

Report No. 6090-IN

India: Economic Situation and Development Prospects

(In Two Volumes) Volume I: Executive Summary and Main Report

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South Asia Programs
India Division

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CURRENCY AND OTHER EQUIVALENTS

Currency

Prior to June 6, 1966:	US\$1.00 = Rs 4.7619 Rs 1.00 = US\$0.21
From June 6, 1966 to mid-December 1971:	US\$1.00 = Rs 7.50 Rs 1.00 = US\$0.13333
Mid-December 1971 to end-June 1972:	US\$1.00 = Rs 7.27927 Rs 1.00 = US\$0.1374
After end-June 1972:	floating rate
Rate end-February 1986:	US\$1.00 = Rs 12.1520 Rs 1.00 = 0.0823

Rupee values have been converted into dollars by using the prevailing exchange rates indicated above up to 1970/71. For subsequent years the following average rates in rupees per US dollar have been used:

1971/72	:	7.444
1972/73	:	7.706
1973/74	:	7.791
1974/75	:	7.976
1975/76	:	8.653
1976/77	:	8.939
1977/78	:	8.563
1978/79	:	8.206
1979/80	:	8.076
1980/81	:	7.893
1981/82	:	8.929
1982/83	:	9.628
1983/84	:	10.312
1984/85	:	11.887

Source: IMF, International Financial Statistics (IFS), line "rf."

In this report an estimate of 12.2 Rupees per US Dollar was used for 1985/86.

Weights

Unless otherwise specified all weight measures are metric.

Years

The Indian fiscal year runs from April 1 through March 31.

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ABSTRACT : This report attempts to review key issues the Government is likely to face and policy options open to them in their efforts to improve the efficiency and growth of the economy. After a brief review of the economic performance during the Sixth Plan, Chapter 1, discusses objectives and development strategy of the Seventh Plan. Chapter 2 focuses on key policy changes that have been introduced during the past year and evaluates recent macro-economic performance. Chapter 3 addresses to the implications of current sectoral policies; past and planned investment; and their combined impact on growth and efficiency in six principal sectors of the economy--agriculture, energy, manufacturing, transport, housing and urban development and population. Chapter 4 examines the steps that would be required to achieve the domestic resource mobilization goals of the Seventh Plan and Chapter 5 attempts to shed light on the twin questions of: (i) how realistic are the balance of payments assumptions of the Plan; and (ii) what policy changes are needed to assure their realization?

Acknowledgement

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INDIA: ECONOMIC SITUATION AND DEVELOPMENT PROSPECTS

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INDIA INDIA	- SOCIAL INDICATORS DATA SHEET				
	1960/ ^b	1970/ ^b	MOST RECENT ESTIMATE/ ^b	REFERENCE GROUPS (WEIGHTED AVERAGES) / ^a (MOST RECENT ESTIMATE) / ^b LOW INCOME ASIA & PACIFIC	MIDDLE INCOME ASIA & PACIFIC
AREA (THOUSAND SQ. KM)					
TOTAL	3287.6	3287.6	3287.6	.	.
AGRICULTURAL	1763.5	1780.5	1811.4	.	.
GDP PER CAPITA (US\$)	..	..	260.0	278.3	1011.1
ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF OIL EQUIVALENT)	79.0	113.0	138.0	285.7	566.8
POPULATION AND VITAL STATISTICS					
POPULATION, MID-YEAR (THOUSANDS)	434869.0	547569.0	733248.0	.	.
URBAN POPULATION (% OF TOTAL)	18.0	19.8	24.4	22.3	35.9
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILL)			994.4	.	.
STATIONARY POPULATION (MILL)			1700.0	.	.
POPULATION MOMENTUM			1.8	.	.
POPULATION DENSITY					
PER SQ. KM.	132.3	166.6	223.0	173.8	386.9
PER SQ. KM. AGRI. LAND	246.6	307.5	395.8	353.3	1591.2
POPULATION AGE STRUCTURE (%)					
0-14 YRS	40.8	42.7	39.5	36.3	38.2
15-64 YRS	54.4	54.1	56.5	59.4	57.7
65 AND ABOVE	4.6	3.0	3.9	4.3	3.5
POPULATION GROWTH RATE (%)					
TOTAL	1.8	2.3	2.2	2.0	2.3
URBAN	2.5	3.3	3.9	4.1	4.1
CRUDE BIRTH RATE (PER THOUS)	47.7	41.5	33.9	27.5	30.1
CRUDE DEATH RATE (PER THOUS)	23.9	17.9	12.5	10.2	9.4
GROSS REPRODUCTION RATE	2.9	2.8	2.3	1.7	1.9
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUS)	64.0	3782.0	6826.0 / ^c	.	.
USERS (% OF MARRIED WOMEN)	..	11.7	32.0	49.4	56.5
FOOD AND NUTRITION					
INDEX OF FOOD PROD. PER CAPITA (1969-71=100)	98.0	102.0	113.0	116.6	124.4
PER CAPITA SUPPLY OF					
CALORIES (% OF REQUIREMENTS)	98.0	91.0	92.0	106.3	115.7
PROTEINS (GRAMS PER DAY)	56.0	30.0	50.0	60.1	60.3
OF WHICH ANIMAL AND PULSE	17.0	15.0	13.0 / ^d	14.4	14.1
CHILD (AGES 1-4) DEATH RATE	26.3	19.7	11.0	7.3	7.2
HEALTH					
LIFE EXPECT. AT BIRTH (YEARS)	42.2	47.3	54.9	60.5	60.6
INFANT MORT. RATE (PER THOUS)	165.0	139.0	93.0	69.2	64.9
ACCESS TO SAFE WATER (%POP)					
TOTAL	..	17.0	41.0 / ^c	46.2	46.0
URBAN	..	60.0	77.0 / ^c	77.2	57.6
RURAL	..	6.0	31.0 / ^c	34.6	37.1
ACCESS TO EXCRETA DISPOSAL (% OF POPULATION)					
TOTAL	..	18.0	6.0 / ^c	7.8	50.1
URBAN	..	85.0	27.0 / ^c	28.8	52.9
RURAL	..	1.0	1.0 / ^c	5.5	44.7
POPULATION PER PHYSICIAN	4830.0	4890.0	3690.0 / ^e	3318.0	7751.7
POP. PER NURSING PERSON	10980.0 / ^f	7420.0	5460.0 / ^e	4690.7	2464.8
POP. PER HOSPITAL BED					
TOTAL	2180.0	1650.0	1290.0 / ^e	1039.2	1112.1
URBAN	..	..	370.0 / ^g	299.1	651.4
RURAL	..	..	10410.0 / ^g	6028.2	2596.9
ADMISSIONS PER HOSPITAL BED	..	..	..	52.3	41.1
HOUSING					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	5.2	5.6	..	..	..
URBAN	5.2	5.6	..	..	..
RURAL	5.2	5.6	..	..	..
AVERAGE NO. OF PERSONS/ROOM					
TOTAL	2.6	2.8	..	..	..
URBAN	2.6	2.8	..	..	..
RURAL	2.6	2.8	..	..	..
PERCENTAGE OF DWELLINGS WITH ELECT.					
TOTAL	..	..	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..

INDIA	- SOCIAL INDICATORS DATA SHEET				
	REFERENCE GROUPS (WEIGHTED AVERAGES) /a				
	1960/b	1970/b	MOST RECENT ESTIMATE/b	LOW INCOME ASIA & PACIFIC	MIDDLE INCOME ASIA & PACIFIC
EDUCATION					
ADJUSTED ENROLLMENT RATIOS					
PRIMARY: TOTAL	61.0	73.0	79.0 /c	92.6	100.7
MALE	80.0	90.0	93.0 /c	105.5	104.4
FEMALE	40.0	56.0	64.0 /c	79.3	97.2
SECONDARY: TOTAL	20.0	26.0	30.0 /c	31.3	47.8
MALE	30.0	36.0	39.0 /c	40.8	50.6
FEMALE	10.0	15.0	20.0 /c	21.9	44.8
VOCATIONAL (% OF SECONDARY)	2.8	1.0	..	3.2	18.4
PUPIL-TEACHER RATIO					
PRIMARY	46.0	41.0	54.0 /c	38.0	30.4
SECONDARY	16.0	21.0	..	17.4	22.2
CONSUMPTION					
PASSENGER CARS/THOUSAND POP	0.6	1.1	1.4 /h	0.7	10.1
RADIO RECEIVERS/THOUSAND POP	4.9	21.5	55.8	129.8	172.9
TV RECEIVERS/THOUSAND POP	0.0	0.0	2.9	19.8	58.5
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION	10.6	16.2	19.4 /h	25.7	65.3
CINEMA ANNUAL ATTENDANCE/CAPITA	3.2	6.2	6.6	6.0	3.4
LABOR FORCE					
TOTAL LABOR FORCE (THOUS)	185951.0	219194.0	284251.0	..	..
FEMALE (PERCENT)	30.7	32.5	31.4	33.2	33.6
AGRICULTURE (PERCENT)	74.0	74.0	71.0 /c	69.6	52.2
INDUSTRY (PERCENT)	11.0	11.0	13.2 /c	15.8	17.9
PARTICIPATION RATE (PERCENT)					
TOTAL	42.8	40.0	38.8	41.9	38.9
MALE	57.0	52.4	51.7	53.6	50.8
FEMALE	27.3	26.9	25.3	29.1	26.8
ECONOMIC DEPENDENCY RATIO	1.1	1.1	1.1	1.0	1.1
INCOME DISTRIBUTION					
PERCENT OF PRIVATE INCOME RECEIVED BY					
HIGHEST 5% OF HOUSEHOLDS	26.7	26.3 /f	..	..	..
HIGHEST 20% OF HOUSEHOLDS	51.7	48.9 /f	..	..	48.0
LOWEST 20% OF HOUSEHOLDS	4.1	6.7 /f	..	..	6.4
LOWEST 40% OF HOUSEHOLDS	13.6	17.2 /f	..	..	15.5
POVERTY TARGET GROUPS					
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US\$ PER CAPITA)					
URBAN	..	..	132.0 /h	133.9	..
RURAL	..	..	114.0 /h	111.6	151.9
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US\$ PER CAPITA)					
URBAN	..	..	..	..	177.9
RURAL	..	..	..	61.7	164.7
ESTIMATED POP. BELOW ABSOLUTE POVERTY INCOME LEVEL (%)					
URBAN	..	..	40.3 /h	43.8	23.5
RURAL	..	..	50.7 /h	51.7	37.8

.. NOT AVAILABLE
 . NOT APPLICABLE

NOTES

/a The group averages for each indicator are population-weighted arithmetic means. Coverage of countries among the indicators depends on availability of data and is not uniform.

/b Unless otherwise noted, "Data for 1960" refer to any year between 1959 and 1961; "Data for 1970" between 1969 and 1971; and data for "Most Recent Estimate" between 1981 and 1983.

/c 1980; /d 1977; /e 1978; /f 1962; /g 1976; /h 1979; /i 1964-65.

DEFINITIONS OF SOCIAL INDICATORS

Notes Although the data are drawn from sources generally judged the most authoritative and reliable, it should also be noted that they may not be internationally comparable because of the lack of standardized definitions and concepts used by different countries in collecting the data. The data are, nonetheless, useful to describe orders of magnitude, indicate trends, and characterize certain major differences between countries.

The reference groups are (1) the same country group of the subject country and (2) a country group with somewhat higher average income than the country group of the subject country (except for "High Income Oil Exporters" group where "Middle Income North Africa and Middle East" is chosen because of stronger socio-cultural affinities). In the reference group data the averages are population weighted arithmetic means for each indicator and shown only when majority of the countries in a group has data for that indicator. Since the coverage of countries among the indicators depends on the availability of data and is not uniform, caution must be exercised in relating averages of one indicator to another. These averages are only useful in comparing the value of one indicator at a time among the country and reference groups.

AREA (thousand sq. km.)

Total—Total surface area comprising land area and inland waters; 1960, 1970 and 1983 data.

Agricultural—Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to lie fallow, 1960, 1970 and 1982 data.

GNP PER CAPITA (US\$)—GNP per capita estimates at current market prices, calculated by same conversion method as *World Bank Atlas* (1981-83 basis); 1983 data.

ENERGY CONSUMPTION PER CAPITA—Annual apparent consumption of commercial primary energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of oil equivalent per capita; 1960, 1970, and 1982 data.

POPULATION AND VITAL STATISTICS

Total Population, Mid-Year (thousands)—As of July 1; 1960, 1970, and 1983 data.

Urban Population (percent of total)—Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries; 1960, 1970, and 1983 data.

Population Projections

Population in year 2000—The projection of population for 2000, made for each economy separately. Starting with information on total population by age and sex, fertility rates, mortality rates, and international migration in the base year 1980, these parameters were projected at five-year intervals on the basis of generalized assumptions until the population became stationary.

Stationary population—Is one in which age- and sex-specific mortality rates have not changed over a long period, while age-specific fertility rates have simultaneously remained at replacement level (net reproduction rate = 1). In such a population, the birth rate is constant and equal to the death rate, the age structure is also constant, and the growth rate is zero. The stationary population size was estimated on the basis of the projected characteristics of the population in the year 2000, and the rate of decline of fertility rate to replacement level.

Population Momentum—Is the tendency for population growth to continue beyond the time that replacement-level fertility has been achieved, that is, even after the net reproduction rate has reached unity. The momentum of a population in the year t is measured as a ratio of the ultimate stationary population to the population in the year t , given the assumption that fertility remains at replacement level from year t onward, 1985 data.

Population Density

Per sq. km.—Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970, and 1983 data.

Per sq. km. agricultural land—Computed as above for agricultural land only, 1960, 1970, and 1982 data.

Population Age Structure (percent)—Children (0-14 years), working age (15-64 years), and retired (65 years and over) as percentage of mid-year population; 1960, 1970, and 1983 data.

