this source, which grossed Rs. 120.7 million in FY 1979/80. Similarly, the number of hotel beds, which totaled 1,663 in 1974/75, is estimated to reach 6,838 in 1979/80. In the fifth plan 1095 persons were trained in different skills useful to the tourism sector. The Nepal Industrial Development corporation invested a sum of Rs. 115.4 million in tourism industries during the fifth plan period.

Among the various activities conducted in the public sector during the fifth plan mentioned in particular may be made of the production and distribution of 1.6million copies of brochures, insertion of 133 advertisements in periodicals of international standard, extension of hospitality to 64 travel writers, production of 10,000 photo slides and 2 motion pictures and participation in altogether 44 fairs, seminars and exhibitions as part of tourism promotion. Signposts were erected along the trekking routes, land was acquired for the creation of camping sites and tourist information centers were opened in two places. In the field of spa development, construction work was taken in hand in Myagdi and Kodari, initial work on the installation of cable car in Shibpuri was completed, first round of studies on the development of camping sites in Pokhara was concluded and the preliminary survey work in the Begnastal and Rupatal areas were completed.

Sixth Plan Objectives

The objectives set for tourism development are to increase net foreign exchange receipts, which will help improve the balance of payments situation, and up to develop tourism industry and enterprises, which will open up to the people at large more employment and earning channels.

Policy

To make tourism infrastructures more effective where they exist, to make the existing touristic spots more eye-catching, to develop new tourist resorts and to maximize the use domestic products in the tourism industries, while proportionately reducing use of the imported goods – these will be the basic policy guidelines for the development of tourism in Nepal during the Sixth Plan period.

Working Policy

Programmes mentioned in the first master plan but still awaiting implementation will be gradually put under way. As the first master plan is in the terminal phase, a new master plan will be worked out. Liberal policies will be adopted as regards foreign investment in the interest of increasing the number of tourist arrivals. At the same time, internal flight schedules will be made regular and reliable so the tourists can be included to visit resort areas outside Kathmandu. Special attention will be turned towards drawing up and carrying out policies and programmes for the development of tourism in a coordinated fashion.

Programmes

In the Sixth Plan the aims are to prepare the second tourism master plan and to produce photographs of 87 peaks and to print and distribute 200 illustrated brochures on mountain tourism under the Himalayan region mountain tourism development project. Studies on the impact of tourism on the country and similar other pertinent subjects will be undertaken under the tourism survey and investigation project, while the resort area development project will make an in-depth study of Ilam, Dhankuta, Kulekhani, Rupatal-Begnastal complex, Srinagar area and Rara, and offices will be set up in three of the areas which are deemed appropriate for development in the form of tourist resorts. The Shibpuri cable car project will be executed by the private sector. Only the physical development work will be undertaken by the government. The targets set under the remote area tourism development programmes are to open 10 tourist trails with camping sites at appropriate places, to improve trekking routes leading to sight-seeing areas, to preserve the Muktinath complex and to develop resting places and guest-house along the trekking routes. Under the information centre strengthening projects, information centers located in Pokhara, Kankar-Bhitta, Tribhuvan Airport, Basantpur and other centers in the Tarai will be strengthened. Under the development programme of spa areas, development of ponds and improvement of physical facilities like resting places will be taken in hand. Under the tourism materials production, distribution and promotion project, 4 million booklets will be inserted in the publications of international standard, a number of reputed personalities will be invited to visit Nepal, altogether 75 seminars, fairs and exhibition will be attended and membership of international organization will be acquired. The Hotel management and Training Centre places to train 625 persons on different subjects. The building of the Tourism

Directorate-General is expected to be completed by the first year of the sixth Plan. Besides, the Khumbu area development project and other district level projects will also go ahead as scheduled.

Expenditure

To carry out the projects and programmes enumerated above Rs. 60 million has been set aside.

F. Power

Electric Power is basic to the economic development of the country. Because of the vast, almost limitless, potential existing for the development of electricity and because of alternative energy sources like coal, gas, and mineral oil not yet being discovered, emphasis has been laid on the development of electricity since the beginning of planned development. In 1955/56 before the start of the first plan there were 2,077 kilowatts (kw) of hydro-electric power and 4,203 kw of diesel-generated power, making a total of 6,280 kw of installed capacity. In 1974/75, the final year of the fourth plan, this figure jumped to 49,634 kw, consisting of 36,368 kw of hydro-electricity and 13,266 kw of diesel power. During the fifth plan period 18,712 kw were added to make the installed capacity up to 68,346 kw in the last year of the fifth plan (1979/80), of which hydro-electricity accounted for 52,588 kw and the balance of 15,758 kw was generated with the help of thermal plants. If 11,568 kw of power, which the industrial units are to generate for their own use are to be added, then the total installed capacity in the country will be 79,914 kw. Although production of electricity, particularly hydro-electricity, has been growing apace over the past plan periods, it has not been able to meet the rapidly increasing needs of the various sectors, with the result that short supply of power has become one of the biggest impediments to the economic development of the country.

Projected Demand and Supply

During the fifth plan period it is estimated that the demand for power was growing at the rate of 15.8 percent per annum. But as supply could not keep pace with demand, power supply in the final year of the plan (1970/80) seems to have fallen short by 17,000 kw. During the sixth Plan period the demand for power is estimated to go up 16 percent each year. In 1985-90 the demand is estimated to increase at the annual rate of 12.8 percent. On this reckoning the demand for power in FY 1989/90 is expected to touch the record figure of 357,000 kw. The hydel power development projects, that are to be executed under the Sixth Plan, are drawn up with these projections in mind.

Sixth Plan Objectives

The main aims of electricity development in the Sixth Plan are to produce enough electric power to meet the growing demands of the different sectors, to extensively widen the domestic use of electricity with a view to stopping further depletion of the forest wealth, and to supply power required for electrifying the transport system as a substitute of petroleum.

Policy

One of the basis policies governing electricity production will be to develop hydel power schemes, which can meet not only the long run power needs of the country but also create a surplus whose export can augment foreign exchange earning. Such projects will as far as possible be of the nature of multi-purpose projects, covering irrigation and other utilities. Small hydel power projects will be popularized in the mountainous region, where they will be of immense help in developing cottage and small industries and boosting agricultural production. Meanwhile, the search for alternative sources of cheaper energy will be initiated, for which research and survey programmes will be launched.

Working Policy

The working policy will be to complete the projects under construction with the least delay, to develop and expand an integrated system, which is capable of ensuring regular and reliable power supply, to adopt cost-efficient technology in connection with the construction of small hydel projects, and to discourage diesel power projects, step by step.

Physical Target

The targets set for the Sixth Plan period are to generate 129,923kw of hydro-electricity and 15,000 kw of diesel-electricity to make a grand total of additional 144,923 kw. As regards transmission lines, additional 1,324 kilometres of line of various kilovolt capacities will be laid out.

Programme:

During the sixth plan projects listed below will be put into effect:

1. *Big Hydro-electricity:* The sixth Plan aims at executing 6 big hydel projects, which will generate enough power to meet the household needs along with the agricultural and industry. Among them Kulekhani, (600,000 kw) and Marsyangdi (50,000 kw) projects are to be completed and in respect of Kankai (38,000 kw), Ghimruk of the far Western Zone (10,000 kw) and Deoghat Sapt-Gandaki (150,000kw) projects work will be initiated within the Sixth Plan period.
2. *Small Hydro electricity:* In the remote mountainous region there is enough scope for generating power by tapping local rivers and rivulets. The power to be generated in this way will be available not only to meet the household requirements of the locality but also for use in the development of agriculture and rural industries. Of the 26 projects started in the prominent hilly areas only 3 were commissioned during the fifth plan period. The Sixth Plan is geared at completing the construction of those 13 outstanding projects, which will have the

combined capacity of 3,341 kw. As regards new projects, the aim is to complete 6 projects in the Eastern Region and 3 in the Fifth Development Region to make a total of 9 projects, the output of which is estimated at 2,482 kw. In other words, small power projects to be completed within the Sixth Plan period will number 41 with the total installed capacity of 5,823 kw.

3. *Diesel Centres:* As big hydro-electric power projects take a correspondingly long gestation period, an interim arrangement has to be made to plug the immediate supply gap. Bearing this in mind, diesel plants each will be set up in Hetauda and Biratnagar with the capacity of 10,000 kw and 5,000 kw respectively, making a total of 15,000 kw. The Hetauda Diesel Centre, which was started under the fifth plan, will be completed in FY 1980/81,

4. *Construction and Expansion of Transmission Lines:* To transmit power from the production site to the consumption point 829 kilometres (kms) of transmission lines of the capacity of kilovolt (kv) and 495 kms of transmission lines of the capacity of 33 kv will be laid out to make a total of 1,324 kms. Of the projects with the capacity of 33 kv Devighat, Kathmandu, Marsyangdi –Bharatpur- Pokhara, Hetauda-janakpur_Biratnagar and Bharatpur (Dumkebas)-Butwal transmission networks will be completed, whereas construction of Butwal-Nepalgunj, Hetauda-kathmandu and Hetauda-Bharatpur lines will be initiated.

5. *Electrification :* Expansion and consolidation of the existing distribution network is a continuous effort directed towards ensuring regular and breakdown-free supply to all consumers, whether industrial, commercial, agricultural or domestic. Similarly, to provide electricity in those areas where there are industrial, commercial and agricultural potentiality is an important aspect of the electrification programme. During the sixth Plan period electricity supply and electrification programmes will be continued in all the five development regions according to need.

6. *Survey and feasibility Study:* Various kinds of the surveys and the feasibility studies will be conducted under the sixth Plan to exploit in a planned and hydel production capacity of the country. Apart from the drawing up of the master plan relating to the Koshi river basin hydro-electricity, feasibility studies of Mulghat (Tamur river) will be completed. Final feasibility study of 150,000 kw capacity Deoghat (Sapta-Gandaki) project will be ended and feasibility study of the technical and economic aspect of the Bagmati river multi-purpose projects will be initiated in the same way, survey and feasibility of the Rapti river multi-purpose project in the Far Western region will be started. Besides, surveys and feasibility studies of the rivers and the catchment areas will also be conducted.

7. *Miscellaneous:*

(a) *Karnali hydro-electric project:* In the fifth Plan the project report was finished and it was estimated that it has the capacity to generate 3.6 million kw. During the Sixth plan other benefits (including irrigation and float control) and accrues from the execution of the project will be evaluated and necessary provision will be made for initiating construction of the project.

(b) *Water and Power Commission:* The commission is charged with coordinating and providing guidelines to all those governmental units that are engaged in gradually popularizing the use of water power in the different fields of national economy and mounting studies and research on how water resources can be utilized to develop power, irrigation, waterways, drinking water and fisheries, etc., besides checking soil erosion. This commission will carry on those activities during the sixth plan period.

Expenditure

And outlay of Rs. 3800 million will be incurred in the Sixth Plan for power development

9. Transport and communication

A. Road Transport

To road transport, almost literally the vertebra of the socio economic development of the country, was assigned the highest priority in some of the past periodic plans as attested to by the amount of investments made in that sector. As a result, the physical progress achieved in this field has evidently been quite satisfactory and significant. Dramatic changes have been brought about in the road situation from what it used to be before to start of planned development.

The fifth Plan added 1,767 km. To 3,175 km. Of road constructed by the end of the fourth plan (1974/75) to make a total of 4,940 km. In FY 1979/80. Of these black-top roads constituted 2,044 km, gravel 564 km. And fair weather 2,332 km. The maximum target of the fifth plan was to build 67 suspension bridges. Of which 61 were completed. In contrast the target of building 8 motorable bridges fell short by half.

Road transportation system, which went on expanding as a result of planned development, has remained an important pre-requisite for the multi-faceted development, of the country in no uncertain terms. The supreme object of the strengthening the basis of national and regional integrity, which can be possible only through a transport system embracing different parts of the country, is being fulfilled by the highways and feeder roads constructed during the past plans. Nevertheless there are certain important parts of the country which have yet to be joined by road transport. Therefore, during the Sixth Plan period also the process of linking hill and Tarai districts by motorable roads, particularly in the Eastern and Far Western Regions. Will be continued.

Objectives

The Sixth Plan aims to construct and develop such roads as are likely to strengthen the basis of national regional integrity by linking different parts of the country with one another and to support development projects and tourism industries with prejudice to regional balance. The other objective is to develop suspension bridges foot-tracks, mule-trails and wheel-tracks(capable of handling high-clearance vehicles like carts and jeeps.

Policy

For the achievement of the targets mentioned in connection with the road development, the policies to be adopted will be to complete those highways that are under construction, to undertake construction of new highways on the basis of economic feasibility only, to give priority to projects relating to suspension bridges , foot-tracks, mule-trails and wheel-tracks, which are calculated to provide minimum transport facilities to the rural areas, and to undertake construction of highways and their tributaries on the basis of traffic density alone, while constructing new high ways of low traffic density, a single lane soft-or semi-hardtop wheel-track where trucks can play, will be constructed in the beginning. At the same time, in roads building labour-intensive technology will be adopted.

To improve the service standard of public transport in the urban areas steps will be taken to develop bus routes, bus terminals and bus stops in a systematic way and more attention will be devoted to devising measures to attract private sector investment in this area. At the same time feasibility studies will be undertaken to develop transportation system like trolley bus , trolley truck, ropeway and railway which are motivated by hydel power instead of petroleum products, whose prices are skyrocketing .

Working Policy

Highways, feeder roads and main urban roads will be constructed at the central level. As for the suspension bridges, foot-tracks, mule-trails and wheel-trails, which have a direct bearing on the village life, they will be divided into two categories-national and local-and the construction of the former will also be undertaken at the central level. Construction of local level suspension bridge etc, will be entrusted to the Panchayat units will the financial and technical cooperation to be made available by the central level. Besides suspension bridges, steps will be taken to improve the cable and pulley bridges that are used to ford the rivers and rivulets flowing through a village or on way from one village to another. A master plan will be prepared for the planned development of foot-track, mule-trails, wheel-trails and suspension bridges of the national standard.

Priority: Under the Sixth Plan, topmost priority will be given to the projects that are in an advanced stage of construction, the remaining sections of the Mahendra Highway, projects relating to the north-south roads of Far Eastern and Far Western areas, and projects designed to provide the minimum rural transport service.

Physical Target: The sixth Plan aims to build a total of 1,950 kms Of additional roads, the breakdown being 672 km of black-top, 775 km of hard-top and 503 km of soft-top roads of the wheel-trails standard. Besides, 300 suspension bridges and 121 km of arterial mountain roads of foot-track or mule-track standard will be constructed at the central level.

The Panchayat sector plans to build 1,208 km of wheel-trails, 6,554 km of foot-tracks and mule-trails and 6,156 bridges and culverts.

Construction of Highways: The proposed highway construction programme under this plan has been classified under three broad heads-1) remaining portions of the Mahendra Highway, 2) north-south highways, and 3) mid highlands east-west highway – comprising a total of 11 projects, whose successful completion will add

649 km to the existing network. The remaining portions of the Mahendra Highway consist of the Kohalpur-Mahakali, Butwal-Kohalpur and Hetauda-Narayangarh projects. Implementation of these projects will yield 231 km of black-top and 80 km of hard-top roads to make a total of 311 km.

The north-south highway construction programme aims at building 152 km of black-top, 58 km of gravel and 44 km of fair-weather roads. Under this programme fall the Mahendra Highway-Kanyam-Ilam, Ilam-Fidim-Tablejung, Dharan-Dhankuta, Gorkha-Narayangarh, Mahendra Highway-Surkhet and Dadeldhura-Baitadi, Darchula projects.

According to the programme of gradually taking up the construction of mid-mountain east-west highway, Fidim-Terahthum, Dhankuta-Kathmandu, Pokhara-Surkhet and Surkhet-Ridikot-Doti-Dadeldhura road construction projects are included in the sixth Plan. In the first phase of construction these roads will be merely truck-worthy, and they will be upgraded later on the basis of the economic justification. Of the projects mentioned above, Terahthum-Dhankuta sector will be constructed under the Koshi mountainous region development plan. It will be of the wheel-trails standard. Fidim-Terahthum road will be constructed, only if the feasibility study is positive. Similar procedure will be applied to Surkhet-Ridikot-Doti-Dadeldhura road.

Construction of Feeder Roads: Construction of feeder roads further enhances the value of the highways. That is the reason why equal emphasis has been laid on the construction of highways and feeder roads since the last plan period.

The feeder roads to be constructed in the Sixth Plan are grouped under four heads – 1) feeder roads radiating from the highways, 2) other feeder roads, 3) Panchayat roads to be upgraded to feeder roads and 4) feeder roads to be constructed on the basis of feasibility studies. Leaving aside the roads depending on feasibility findings, 33 feeder roads projects will be launched during the Sixth Plan. From the implementation of those projects 942 km of roads will be built, besides upgrading the jeepable roads to make them able to handle trucks.

Integrated Rural Development Project Roads: This plan will give priority to the construction of those roads, which form part of the integrated rural development projects, which are being launched in different parts of the country with foreign assistance to raise the standard of living of the people living in the villages. The implementation of these construction activities will produce 265 km of road.

Main Urban and District Headquarter Roads: Under this project 90 km of black-top roads and 4 kms of gravel road will be constructed. In the Kathmandu valley 45 km of urban roads in Kathmandu, Patan and Bhadgaon will be tar-coated. In respect of other urban roads, particularly those of the zonal and district headquarters, roads in 19 areas will be improved and bitumenised.

Maintenance and Reconstruction of Roads: Heavy rainfalls, floods and land slides badly damaged the highways from time to time, necessitating extensive repair and reconstruction. Hence, in the Sixth Plan also maintenance works on the Mahendra, Tibhuvan, Siddhartha, Prithivi and other highways will be continued. Besides, the plan will also provide for the supply of road-building equipments, setting up of workshops and running of mechanical training courses.

Bridges and Suspension Bridges: In the Sixth Plan period leftover works on the construction of the bridges, started in the last plan, will be completed. The Narayani bridge, bridges along the Ghorahi-Tulsipur road, man. Bharda and Dubahi bridges may be cited as examples. Construction of new bridges includes the Mechi bridge and Rato bridge, bridges along the Tribhuvan highway and the Pathalaya-Dhalkebar section of Mahendra Highway, bridges over Bishnumati (on the way of Swayambhu from Kalimati), Dhobi khola, Bagmati (near Gokarna), and Snkhamul (Patan) rivers, while the bridge on the way to Mahendra cave (Kaski) and Khando bridge in Saptari will be repaired.

The suspension bridge to be constructed at the central level within the plan period have been divided under three captions: 1) suspension bridge construction, 2) suspension bridge reconstruction and repair, and 3) survey and feasibility study. The number of bridges to be built during this plan period will be 300, which is inclusive of the 53 bridges whose construction work was started in the fifth plan. Construction of new bridges apart, reconstruction and repair of bridges already in existence along the main mountain trails will be undertaken in the Sixth Plan.