Population Growth Rate (percent)—total—Annual growth rates of total mid-year population for 1950-60, 1960-70, and 1970-83.

Population Growth Rate (percent)—urban—Annual growth rates of urban population for 1950-60, 1960-70, and 1970-83 data.

Crude Birth Rate (per thousand)—Number of live births in the year per thousand of mid-year population; 1960, 1970, and 1983 data.

Crude Death Rate (per thousand)—Number of deaths in the year per thousand of mid-year population; 1960, 1970, and 1983 data.

Gross Reproduction Rate—Average number of daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970, and 1983.

Family Planning—Acceptors, Annual (thousands)—Annual number of acceptors of birth-control devices under auspices of national family planning program.

Family Planning—Users (percent of married women)—The percentage of married women of child-bearing age who are practicing or whose husbands are practicing any form of contraception. Women of child-bearing age are generally women aged 15-49, although for some countries contraceptive usage is measured for other age groups.

FOOD AND NUTRITION

Index of Food Production Per Capita (1969-71 = 100)—Index of per capita annual production of all food commodities. Production excludes animal feed and seed for agriculture. Food commodities include primary commodities (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded); they comprise cereals, root crops, pulses, oil seeds, vegetables, fruits, nuts, sugarcane and sugar beets, livestock, and livestock products. Aggregate production of each country is based on national average producer price weights; 1961-65, 1970, and 1982 data.

Per Capita Supply of Calories (percent of requirements)—Computed from calorie equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stock. Net supplies exclude animal feed, seeds for use in agriculture, quantities used in food processing, and losses in distribution. Requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distribution of population, and allowing 10 percent for waste at household level; 1961, 1970 and 1982 data.

Per Capita Supply of Protein (grams per day)—Protein content of per capita net supply of food per day. Net supply of food is defined as above. Requirements for all countries established by USDA provide for minimum allowances of 60 grams of total protein per day and 20 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Supply; 1961, 1970 and 1982 data.

Per Capita Protein Supply From Animal and Pulse—Protein supply of food derived from animals and pulses in grams per day; 1961-65, 1970 and 1977 data.

Child (ages 1-4) Death Rate (per thousand)—Number of deaths of children aged 1-4 years per thousand children in the same age group in a given year. For most developing countries data derived from life tables; 1960, 1970 and 1983 data.

HEALTH

Life Expectancy at Birth (years)—Number of years a newborn infant would live if prevailing patterns of mortality for all people

at the time of its birth were to stay the same throughout its life; 1960, 1970 and 1983 data.

Infant Mortality Rate (per thousand)—Number of infants who die before reaching one year of age per thousand live births in a given year; 1960, 1970 and 1983 data.

Access to Safe Water (percent of population)—total, urban, and rural—Number of people (total, urban, and rural) with reasonable access to safe water supply (includes treated surface waters or untreated but uncontaminated water such as that from protected boreholes, springs and sanitary wells) as percentages of their respective populations. In an urban area a public fountain or standpost located not more than 200 meters from a house may be considered as being within reasonable access of that house. In rural areas reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.

Access to Excreta Disposal (percent of population)—total, urban, and rural—Number of people (total, urban, and rural) served by excreta disposal as percentages of their respective populations. Excreta disposal may include the collection and disposal, with or without treatment, of human excreta and waste-water by water-borne systems or the use of pit privies and similar installations.

Population per Physician—Population divided by number of practicing physicians qualified from a medical school at university level.

Population per Nursing Person—Population divided by number of practicing male and female graduate nurses, assistant nurses, practical nurses and nursing auxiliaries.

Population per Hospital Bed—total, urban, and rural—Population (total, urban, and rural) divided by their respective number of hospital beds available in public and private, general and specialized hospitals and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally custodial care are not included. Rural hospitals, however, include health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodation and provide a limited range of medical facilities.

Admissions per Hospital Bed—Total number of admissions to or discharges from hospitals divided by the number of beds.

HOUSING

Average Size of Household (persons per household)—total, urban, and rural—A household consists of a group of individuals who share living quarters and their main meals. A boarder or lodger may or may not be included in the household for statistical purposes.

Average Number of Persons per Room—total, urban, and rural—Average number of persons per room in all urban, and rural occupied conventional dwellings, respectively. Dwellings exclude non-permanent structures and unoccupied parts.

Percentage of Dwellings with Electricity—total, urban, and rural—Conventional dwellings with electricity in living quarters as percentage of total, urban, and rural dwellings respectively.

EDUCATION

Adjusted Enrollment Ratios

Primary school - total, male and female—Gross total, male and female enrollment of all ages at the primary level as percentages of respective primary school-age populations. While many countries consider primary school age to be 6-11 years, others do not. The differences in country practices in the ages and duration of school are reflected in the ratios given. For some countries with universal education, gross enrollment may exceed 100 percent since some pupils are below or above the country's standard primary-school age.

Secondary school - total, male and female—Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational, or teacher training instructions for pupils usually of 12 to 17 years of age; correspondence courses are generally excluded.

Vocational Enrollment (percent of secondary)—Vocational institutions include technical, industrial, or other programs which operate independently or as departments of secondary institutions.

Pupil-teacher Ratio - primary, and secondary—Total students enrolled in primary and secondary levels divided by numbers of teachers in the corresponding levels.

CONSUMPTION

Passenger Cars (per thousand population)—Passenger cars comprises motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.

Radio Receivers (per thousand population)—All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since most countries abolished licensing.

TV Receivers (per thousand population)—TV receivers for broadcast to general public per thousand population; excludes unlicensed TV receivers in countries and in years when registration of TV sets was in effect.

Newspaper Circulation (per thousand population)—Shows the average circulation of "daily general interest newspaper," defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" if it appears at least four times a week.

Cinema Annual Attendance per Capita per Year—Based on the number of tickets sold during the year, including admissions to drive-in cinemas and mobile units.

LABOR FORCE

Total Labor Force (thousands)—Economically active persons, including armed forces and unemployed but excluding housewives, students, etc., covering population of all ages. Definitions in various countries are not comparable; 1960, 1970 and 1983 data.

Female (percent)—Female labor force as percentage of total labor force.

Agriculture (percent)—Labor force in farming, forestry, hunting and fishing as percentage of total labor force; 1960, 1970 and 1980 data.

Industry (percent)—Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1980 data.

Participation Rate (percent)—total, male, and female—Participation or activity rates are computed as total, male, and female labor force as percentages of total, male and female population of all ages respectively; 1960, 1970, and 1983 data. These are based on ILO's participation rates reflecting age-sex structure of the population, and long time trend. A few estimates are from national sources.

Economic Dependency Ratio—Ratio of population under 15, and 65 and over, to the working age population (those aged 15-64).

INCOME DISTRIBUTION

Percentage of Total Disposable Income (both in cash and kind)—Accruing to percentile groups of households ranked by total household income.

POVERTY TARGET GROUPS

The following estimates are very approximate measures of poverty levels, and should be interpreted with considerable caution.

Estimated Absolute Poverty Income Level (US\$ per capita)—urban and rural—Absolute poverty income level is that income level below which a minimal nutritionally adequate diet plus essential non-food requirements is not affordable.

Estimated Relative Poverty Income Level (US\$ per capita)—urban and rural—Rural relative poverty income level is one-third of average per capita personal income of the country. Urban level is derived from the rural level with adjustment for higher cost of living in urban areas.

Estimated Population Below Absolute Poverty Income Level (percent)—urban and rural—Percent of population (urban and rural) who are "absolute poor."

ECONOMIC DEVELOPMENT DATA

GNP PER CAPITA IN 1983 US\$200 g/

GROSS DOMESTIC PRODUCT IN 1984/85 /b/

	US\$ Bln.		ANNUAL RATE OF GROWTH (% CONSTANT PRICES) c/					
	US\$ Bln.	%	85/86-89/90	80/81-84/85	85/86-89/90	70/71-74/75	75/76-79/80	80/81-83/84
GDP at Market Prices	179.34	100.0	3.7	3.6	3.7	2.9	4.1	6.2
Gross Domestic Investment	41.88	23.4						
Gross National Saving	35.93	20.0						
Current Account Balance	5.95	3.4						

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1981

	Value Added (at factor cost)		Labor Force i/		V.A. Per Worker	
	US\$ Bln.	%	Mil.	%	US\$	% of National Average
Agriculture	52.5	35.9	172.7	70.6	304	51
Industry	34.5	23.6	31.6	12.9	1,092	183
Services	59.2	40.5	40.3	16.5	1,469	246
Total/Average	146.2	100.0	244.6	100.0	599	100

GOVERNMENT FINANCE

	General Government g/			Central Government		
	Rs Bln.	% of GDP		Rs Bln.	% of GDP	
	1984/85	1984/85	80/81-84/85	1984/85	1984/85	80/81-84/85
Current Receipts	436.23	20.46	19.56	240.88	11.30	10.42
Current Expenditures	476.26	22.34	20.05	274.57	12.88	11.30
Current Surplus/Deficit	-40.03	-1.88	-0.49	-33.69	-1.58	-0.88
Capital Expenditures f/	184.24	8.64	8.12	148.19	6.86	6.08
External Assistance (net) g/	15.67	0.74	0.87	-	-	-

MONEY, CREDIT AND PRICES

	1970/71	1975/76	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	Feb. 85	Feb. 86
	(Rs Billion outstanding at end of period)									
Money and Quasi-Money	109.8	224.8	472.3	657.7	827.5	728.7	860.9	1,027.7	1,003.4	1,164.0
Bank Credit to Government (net)	54.6	106.3	200.1	251.2	306.3	353.8	407.8	501.5	490.5	593.2
Bank Credit to Commercial Sector	64.6	156.2	310.1	366.4	434.6	517.1	612.7	715.0	688.0	789.1

	1970/71	1975/76	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1984/85 Apr.-Feb	1985/86 Apr.-Feb
	(Percentage of Index Numbers)									
Money and Quasi-Money as a % of GDP mp	27.3	30.3	43.9	43.6	42.5	44.2	44.4	48.0	-	-
Wholesale Price Index (1970/71=100)	100.0	173.0	217.6	257.3	281.3	286.7	316.0	338.4	338.0	357.5

Annual Percentage Changes in:

Wholesale Price Index	7.7	-1.1	17.1	18.2	9.4	2.6	9.5	7.1	7.1	5.8
Bank Credit to Government (net)	15.0	22.7	25.6	28.5	19.1	18.5	15.3	23.5	20.3 g/	17.6 h/
Bank Credit to Commercial Sector	19.4	22.7	21.5	18.2	18.6	19.0	18.5	16.7	12.3 g/	10.4 h/

- a/ The per capita GNP estimate is at market prices, using World Bank Atlas methodology, base period 1/81-83.
 All other conversions to dollars in this table are at the average exchange rate prevailing during the period covered.
 b/ Quick Estimates, Central Statistical Organization.
 c/ Computed from trend line of GNP at factor cost series, including one observation before first year and one observation for last year of listed period.
 d/ World Bank estimates of net disbursement of concessional aid and IBRD.
 e/ Transfers between Centre and States have been netted out.
 f/ All loans and advances to third parties have been netted out.
 g/ Percentage change from end-March 1984 to end-February 1985.
 h/ Percentage change from end-March 1985 to end-February 1986.
 i/ Total Labor Force and percentage breakdown from 1981 Census. Excludes data for Assam.

BALANCE OF PAYMENTS	1982/83	1983/84	1984/85 ^{1/}	1985/86 ^{1/}	MERCHANDISE EXPORTS (AVERAGE 1981/82 - 1984/85) ^{g/}	
					US\$ Million	%
(US\$ Million)						
Exports of Goods ^{g/}	8386	8667	8931	9159	Engineering Goods	1148 13.8
Imports of Goods ^{g/}	14385	14360	13398	14400	Tea	477 5.7
Trade Balance	-5999	-5693	-4467	-5241	Gems	1093 13.1
NFS (net)	935	1059	1031	848	Clothing	713 8.0
Resource Balance	-5064	-4834	-3438	-4294	Leather and Leather Products	377 4.5
-----					Jute Manufactures	233 2.8
Interest Income (net) ^{h/}	-255	-714	-819	-948	Iron Ore	385 4.6
Net transfers ^{i/}	2504	2630	2382	2352	Cotton Textiles	298 3.6
Balance on Current Account	-2816	-2778	-1903	-2888	Sugar	74 0.9
-----					Others	3541 42.4
Direct Investment	65	63	62	63	Total	8337 100.0

Official Loans & Grants (net)	1708	1565	1569	2193	<u>EXTERNAL DEBT, MARCH 31, 1985</u>	
Gross Disbursements	2321	2182	2188	2852	US\$ Billion	
Amortization	613	617	619	659	Outstanding and Disbursed	26.33
Private Borrowing (net)	397	644	808	404	Undisbursed	10.57
-----					Outstanding including Undisbursed ^{r/}	36.90
Non-Resident Deposits	434	738	399	1380	<u>DEBT SERVICE RATIO FOR 1984/85 ^{1/} ^{q/}</u>	
Transaction with IMF (net)	1960	1271	76	-262	15.0 %	
All other items ^{g/}	-1243	622	-748	-330	-----	
Increase in Reserves (-)	-505	-881	-263	-580	<u>IBRD/IDA LENDING, MARCH 31, 1986 ^{1/}</u>	
Gross Revenues (end year) ^{g/}	4966	5847	6111	6870	US\$ Million	
Net Reserves (end year) ^{m/}	2090	1697	2179	2314	IBRD IDA	
-----					Outstanding and Disbursed	2569 9599
Fuel and Related Materials					Undisbursed	4780 3963
-----					Outstanding and Undisbursed	7349 13562
Imports (Petroleum) ^{g/}	4717	3490	3213	3546		
of which: Crude	3096	2240	1521	2496		
Products	1622	1250	1692	1050		

RATE OF EXCHANGE

June 1966 to mid-December 1971	: US\$ 1.00 = Rs7.50 Rs1.00 = US\$0.13333
Mid-December 1971 to end-June 1972	: US\$ 1.00 = Rs7.2797 Rs1.00 = US\$0.137376
After end-June 1972	: Floating Rate
Spot Rate end-March 1985	: US\$ 1.00 = Rs12.4300 Rs1.00 = US\$0.0805
Spot Rate end-March 1986	: US\$ 1.00 = Rs12.3609 Rs1.00 = US\$0.0809

- ^{1/} Estimated.
^{2/} Figures given cover all investment income (net). Major payments are interest on foreign loans and charges paid to IMF, and major receipts are interest earned on foreign assets.
^{3/} Figures give include workers' remittances but exclude official grant assistance which is included within official loans and grants, and non-resident deposits which are shown separately.
^{4/} Exclude net use of IMF credit.
^{5/} Amortization and interest payments on foreign loans as a percentage of total current receipts.
^{6/} Includes exchange rate adjustments to the valuation of reserves and financing of imbalances in rupee trade.
^{7/} Excluding gold.
^{8/} Net of crude petroleum oil exports.
^{9/} Includes IMF.