The Panchayat sector plans to build 6,156 bridges and culverts, including suspension bridges. Besides, assistance will be extended through the ministry of local development for the laying out and reconditioning of cable-and-pulley river-crossing contrivances.

Construction of Foot-tracks, Mule-tracks and Wheel-trails: As has been stated above, a tremendous amount of time and money will be required to link all the villages in the mountainous areas with a network of all-weather motorable roads. Viewed against this background there appears to be no viable alternative to building and improving foot-tracks, Mule-tracks and wheel-trails, if the transport problems of those areas are to be solved immediately. Since some of these tracks and trails are of national importance and some other have local value only, they are divided into two categories from the construction point of view as well. Surveys and feasibility studies will be conducted to determine which of the trails along the main routes are of national importance. On the basis of such studies and surveys a master plan will be evolved, which will be executed at the central level.

This construction programme will include not only the various kinds of trails but also the suspension and other types of bridges on route. In this plan period priority will be given to routes leading from the villages to district headquarters and from district headquarters to zonal headquarters.

Mountain Transport Development Programme: The construction of 1) Baitadi-Darchula-Tinker Vyas Mule-Trail, (51 km), 2) Jajarkot Tallu mule-trail (7km), 3) Okhaldhunga-Namche mule-trail (21km) and 4) Tansen-Ridi-Tamghas road (37km), totaling 122 km, which was started in the fifth plan with the help of the World Food Programme will be completed in the Sixth Plan.

Main roads of the Kingdom will be repaired and maintained on the basis of a master plan to be drawn up after survey works.

Miscellaneous: The miscellaneous programme includes works like studies and surveys on road transport development, land acquisition, plantation of trees either sides of the roads, royalty on logs, and preservation of the Dhangarhi-Dadeldhura highway from the effects of soil-erosion.

Expenditure

A sum of Rs. 3,020 million has been allocated for the programmes and projects relating to roads development in the Sixth Plan.

B. Air Transport

Ours is a mountainous country where an inter-district roads network can be created only at a cost of astronomical proportion. So, the development of the air transportation is of immense value not only from the stand point of international travel but also from the domestic angle. Such a development is not only desirable. It is in fact quite inevitable. That is the reason why equal attention has been given to developing air and road transports since the previous plan periods. Compared with 5 airports that existed before the first plan, their number reached 39 in FY 1979/80, the final year of the fifth plan.

During the fifth plan period a fair weather airstrip was constructed at a new place in Dhangarhi and the left-over works of the Biratnagar airport were completed. At the Tribhuvan Airport the old runway of 6,600 ft was refurbished and work on the construction of an airport on a new site in Nepalgunj was taken in hand. In the area of STOL construction, one each was built in Humla, Baitadi, Bhijpur, Rolpa, Bajhang, Manang and Lukla, making a total of 7 STOLs, two more than originally planned.

Objectives

The principal objectives of the development of aviation are to develop international air services, which will help promote tourism and foreign trade, and to develop internal air services to transport men and material to those remote, mountainous regions which do not have other modes of quick transportation.

Policy

1. Since provision of dual transport system does not seem to be justified at present, airways will not be developed or will be developed only at a low priority rating in those areas which already have or are soon to have road transport facilities except certain important places.
2. Instead of investing more money in building new airports to expand international air service, necessary facilities, which ensure maximum use of the existing airports and airstrips, will be added and the internal movement of passengers and goods will be made more efficient and reliable with the acquisition of some small planes.
3. Timely changes will be made in the policies relating to international air services in order to attract a greater number of tourists to visit Nepal.
4. The internal services of the Royal Nepal Airlines Corporation, the only flag-carrier of Nepal, will be made more capable and efficient.

Working Policy

To make the internal air transportation system more regular and dependable, one of the airports in each development region will be developed into a base from where flights to the district of the region will be operated. For this purpose, the selected regional airport will be adequately equipped. While constructing small or STOL airstrips, the requirement of the tourism development will be mostly kept in view.

Priority

1. To complete the Tribhuvan International airport, Nepalgunj airport and other projects underway.
2. To install communication and navigational aids to make the internal flight safer and more reliable.

Physical Target

To complete the construction and consolidation works on five operational airports, to complete the remaining works of 2 STOL airports and lengthen the runway of five others—these are the physical target by the Sixth plan.

Airport construction and consolidation

Included in the programme are the Tribhuvan Airport, Nepalgunj Airport, Pokhara Airport, Surkhet Airport and Dhangarhi Airport.

1. *Tribhuvan Airport:* Under this project all the remaining works on the old 2000 metres runway and 925 metre taxiway will be finished. Construction on the new terminal complex of international standard will be completed. Besides, water supply will be provided for and warehouse, aircraft parking lot, hangars, civil maintenance ward and other building will be constructed. Additional communication and navigational aids will be installed to provide better facilities.
2. *Nepalgunj Airport:* Under this project construction of runway, terminal building and physical facilities which was started last plan, will be given the finishing touches. In addition, communication and navigational aids, needed for air service, will be installed.
3. *Pokhara Airport:* This project aims at completing the disbursement of compensation of 3,106 ropanis of land along with a number of houses. The economic and feasibility study on the airport construction will be reviewed before taking up actual construction works.
4. *Surkhet Airports:* Works on additional physical facilities like construction of residential quarters and paved drainage, provision of water, extension of terminal buildings, installation of VHF repeater navigational aid and SSB communication equipment, and electrification will be taken in hand as planned.
5. *Dhangarhi Airport:* Remaining works of this project will be rounded off.

Provision for additional physical facilities: This programme covers the airports of Simra (Bara), Biratnagar (Morang), Rajbiraj (Saptari), Chandragarhi (Jhapa), Bhairahawa (Rupandehi) and Tumlingtar (Sankhuwa Sabha). In some of them works left over in connection with terminal buildings will be initiated, while in others constructions works on the police and staff houses, approach roads, water supply system, fire brigade shed, drainage system and the like will be initiated. As regards STOL stripes, construction of terminal building with towers, fencing, police quarters, generator house and drainage system along with landslide prevention and obstruction removal works will be started in Humla, Baitwadi, Bhojpur, Dolpa, Jomsom, Rukum, Manang, Bhajang, Rolpa, Syanboche, Diktail (Doti), Saphebagar (Achham), Taplejung, Lamidanda and Lukla.

Construction, improvement and extension and STOL fields: This programme is composed of seven projects. Of this the remaining works on the Bajura airstrip will be completed and the construction of terminal building, And the staff and police residential houses will also be completed. Apart from this the construction airstrips and terminal building at Darchula will be completed. Improvement and extension of Phaplu Airstrip will be completed. Lamtang airstrip will be improved and extended and the terminal building, staff quarter and generator house will be constructed. The run ways of Baglujg Jumla airstripe will be extended. Besides, the airstripe at Ramechhap, which can now handle only pilatus porters, will be extended to permit landing and take-offs of Twinotters.

Communication and navigational aids and rescue services: TVS's and approach lighting will be installed in the airports at Bhairawa and Biratnagar, while in the Dhangarhi and Surkhet airports communication and navigational aids will be installed. To guide aircrafts in the Fas Western Region, repeater station and locator beacon will be set up. Air-to-ground and point-to-point communication equipments will be install 10 STOL fields.

Miscellaneous: additional workshops, fire complex, approach road and the like will be constructed, various training courses will be conducted, air craft safety and information service will be put into effect, and heli-pads, which are deemed essentials to the development of tourism industry, will be built under this programme. At the same time an alternative to Tribhuvan International Airport will be explored.

Expenditure

For the different programmes and projects to be set a foot in connection with the development of aviation Rs. 780 million has been set a side.

Royal Nepal Airlines Corporation

Over the past decades, royal Nepal Airlines Corporation has considerable added to both its internal and external services. As a result, dramatic improvements were made in the situation where it can at a loss and threatened to become liability to government, till the third plan period (1965-70). It has since developed the capacity to make profit. In the fifth plan period, the RNAC purchased one Boeing 727 jet plane, 4 twin otters and one Avro to make a fleet of 6 aircrafts.

Main programmes

The sixth Plan is targeted to acquire 5 passenger planes and one freighter, which cam operate small airstrips. Additional ground handling equipments will be installed. In 4 STOL strips like those of Humla and Dolpa SSB communication set will be brought into operation. Workshops will be opened in Pokhara, Nepalgunj, Dhangarhi, Biratnagar to provide maintenance services to the aircrafts.

C. Other Transports

(ropeways, railways and waterways)

Nepal Transport corporation, setup in the public sector in 1964, has been providing different services of public transport such as railway, ropeway, trolley bus, bus and trucks with the help of Nepal ropeway transport, Nepal Janakpur-Jayanagar railway, Nepal government railway (plying between Birgunj and Raxaul) and trolley bus service in addition to bus and truck services around the Kathmandu valley and along the highways. To make the services provided by Nepal Transport Corporation more regular, convenient and dependable and to add some new services, programmes to construct and consolidate ropeways, railroads, trolley bus and containerized truck services were carried out in the fifth plan. By the end of the fifth plan works on the completing the leftover construction of the trolley bus project, strengthening the Janakpur-Jayanagar railway and mounting feasibility surveys in connection with Bhojpur-Dhankuta, Jomsom-Baglung and Surkhet-Dailekh-Jumla ropeways were completed.

Objectives

In the context of developing the transit system of the country in a smooth and planned manner, the /sixth Plan aims to develop and strengthen means of transport like railways, ropeways and waterways, to draw up concrete plans for the development of electricity-powered transportation system, and to regularize and systematize public transport services.

Policy

Besides improving and reconstructing and existing rails and ropeways, the Kathmandu-Bhaktapur trolley bus service will be improved, where necessary, and extended to some more places. To lend substance to the long-term objective of gradually basing the transportation system on electricity instead of petroleum products, whose prices are on the upswing, feasibility studies will be conducted on the development of trolley bus, trolley truck, railways and ropeways and improvements will be made upon the rapid transit system of urban areas like Kathmandu.

Main Programmes

To accord with the objectives and policies defined above, the programme includes projects relating to the development of ropeways, railways, trolley ways, urban rapid transit system, waterways and containerized transport.

To complete works on strengthening the Hetauda-Kathmandu sector of the Nepal ropeway, to complete the outstanding works on Janakpur-Jayanagar railway, to strengthen the present trolleybus express service and to take its last stop to the Tribhuvan Airport will form part of the Sixth Plan programmes. Under the urban transport system development programme, 35 buses will be acquired, 3 main bus stops will be constructed and workshops will be set up in numbers sufficient to cope with the maintenance of the rolling stocks. In addition, 7 containerized trucks will be acquired and feasibility studies on electrified railways, ropeways, waterways and trolleybuses will be mounted.

Expenditure

For the execution of programmes and projects mentioned above Rs. 80 million has been set aside.

D. Postal Services

Of all the communication media postal services have an important role in the context of the diverse geographical conditions of the Kingdom. The postal services today are not limited to the exchange of ordinary letters. They have become the means of extending help to the financial and commercial sectors also.

Since the start of planned development, postal services have been rapidly expanding. In FY 1955/56 post offices numbered 124 only. During the past plan periods this figure went on increasing until it reached a total of 1,007 by the final year of the fourth plan (1974/75). With the addition of 351 post offices during the plan the total reached 1,358 by the end of the fifth plan, which represents a post office- population ration of 1 to 10,530.

Objective

The main objective of the postal development will be to provide quick and efficient mail service to as many people as possible. Instead of limiting postal services to the simple function of delivering mails, economic services, started in the last plan period, will be made wider in scope and effective in content.

Policy

To further extend the postal services qualitative and quantitative improvements will be made so that by the year 1994/95 the target of one panchayat, one post office can be fulfilled. Attempts will be made at enabling the post offices to stand on their own legs. While setting up post offices, regional balance, besides area and population, shall be the prime consideration.

Physical Target: During the Sixth Plan period 480 new post offices will be inaugurated to bring the total to 1,838 by the final year of the Sixth Plan (1979/80). In this way the post office- population ration will roughly work out to 1 to 8,711. Area wise, the coverage of 1 post office will be 79.39 km of the inhabited area.

Main Programmes

1. *Branch Post Office:* 80 branch post offices will be set up to bring the total 366 by the final year of the Sixth Plan.
2. *Agency Post Office:* 400 agency post offices will be established in different parts of the country to bring the total to 1,397 by the end of the Sixth Plan.
3. *Mail Line Extension:* 30 mail lines will be extended during the Sixth Plan period to provide postal services in a smooth and expeditious manner.
4. *Mail Carriage:* To accelerate the transport and delivery of postal articles, mail will be transported by the quickest available means- by air or by bus, In areas where bicycles are usable the postmen will be provided with bicycles for home delivery of mail, in addition to motor vans and scooter vans. Under this programme 6 motor vans, 11 scooter vans and 500 cycles will be provided during the Sixth Plan.
5. *Construction and Extension of Post office Buildings:* Till the end of the fifth plan only 61 post offices were located in their own buildings. During the Sixth Plan period 31 new post office buildings will be built and 10 existing buildings will be extended. On top of that 50 post office buildings will be built at the people's level with the help of governmental grants. Besides, construction of 19 and extension of 2 buildings, which were initiated in the fifth plan, will be completed by the end of the Sixth Plan.
6. *Money Order Service:* After reviewing the functioning of the money order service now in existence, such services will be made available at 100 more post offices.
7. *Postal Savings Bank:* During the plan period this service will be offered at 50 more post offices to bring the total to 75.
8. *Cash-on-delivery Service:* This is one of the important financial services which the postal system can provide. The Sixth Plan aims to offer this service through 14 different district post offices.

Miscellaneous: In-service training will be imparted to 600 employees. Functioning of the various post offices will be improved. 1,500 letterboxes and 2,500 post boxes will be installed. Building of the central ticket store will be constructed and the General Post Office will be strengthened.

Expenditure

To execute the programmes relating to the postal services Rs. 30 million has been earmarked.

E. Telecommunication

Like transport, communication also forms part of the infrastructure needed for the all-round development of the country. In a country like ours, where the bulk of the territory is mountainous and where air transport is in short supply, telecommunication stands out head and shoulders above other means of communications. On this account, telecommunication has been receiving sufficient attention since the past decades.

During the fifth plan period 4,750 telephone lines were added to bring the total to 13,670 in the final year of the plan (1979/80). Under the micro-wave communication system major works on the establishment of new links were completed. Besides, old wireless equipments in 8 districts were replaced by transistorized sets operating on solar energy and initial steps had been taken toward setting up an earth station, which will facilitate satellite communication with the world.

Objectives

Besides developing and extending internal trunk communication system on the basis of regional balance, the plan aims to harness new technologies like satellite communication to make international telecommunication service more convenient and easily available. To meet the demands of industry, commerce, tourism and other sectors, local telephone and telex services will be extended and solar powered wireless communication service will be expanded.

Policy

To develop appropriate means of communication for inter-district contact, to provide local telephone facility in all zonal headquarters, to expand international trunk service by means of satellite communication, and to develop solar powered wireless communication service –these will be the broad policy guidelines of the sixth plan.

Priority: top priority will be given to the task of completing those projects which were in different stages of construction of local telephone exchange, and establishment of the earth station.

Physical targets: Among the different programmes that are included in the sixth plan for the development and expansion of telecommunications, 23,450 telephone lines and 27 new telephone exchanges will be installed to bring the total to 37,120 and 45 respectively by the final year of the plan. Besides, telephoned services will be established in 25 additional towns and administrative headquarters, compared with 18 towns, where telephone facilities were installed in the last plan. In the field of microwave communication, besides completing the constructions of 6 microwave links, which were stated in fifth plan, 6 more links will be set up and earth station will be erected to facilitate satellite communication.

Establishment and development of local telephone exchange: Due to development expansion of trade and industry, the demand for local telephone service has been shooting up most dramatically. Keeping this in view, telephone exchanges will be established in 25 additional towns and 24,490 telephone lines will be added. 10,000 automatic telephone lines in Kathmandu, 2,000 in Patan, 1,000 each in Bhaktapur, Biratnagar and Birgunj will be added. Manual exchanges in Pokhara, Bhairahawa, Nepalgunj, Hetauda, Janakpur and Dharan will be supplanted by automatic exchange. Besides, the capacity of the manual exchanges in Bhaktapur, Butwal, Tansen, Rajbiraj and Bhadrapur will be increased to 400 lines each. Manual exchanges will be installed in Bnepa, Surkhet, Dhankutta and Mahendranagar, among others.

Establishment and expansion of internal trunk system: Pursuant to the objective of setting up telecommunication services (telephone, telegraph and telex) in different parts of the country, microwave links installed in fifth plan, will be expanded and 6 new links will be set up. Besides, in some prominent cities subscriber trunk dialing system will be introduced.

Development of international trunk system: As a result of Nepal's ever-growing foreign trade and international contracts, the demand for international telecommunication services has in recent times soared up quite high, compared with the past. To maintain communication with countries other than India, direct links have been set up with three prominent international telecommunication centers, namely, Bombay, Hongkong and Tokyo. But the limited channels available through these administrations have not been sufficient to cope with the rising traffic demand, causing a good deal of inconvenience and irritation to the clients. To obviate these difficulties, the Sixth Plan aims to set up an earth station, to install manual, semi-automatic trunk exchanges, and to enter the Asian Telecommunication Network.

Consolidation of Wireless Service : Works on the setting up of 40 more solar transmitter sets will be completed during the Sixth Plan.

Miscellaneous: The Sixth Plan aims to complete the remaining works on the training centre and start construction of a central office building in Kathmandu, one regional office building each in Biratnagar, Nepalgunj and Bhairahawa along with warehouses. Studies will be conducted to establish the facilities of telecommunication services in the Nepal-India border areas and subscriber trunk dialing service between Nepal and India. Antenna

and other equipment needed for frequency management and monitoring service will be installed and the different communication now in operation will be mentioned and improved.

Expenditure

For the operation of the programmes mentioned in the foregoing a total outlay of Rs. 480.46 million will be required out of which HMG/N will bear Rs. 320 million.

F. Other Communication

Under the head other communication fall the development of broadcasting, department of information, HMG's printing press, Rastriya Samachar Samiti, Gorkhapatra Sansthan, Ratna Recording Corporation, Sanskritik Sansthan and Royal Nepal Film Corporation.

Development of Broadcasting (Radio Nepal): medium web broadcasting station will be set up in Kathmandu and Pokhara in order to improve the transmission quality in such a way as to make Radio Nepal's programme distinctly audible throughout the Kingdom. Other works in this feid include improvement renewal and provision of additional equipments to the transmitters, and the upgrading of the standard of outside broadcasting. Feasibility study on communication through television will be conducted during the plan period.