EXECUTIVE SUMMARY

A. Introduction and Recent Policy Changes

a.1 India's Seventh Five-Year Development Plan (1985-89) aims at raising the growth rate of the economy from its trend value of 3.0 to 4.0% to a new level of 5%. This is an ambitious but necessary growth target if pervasive poverty and the employment problem are to be effectively addressed. It is an ambitious growth target first, because, unlike the Sixth Plan, it is not based on an unusually low base year. ^{1/} Second, it can rely only to a limited extent on accelerated growth in investment (gross investment rate is projected to increase only from 24.5% in 1984/85 to 25.9% in 1989/90), and therefore it has to depend to a large extent on increased efficiency in the use of capital and other resources. Third, with agriculture and services having only limited potential for more rapid growth, the brunt of the acceleration in overall growth will have to be borne by the industrial sector, which has been sluggish for the past two decades. More specifically to raise the overall growth rate of the economy to the 5% level, India will need to:

- Sustain the progress it has brought about in recent years in raising productivity;
- Accelerate the growth of industrial production through policy changes which enhance competition (domestic and foreign) and efficiency;
- Improve the overall productivity of investment in the economy, including particularly basic infrastructure;
- Improve domestic resource mobilization efforts through a more efficient tax system and wider use of economically efficient pricing especially in the public enterprises; and
- Accelerate export growth to meet the higher import requirements of the faster growing industrial sector.

a.2 This report attempts to analyze these key constraints and policy options open to the Government in its efforts to overcome them. After a brief review of the economic performance during the Sixth Plan, Chapter 1, discusses objectives and development strategy of the Seventh Plan. Chapter 2

^{1/} Output in the base year of the Sixth Plan (1979/80) was particularly low due to bad weather and relatively poor industrial growth. Alternative estimates of the growth rate based on three year moving averages suggest a growth rate between 4.3% and 4.7%, well above the 3.5% level which prevailed in the 1960s and 1970s but significantly lower than the 5.5% growth between 1979/80 and 1984/85. The Sixth Plan growth rate may have also been overstated by a statistically suspect 12% p.a. growth in Public Administration and Defense.

focuses on key policy changes that have been introduced during the past year and evaluates recent macro-economic performance. Chapter 3 addresses to the implications of current sectoral policies; past and planned investment; and their combined impact on growth and efficiency in six principal sectors of the economy--agriculture, energy, manufacturing, transport, housing and urban development and population. Chapter 4 examines the steps that would be required to achieve the domestic resource mobilization goals of the Seventh Plan and Chapter 5 attempts to shed light on the twin questions of: (i) how realistic are the balance of payments assumptions of the Plan; and (ii) what policy changes are needed to assure their realization?

a.3 The Government is fully cognizant of the difficulty of overcoming the constraints and the policy changes necessary to reach the development targets. In the Seventh Plan (1984/85-1989/90), the objective of having participants in the economic process respond more to market incentives, rather than directives, is reflected in the perhaps understated and nuanced, but nonetheless clear resolve to expand the economic role of prices, costs and wages. The new courage to confront foreign competition is reflected in the Plan's focus on modernization of processes and equipment, and increases in the size of economic units. Moreover, the tacit admission that the bureaucracy has neither the answers to all questions nor possesses the keys to the future course of economic development, and that much will depend on the initiatives of the more dynamic forces of the society, is reflected in the willingness to open doors to the private sector, permitting it to enter sub-sectors it had limited access to, such as for example, road building or power generation. It is also reflected in the efforts to gradually remove subsidies and similar budget transfers so as to make investors and producers in both the private and public sector directly responsible for the results of their decisions, thus enhancing their economic rationale.

a.4 During the past year, the first year of the Seventh Five Year Plan, a large number of policy initiatives especially in the areas of industrial policy, trade policy, tax policy, monetary policy and policies towards poverty alleviation were introduced in conformity with the general policy thrust of the Plan and its growth objectives.

a.5 Industrial Policies. A key requirement for improved productivity and growth in the industrial sector is to secure greater competitive pressure within the sector than has been the case in the past. As a practical matter, the size and domestic orientation of the Indian economy mean that this competitive pressure must come mainly from within the economy through appropriate industrial policies. An important complement, however, is to secure increased exposure to foreign trade as well as to stimulate reduced costs and improved quality of production. To increase competition, domestic policies will need to allow freer entry and exit of firms in the industrial sector and greater reliance on market signals. To these ends, the existing overly elaborate system of administrative controls on firm size, product choice and small scale industry and public sector reservation will have to be drastically reduced.

a.6 Last year's economic report described a number of measures (some of which had been initiated by the previous government) which are in line with these policy directions, including the opening up of telecommunication equipment manufacturing to the private sector, fresh approaches to the development of the electronics and computer industries, and the "broadbanding" ^{1/} of the automotive and machine tool industries. Other changes announced during the March 1985 budget session raised the asset limit for large companies and for small scale and ancillary activities, and increased the list of delicensed industries from 9 to 25. Further measures followed, and by the end of the financial year there was a clear decrease in restrictions including:

- A reduction in the number of companies coming under the Monopolies and Restrictive Trade Policies Act from 1505 to 230 by December 1985.
- Considerably more scope for MRTTP and established foreign equity companies to expand their capacity and diversify products;
- More liberal "reendorsement" rules allowing for capacity expansion without obtaining a license, and recognizing additional capacity resulting from modernization or replacement;
- A substantial increase in the number of industries in which no license is required to install or expand capacity;
- Increased flexibility to use installed capacity for alternative products as a result of an increase in the number of industries subject to "broadbanding";
- A series of administrative improvements which appears to have significantly reduced delays in obtaining clearances, especially for larger companies and foreign collaborations; and
- A new textile policy which: removes the freeze on mills' loom capacity; discontinues restrictions on production and use of synthetic fibers and yarns; and significantly reduces excise taxes on synthetic fibers.

a.7 During 1984/85, private corporate profitability improved considerably over the previous year, this trend continued during 1985/86. The improved profit picture and the general optimism associated with the policies of the new government, contributed to a sustained stock market boom during calendar 1985 in which the major indexes increased by over 80 percent. The general

^{1/} "Broadbanding" refers to industrial licensing where capacities are licensed by broad categories of products rather than specific products to provide greater flexibility to the producers.

buoyancy of the investment climate, as reflected in the stock market boom was further corroborated by a 9.3% increase in the production of capital goods industries between April -- November 1984. These developments suggest that the manufacturing sector was beginning to respond to the new policy initiatives, although the payoff in terms of faster growth of manufacturing output is likely to occur with a lag.

a.8 Trade Policies. Further changes in external trade policy will also be critical, not only to stimulate competition and efficiency but also to ensure that the potential for manufactured export growth is fully exploited. Greater access to imported inputs and capital goods through import liberalization, which began in the second half of the Seventies, will need to be sustained. Many of the problems that have constrained India's exports are closely related to the structure of industrial policy. Restrictions on size, growth, entry and exit of firms combined with quantitative restrictions and high tariffs on imported inputs, curbs on collaboration agreements and on the import of technology have caused Indian firms to neglect cost, quality and innovation -- all critical factors in international competitiveness. Therefore, success in achieving the Plan's export target will to a large extent depend on how fast these policies will encompass the broad spectrum of the industrial sector and how effectively they will be implemented in the face of the expected resistance by those who stand to lose from the new policy initiatives. It would be naive, however, to think that the structure and functioning of Indian industry can be changed dramatically within the span of four to five years. To secure results in the short term, benefits from changes in industrial policy need to be complemented by direct export incentives, especially an exchange rate policy that enhances the relative profitability of export sales.

a.9 During the year, the Government released three important documents: the report of the Hussain committee on trade policies; the Narasimham committee report which also dealt with trade policies and a statement on long-term fiscal policy (LTFFP) which among other things set out the broad framework for future trade policies. The most important recommendation of the two committees was that the Government should give greater impetus to the ongoing process of trade liberalization in particular by the removal of quantitative controls on imports so as to move to a regime in which most imports would be regulated by tariffs. The Hussain committee also recognized the fundamental problem that under the present regime, effective incentives for import substitution are generally much higher than effective incentives for exports, and recommended that at least some of this difference should be offset by moderating protection in the domestic market while ensuring that the various export incentives fully compensate exporters for the tariffs, excise taxes and other measures which raise the cost of their inputs above world prices. This committee also emphasized the importance of maintaining the real effective exchange rate at a level which would maintain the competitiveness of exports. Both committees emphasized the advantage of a tariff-based system in reducing the burden on both firms and the Administration, of the present exceedingly complex, multi-layered and highly discretionary quantitative

control system. Insofar as quantitative and other controls remain, they recommended that they should be simplified and as far as possible made automatic and non-discretionary in their application.

a.10 The import-export policy announced in April 1985 implemented some of these recommendations. On the import side there was considerable freeing up of import controls on capital goods, and some substantial import duty reductions. Regarding imported raw materials and components, the effects of the policy changes are much less clear; except for items required by some industries, notably electronics and vehicle manufacture, there may not have been much change in the extent to which firms can import raw materials without first obtaining a license. On the other hand, the 1986/87 budget made a beginning in simplifying the tariff structure as envisaged by the LTFP by reducing the previous eleven auxiliary duty rates to three rates.

a.11 As regards exports, the new Import-Export Policy increased export incentives in some respects, while others were reduced. On the positive side, among others, the following measures were introduced: (a) to reduce redtape, a "passbook" scheme was adopted for duty free imports used in export production; (b) the number of exported products eligible for advance licenses was increased; (c) Firms registered under the "100% export-oriented units" scheme were allowed to sell up to 25% of their production in the domestic market. (d) Export taxes applied to 12 mineral and agricultural products were abolished (see paras. 2.34-2.36). On the negative side: (a) the advanced licensing scheme was tightened by increasing the minimum value added requirement; (b) a number of facilities available for large export and trading houses were withdrawn or restricted. They were, for example, excluded from the new "passbook" scheme and their potential gains from the new profit tax incentive were reduced. On balance, the policy changes and some administrative improvements made during the year probably had only a marginal impact on facilitating exports and its profitability. Recognizing this, in January 1986, the Government announced that it would establish a new schedule of more generous cash compensation rates and would review and simplify the duty drawback scheme. The 1986/87 budget also included a number of new (but in the aggregate, minor) measures to promote exports. Moreover, in April 1986 the Reserve Bank announced improved foreign exchange forward cover facilities and an extension of the period covered by concessional interest rates for export pre-shipment credit.

a.12 The trade policy developments described above were broadly consistent with the lackluster performance of exports and the robust growth of imports during 1985/86. The principal impact of the recent trade policy reforms has been to facilitate the modernization of domestic industry through the import of machinery and equipment and, to a lesser extent, raw materials. Given the obsolete capital stock and lagging technologies of many Indian industries, this is a welcome development; it should help reduce production costs, improve product quality, increase competition and more generally, the dynamism of many industries. However, as discussed in Chapter 5 below, if export growth rates cannot be accelerated to levels close to 7%, the

prospects for maintaining the import liberalization effort would become much more difficult.

a.13 Taxation Policies. In announcing the LTFP, the Government hoped to reduce speculation on future fiscal policies and to promote an open debate on major tax proposals in advance of their implementation. As noted in our 1985 Economic Report, the 1985/86 budget reduced income tax rates for individuals and abolished the surcharge on income tax. Estate duty was abolished, and wealth tax rates were lowered. This was a major change which, together with the reduction in income tax rates, reduces the maximum marginal tax rate on income from wealth from approximately 112% to 70%. In the 1986/87 budget, further concessions and simplifications foreshadowed by the LTFP were made. These relate to gift taxes, capital gains tax and deductions from taxable income.

a.14 At the company level, the 1985/86 budget reduced income tax rates by 5 to 10 percentage points, and the 1986/87 budget removed the surcharge. However, the promised removal of company surtax was deferred until the 1987/88 budget. Other relevant tax changes included new incentives for exports, simplification of depreciation schedules and uniform tax rates on royalties (see paragraphs 2.37-2.40).

a.15 Regarding excise taxes, the 1986/87 budget introduced the modified value added tax system (MODVAT) for 37 of the 68 chapters of the excise tariff a reform of major importance. The changes introduced should greatly reduce inefficiencies resulting from the present cascading system which only provides for tax offsets for a limited number of products. A new, more smoothly phased excise tax concession scheme for small scale industry was also introduced. This should reduce the incentive to avoid or minimize excise taxes by artificially splitting production units. Moreover, the excise tariff schedule was simplified by the elimination of special excise duties which previously applied to 132 items. As regards customs duties, as noted previously, the 1986/87 budget commenced the process announced by the LTFP of simplifying the tariff structure by reducing the number of auxiliary duty rates from 11 to 3. A number of measures to simplify procedures and to reduce the possibilities for time consuming appeals were also announced during the year.

a.16 While it is too early to judge the extent to which these policy changes will permanently improve the elasticity of the tax system, it is encouraging that the Central Government's tax receipts during 1985/86 were running well ahead of 1984/85 and of the budget estimates. If, on top of the measures already taken over the past years, the recent and proposed reforms in LTFP are implemented and rigorously enforced, incentives for production and "rent seeking" activities would be reduced.

a.17 Monetary Policies. In December 1985, the Reserve Bank of India (RBI) released the report on the working of the monetary system produced by the Chakarvarty Committee. A major concern of the report is the continuing rate

of increase of money supply in excess of the growth of real output. In addition, the report cites a number of other aspects of the monetary system, in particular noting:

- That funds are obtained by the government at negative or low interest rates through the absorption of treasury bills and medium and long term securities. The committee argues that the consequent availability of funds to government projects at less than their opportunity cost leads to distortions in spending, particularly the failure to fully take into account the economic cost of delays in project completion.
- That together with directed low interest loans to priority sectors, the tying up of large proportions of the commercial banks' assets (at present 37% of net demand and time liabilities) in relatively low yielding assets has reduced their profitability and concomitantly has inhibited desirable increases in deposit rates.
- That the system has prevented the emergence of broad based markets for treasury bills and other short term instruments as well as for medium and longer term government bonds, which, in turn, has meant that the open market purchase and sale of the securities has not been a practicable means of credit control by the RBI.

a.18 The broad thrust of the Report's recommendations to simplify and liberalize the monetary system are in line with the intentions of the Government's other policy initiatives, although in the latter case, neither the (RBI) nor the Government have so far indicated when the principal recommendations will be implemented. If adopted, the recommendations would involve major changes in the approach to monetary policies and in the financial system; it would entail considerably more fiscal discipline on the part of the Government and would make a major contribution to increasing the efficiency of the financial sector and the economy.

a.19 Poverty Policies. The Government's direct anti-poverty programs have aimed increasingly on improving the quality of services provided rather than simply the achievements of physical and financial targets. Over the last two years of the Sixth Plan, the annual amounts invested under the Integrated Rural Development Program (IRDP) rose by about 9% in real terms. At the same time, the total number of beneficiaries rose by about 15% to nearly 4 million, implying a reduction in the benefits provided per beneficiary by about 6% during the Plan period. With the increasing shift of emphasis from quantity to quality, only 1.53 million households were assisted during the first 9 months of 1985/86 (the first year of the Seventh Plan) as against the annual target of 4 million households. Of the total Seventh Plan outlay of Rs 18,640 million at 1984/85 prices for IRDP, the revised estimate of expenditure for 1985/86 is Rs 2,870 million (Rs 2,730 million assuming an annual price increase of 5%), which amounts to 14.6% of Plan outlay. The budget for 1986/87 has proposed Rs 4,280 million (Rs 3,860 million assuming annual price

increase of 5%) for the program, amounting to 20.7% of the Plan outlay. The budget retains the physical target of 4 million households, but the ratio of old recipients to new has been altered from 50:50 as given in the Plan to 75:25.

a.20 Employment provided under the National Rural Employment Program (NREP) in 1984/85 reached the level of about 350 million mandays in 1982/83, after a decline was observed in the favorable agricultural year 1983/84. In addition, under the Rural Landless Employment Guarantee Program (RLEGP) established in August 1983 about 260 million mandays of employment were generated during the first 20 months of the Plan. This represents a significant expansion in the public employment program.

a.21 In the autumn of 1985 it was decided to increase the subsidized distribution of foodgrains. This is being accomplished through several ongoing programs, especially the Integrated Tribal Development Program, but also the employment and women and children support schemes.

a.22. The Government's regulatory and trade policies, discussed earlier will also no doubt touch the poor. To the extent that the policies succeed in increasing economic efficiency and stimulating growth, the benefits will tend to accrue generally to the public at large in the form of lower prices and, eventually, higher employment and incomes. The effects on the poor, and increasingly over the medium to longer term, may be expected to be positive. This is the general experience of other countries, and is also strongly suggested by the recent reductions in poverty incidence in India during a period where per capita consumption was increasing relatively rapidly.

B. Recent Economic Performance

a.23 Annual growth during 1984/85 was disappointing at only 3.6%. On the basis of limited information available so far, 1985/86 GDP growth is likely to range between about 5.5% and 6.0% and to a large extent reflecting the impact of macroeconomic policy changes introduced during the last two years. Trends in foodgrain production have, as usual, dominated Indian agricultural performance over the last 12 months. Foodgrain production is likely to grow by about 2% p.a. to approximately 149 million tons in 1985/86 but will still be 3 million tons lower than the peak production reached in 1983/84. After allowing for other crops, agricultural GDP may grow at or slightly below the Seventh Plan target of 2.5%. It is likely that the growth of real value added in manufacturing and in the electricity gas, and water sector will reach or slightly exceed the Seventh Plan targets of 5.6% and 8% respectively. However, the growth of the mining and quarrying sector will be well below the Plan target of 11.8%, principally due to a lower rate of growth of coal production. Within the mining sector, the growth of crude oil production slowed considerably during 1985/86 to about the rate projected for the Seventh Plan. Preliminary estimates of output in several manufacturing products, notably steel, cotton yarn, sugar and tea show clear increases over 1984/85, while other products report recessionary conditions during the

second half of the fiscal year. On balance, it is likely that manufacturing will reach the Seventh Plan target of 5.5%.

a.24 An essential requirement for the economy to attain the Seventh Plan goals is that exports should grow at a distinctly faster rate than in the past so as to finance the import requirements. According to provisional trade estimates, the US dollar value of non-petroleum exports during the first six months of 1985/86 declined by 1.1%, whereas, there was a surge of imports which increased by 21.1% over the corresponding six months of 1984/85. Most of this increase in imports, however, was attributable to bunching of bulk imports by importing agencies. Despite the probable increase in the trade deficit over last year's level of US\$4.7 billion, foreign exchange reserves declined by only US\$0.5 billion during the financial year, from US\$6.1 billion at the end of March 1985 to US\$5.6 billion at the end of January 1986, equivalent to about 4.5 months of imports. This relatively small decline was in part due to continued increases in worker remittances and investments in Non-Resident accounts. An increase in tourism receipts following a fall in 1984/85, has also been a factor.

a.25 As of December 1985, inflation as measured by the wholesale price index was running at an annual rate of about 5.6%. Increases in a number of administered prices during December, January and February (for coal, fertilizer, some grains, petroleum and railway freights) are not expected to significantly change these trends, which are about one percentage point below inflation in 1984/85. The main influence restraining price increases was the adequate supplies of agricultural products; in the case of sugar and edible oils, domestic supplies have been augmented through imports.

a.26 During the first 10 months of 1985/86 electricity generated by public utilities increased by 8.2% over the corresponding period of fiscal 1984/85, compared to an increase of 13.1% between the same periods of 1983/84 and 1984/85. However, this decline in the rate of growth was due to an absolute decline of 5.1% in hydel generation following the indifferent monsoon in several catchment areas and lower water levels in the major reservoirs on account of lesser inflow and overdrawals during 1984/85. Electricity generated from thermal and nuclear power plants increased by 15.5%—roughly the same order of growth as in the previous year. Further improvements also occurred in the average plant load factor of thermal plants, which was 51.3% during April-January 1985/86 as against 48.6% during the corresponding period of 1984/85. For the remainder of the year, overall growth is expected to be slightly above the actual growth during the Sixth Plan of 8.4%.

a.27 In 1984/85, coal production reached 147.4 million tons, an increase of 6.7% over 1983/84. While there was a substantial decline in shortages, attempts to grapple with a number of well recognized problems, including poor and declining coal quality, difficult labor relations, poor coordination between production and the delivery capabilities of the railways and large operating losses, met with limited success. Poor planning, inadequate handling facilities, and railway wagon shortages led to a large accumulation of

pithead stocks which reached 29.2 million tons valued at over Rs 5 billion at the end of March 1985. At the same time there were shortages in several important consuming centers, especially of higher quality thermal and coking coal from deep underground mines. During 1985/86 excess pithead stocks declined (to about 22 million tons at the end of January 1986) as the planned increase of production was cut back. As a result, production this year is unlikely to exceed 153 million tons, or about 3.8% in excess of 1984/85 production.

a.28 During 1985/86 production from Bombay High was reaching a plateau and total crude oil production is expected to increase by about only 3.5% compared to an increase of 11.4% in 1984/85 and the growth of over 40% between 1978/79 and 1984/85. Assuming continuing exploration but no major new discoveries, the Seventh Plan projects an annual rate of increase of 3.5% between 1984/85 and 1989/90. During 1985/86 a series of major refinery expansions were completed and most local crude is now being refined in India. Consequently crude exports and the offsetting product imports have more or less ceased.

a.29 During the first nine months (April-December) of 1985/86 cumulative rail traffic reached 187 million tons, an increase of 9.1% over the corresponding period of 1984/85. Net ton kilometers of goods traffic carried increased even more sharply, by 14.4%, compared with a 2.2% increase during 1984/85. Shipments of cement, coal, POL and fertilizers and almost every other commodity group increased. The increase in railway traffic was made possible by greater operational efficiency as shown by noticeable improvement during both 1984/85 and 1985/86, in indicators such as wagon turn-around time and net ton kilometers carried per wagon per day on broad gauge lines.

C. Sectoral Investments and Policies

a.30 Returns to investment has been low in India. Despite a significant increase in the investment rate (from about 11.0% in the 1950s to 23% in the early 1980s), the trend growth of output has remained more or less stable at about 3.5% to 4.0% per annum, implying high and rising capital output ratios. It is clear that the high capital output ratios are partly explained by changes in the composition of investment. The rate of growth of investment has generally been fastest in those sectors with the highest capital output ratios (i.e., power, mining and irrigation). In other words, investment has been shifting (with good economic justification) increasingly towards those sectors which use more than the average amount of capital to effect a unit increase in output, explaining in part the rise in the total ratio. There is, however, no doubt that a large part of the rise in the capital output ratios is also explained by a deterioration in the efficiency with which existing and new capital is used. Factors responsible for low returns to capital are many. They span the spectrum from inefficiencies in allocation of investment at the subsector level to poor maintenance practices at the plant level. The Seventh Plan conveys the critical need to improve economic efficiency more strongly than any previous Plan. Chapter 3 of the report

reviews the Plan's objectives and policy initiatives for improved efficiency in key sectors of the economy.

a.31 Agriculture. The Seventh Plan projects a 2.5% growth rate in agricultural value added. This is consistent with the demand likely to be generated by an overall GDP growth rate of 5% and with the objective of ensuring that India remains self-sufficient in cereals. In volume terms, foodgrain output is expected to grow by 3.7% annually; high average annual growth rates for oilseeds (6.7%), sugarcane (3.8%), and cotton (4.8%), and tea (3.5%) are also expected. Out of a total public sector outlay of Rs 1,800 billion (1984/85 prices), the Seventh Plan allocates 9.4% to irrigation and 10.9% to various agricultural and rural development schemes. In relative terms, these figures do not represent a major shift in the allocation of resources compared to what was achieved during the Sixth Plan.

a.32 An important and novel thrust in the Seventh Plan's agricultural strategy is the priority accorded to rapid completion of ongoing irrigation schemes. Alongside stepped up spending on schemes which are capable of yielding benefits during the Seventh Plan, the utilization of existing irrigation potential is also given high priority through projects expediting construction of field channels and other structures, land preparation activities, and the introduction of appropriate operational procedures. A major effort is also to be made to exploit groundwater resources particularly in Eastern and Northeastern India. A second significant theme in the Plan is the need to increase productivity and reduce output fluctuations in rainfed zones. Increased production in such areas is viewed as closely linked to attaining the Plan's poverty and employment goals. Development of dryland agriculture is to be fostered through intensified research and extension work, enhanced and better orchestrated institutional credit flows, infrastructure investment including development of watersheds, and crop (loan) insurance schemes.

a.33 Despite the significant achievements in agriculture during the Sixth Plan period, formidable challenges remain. The number of rural poor remains very large. Agricultural performance has varied widely by region. These disparities can be traced to sizable differences in yields between and within areas of irrigated and unirrigated farming. Low average productivity in India's growing expanse of irrigated agriculture is attributable in part to poor design and construction and to inefficiencies in system operation. With expansion of irrigation becoming more expensive and constrained by technical, social and environmental issues, the importance of greater efficiency in the use of existing infrastructure has increased.

a.34 Productivity in irrigated and rainfed farming will have to be enhanced if Indian agriculture is to attain important sectoral objectives. The Seventh Plan appropriately puts emphasis in the irrigation program on the completion of ongoing projects and improvement in the utilization of existing assets. However, the measures proposed involving essentially the allocation of financial resources primarily to completing works in progress appear

inadequate to achieve desired results. What is needed in addition is preparation by each State of a long-term irrigation program providing planning and operational guidelines for State-level actions. Beginning at the project level with an analysis of the services each system can reasonably be expected to provide and the factors contributing to current sub-par performance, the exercise should culminate in the formulation of realistic assessments of the irrigation possibilities and constraints in each State as a basis for the planning of investment and operational expenditures, management and institutional adjustments, training and resource mobilization measures.

a.35 The Seventh Plan recognizes that agricultural research and extension require streamlining and strengthening if productivity in irrigated and rainfed areas is to be enhanced. India's extension services which have been largely reorganized along the lines of the Training and Visit (T&V) System remain vulnerable to various pressures which must be resisted if the reforms are to yield sustained benefits. Looking beyond such residual "start-up" problems, a major technical challenge facing extension is to steadily enhance the specificity and utility of the assistance provided to farmers. Improvements in extension quality will require committed and imaginative management.