Development of Information: This department will produce and exhibit 10 colour documentaries, 18 black-and-white documentaries and 72 news reels, acquire film exhibition equipments and construct office buildings.

HMG's printing press: Besides providing for necessary machinery and equipments, preliminary work on the establishment of security printing will be undertaken.

Rastriya Samachar Samiti: Under the development programme of this samiti, construction of office building in Nepalgunj will be completed, its central office will be extended, monitoring until will be established for quikly picking up and circulating world news mechanical workshop and documentation and training units will be set up, teleprinters service between kathmandu and nepalgunj will be started, zonal office building in Janakpur, Rajbirkaj and Birgunj or Hetauda will be constructed. Zonal office building s in all places except Janakpur will be constructed through the medium of people's participation.

Gorkhapatra Sansthan: Besides providing for 1 monocaster, 1 cutting machine (22") and 1 generator to bring out the news papers in time, the Sansthan will use delivery vans to ensure the timely distribution of its publications

Ratna Recording Corporation: This corporation will produce discs record and cassettes of the Nepalese songs both in vocal and instrumental forms and sell them at fair price. With the help of appropriate promotional strategy it will popularize the Nepalese music within the Kingdom and beyond. It will also equip the studio building with recording machine and other accessories.

Sanskritic Samsthan : A national theater, the crying need of the Samsthan, will be constructed and equipped with sophisticated sound and lightning system. A costumes 'library' will be to make the shows stages by it more attractive and effective.

Royal Nepal film Corporation: This Corporation will produce 3 feature films in colour and 3 clloured documentaries in addition to constructing a shooting studio, without which the production programme cannot meet the schedule. It will also procure sound and lightning equipments.

Expenditure

To carry out the programmes listed above Rs. 100 million has been set aside.

10. Social Services

A. Education

One of the important infrastructures, without which no all-round development of the country can be visualized, is education. The national education system plan, which has been in force in Nepal since 1971 and under which national education policies and objectives have been clearly laid down and technical and vocational education has been developed in an effort to evolve an education and 106,109 in secondary education while training was imparted to 37, 39,63 percent of teachers in each of the above mentioned categories respectively. In the remote areas 4/5 grades of lower secondary level were almost invariably added to each primary school and scholarships offered to the students of those areas were increased in number.

In the field of higher education, 12,144 and 19,373 technical and general manpower respectively were produced till the fourth year of the fifth plan.

During the Sixth Plan period primary education will be changed from 1-3 to 1-5 and lower secondary educating will correspondingly be changed from 4-7 to 6-7. When this new organization is applied in all the 75 districts of the country, the majority of the students will, it is believed, obtained educational opportunities easily and continently.

In the sphere of higher education, the institutes will be divided into three categories-technical, vocational and general-and primacy will be given to the development of the first two categories.

Objectives

1. The aim of the primary education will be not only to teach the three R's to children but ot inculcate in them habits of disciplined and hygienic living also. The lower secondary education will, besides creating the pre-requisites for enrolment into secondary school, lay stress on character formation and develop in them dignity of labour and habits of perseverance. The secondary education will impart such basic knowledge as may be of help in going in for as many levels as may be needed for national development.
2. Special emphasis will be laid on opening avenues of education to as many as women as possible.
3. Additional facilities will be extended to the development of vocational and technical education, and general education will be set on a firm footing.
4. The development of technical education will be stressed; otherwise balanced production of technical manpower, which in high demand in the country, will not be possible.
5. Multi-purpose educational programmes, which are well-designed to play a supportive role to the socio-economic development of the rural areas, will be carried out.

Policy

1. To consolidate the existing educational facilities and to raise the quality of education.
1. To give priority to the development of primary, adult, vocational and technical education.
2. To develop an education system which will impart such knowledge and skill as can be relied upon to provide a right basis for the economical and efficient exploitation if the human and natural resources available in the country.
3. To develop general education, based on the principle of popular participation and involvement.
4. To develop curriculate and bring out textbooks that are attuned to the national and social norms.
5. To devise and implement special programmes that would give educational opportunities to the areas, lagging behind from the educational point of view, and to womenfolk.

Programme

1. To permit private and panchayat sector to run pre-primary schools.
2. To popularize the concept of making adult work and profession-oriented and to make such education and educational material freely available.
3. To expand campuses of the technical education institutes and strengthens the campuses dealing with non-technical subjects.
4. To develop institutions like trade schools to impart vocational training.
5. To preserve the sites and objects of archaeological importance.
6. To stimulate the establishment of general and professional campuses in the private sector.

Physical Target

1. Primary education will be made available to 75 percent of the children, belonging to the age group of 6-10.
2. Lower Secondary education will be made available to 40 percent of the student population, belonging to the age group of 11-12.
3. Secondary education will be made available to 30 percent of the student population, belonging to the age group of 13-15.
4. Functional adult education will be effectively imparted to 900,000 adults.

5. Of the total number of students to be admitted to the certificate level in the various institutes, 30, 35 and 35 percent will be apportioned to the technical, vocational and general education respectively.

Primary Education: To guarantee educational facilities to 75 percent of the children of the age group 6-10, additional provision of 1,250 primary school and 18,800 teachers will be made. During the plan period the number of students and teachers are estimated to total 1,649,000 and 52,000 respectively. Education will be free to all the students of this level and text-books will be free up to class III.

Lower Secondary Education: During the plan period 40 percent of the student population of the age group 11-12 will be made for 1,000 schools and 4,000 teachers, which will bring the total enrollment to 287,000 and total number of teachers to 10,000.

Secondary Education: 30 percent of the student population of the age group 13-15 will be given secondary education during the plan period. For this purpose additional provision of 400 schools and 2,200 teachers will reach 277,000 and 6,800 respectively during the plan period.

Adult Education: Besides increasing the literacy figure in all the remaining districts of the Kingdom, functional education will be given to approximately 900 thousand adults. To run this programme, centers as required will be opened.

Trade School: The aim of the trade school will be to produce skilled manpower for development in the projects, which are to be launched in the urban and rural areas. They will be set up in the areas where integrated rural development programmes are to come in force. During the plan period Butwal Technical Institute and Balaju Mechanical Training Centre will be converted into the trade schools. Besides setting up technical school of secondary level at Lahan, Dhankuta and Jumla, poly-technique technical education will be given in Dharan under the auspices of the Engineering Institute. Lower secondary and secondary level trade schools will be established in Siphel and Sanothimi respectively. These apart, construction of trade schools will be included in the integrated rural development programmes of Muatang, Kaski, Jiri and Solukhumbu.

Educational Material: On the basis of revised curricular and textbooks, the educational material needed for the schools of different levels will be updated and made available to 1,250 primary 1,000 lower secondary and 400 secondary schools, which are to be added.

Teacher Training: During the plan period Radio teacher training remote training system, and local teacher training programme will be expanded to train a bigger number of primary teachers from the quantitative point of view. During the plan period 14,000 primary, 8,000 lower secondary and 4,000 secondary teachers will be trained. Besides, short-term training will be given to 20,000 teachers and construction of 13 women's hostels will be completed.

Seti rural Development: The aim of this project is to supply skilled workers needed for the health and education sectors and village level construction works in the two zones-Seti and mahakali. During the Sixth Plan period an educational projects, encompassing resource centre, technical school, teacher training, and formal education will be put into effect. This project will see to it that the school drop-outs are kept to the minimum.

National Sports Council : During the plan period construction works relating to sports will be undertaken in Kathmandu, Nepalgunj, Pokhara, Biratnagar, Mahendranagar, Dhangarhi, Kusma, Palpa, Bhairahawa, Rajbiraj and Okhaldhunga, while in Hetauda a hostel will be built.

Royal Nepal Academy: To enrich and Propagate the Nepalese art and culture, training courses on music and drama will be conducted and Birendra Art Gallery will be set up in Kathmandu.

Educational Programme under the Integrated Rural Development Project: During the plan period works like physical improvement of the schools, distribution of educational materials and establishment of technical school, where necessary, will be undertaken as part of the integrated rural development projects in operation in the Koshi mountainous area and three districts of the Mahakali Zone, along with schools forming part of the Sagarmatha and Rasthwa-Nuwakot projects.

Archaeology : In the process of preserving the cultural heritage of the Kathmandu Valley, preservation, restoration and environmental improvement works will be undertaken in 7 places in Kathmandu, besides similar operations to be mounted in respect of ancient monuments belonging to other parts of the country. A statue of King Prithivi Narayan Shah will be erected in Gorkha.

Higher Education: In the field of higher education campuses of technical institutes will be expanded and those of humanities will be consolidated with the aim of producing a total of 72,301 manpower during the plan period.

Engineering Institute: Various courses conducted by this Institute in the past years will be training in electrical, electronics and architecture. To produce middle-and low-level manpower, an eastern zone campus in Dharan and a western zone campus in Pokhara will be established. In this way, the campuses under this institute aim at producing 138 low-level, 2,399 middle-level and 241 graduate-level technical manpower during the plan period.

Agriculture and Animal Science Institute: During the plan period , certificate-level, diploma-level and post-graduate-level courses will be conducted in agricultural subjects. New campuses will be opened in Far

Western and Eastern Regions to run basic courses of the certificate level. In the second year of the plan a horticulture campus will be opened in Baglung. Thus, during the Sixth Plan period 4,832 certificate level, 407 graduate level agricultural technicians are estimated to be produced. There is also a programme for giving agriculture training to 550 persons.