a.36 As regards research, the Seventh Plan provides an opportunity to capitalize upon the various improvements introduced in the late 1970s in the planning and management of research. These include the preparation of improved zonal inventories (to help establish priorities for research, extension and other agricultural services) and the emergence of Zonal Research Advisory Committees as forums in which research and extension programs are formulated.

a.37 The Plan acknowledges that the agricultural credit system after 20 years of institutional proliferation, geographic expansion, and rapid growth in lending, faces severe problems. To overcome these difficulties the National Bank for Agriculture and Rural Development (NABARD) needs the autonomy and oversight powers that would enable it to assist cooperative and commercial banks to improve staff training and make it more relevant to the realities of rural banking. Also in need of strengthening within the apex institution and branch levels are: reporting, monitoring, and evaluation procedures to ensure corrective feedback, adequate supervision, and improved loan performance. NABARD will be unable to bring about needed procedural and institutional changes unless its own management is strengthened, and unless the objective of continuously expanding disbursements is tempered by consideration of the consequences for loan appraisal, supervision, and recovery.

a.38 The Seventh Plan continues to focus attention on the social forestry programs launched and pursued with good results during the Sixth Plan. However, the timber, fuelwood and fodder production, environmental conservation, and other related goals of social forestry will not be easily achieved. There are major technical concerns to be addressed in designing

appropriate public initiatives and there are also intricate social and organizational challenges to resolve. Addressing these and other tasks will depend on further improvements in forestry organizations and related institutions.

a.39 Efforts to improve the effectiveness of all the above functional systems and services would be considerably enhanced by a reappraisal of price, market (including trade) and subsidy policies. There are four areas of policy which warrant further consideration. First, the foodgrain economy appears to be in considerable disequilibrium as evidenced by high grain stocks (23 million tons) and the seemingly limited options for disposing of surplus supplies. In setting a 180 million tons foodgrain production target by 1989/90, the Plan exhibits considerable caution as regards the significance of recent trends in cereal production. This cautious but ambitious stance is understandable and appropriate given the broad objectives of national self-sufficiency and social justice (see Chapter 1), and in view of the difficulty of anticipating the future path of production. Nevertheless the implied 3.7% target growth rate for foodgrains needs to take account of several considerations. First, this rate, which is higher than that achieved during the Sixth Plan and earlier Plans, will be difficult to attain -- at least at a reasonably low cost -- considering the fact that the Plan also calls for significant production increases in various other crops which compete with foodgrains for land and other inputs. Secondly, the 3.7% growth target may underestimate the difficulties of disposing of current surplus stocks through exports (markets are weak and India is a relatively high cost producer) and expansion of "food for work" programs at home (there are significant organizational impediments) and in view of the high financial costs and storage losses entailed in maintaining large public inventories. Setting India's requirements (taking account of the growth rates in population and per capita income expected in the Seventh Plan) against the costs of holding large stocks, would argue for consideration of a somewhat lower target growth rate for foodgrains production.

a.40 Second, the nature of the encouragement to be provided to producers of non-foodgrain crops needs careful review. The Plan's proposal to initiate procurement operations for oilseeds, pulses, and other major crops which remain "unprotected" is worrisome. Procurement mechanisms in place for crops such as cotton, sugar, and jute have proven expensive and largely ineffective given that price stability and reductions in output fluctuations have not been achieved. Providing stable and favorable returns for a range of crops through public procurement could saddle the country with a rigid pricing and production structure in which comparative advantage, whether for individual farmers, or the economy as a whole, disappears from view.

a.41 Third, public marketing interventions in other spheres are also worth reviewing. Central and State-owned seeds corporations have operated fairly inefficiently and have not succeeded in providing adequate supplies of good quality seeds. If permitted, private farms could take over the bulk of

production and distribution activities leaving to public agencies such important functions as maintaining gene bank certification and quality control.

a.42 Fourth, input subsidies have been rising rapidly with a large share of these benefits accruing to market-oriented operators of larger holdings who can afford to pay prices which reflect the full costs of providing inputs and who should probably be encouraged to make more efficient use of water, fertilizer, and electricity. Shortfalls in resources for agricultural investment and recurrent expenditures could surely be eased if subsidy payments were more quickly contained.

a.43 Energy. Investment in the energy sector will continue to account for almost one-third of total Plan outlays. During the Sixth Plan, the original allocation for the petroleum sector rose by 40% in response to growth in recoverable reserves and in recognition of the efficient management of the development program. Investment within the sector is to increase by a further 31% during the Seventh Plan. The focus of the program will shift increasingly from developing known fields to exploration. The share of investment in natural gas development within the overall sectoral outlay is planned to rise in order to exploit available reserves of recoverable free gas. Crude oil production, which rose from 12 million to 29 million tons during the Sixth Plan, is estimated to reach 35 million tons in 1989/90.

a.44 The Seventh Plan calls for a 69% increase in real public expenditure in the coal sector over that achieved during the Sixth Plan and for production to rise to expand by 9% per annum to reach 226 million tons by 1989/90. Actual production of 147 million tons in 1984/85 had fallen short of the Sixth Plan target of 165 million tons due to delays in acquiring land and procuring equipment, irregular power supplies and poor management have contributed to relatively poor performance in recent years. The timely initiation and completion of investments, improvements in capacity utilization and operational efficiency, and the introduction of appropriate mining technologies will be critical in achieving the productivity and output targets.

a.45 The power sector continues to receive the largest share of public expenditure reflecting the high priority accorded to reducing power shortages. The Plan recognizes the constraints which resulted in a shortfall of 26% in the expansion of generating capacity and increased transmission losses during the Sixth Plan. As was the case in the Sixth Plan, the bulk (63%) of projected power outlays will be for expanding generating capacity. The envisaged 60% real increase in spending over actual Sixth Plan outlays is expected to yield a 53% increase in generating capacity. The generation of electricity both from new plants and more efficient use of existing facilities is expected to rise by 12.3% per annum as compared to 8.3% during the Sixth Plan.

a.46 The years ahead will undoubtedly strain the capabilities of the energy sector as it aims to meet the needs of an economy growing at a rate of 5% a year. To the extent possible, India will try to meet these requirements

from indigenous energy resources and without further increase in the allocation of public investment resources to the energy sector. The Seventh Plan responds to this challenge by emphasizing: (a) the accelerated exploitation of coal, hydro and nuclear power resources; (b) the intensification of exploration for oil and gas; (c) implementation of appropriate policies to assure the efficient utilization of the large gas resources; (d) the management of energy demand, in particular with respect to the growing demand for oil (through formulation of a national transport fuel policy, the implementation of efficient petroleum product pricing policies), etc.; and incentives for energy conservation and inter-fuel substitution; and (e) the exploitation of renewable energy resources through reforestation and expanded use of biogas, biomass, wind, and solar energy, to meet in particular the energy needs of rural communities.

a.47 To provide companies and institutions in the energy sector with the means to meet the targets of the Seventh Plan the Government will need to: (a) improve the efficiency with which existing capital and labor resources are used in the energy sector, particularly in the power and coal subsectors; (b) streamline the regulatory environment in which energy sector companies operate so as to accelerate the implementation of projects and improve the efficiency of their operations through measures that would ease the process of land acquisition, imports of spare parts, obtaining of permits and clearances, etc.; as well as provide managers of energy sector companies and institutions with the autonomy they need for the efficient management of their enterprises; (c) put in place an energy pricing policy that would not only provide companies with sufficient internal resources, but also encourage energy conservation and substitution of petroleum products by other fuels; and (d) accelerate reforestation and implement a dissemination strategy for cost-effective renewable energy technologies.

Transport

a.48 The transport sector outlay is set to rise by 40% over the actual level achieved during the Sixth Plan. The sector's share of total public outlays (13%) is identical to that attained in the Sixth Plan. As with other sectors, the Plan gives priority to rehabilitation and replacement investments and to operational improvements.

a.49 Transport demand in India has been growing at an average annual rate of about 6% over the past twenty years, with annual growth in road and civil aviation being considerably higher, at around 10%. As a result of past underinvestment and continuing institutional weaknesses, the transport sector is ill-equipped to meet current demand and inadequately prepared to cope with the prospective doubling of demand and the likely changes in traffic patterns.

a.50 The major thrust for augmenting transport capacity should be on improving productivity of existing facilities through technological upgrading as well as improved management practices. The main long-run objective of the

sector--and the Plan document underlines this--should be to minimize transport coefficients, that is ton-kms per unit of economic output. This would require appropriate location of industries, beneficiation of minerals and ores, and pit-head thermal generation of electricity among others. The allocation of funds among the various transport modes appears generally appropriate, although a reallocation from shipping to roads is likely to yield increased benefits.

a.51 Previous Bank and Government work have identified other major issues affecting the sector. They are: (a) inadequate planning and coordination of intermodal investments; (b) lack of cost-based pricing; (c) inadequate utilization of already available transport capacity at the operational level; (d) weak management of public transport enterprises particularly in traffic forecasting, maintenance engineering, safety and investment planning; (e) excessive regulation which limits freedom of intermodal choice for the user and constrains private sector investment in the sector; (f) lack of adequate economic evaluation for a large number of projects; and (g) freight equalization policies which distort location decisions and increase real transport costs to the economy.

a.52 Industry. The Seventh Plan envisages a significant acceleration in industrial growth (value added in manufacturing and mining), from 4.6% during the Sixth Plan to 6.8% during the next five years. Cement (10.2%), fertilizer (10.5%), PVC (22.6%), synthetic rubber (13.6%), aluminum (12.5%), and commercial vehicles (10.6%) are among the manufacturing and mining goods whose output (in physical terms) is expected to show a rapid increase. The Seventh Plan is expected to achieve its relatively ambitious industrial growth target through a strategy which puts special emphasis on improvements in productivity, reductions in cost, and improved competitiveness. In the public sector, this strategy is to be realized through expenditures largely to complete ongoing schemes and to install equipment which will allow enhancement of production from installed capacity. Public sector industrial outlays are to be backed by organizational and administrative changes making possible increased autonomy and accountability in public industrial enterprises, and the introduction of competitive elements within the public sector and between public and private firms.

a.53 Private industrial investment is expected to rise in response to improved power supplies and wide-ranging changes in fiscal, regulatory, pricing and trade policies. Fiscal measures will aim at minimizing the cascading effect of indirect taxes and rationalizing the tax structure to reduce "black" income generation and to allow firms to use profits and capital market borrowings for expansion. The Seventh Plan envisages further changes in licensing policy to allow the establishment of large plants which could reap the benefits of economies of scale. The longstanding policy of reserving (on employment and equity grounds) various items for production in small-scale units is also to be recast. Likewise a new policy identifying alternatives to the government having automatically to take over "sick" (insolvent) private sector firms will be worked out.

a.54 As indicated earlier, the Government has already taken significant steps to change its industrial policy framework so as to help attain these relatively ambitious objectives. The success of the new initiatives will depend to a large extent on: how effectively they are implemented; how well the momentum already generated in the policy area is maintained; and of course achievements in mobilizing the necessary domestic and external resources.

D. Domestic Resource Mobilization

a.55 The Seventh Plan calls for total expenditure of Rs 3,481 billion and for a public sector outlay of Rs 1,800 billion. Of the latter, 42% is to be financed through the public sector's own resources compared to 37% under the Sixth Plan. Domestic borrowing would provide 48% of the required resources and the remaining 10% would come from external sources. Attaining this increased level of self-financing will be one of the Government's most formidable challenges in implementing the Seventh Plan.

a.56 To accomplish the self-financing goal set in the Seventh Plan, the public sector would have to increase the funds available from its own resources from the 4.8% of GDP realized during the Sixth Plan to 6.1%. This is a modest target. But to attain this while simultaneously allowing a sharp deterioration in Governmental current non-plan budgetary surplus (from 2.6% to 1.3% of GDP) and expecting an even sharper increase in public enterprise savings (from 2.2% to 4.8% of GDP) will require hard choices and significant changes in the policy framework. There are three general areas where considerable effort is required: improvements in Central and State revenue performance; improvement in the financial performance of the public enterprises; and perhaps of greatest importance, control of current expenditures.

a.57 With respect to Central and State Revenue Performance, it is clear that there is considerable scope for improving the buoyancy, administrative efficiency and equity of the direct taxation system. Broadening the tax base, reducing tax rates, and stronger and more effective enforcement of tax laws are the key policy instruments in this area. As important as direct taxes are in terms of their potential for providing a better basis for generating government revenues in the future, the heart of the tax system today in India is indirect taxes. These are expected to account for over 85% of all tax collection in 1985/86. Efforts to increase the elasticity, efficiency, and equity of the Indian tax system must clearly focus on indirect taxes as well.

a.58 It is also essential that substantial progress is made to improve the financial performance of the public sector enterprises if the Plan's domestic resources mobilization targets are to be attained. Yet it will be difficult to raise the contribution of the public enterprises' share in total revenue generation from 2.2% of GDP in the Sixth Plan to 4.8% during the Seventh

Plan. This will not only require effective measures to improve profitability through economically efficient pricing, but also significant improvements in operational efficiency that would allow for reductions in costs.

a.59 Curtailing the recent high growth in current expenditures (or "revenue expenditures" as they are identified in the Indian budget) will also play an important role in meeting the Plan's resource mobilization targets. Current expenditures have risen rapidly both absolutely and relative to GDP during the period since the end of the 1970s. In ways this is more significant than the growth rate of revenues in explaining the declining and, more recently, negative current budgetary savings. Overall revenue receipts are now equivalent to around 19.5% of GDP, roughly the same level that they were at the end of the 1970s. On the other hand, revenue expenditures have risen from an average of 17.7% of GDP during the last three years of the 1970s to 19.7% in 1984/85. A variety of factors have been responsible for the relatively rapid growth of current expenditures. Subsidies and interest payment on domestic debt are the two critical items that deserve the greatest attention.

a.60 There is a long list of Central Government subsidies. Subsidies go to everything from khadi industry development to shipbuilding. But two subsidies account for over 70% of the total--food and fertilizer. Fertilizer subsidies are by far the largest--over Rs 19 billion in 1984/85 vs. Rs 11 billion for food. They are also the most rapidly growing, having risen by 70% per year in nominal terms between 1981/82 and 1984/85. In January 1986, the Government took some initial steps to reduce both food and fertilizer subsidies through price increases. In its efforts to further reduce the key subsidy items, the Government needs to study how much of the effective subsidy goes to the user, to the producer and to others, such as the middlemen, so that appropriate measures can be taken to minimize social costs.

a.61 Interest payments have risen very rapidly over the past decade from the 1.7% of GDP they represented in 1975/76 to the present levels of 3% of GDP. During the same period, they have risen from 15% of revenue receipts to 25%. This reflects both the growing national debt and rising interest rates--two very closely related factors. Public debt has risen from Rs 215 billion to Rs 871 billion between 1975/76 and 1985/86 (from 29% of GDP to 40% of GDP). Of this increase, the most important was domestic debt, which has risen from 19% of GDP to 31% over the same period. While part of the much higher interest burden today can be explained by the larger absolute size of the national debt, the remainder of the explanation must be sought in its terms.

a.62 The rising burden of debt service relative to Government revenues and to GDP can only be reduced in the final analysis by measures that reduce deficit financing. Such measures would have a two-pronged effect. First, they would reduce or at least stabilize the total volume of debt relative to GDP that the Government has to service. Second, by lowering borrowing from

the banking system, the rate of monetary expansion should be reduced and inflationary pressures curbed resulting in lower interest rates.

a.63 There is good reason to hope that the Government will be successful in its efforts to improve its domestic resource mobilization efforts. Government has explicitly recognized the nature of the problems in the Plan itself and the LTFP. More importantly, the Government has already indicated its willingness to take the required measures and has already acted upon a number of them.