Institute of Medicine: Courses currently taught under this Institute will be continued in the Sixth Plan also. Diploma level education will be started in the Ayurveda (traditional medicine). A teaching hospital will be built in the precincts of Maharajgunj Central will be established in Dhankuta. During the plan period the combined output of different campuses is estimated at 2,206 certificate level technicians, 60 graduate level medical diploma-holders and 102 nurses.

Institute of Forest: During the plan period certificate level courses on forestry and soil and water conservation, being conducted at the Hetauda Campus, will be kept up. Teaching will be started at the Pokhara Campus and training will be given to Sagarmatha project personnel. During the plan period 825 certificate level and 70 graduate level forest technicians will be produced and departmental training will be given to 160 persons.

Institute of Education: In addition to the courses conducted in the fifth plan period, the Sixth Plan will run short-term courses also as a special programme. The Nepalgunj Campus, which is now functioning in Nepalgunj Campus, which is now functioning in Nepalgunj will be shifted to a building which is to be constructed in Surkhet. At the same time, provisional mobile centers will also be set up, as and when needed. The Sixth Plan aims to give diploma-level training to 289, secondary teachers' training to 9,461 and primary teachers' training to 13,318 persons.

Institute of Law: During the plan period, 3 certificate level campuses, consisting of 1 each in Central, Eastern mountainous and Western Tarai region, will be established, while campuses in Pokhara and Rajbiraj will be upgraded to graduate-level and that of Kathmandu to post-graduate-level. During the plan period 3,650 certificates level and 1,050 graduate level manpower will be produced.

Institute of Science and Technology: Leaving aside the programmes conducted in the fifth plan, the Sixth Plan aims to add a certificate level campus in the western region. The estimated production of manpower from the various campuses is certificate level 3,900, graduate level 1,500, post-graduate level 750 research level 30.

National Sports Council: During the plan period construction works relating to sports will be undertaken in Kathmandu, Nepalgunj, Pokhara, Biratnagar, Mahendranagar, Dhangarhi, Kisma, Palpa, Bhairahawa, Rajbiraj and Okhaldhunga, while in Hetauda a hostel will be built.

Institute of Management: During the plan two new campuses will be set up and research level will be added under this Institute. The various campuses functioning within it are estimated to produce a total of 3,400 certificate level, 2,000 graduate level, 1,500 post-graduate level and 2 research level manpower.

Institute of Humanities and Sociology: The teaching works, started in the fifth plan, will be continued and without any change during the Sixth Plan period. It is only in the third year of the plan that a degree-level campus will be established in the eastern region. The various campuses functioning within it is estimated at 500 certificate-level, 250 graduate-level, 250 post-graduate level and 21 research-level manpower.

Centre for Economic Development and Administration: Subjects relating to planning, education and different facets of economic development have been included in the research and evaluation programme to be carried out by this institute during the plan period. Besides, different types of training and seminars will continue to form part of its general activities.

Nepal and Asian Research Centre: This Institute will carry out research on various subjects connected with Nepal and Asia and will strive hard to make the world know more about Nepal and Nepalese.

Centre for Applied Research on Science and Technology: During the plan period research works designed to help develop national economy, evolve simple, elementary physical tools for in local science and technology and promote other services, will be conducted by this Institute.

Educational Development and Research Centre: This Institute will carry out research and study on important subjects like education curriculum and practical and vocational education in the particular context of rural development and quality improvement in the domain of higher education.

Library: One regional library each will be set up in Pokhara and Nepalgunj.

Expenditure

A sum of Rs. 1,660 million has been set aside for the implementation of the programmes outlined above.

B. Health

Healthy manpower is the foundation stone of a nation. For this reason health services development has been emphasized since the very beginning of the era of planned development in Nepal. A long-term health plan (1975-1990) has also been drawn up, which was to come into effect from the fifth plan. It has been taken as the base for the formulation of the Sixth Plan.

Smallpox has been eradicated from the country since 1977. Malaria has been controlled to a large extent with proportionality favourable impact on life in general. The goiter control project is busy distributing iodised salt in those remote areas where goiters are endemic. Leprosy control works are under execution nationwide. During the fifth plan period, family planning and maternity and child health project has delivered its services to 801,000 married couples, preventing an estimated number of 38,285 births. Similarly, on the curativeside, 12 new hospitals were constructed and a total of 327 beds were added during the fifth plan period to bring the total to 2,586. To deliver health services in the rural areas, 232 health posts were set up, making a total of 583. integrated health programme was applied in 23 district.

Implemented in a planned way of Nepal all-round development, the various health projects are, on the one hand, estimated to have raised the average life expectancy to 45 years and mortality rate brought down to 19 per thousand, on the other. According to Nepal Fertility Survey of 1975/76, infant mortality is 152 per thousand of live births. To reduce the crude death rate from 19 to 17 per thousand and to raise the average longevity from 45 to 48, objects and policies, mentioned below, will be adopted.

Objectives

To deliver basic health service to the maximum number of the people, which will have the effect of pushing up the average life expectancy of the general public, to control birth rate as required, while curbing the incidence of infectious and epidemic diseases through preventive services, to improve the nutrition level and environment hygiene-these and others like these will be the principal objective of the health development.

Policy

Preventive services will be adequately emphasized as they hold the key to checking the outbreak of infections and epidemic diseases. As the village level preventive service and general curative along with basic health service will be delivered through the health posts. To this end, services of the rural health workers and ward level volunteers will be utilized to the full. Health services, that are to be delivered in this way, will be gradually carried in and integrated form. In the implementation of nutrition programme a multi-disciplinary approach will be made. Private sector will be allowed to run hospitals on condition that the policies and the rules lay down by the government are strictly observed. To develop the Ayurvedic system of medicine as an integral part of the health service, the policy will be to lay particular stress on production of drugs that are based on the local herbs and medicinal plants.

Programme

1. *Community Healths and Integration* : Functioning as units designed to deliver basic minimum health service, the health posts, numbering 583 till the end of the fifth plan, will total 1,050 with the addition of 467 of them during the Sixth Plan. Rural health workers will function under the health posts and services of the Panchayat-based volunteers will also be made available from village to village. Ward level workers will be deployed in 10 to 13 districts in an experimental form. The integration plan, which is now in operation in 23 districts, will fan out the 48 districts by the end of Sixth plan.

2. *Health Post Building Construction*: The Sixth plan aims to constructing 250 health posts buildings at the rate per year.

3. *Preventive Health service*: since to control and eventually root out infectious and epidemic diseases and to create a situation where diseases are kept at bay, are from the financial and technical view points, far more appropriate than to take remedial measures after the onset of the diseases, a number of different programmes will be launched in the field of preventive services. Prominent among the projects delivery preventive services in Malaria Eradication Project of the total population 1.7 in every thousand to believe to be affected by this scourge, through eradication programme are in operation in 52 districts of the country. The Sixth Plan aims to spray insecticides in an area inhabited by 2.1 million people. Blood samples will be collected and examined an infected persons will be treated. About 1,360,000 children will be vaccinated against epidemic diseases and against diseases like Tetanus, Poliomyelitis, Measles and Whooping Cough. Of the pregnant women or those in the fertile age group, 1,250,000 will be inoculated with Tetanus Toxide against Tetanus under the expanded immunization programme. Another such project is the Tuberculosis control project under which BCG vaccines will be given and Tuberculosis patient will be detected and given institutionalized treatment. Under this projects BCG vaccines will be given to 1,697,600 children of the age group 0-5 sputum of 309,000 people will be examined and treatment will be given to 11,600 active cases.

4. *Curative Health Services*: till the end of fifth plan period, the number of hospital was 73, number of beds 2586, bed-population ratio was 1:5, 515 and doctor-population ratio 1:32, 267. by the end of the Sixth Plan the figures are estimated to be 98, 4020, 1:3, 983 and 1:22, 486 respectively.

During the Sixth Plan period, 25 districts, having no hospitals, will have 15-bed hospital each and the hospitals in Dhankuta, Pokhara and Surkhet will be developed in the form of zonal hospitals. Among the existing hospital, Lalitpur hospital will have 200 additional beds including 50-bed orthopaedic unit, 100 beds will be added to Kanti hospital, O.P.D building and an operation theatre will be constructed in the Bir hospital premises. An operation theatre will also be constructed in the maternity hospital. These apart, beds will be added to several hospitals, which together will make available a total of 1,434 additional beds within the plan period.

In the Ayurveda, 50 Ayurvedic dispensaries will be established, one 15-bed hospital each will be built in two-development region and the production of Ayurvedic drugs will be stepped up.

To increase diagnostic efficiency health labourites commensurate with their status will be set up in the zonal and district hospitals. Some of the health post will be equipped to provide less elaborate services.

5. *Health Promotion Service*: Stress has been laid in the Sixth Plan on different health promotion measures of prophylactic nature. They include control of population growth rate, nutrition and atmospheric pollution, distribution of iodised salt to prevent goiter and cretinism, prevention and blindness, information of health, control of zoonotic diseases and similar other programmes.

Under the Family Planning and Maternity Child Health Project, family planning services will be provided to 900,000 married couples, ante-natal and post-natal services will be provided to 150,000 women, and medicare will be provided to 1,000,000 children of below 5 years. During the Sixth Plan the programme is to bring down the birth rate from 42 to 40 per thousand, for which the total fertility rate has to be reduced from 6.3 to 5.8 per female.

To raise the nutrition status a multi-sectoral programme will be launched to boost production of nutritious foods, which will be processed and distributed with particular stress on their proper utilization. Other programmes include the surveillance on the nutrition status of 150,000 children and treatment of cases involving malnutrition.

Apart from the continuation of the goiter control project existing since 1972/73, iodine injection programme will be started in 20 districts of the remote area to eradicate thyroid diseases and save the future generation from the affliction of goiter, cretinism and mental retardation. Similarly, with a view to treating preventable blindness and reducing the incidence of blindness, the prevention of blindness programme will be put into effect. Under it, a national survey will be mounted and mobile teams will be detailed to perform cataract operations.

6. *Miscellaneous*: Other programmes, impinging directly or indirectly on health services, are covered by this group. Under it are involved mobile teams that are dispatched to different places from time to time supply of drugs and other materials to the health institutes, repair and maintenance of vehicle and other equipments, and formulation of plan and programme. Projects under implementation in the fifth plan will be carried over the Sixth Plan.

Expenditure

In the Sixth plan Rs. 1,060 million has been earmarked for the health sector.

C. Drinking Water and Sewerage

Viewed from the angle of the public and sanitation, drinking water and sewerage constitute basic necessity. Provision of pure drinking water can raise the health status along with improvements environmental sanitation. By the end of the fifth plan period, the piped drinking water facilities were extended to 10.9 percent of the population, i.e. drinking water supplies of 139.1 million litres per day were made available to 1,548,000 persons.

Sixth Plan Objectives

In the context of fulfilling the basic minimum requirement of the people, the Sixth plan ends principally at extending the drinking water facility to the maximum number and to reduce the regional inequalities to the utmost extent possible. In the execution of projects the use of local material, skill and labour will be optimized on the basis of mass participation along with provision of sewerage in the urban areas.

Policy

Under the Sixth plan the policy will be to make quantitative improvement of the existing drinking water supply in the urban areas, while new drinking water supply scheme will mostly be launched in the rural areas. In the selection of projects special preference will be given to such projects that can be implemented with the active cooperation of the people, who are to be the direct beneficiaries. To economies both on time and money, locally available materials and technology will be put to maximum use. Piping materials and technical support will, where necessary, be given in the form of grant. If repair and maintenance works are not carried out in connection with the projects already completed, the people will be deprived of their benefits. Hence, necessary arrangements will be made in this Plan, to entrust this crucial function to the local panchayats themselves. As the sewer disposal system currently existing in the country is in a rudimentary stage, sewerage will be provided in areas where there is pre-fuse water supply and for the rural area development of sanitary latrines will be under taken phase wise.

Physical Target

The target is set at bringing about 30 percent of the estimated population in 1985, the last year of the Sixth Plan, within the coverage of Piped up supply. By the end of the Sixth Plan 25.8 percent or 3,853,000 people living in the rural areas will be benefited, compared with 6.4 percent or 861,000 at the end of the fifth plan. In the urban areas it is estimated that by the end of the Sixth Plan 87.2 percent or 950,000 persons will enjoy the benefit of piped water supply, as against 83 percent or 687,300 persons to whom such benefit accrued at the end of the fifth plan.

Programmes

675 drinking water projects, composed of those that were left over under the fifth plan and those that are to be initiated in the Sixth plan, will be taken in hand. In the rural areas, apart from supplying piped water as expeditiously as possible, 9,200 hand pumps are programmed for installation in appropriate places. Surveys and studies will be carried out new areas to assess on the feasibility of undertaking drinking water projects. Detailed designs and cost estimate will be worked out as regards those that are deemed feasible. To maintain regular supply from the completed projects repair and maintenance work will be done at frequent intervals. At the same time, no effort will be spared to raise both the quantitative and qualitative level of the water supplied. According to the policy of developing sewerage in the interest of public sanitation, small drains will be laid out. a report will be prepared, following feasibility studies, on how to make suitable arrangement for efficiently draining away the rain water. Similarly, to raise the cleanliness standard of the villages, sanitary latrines, which are almost non-existent till now, will be built to cover 3 percent of the population or 440,000 persons plus 1,500 school children.

Master Plan

Under the master plan for drinking water and sewerage the first projects has been completed and the second will expand the drinking water supply in Kathmandu, Lalitpur, Pokhara and other urban areas, pipelines will be extended in Thimi and Bode, and sewerage will be expanded in those areas where the density of population is high. This will result in the additional supply of 139,650,000 litres of water per day. Under the third project of the master plan, underground water will be surveyed for supplying drinking water to new places within the greater Kathmandu and Pokhara areas, reservoirs will be constructed and pipelines extended in Biratnagar and Birgunj, and in Dharan, Janakpur, Hetauda, Bhairahawa, Butwal and Nepalgunj existing sources will be improved and pipelines extended.

Expenditure

Rs. 1,000 million has been set aside for the implementation of drinking water and sewerage projects under the Sixth Plan

D. Panchayat

In local development activities 3,112 to different projects were completed under grants programme during fifth plan period. Within this period, besides completing 402 water supply schemes and construction of 387 kms of rural roads, roofs were distributed to 589 primary schools, and training was given to 9,393 men and women. Small area development programmes were launched in 10 districts, making a total of 704 projects.

Sixth Plan Objective and Policies

The objective of the panchayat sector are comprised, among others, of boosting agricultural output, maximizing the mobilization of local resources and talents, and raising the quality of village life by optimum reliance on labour-intensive technique. The policy-frame designed to realized those targets stresses local initiative and leadership, execution of integrated rural development programme to meet local needs, and development of such technical and managerial skills as are basic to local development.

Programme

1. *District Plan:* Under it, small projects like dam, canal, drinking water, foot-trail, suspension bridge, school building and health post, received from the various districts as village-town-and district-level projects, will be carried into effect. During the plan period these projects requiring a total outlay of Rs. 1,800 million will be executed. Of this outlay, Rs600 million will be financed through the government grants and the remaining Rs. 1,200 million through the mobilization of local resources.
2. *Local Development Programme:* It aims at implementing 8,800 rural drinking water projects, constructing 122 km of road, undertaking 111 irrigation projects and distributing roof to 1,000 primary schools, among others.
3. *Integrated Rural Development:* Integrated rural development projects will be launched in 6 different parts of the country to bring about comprehensive development of the rural areas. Under those projects central and local programmes will be inter-linked with and implemented as complimentary to one another.
4. *Remote Area Development Programme:* Under this programme, besides operating different projects in the remote, and backward districts of the country, local leaders will be taken round on a “Know Nepal” tour and posters and brochures will be printed in local languages.
5. *Training Programme:* During the plan period 8,806 individuals will be given training to meet the target of producing ‘development workers’ who are equipped with middle and lower level administrative and technical skills and knowledge, enabling them to play supportive roles in local development. In addition, village development training courses will be run for the benefit of as many men and women as may be necessary so that they can be of direct help in formulating, implementing and evaluating local development programmes. Other training programmes will centre on inculcating such knowledge as is relevant to the rural community and on such specifics like nutrition, baby and child care, domestic signs, population education and the like, which may enable the womenfolk to become partners in progress.
6. *Others:* apart from the programmes enumerated above, vital registration system will be enforced in 29 more districts and 17 survey and research works will be conducted on market organization , distribution process, integrated rural development and so on.

Expenditure

Rs. 490 million has been earmarked for the above programmes except those that are to be operated under people’s participation.

E. Housing and Physical Planning

During the fifth plan period the Department of Housing and Physical Planning undertook various construction works in the four development centre- Dhankuta, Kathmandu, Pokhara and Surkhet. In Kathmandu numerical data on traffic flow were collected, Ranamukteshwar area was reconstructed and improved and 55 residential buildings for the use of the low-salaried government employees were constructed, besides carrying out surveys, studies and sample collection of the local building materials found in and around Dhankuta, Surkhet, Pokhara, Tansen, Butwal and Bhairahawa. In connection with the reconstruction of Singha Durbar, construction of the structure forming the first quadrangle was completed and the work of installing various fixtures is going ahead. Base maps and master plans relating to the conservation of the various parts of the city were prepared. Under the Bhaktapur Development Project, various repair, maintenance and constructions works, connected with the preservation of the city's ancient art and environmental sanitation were taken in hand.

In the context of the Lumbini development, of the various works to be executed, according to the master plan, land acquisition and construction of roads, canals, surface drains and houses were undertaken. One documentary film was produced. Water and power were provided and archaeological excavations; research and investigations were also conducted side by side.

Sixth Plan Objective

Under the Sixth Plan the principal objectives of the Department of the Housing and Physical Planning are: to conduct physical surveys of the areas resulting from the process of development projects being carried out in the country, to help develop and construct urban areas in a planned way and by a coordinated regional approach, to extend technical support for evolving functional designs in the construction of zone-and district-level governmental buildings, to develop a construction technology which will permit maximum use of locally available construction material, to prepare the base for a well-ordered repair and maintenance schedule of the governmental office buildings with the help of the up-to-date inventory, and the like.

Policy

Basically, housing development in the urban area will be strictly governed by the land-use policies and rules. Construction works in general will be designed to go with the local atmosphere and use of local materials, labour and skill will be encouraged to be maximum extent possible.

Programme

For the development of all the four-development centres town construction programmes will be set afoot and under the town planning programme base-maps will be drawn up for the urban areas and rural sectors. A certain number of residential houses will be built and sold to families of low-income group. As regards the reconstruction of the Singha Durbar Secretariat, a new and more practical master plan will be developed and implemented. A laboratory will be setup within the construction material research centre as a prelude to going into production. Different socio-economic services will be offered under the Bhaktapur Development Project, while under the Nepal Solid Waste Disposal Project, waste matter will be removed and re-cycled as farm manure in all the three cities of Kathmandu, Lalitpur and Bhaktapur. Preliminary study of other urban areas will also be carried out. In connection Lumbini development, the policy will be to implement it as a regional development project of that area as envisaged by the master plan.