E. External Resources for Development

a.64 Despite a disappointingly low export volume growth (4.5% per annum) and significant liberalization in imports of capital goods, raw materials and components (volume growth of about 9.0% per annum), India was able to end the Sixth Plan period with a relatively small current account deficit (1.2% of GDP) and a low debt service ratio (15.0%) in 1984/85. A number of factors have been instrumental in compensating for the serious shortfall in export performance. First, the growth in the volume of imports declined as a result of successful import substitution in petroleum, fertilizers, cement, foodgrains and non-ferrous metals. Second, transfer payments from Indian workers abroad as well as the flow of non-resident deposits remained buoyant despite the recession in the oil exporting countries of the Middle East. Third, the sizable fall in unit values of bulk import items (POL, fertilizers and iron and steel) during the later part of the period helped improve India's terms of trade. Finally, India was able to borrow relatively large amounts from the IMF (US\$4.5 billion) and commercial markets (US\$3.0 billion) to boost its capital account.

a.65 Since the 5.5% GDP growth rate during the Sixth Plan period was achieved from a low base year (1979/80), the 5% GDP growth target for the Seventh Plan is essentially a more ambitious target requiring higher imports and a much stronger export performance. The foreign exchange requirements are expected to be higher not only because of higher overall growth but also because of the higher industrial growth target--6.6% per annum compared with only 4.6% per annum growth during the Sixth Plan period. The Seventh Plan aims to meet this challenge through a 6.8% per annum volume growth in exports; 5.8% per annum growth in overall imports; and by borrowing US\$9.5 billion (US\$1.9 billion annually) from commercial markets over the next five years.

a.66 As indicated earlier, India has taken significant steps to accelerate the import liberalization effort initiated in 1978. Although total merchandise imports were reduced from about 10% of GDP in 1980/81 to about 7.3% in 1984/85, thanks to a successful import substitution effort in key bulk commodities (crude oil, fertilizers, cement, foodgrains), imports of non-bulk commodities (capital goods, raw materials, components etc.) which are essential for improved efficiency and growth, especially in the industrial sector, grew by 9.0% per annum between 1979/80 and 1984/85. The Seventh Plan

projects that total merchandise imports will decline a bit further, from an estimated 7.3% of GDP in 1984/85 to about 7% in 1989/90. The projected fall in total imports is primarily due to slower growth in non-bulk imports of about 6.9% per annum compared to 9.0% per annum during the 1980/81-1984/85 period. Thus the implicit import elasticity of non-bulk imports with respect to GDP is assumed to drop from 1.6 during the 1979/80-1984/85 period to about 1.4 during the Seventh Plan period. The projected drop in non-bulk imports is actually much sharper since the Seventh Plan's non-bulk import projections are based on an unusually low base year (1984/85). When compared to the first four years of the Sixth Plan, the Seventh Plan's non-bulk import elasticity with respect to GDP is actually assumed to drop by almost 50%. More importantly, the Seventh Plan's implicit elasticities with respect to industrial value added are projected to be equal to unity and much below recent experience. The low non-bulk import growth assumptions of the Seventh Plan would have been a critical and serious concern for continued progress in improving the efficiency and growth of industry, if the recent sharp drop in oil prices did not provide additional room to increase non-bulk imports.

a.67 The Plan's projections of the current account deficit (1.6% of GDP) reflects an outlook for commodity prices prevailing about eight months ago and does not reflect the significant price movements in oil as well as other primary and manufactured goods which have occurred since then. The Seventh Plan's price assumptions have, for example, estimated oil prices to increase by 6% per annum or constant in real terms. Similarly, prices of other bulk import items like fertilizers, edible oil and non-ferrous metals have been assumed to recover relatively quickly. As a result, the Plan projections has assumed a loss of about US\$600 million (in 1984/85 prices) on account of the worsening terms of trade during the five year period. When the Plan's balance of payments projections are reconstructed in light of recent price developments, the picture changes significantly. Mostly due to the sensitivity of India's terms of trade to international oil prices, the terms of trade improves by about 13% and the terms of trade gain in 1989/90 reaches about US\$2.1 billion or 1% of GDP. The current account deficit to GDP ratio declines from 1.1% in 1984/85 to about 0.1% in 1989/90. The debt service ratio (including amortization of the IMF) remains at comfortable levels, increasing from 17.6% in 1985/86, peaking at 19% towards the end of the period and sharply declining thereafter (15% in 1992/93) as the IMF amortization burden declines. No doubt, the Government will take advantage of this breathing room created by the improved terms of trade to expand the availability of imported inputs to improve industrial efficiency, exports performance and overall growth.

a.68 Despite the relief provided by the improving terms of trade, export performance will be the most critical factor in maintaining a viable balance of payments position. It is clear that unless the average annual growth in exports is close to the Plan target of 6.8%, the commercial borrowing requirements and the concomitant debt service levels will be too large to meet the import requirements of the accelerated industrial growth targets of the Plan. For example, assuming no change in concessional aid flows, non-

factor services, transfer payments and import levels, if only a 4.8% export growth is realized, India would have to borrow approximately US\$6.1 billion more in commercial markets during the period to retain the projected import and GDP growth rates. The current account deficit to GDP ratio in this case would rise to about 2.4% and the debt service ratio to 26.4% in 1989/90.

a.69 Concessional assistance, embodied in innovative replicable project designs and reinforced by constructive policy dialogue with concerned agencies has produced tangible results in Indian agriculture as it underwent restructuring and modernization in the 1970s. Today, India is taking concerted steps to restructure its trade and industrial policy framework in an effort to raise its industrial growth rate to a new level so that it can more effectively deal with its pressing poverty and employment problems. The trade and industrial policy changes outlined in the Seventh Plan and other recent policy statements promise immense benefits in the medium term. However, the transition period is replete with risks emanating mostly from the scarcity of domestic and external resources. The aid community has another opportunity at this juncture to play a critical role in India's development efforts by accelerating its commitments to support industrial growth and a viable balance of payments. Accelerated concessional aid can provide the cushion that India needs in the face of a vitally needed degree of maneuverability for enhancing it to attain the desired structural change first in the industrial sector, and ultimately in the economy as a whole.

Chapter 1

OBJECTIVES AND DEVELOPMENT STRATEGY OF THE SEVENTH PLAN

A. Accomplishments of The Sixth Plan

1.01 The pace of economic growth appears to have quickened during India's Sixth Five Year Plan (1980-85), raising the prospect of even more rapid growth during the country's Seventh Plan which began in April 1985. Actual growth in GDP (at factor cost) between 1979/80 and 1984/85 was 5.5%, which exceeded the Sixth Plan target of 5.2%. However, this figure overstates the trend rate, because output in the base year (1979/80) was particularly low due to bad weather and relatively poor industrial growth. Alternative estimates of the growth rate based on three-year moving averages suggest a growth rate between 4.3% and 4.7%, well above the 3.5% rate which prevailed in the 1960s and 1970s but significantly lower than the 5.5% growth between 1979/80 and 1984/85. 1/

1.02 This step-up in the growth rate reflects improved performance in several key sectors. In agriculture, ambitious Sixth Plan targets were virtually attained in production of the all-important foodgrain and oilseed crops. While achieving output gains, agriculture appears to have become more resilient and resistant to poor weather. The recorded growth rate of agricultural value added of 4.5% (Table 1.1) exceeded the Sixth Plan target of 3.8%. Petroleum is another key sector in which the production growth rate (20% per annum in physical terms) surpassed the Sixth Plan target (12.1%). Large average yearly increases were also recorded in power generation (8.3%), use of natural gas (19.2%), and in the production of cement (10.6%), fertilizer (8.1%) and coal (6.9%). As seen in Table 1.1, the Sixth Plan also witnessed rapid growth in the transportation and communications sectors and in the services sector as a whole.

1.03 These production gains during the Sixth Plan are noteworthy because they occurred in the face of a worldwide recession in the early 1980s, deteriorating terms of trade and other after-effects of the 1979 oil crisis, unfavorable weather conditions in several years, and adverse domestic political developments, including protracted crises in several regions of the country. Clearly, India's economic policymakers have been successful in coping with and adjusting to short-run challenges, both international and domestic. More specifically, prudent and skillful macro-economic management allowed production to grow during the Plan period, while at the same time keeping external borrowing well within acceptable levels of risk and holding inflationary pressures in check.

1.04 Despite the step-up in growth rates in several key sectors and in the economy as a whole, there were a number of unsatisfactory facets of economic performance in the Sixth Plan. First, the national savings rate, which had risen steeply in the 1970s, actually fell (from 24.3% to roughly 23%) between 1979/80 and 1984/85 and, thus, remained well below the rate required (24.5%) to finance the Sixth Plan's investment program. As a consequence, gross

1/ The Sixth Plan growth rate may have also been overstated by a statistically suspect 12% p.a. growth in Public Administration and Defense.

ment rose by 6.4% p.a. in real terms rather than the intended 8.9% p.a., and the share of investment in the GDP reached 24.5% rather than the targeted 25.1%. The shortfall in savings was most noticeable in the public sector, and outlays on Plan account were 21% below what was anticipated in the Sixth Plan (Table 1.4). The strained resource position in the public sector arose mainly because of disappointing revenue mobilization through the tax system (the share of tax revenues in GDP remained at approximately 16% throughout the Sixth Plan) and from the low or negative levels of profitability in various public sector enterprises. Public sector resources were augmented through expanded recourse to market borrowing. However, this approach threatened price stability, preempted private investment, and resulted in rapidly rising interest payments. In fact, non-Plan spending on interest payments, as well as defense and various subsidies and transfers rose rapidly during the Sixth Plan and accounted for much of the shortfall in gross investment.

1.05 At the sectoral level, the growth rate of value-added in the crucial manufacturing sector (4.3% during the Sixth Plan) was much below what was targetted (6.5%) and less than what could have been achieved given the country's pool of trained manpower and the availability of large and expanding domestic markets as well as export possibilities. Thus manufacturing output has not been able to break out of the mediocre growth trend of the past two decades. It has continued to be inhibited by a policy environment in which multiple objectives are pursued, using cumbersome and indiscriminate tools, such as restrictions on the use and expansion of capacity, price controls, and "reservations" that mandate production exclusively by small-scale units. Quantitative limits on imports of inputs and capital goods, and inordinately high tariffs on other imports have also been employed to achieve import substitution. The resulting inflated structure of costs and prices in the industrial sector severely impaired the competitiveness of Indian manufactured goods in world markets. Not surprisingly, India's exports grew by 4.5% per annum, compared to the Sixth Plan target of 9%.

1.06 India's policymakers have been acutely aware of the above-mentioned shortcomings and development constraints and have responded in various ways. Initially, in reaction to the 1979 oil crisis, some key regulations and restrictions were relaxed. Eventually, the entire structure of trade, industrial, and fiscal policies came under scrutiny as implementation of the Sixth Plan proceeded. Inevitably and understandably, the tentative and exploratory initiatives taken in recent years have had a piecemeal and what sometimes appears to be an ad hoc quality. However, the 1985/86 budget, which among other things proposed changes in the MRTP legislation which freed many large firms from constraints on further growth, increased to 25 the number of industries not subject to licensing and broadened licensing categories for other industries, offered greater incentives to exporters and took steps to rationalize the tax system, provided the first indication of the sort of broad approach and underlying policy framework which the Government was evolving. Of course, the format of an annual budget measure limited the scope and depth of the discussion of national economic policy. The Seventh Plan and the Long-Term Fiscal Policy documents, however, provided overall statements of national economic objectives, constraints and risks inherent in the development process as currently perceived, macro-economic policies, sectoral strategies and instruments, and the tasks and responsibilities to be fulfilled by the public sector. The rest of this Chapter describes the Seventh Plan, discusses novel themes and sectoral approaches,

and serves as an introduction to subsequent Chapters which look more closely at various features and policy dimensions of the Plan.