Expenditure

Rs. 250 million has been set apart for the implementation of the programmes and projects mentioned above, of which 13 percent or Rs. 32.6 million will be spent on the Lumbini Development Project.

F. Administrative Reforms

During the fifth plan progress of the different programmes relating to administrative reforms was well up to the mark.

Objectives and Policies under Sixth Plan

Administrative organization and methods will be strengthened. Stress will be laid on the spirit of service and productivity. Civil service will be structured to attract talent and it will be job-oriented. With such policy guidelines the target of further strengthening the present administrative machinery will be fulfilled.

Programmes

Among the programmes to be conducted within the frame-work of the policies mentioned above, surveys on the organization and method of 15 offices will be carried out, five subjects will be specially studied, consultancy services will be offered to 5 corporations, and administrative in-service training will be conferred on 1,150 gazetted and 3,250 nongazetted officers, covering various courses. In addition to making timely improvements on the training programmes in order to make them broader-based and more effective, an administrative training centre will be setup. A documentation centre will be constructed for the safe storing of document relating to the administrative personnel. Job descriptions of the employees belonging to different services and faculties will be prepared. And with a view to raising the efficiency and capability of the government servants, various kinds of internal and external training programmes will be conducted within the Sixth Plan period.

Expenditure

It is estimated that Rs. 20 million will be required for the carrying out of the programmes enumerated above.

G. Planning and Statistics

Reliable statistics are vital to the formulation of development projects, which are geared to the targets and policies of the plan. Unsupported by correct facts and figures, planning will be riddled with mistakes and shortcomings and its implementation aspect will be weak and disarrayed. Hence, the importance of doing away with anomalies and duplication cropping up in the field of statistics and maintaining a uniform national standard, in the first place, collecting and supplying up-to-date and dependable data to the agencies concerned, in the second place, seem to be too obvious to need any emphasizing.

In the context of gathering reliable and up-to-date statistics to make development plans and programmes more result oriented, studies on unemployment, income and consumption pattern, saving and investment, and migration were completed. The new evaluation system was re-assessed. Mid-term study on population was concluded. Findings of the national agricultural census were brought out. Computer work surveys of 23 offices were completed along with training seminars on that subject. Although, as shown above, achievement with regards to some of the physical targets set by the fifth plan, have been quite satisfactory, statistical and other information relating basically to the national and regional levels and different economic and social sectors could not be collected, according to the targets and the policies laid down in the plan.

Sixth Plan Period

Against this backdrop, the principal aim under the Sixth Plan will be to make the development plans more practical and effective by supplying almost all kinds of reliable and up-to-date statistics that may be needed for formulating the present and future plans of the country and for laying down the policies and programmes under them.

Policy

Strengthening of the planning cell, formulation of planning group, detailed investigation and feasibility study, coordination among different planning units, integration of the population aspects with the formulation of development plans and programmes, and similar other viewpoints will constitute the policy frame to guide and to govern the planning and statistics. It will also be the policy to remove whatever inconsistencies and duplication are there in the present method of collecting, processing and analyzing the statistics and to present correct and reliable data, besides enforcing the Statistics Act with greater vigour and dynamism. The capacity of the computer will be expanded to make its service more easily available.

Programme

In pursuit of the objectives and policies set forth above, programmes relating to the basic minimum requirements, labour-intensive technology, impact study of development programme on public life, development of library and review room, national population census and agricultural census, development of national account, survey of cottage and small industries, expansion of computer facility and capability, repair, maintenance and improvement of the computer hardware, computer training and the like will be carried out during the Sixth Plan.

Expenditure

Rs. 95 million is estimated to be expended during the Sixth Plan for the programme outlined above.

H. Science and Technology

Today science and technology have as much as importance as capital, labour and land for development. That too is one of the prominent factors that are at the root in the difference in development standards between the developed and developing nations. To speed up growth rate it has become essential that appropriate science and technology be worked out and extended. To meet our national requirements it may not be just sufficient develop and upgrade indigenous technology and skill. We may also have to import suitable technology from international world.

Following the formation of the National Science and Technology Council in 1975, different programme were carried out in this field in an organized fashion as a first step in the direction of linking it up with the process of nation building. Over the past few years HMG/N, the University and other units connected with science and technology have been busy conducting research and investigation as well as holding symposia and seminars on science and technology, in addition to launched programmes on agriculture, medicinal herbs, minerals, drugs, solar energy, construction material, and scientific educational and training. Nevertheless, there is still much to be done in coordinating the works going on the field of science and technology, in developing national technology according to our needs, in finding out appropriate international technology, and in whipping up popular enthusiasm about the use and utility of such techniques.

Sixth Plan Objectives

During the plan period the principal objectives will be increase the capability of national science and technology in such a way as to enable to embrace the entire development processes of the country, to inform the people at large on the use and utility of science and technology, and to maintain coordination among the different units that are engaged in developing and extending science and technology.

Policy

The main policies will be to strengthen the units connected with science and technology and to established coordination among them, to interlock the agency of science and technology with the function of the national agency, to mobilize human and other natural resources available in the country, and to develop and expand appropriate technology, both national and international.

Programme

In connection with achieving the aforementioned objective during the plan period selection and development of appropriate technology, survey of natural resources, training of science and technical manpower, and dissemination of information on science and technology will form part of the development activities of the National Council of Science and Technology. Besides, technological and professional institutes including the National Council will be strengthen and invested with greater capability.

Expenditure

To carry out all these programmes an amount to the tune of Rs. 16 million will be spend during the plan period.

I. Population

Population Status

If, with the growth rate averaging 1.2 percent, Nepal's population took sixty years to double itself in the period between 1911 and 1980 the population went up 2.34 percent annually to make a total of 14.3 million in 1980. during the Sixth Plan period growth rate is estimated to be 2.3 percent per annum, which means that by the end of Sixth Plan, that is in the year 1985, the population curve will swing up to reach a new high of 16 million. In 1985 males are estimated to number 8,217,055 and females and 7,792,926 out of the total population, compared with 7,287,064 males and 6,975,154 females in 1980. other demographics data are given in table below.

Table 11

Demographic Data

	<u>1975</u>	<u>1980</u>	<u>1985</u>
Growth rate (percent per annum)	2.4	2.3	2.3
Crude birth rate (per thousand per year)	45	42	40
Crude death rate (per thousand per year)	21	19	17
Total fertility rate (per woman of age group 15-49)	6.3	6.3	5.8
Average life expectancy (year)	43	45.5	48

Population Growth and its Impacts on Different Sector

Agricultural Sector: in 1980, 19.3 percent of the total lands were under cultivation and the land-man ratio was 1:0.196 hectre, which will go down to 1:0.181 hectre by the end of the Sixth Plan period.

The total foodgrain production in 1980 was 2.6 million metric tons against the estimated total requirement of 3.3 million metric tons. By the end of the Sixth Plan period the production of foodgrains is estimated at 2.7 million metric tons, while the actual requirement will be 3.7 million metric tons.

Forest Sector: In 1980 the density of population was 98.1 persons to the kilometer-509.4 persons in the case of cultivated land and 373.6 persons in the forestland. In 1985, however, the density will be 110.1 as a whole-density of 554 in cultivated land and 482.5 in the forest area.

Labour Force: According to a survey carried out by National Planning Commission, 63 percent of the rural labour force could not be gain fully employed. And in the 5-year period between the final tear of the fifth and Sixth Plans, it is estimated that the labour force will swell by 1.3 million.

Education: In 1979/80 boys and girls of primary school age are believe to have numbered 2 million, of whom only 1.236 million got enrolled. By the end of Sixth Plan this figure is estimated to reach 2.2 million. The plan period will require a good deal more of teachers to provide primary education facilities to 75 percent of the primary school-going children.

Health: According to present estimates, one physician serves 32,267 persons, one hospital bed covers 5, 515 persons, one hospital takes care of 119,373 persons and each health post looks after 24,463 persons. In fact, the medical facilities available in Nepal are quite low even by the standards of the developing countries. By the end of Sixth Plan the ratios are expected to work out as follows: 1 physician to 22,486 persons, 1 hospital beds to 155,437 and 1 health post to 19,220. It is cleared that population growth will be chiefly responsible for obstructing the efforts to raise the standard of public health.

Urbanism: Urban population, which was 5.8 percent of the total population in 1980, is expected to go up to 6.8 percent in 1985.

Sixth Plan Objectives

1. The population growing at the annual rate of 2.3 percent will be regulated and pre-requisites for holding down the population curve will be created in the Sixth Plan.
2. Problems of population distribution and migration will be tackled.

Policy

Family planning programme will be introduced in a rural area where fertility rate is rather high. Permanent sterilization programme will be emphasized. Economic activities in the hill areas will be intensified in an effort to regulate the movement of population. And to popularized family planning among the people at large, adequate provision will be made for publicity and extension of services.

Programme

During this plan period, the Family Planning and Maternity and Child Health Project and Community Health and Integration Project will take up broad and effective programme directed to ward regulating the population. The system of birth and death registration will be strengthen as regards population education, the Ministry of Education, Panchayat Training Centre, Cooperative Department, Administrative Management Department, Woman's Service Coordination Committee, Mother's Club and Woman's Organization will

launched different programmes. The activities and organizational set-up of the present National Population Commission, which was appointed in 1980, will be made more realistic and practical, besides strengthening the inherent linkages running through migration, population and development policies.

Expenditure

Rs. 29 million will be spent in the plan period to fund the programme mentioned above.