Table 1.1: MACRO-ECONOMIC INDICATORS - SIXTH AND SEVENTH PLANS

A. Sectoral Rates of Growth and Shares of Gross Value Added at Factor Cost

	<u>Sixth Plan (Actuals) a/</u>		<u>Seventh Plan (Targets)</u>	
	<u>Growth Rate</u>	<u>Share</u> (1984/85)	<u>Growth Rate</u>	<u>Share b/</u> (1989/90)
Agriculture	4.5	36.9	2.5	32.7
Secondary Sector	4.6	26.3	6.6	28.3
Mining	9.3	3.5	11.8	4.8
Manufacturing	4.3	14.6	5.6	15.0
Electricity, gas, water	7.6	2.0	8.0	2.3
Construction	3.3	6.2	5.0	6.2
Tertiary Sector	10.9	36.8	6.3	39.1
Transport, storage and communication	7.2	5.6	7.2	6.2
Other services	11.7	31.2	6.1	32.9
All Sectors	5.5	100.0	5.0	100.0

a/ Derived from the GDP estimate provided in the "Quick Estimates" (1/26/86); Seventh Plan growth rate targets, except for other services which are treated as a residual.

b/ Derived from Seventh Plan growth rate calculations.

B. Gross National Savings and Investment Rates (%)

	<u>1984/85</u>	<u>1989/90 (Target)</u>
Gross National Savings (Total)	22.2	24.3
Public	3.2	5.1
Private	19.0	19.2
Foreign Savings	1.2	1.4
Gross Investment (Total)	23.4	25.9
Public	12.6	11.7 a/
Private	11.9	12.8 a/
Errors and Omissions	-1.1	

a/ Average over Seventh Plan.

Sources: GOI, Seventh Five Year Plan; CSO, "Quick Estimates of National Income, Consumption on Expenditure, Saving and Capital Formation 1984-85."

B. Long-Run Perspectives and New Thrusts in the Seventh Plan

1.07 The Seventh Plan aims to build upon the accomplishments of the Sixth Plan which is portrayed as a watershed in the country's development experience. The Seventh Plan praises the previous Plan for results achieved in key sectors such as agriculture and energy. The Sixth Plan is also credited with the advancing towards longstanding national objectives of self-sufficiency, social justice, and modernization. The substantial reduction achieved during the Sixth Plan in imports of foodgrains, petroleum products, and fertilizers, and the atomic energy and agricultural and medical research programs are mentioned as examples of increased self-reliance. The Seventh Plan cites findings of a considerable decline in the incidence of poverty between 1977/78 and 1983/84. ^{1/} This welcome trend is attributed to the growth-with-equity strategy pursued during the Sixth Plan. In this respect, credit is given to the expanded implementation of programs such as the Integrated Rural Development Program (IRDP) and the National Rural Employment Program (NREP). Finally, the Seventh Plan notes with satisfaction the technological advances achieved in India since 1980, including the rapid spread of high-yielding varieties (from 35 million to 56 million hectares), increased use of fertilizers (9.2% growth in consumption), rural electrification (64% of villages electrified), and the expanded use of computers.

1.08 In view of the progress made during 1980-85, the Seventh Plan voices confidence that the country can attain a 5% annual rate of expansion (value added) between 1985 and 2000, which is considered the minimum rate of growth needed to reach the country's development goals, while also providing for the basic needs and full employment of the population. Sustained 5% growth and some further increase in the rate of capital formation (from 24.5% to 26.4% of GDP) are projected to bring in their wake major structural changes during the perspective period. For instance, more rapid industrialization is expected to raise the share of manufacturing and mining in GDP from 17% (1984/85) to 24% in 1999/2000 (annual growth rate of 7.1%). The shares of services, transport, and the infrastructure sectors will also increase, but that of agriculture is projected to fall from 37% to 26%, implying a growth rate of 2.4% per annum.

1.09 By the year 2000, levels of living and the quality of life in India are expected to be vastly different from those prevailing in the mid-1980s.

^{1/} This conclusion is derived on the basis of the latest two surveys of NSSO 32nd round (1977/78) and 38th Round (1984/84). The consumption estimates emanating from NSSO are adjusted upward across all expenditure classes to the CSO estimate of private consumption by a common factor (9% for 1977/78 and 21% for 1983/84). Poverty lines for these two years are then updated by the CSO consumption deflator from the poverty line of 1973/74. It must be stressed, however, that the original (unadjusted) NSSO data also show a decline in poverty incidence, although less dramatic than the adjusted figures, i.e. from 55.1% of 50.8% (all India); 58.1% to 54.2% (rural) and 44.4% to 40.3% (urban). The Planning Commission attributes this decline to overall economic growth as well as to the anti-poverty policy interventions. It should be pointed out, however, that 1983-84 was an exceptionally good agricultural year. By comparison 1977/78 was a good, but not an exceptional year.

Only 5% of the population is expected to have income below the official poverty line. With per capita income projected to rise from Rs 2,616 to Rs 4,163, consumption of different foodstuffs and manufactured goods and the domestic use of energy are projected to increase at a rapid rate (Table 1.2). The population, expected to number 972 million in the year 2000, is to be served by a diversified and self-sufficient agriculture, a dynamic and outward-looking industrial sector, and expanded and modernized power generation facilities and transportation and communications networks. By the year 2000, universal primary schooling and other educational instruments are expected to have eliminated illiteracy. Together with increased food consumption, better sanitation and health facilities, assured drinking water supplies, and controls on air and water pollution are expected to lead to a significant increase in life expectancy (see Table 1.2). The birth rate is projected to fall by 33% to 23.1 in the year 2000.

1.10 The Seventh Plan recognizes formidable obstacles to achieving the long term objectives set for the country by the end of the century. One key constraint is rapid population and labor force growth in a society in which poverty and underemployment remain extensive. The Plan shows that despite an assumed drop in the fertility rate by a third, the population will still be increasing at a 1.5% p.a. rate in the year 2000--falling death rates and a 60% increase in the number of women of childbearing age will work to keep overall growth rates high. India's population of labor force age (15 to 60) is likely to grow by 2.3% per annum over the next 15 years with the potential work force projected to increase by 120 million. Demographic expansion will pose challenges not only in rural areas where past labor force growth has been accommodated, but in India's cities which are likely to absorb over half of the prospective population increase by the year 2000. The urban labor force is expected to grow by 3-4 million per annum in the 1985-2000 period. The Plan is cognizant that existing space limitations in metropolitan areas make it desirable that urban growth take place, to the extent possible, in the smaller cities and towns.

1.11 As in previous Plans, the Seventh Plan recognizes the importance of special employment schemes. However, the diagnoses of employment and poverty problems and the solutions proffered depart, in significant respects, from those provided in the past. The Seventh Plan's view of various development challenges is more nuanced. For instance, the degree and nature of poverty are clearly seen to vary significantly among regions, between city and country, and between irrigated and rainfed agricultural zones. For the first time, prospects for the poor in many settings are understood to be limited by deforestation, soil erosion, and other forms of environmental degradation.

1.12 The Seventh Plan envisages a continuing role for IRDP and related programs in tackling the country's poverty problems. But the Plan emphasizes that the vast and complex structure of anti-poverty schemes and initiatives needs to be reorganized and simplified. The Plan stresses that these programs, even after their rationalization, are not solutions in themselves but must be linked with and contribute to rapid growth in the major economic sectors. The Seventh Plan views the bulk of future work opportunities as emerging in agriculture. Unlike previous Plans, though, future agricultural employment gains are expected to be recorded primarily in accessory and derivative (non-crop) activities rather than in crop production. The large role assigned to employment generation in manufacturing is another new feature in the Seventh Plan. Manufacturing (including mining) is expected to

provide 17.4% of the 40 million jobs to be created during the Plan period (see paragraphs 1.20-1.21).

1.13 The sectoral strategies unveiled in the Seventh Plan encompass a number of novel thrusts which could eventually coalesce into a new approach to development. First, a more carefully defined and circumscribed role is indicated for the public sector. For the first time, gross private investment is expected to exceed public sector investment). In the past, the leadership role assigned to the public sector resulted in numerous Government initiatives impinging on all aspects of the economy. Decisions about the scope and thrust of Government activities drew inspiration from a fully articulated model of national economic development. A more pragmatic and less deterministic approach, oriented to considerations of effectiveness and quality, is evidenced in the Seventh Plan. The Plan views the public sector as playing a strategic (as distinct from a lead) role, in which Government interventions are progressively focused on the provision of physical and social infrastructure, protecting the poor and reducing income disparities, narrowing regional inequities, preserving the environment, and strengthening the country's scientific and technological base.

Table 1.2: SOCIAL AND ECONOMIC CHANGES DURING THE PERSPECTIVE PERIOD (1985-2000)

<u>Item</u>	<u>Seventh Five Year Plan 1985-90</u>		<u>Long-term Perspective</u>
	<u>1984-85</u>	<u>1989-90</u> (Target)	<u>1999-2000</u> (Target)
Life expectancy (years): Male	56.1	58.6	63.3
Female	57.0	59.7	64.7
Infant mortality rate (per thousand birth)	106	90	60
Death rate (per thousand)	11.9	10.4	8.2
Birth rate (per thousand)	32.6	29.1	23.1
Fertility rate (per thousand)	152	132	99
Labor force (million in age group 15-60)	288	327	408
Urbanization (percent)	24.70 (1981-86)	26.85 (1986-91)	32.20 (1996-2001)
Per Capita GDP (Rs) (1984-85 prices)	2,616	3,027	4,163
Per Capita consumption expenditure (Rs) (1984-85 prices)	1,979	2,271	3,124
Percentage of people below poverty line	37	26	5
Per Capita consumption grains (kg)	178	193	215
Per Capita consumption cloth (Mtrs)	16.16	17.78	22.36
Per Capita electricity generation (KWH)	226	362	578-621
Saving: GDP ratio (per cent)	23.3	24.5	25.8
Investment: GDP ratio (per cent)	24.5	25.9	26.4

Source: GOI, The Seventh Five Year Plan.

1.14 A second concern articulated throughout the Seventh Plan is the need to bring about efficiency improvements within the public sector and in the economy as a whole. "Efficiency gains", as understood in the Plan, can be sought from a number of sources including the allocation of investment funds between and within sectors; the speed and quality of project execution; replacement of old or outmoded equipment; the level of capacity utilization; organizational and institutional arrangements; management and operational procedures (including maintenance of assets); and the framework of incentives

(including subsidies). Although efficiency improvements are not costless and could affect resource mobilization in the short run, the Plan makes it clear that efficiency gains and enhanced resource generation in the public sector (and in private enterprises) can and must be made mutually supporting.

1.15 Another novel theme in the Seventh Plan is awareness of the vast development potential inherent in science and new technology, coupled with recognition of the need to use available technical resources more efficiently and to continue to enlarge the pool of qualified scientific, technical, and administrative manpower in the country. Finally, hoped-for advances in industrial growth and modernization of technologies account for the Seventh Plan's heightened sense of India's prospective involvement in the international economy. The Plan acknowledges that India's import needs will continue to grow rapidly. Given the reduced availability of concessional assistance, the Plan also recognizes that rapid growth of exports is critical to the execution of the country's development strategy.

C. Sectoral Objectives and Strategies in the Seventh Plan

1.16 The Seventh Plan aims for a 5% average annual growth rate of GDP. Mining (11.8% per annum), electricity, gas and water supply (8.0%), manufacturing (5.6%) and transport (7.2%) are the sectors expected to attain the highest rates of growth of value added. Growth is to be accompanied by a narrowing of income differentials within the population, a fall in the unemployment rate and a drop by nearly one-third (to 25.8%) in the share of the population whose consumption is below the poverty line standard.

1.17 Reductions in poverty and unemployment are to be achieved partly through higher expenditure on direct poverty alleviation programs, (11%, in real terms, over Sixth Plan actuals ^{1/}) and partly by extending agricultural modernization to the lagging regions where poverty is concentrated. The Seventh Plan sets out to achieve this by properly integrating various beneficiary-oriented programs with area-development programs so that needed infrastructure is built up in the lagging districts.

1.18 Poverty and Employment. The Seventh Plan projects, for the six-year period 1984/85-1989/90, a slightly faster reduction in incidence of poverty than occurred during the six-year period 1977/78-1983/84: the targets for poverty incidence in 1989/90 are 28.2% for rural, 19.3% for urban and 25.8% on average.

1.19 While at first sight very ambitious, these targets become less so when it is realized that income distribution is very densely concentrated around the poverty line. For instance, an income range of 10% around the present poverty line contains, in rural areas, more than 7% of the population. To attain the Seventh Plan's poverty alleviation targets, the incomes of those who are now close to the poverty line will have to increase by about 16%, or about 2.5% per annum over the six years, and 2.7% p.a. over

^{1/} However, the actual expenditures by the Central Government during the first year of the Seventh Plan have been substantially higher than this allocation (see para. 2.07), and this trend is continued in the 1986/87 Budget.

the 5 years of the Seventh Plan (given lower per capita growth in 1984/85). This is equivalent to the average per capita private consumption growth projected in the macro framework of the Seventh Plan. 1/ Thus, targeted reductions in poverty incidence are realistic, provided that the projected GDP growth can be attained, that aggregate consumption can grow nearly as fast as GDP (4.9% p.a., implying only slightly faster growth of investment and public consumption together) and that those in the third and fourth deciles of the population can be made to benefit proportionately in the increase in consumption.

1.20 An important element in the Seventh Plan strategy is to ensure that, even with accelerated growth, the benefits of that growth are distributed proportionally. To this end, three basic Plan priorities are food, work, and productivity. Sufficient availability of food will have a dampening effect on food prices, and thereby protect the real incomes of the poor, who spend 75%-85% of their incomes on food. Additional employment will provide more income for the poor, and productivity increase is necessary to bring the per capita income of the country to higher levels. The Plan document, in its macro presentation, does not discuss the productivity concept in much detail. It is clear, however, that, with only modest growth in the investment ratio, and significant planned acceleration in the trend growth rate, capital productivity will have to increase significantly. On the other hand, there is a clear tradeoff between employment and (macro) labor productivity, since the product of the two is the GDP growth rate, which has been targeted at 5% p.a. In most countries where per capita incomes are growing, a significant part of the macro-economic labor productivity growth takes place through the shift of some activities from traditional to modern production methods or sectors, i.e. through large productivity shifts for limited numbers of workers. This then limits the overall labor absorptive capacity of a modernizing economy, unless it grows very fast. In the case of India, with its labor force during the Seventh Plan growing at a rate of 2.6% p.a., versus a planned GDP growth rate of 5% p.a., the employment situation might well worsen if modernization of the economy were allowed to run its natural course. In facing this dilemma, the Seventh Plan opts for tilting the balance in favor of employment, aiming at a macro-economic employment growth of 4% p.a. Table 1.3 summarizes the value added and employment estimates for the major sectors. 2/

1/ Assuming that population growth will be somewhat faster than the projections in the Plan.

2/ Real income growth in the various sectors will be determined not only by the growth of value added in constant prices, but also by relative prices. Since the whole Plan framework is in constant prices, this aspect, which may have a fundamental impact on the relative income prospects of all the workers, falls outside of the Plan's considerations.

Table 1.3: SEVENTH PLAN: GROWTH OF EMPLOYMENT AND VALUE ADDED BY MAJOR SECTORS /a

<u>Sector</u>	<u>Employment Shares (%)</u>		<u>Growth Rate % p.a.</u>	
	<u>Level 1984/85</u>	<u>Increase Seventh Plan</u>	<u>Employment</u>	<u>Value Added</u>
Agriculture	51.5	44.6	3.5	2.5
Mining, Quarrying	0.6	0.8	5.3	11.7
Manufacturing	14.3	16.6	4.6	5.5
Construction	5.6	5.4	3.9	4.8
Electricity	0.6	1.2	7.8	7.9
Transport	5.9	6.2	4.2	7.1
Services	21.5	25.2	4.6	6.1
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>4.0</u>	<u>5.0</u>

/a Employment measured in standard-person-years of 2184 hours of work.

1.21 As is clear from the Table, the agricultural sector is proposed to continue to bear the brunt of employment absorption, even though its overall share in employment is targeted to be reduced somewhat. Employment in terms of manhours is even expected to grow faster than agricultural value added, implying a fall in average labor income per person-hour worked. 1/ While this reduction is probably at least partly the result of aggregation (in so far as agricultural production and employment growth are aimed to be concentrated in the poorer areas, where incomes are lower), it nevertheless indicates the substantial stress that will continue to exist on employment opportunities. This stress is also evident in most other sectors, where aggregate labor absorption in most cases lags only slightly behind value added growth, leaving little scope for labor productivity improvement. Thus, for instance, in industry, desired productivity increases should be of the input- or capital- saving kind. This is important for the design of the fiscal incentive framework. All the above also underlines how important it is to further stimulate overall economic growth, since such additional growth mitigates the dilemma of having to choose between employment and (labor) productivity growth.

1/ On a per capita basis, the situation is somewhat more favorable, as the annual growth in the rural labor force is estimated at around 2% p.a. The remaining 1.5% p.a. growth in agricultural labor input is in the form of reduced total or partial unemployment.

1.22 Agriculture. The anti-poverty effort is seen as supplementing the considerable impact of agricultural growth on rural incomes. The projected 2.5% annual growth rate in agricultural value added is consistent with the demand likely to be generated by an overall GDP growth rate of 5%, with the stipulation that India remains self-sufficient in cereals. In volume terms, foodgrain output is expected to grow by 3.5-4% annually; high average annual growth rates for oilseeds (6.7%), sugarcane (3.8%), and cotton (4.8%), and tea (3.5%) are also expected (Table 1.4).

1.23 Out of a total public sector outlay of Rs 1,800 billion (1984/85 prices), the Seventh Plan allocates 9.4% to irrigation and 10.9% to various agricultural and rural development schemes. In relative terms, these figures do not represent a major shift in the allocation of resources compared to what was achieved during the Sixth Plan. Table 1.5 shows that actual Sixth Plan irrigation outlays in real terms were 37% below what was intended. Public spending on irrigation and agriculture are slated to grow by 32% and 24%, respectively, during the Seventh Plan. Altogether, agriculture (including spending on irrigation and rural development) accounts for 18% of planned (gross) public investment and 20% of anticipated private investment during the Seventh Plan period.

1.24 An important and novel thrust in the Seventh Plan's agricultural strategy is the priority accorded to rapid completion of ongoing irrigation schemes. Access to irrigation (through major and medium-size schemes) was provided to 4 million additional hectares during the Sixth Plan, far short of the target of 5.7 million hectares. The Seventh Plan attributes this shortfall to inadequate budgetary provision, land acquisition problems, and spreading resources on a proliferating number of projects. The Plan proposes to restrict new starts to medium-size projects in drought-prone, tribal, or backward areas. Alongside stepped up spending on schemes which are capable of yielding benefits during the Seventh Plan, the utilization of existing irrigation potential will also be given high priority by expediting construction of field channels and other structures, land preparation activities, and introduction of appropriate operational procedures. The Plan underscores the need to achieve incremental output growth increasingly from the eastern region. With this objective in view, an effort will be made to exploit groundwater resources particularly in Eastern and Northeastern India.

Table 1.4: INDIA: SEVENTH PLAN - OUTPUT/CONSUMPTION TARGETS FOR KEY PRODUCTS/INPUTS

	Unit /a	1984/85	Seventh Plan Target 1989/90	Growth Rate (%)
Rice	m.t.	60.0	73.0-75.0	4.0-4.6
Wheat	m.t.	45.0	56.0-57.0	4.4-4.8
Coarse cereals	m.t.	32.0	34.0-35.0	1.2-1.8
Pulses	m.t.	13.0	15.0-16.0	2.9-4.2
Total foodgrains	m.t.	150.00	178.0-183.0	3.5-4.1
Groundnut	m.t.	7.3	9.4	5.1
Rapeseed and mustard	m.t.	2.6	3.8	8.0
Total oilseeds	m.t.	13.0	18.0	6.7
Sugarcane	m.t.	180.0	217.0	3.8
Cotton	m.t.	7.5	9.5	4.8
Jute and Mesta	m.t.	7.5	9.5	4.8
Fertilizer consumption	m.t.	8.4	13.5-14.0	9.5-10.2
Pesticides consumption	m.t.	50.0	75.0	8.1
Area irrigated	m.ha.	60.5	71.4	3.3
Area sown to HYVs	m.ha	56.0	70.0	4.5
Coal	m.t.	147.5	226.0	8.9
Crude oil	m.t.	29	34.5	3.5
Nitrogenous fertilizer	m.t.	3.9	6.6	10.9
Electricity generation	t.m.kwh	167	295	12.1
Cement	m.t.	30	49	10.2
PVC	t.t.	84	233	22.6
Synthetic rubber	t.t.	38	72	13.6
Aluminum	t.t.	276	499	12.5
Cloth (mill sector)	m.m.	3,420	4,500	5.5
Commercial vehicles	t.	97	160	10.6
Two-wheel vehicles	t.	918	1,600	11.1

/a m.t. Million tons
 m.b. Million bales
 m.ha. Million hectares
 t.m. kwh Thousand Million Kwh
 t. Thousand
 m.m. Million meters

Source: GOI, The Seventh Five Year Plan.

Table 1.5: INDIA: SIXTH PLAN PUBLIC EXPENDITURE TARGETS AND ACTUALS AND SEVENTH PLAN TARGETS (Rs billions)

	Sixth Plan					Seventh Plan		
	Target		Actual /a	Actual /a		Target		% increase over Sixth Plan Actual
	79/80 prices	% of total	79/80 prices	84/85 prices	% of total	84/85 prices	% of total	
Agriculture and Rural Development	110.6	11.3	96.7	154.9	12.3	196.5	10.9	26.9
Irrigation and Flood Control	121.6	12.5	79.7	127.0	10.1	169.8	9.4	33.7
Power	192.7	19.8	133.5	214.0	17.0	342.7	19.0	60.1
Coal	28.7	2.9	27.4	43.8	3.5	74.0	4.1	69.0
Petroleum	43.0	4.4	60.1	96.3	7.6	126.3	7.0	31.2
Industry and Minerals	150.2	15.4	123.1	197.3	15.7	224.6	12.5	13.8
Transport	124.1	12.7	102.4	164.1	13.0	229.7	12.8	40.0
Railways	51.0	5.2	47.5	76.1	6.0	123.3	6.9	62.0
Other Transport	73.1	7.5	54.9	87.9	7.0	106.4	6.0	21.0
Other /b	204.2	20.9	163.6	262.1	20.8	436.4	24.0	66.5
Total	975.0	100.0	786.0	1,259.5	100.0	1,800.0	100.0	42.9

/a Sixth Plan actuals include actuals for 1980/81, 1981/82, 1982/83 and 1983/84 and revised estimates for 1984/85. The following CSO capital formation deflator was used:

1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
1.00	1.131	1.286	1.379	1.473	1.602

/b Includes communications, social services, special area schemes, and renewable sources of energy.

Source: GOI, The Seventh Five Year Plan; Ministry of Finance, budgetary accounts (1980/81-1983/84) and revised estimates (1984/85); CSO, "Quick Estimates of National Income, Consumption Expenditure, Saving and Capital Formation 1984/85."

1.25 An expected increase in irrigation potential of 13 million hectares during the Seventh Plan is expected to augment the area under high yielding varieties (Table 1.4) and raise cropping intensities. Yield improvements in irrigated areas are to come about through strengthened State extension services, wider use of certified seeds, and significant growth in fertilizer consumption (Table 1.4).

1.26 A second significant theme in the Plan is the need to increase yields and reduce output fluctuations in rainfed zones. Increased production in such areas is viewed as closely linked to attaining the Plan's anti-poverty and employment goals. Development of dryland agriculture is to be fostered through intensified research and extension work, enhanced and better orchestrated institutional credit flows, infrastructure investment including development of watersheds, and crop (loan) insurance schemes. Rainfed regions are also to be the focus of special Plan schemes concerned with

oilseeds, watershed development, small and marginal farmers, and social forestry. The Plan does not give details on the scope, (resource) intensity and phasing of the effort, nor on the principles to be applied in determining relative priorities within the large expanse of rainfed areas in the country. Nor is it clear what the special schemes would contribute that could not be achieved through better functioning of conventional line departments. One initiative that figures in several of these schemes is the introduction (or expansion) of public purchase of oilseeds, pulses and rice. Such procurement operations would be used to support specified floor prices. The National Agricultural Cooperative Marketing Federation is to serve as the Government's buying agent for oilseeds and pulses during the Seventh Plan. A number of the broader themes--awareness of environmental deterioration and regional variation in the incidence of poverty, the need to harness new technologies--of the Seventh Plan are embodied in the approach set out for agriculture.

1.27 Industry. The Seventh Plan envisages a significant acceleration, from 4.7% during the Sixth Plan to 6.8% during the next five years, in the growth rate of value added in industry, consisting of the manufacturing and mining sectors. Cement (10.2%), fertilizer (10.5%), PVC (22.6%), synthetic rubber (13.6%), aluminum (12.5%), and commercial vehicles (10.6%) are among the manufacturing and mining goods whose output (in physical terms) is expected to show a rapid increase (Table 1.4). Production (in value terms) in the emerging electronics and telecommunications subsector is expected to grow at a much accelerated growth rate of 38% a year.

1.28 The Seventh Plan is expected to achieve its industrial growth target through a strategy which puts special emphasis on improvements in productivity, reductions in cost, and improved competitiveness. In the public sector, this strategy is to be realized through expenditures largely to complete ongoing schemes and to install equipment which will allow enhancement of production from existing capacity. The Seventh Plan expects public outlays in mining and manufacturing to increase in real terms by only 13.8% over level of spending achieved in the Sixth Plan (Table 1.5). Such spending will comprise 12.5% of public sector outlays as compared to the 15.7% share recorded in the Sixth Plan. More than 70% of public sector industrial spending is to go to steel and non-ferrous metals, fertilizer, petrochemicals, and cement. Public sector industrial outlays are to be backed by organizational and administrative changes, making possible increased autonomy and accountability in public industrial enterprises and the introduction of competitive elements within the public sector and between public and private firms.

1.29 The Government is expected to continue introducing policies to encourage modernization and expansion in the private sector in general, and specifically in industries requiring special attention and incentives. The step-up in the share of private investment within total capital spending in mining and manufacturing from the 58% targeted in the Sixth Plan to 74% in the Seventh Plan is indicative of the expanded role accorded to the private sector. Private industrial investment is expected to rise in response to improved power supplies and wide-ranging changes in fiscal, regulatory, pricing and trade policies. Fiscal measures will aim at minimizing the cascading effect of indirect taxes and rationalizing the tax structure to reduce "black" income generation and to allow firms to use profits and capital market borrowings for expansion. In the wake of liberalization measures taken during the Sixth Plan, delicensing and "broad-banding" (which

permits licensed firms to produce a wider range of goods) have been introduced to give greater flexibility to entrepreneurs in making production decisions. The Seventh Plan envisages further changes in licensing policy to allow establishment of large plants and reaping the benefits of economies of scale. The longstanding policy of reserving (on employment and equity grounds) various items for production in small-scale units is also to be looked at anew. ^{1/} Likewise a new policy identifying alternatives to the government having automatically to take over "sick" (insolvent) private sector firms will be worked out.

1.30 The Plan notes that price controls have been removed for many goods; a uniform approach to setting prices is to be worked out for those commodities (most originating in the public sector) subject to administered prices. The Seventh Plan anticipates policy adjustments to reduce discrimination against industrial exports and to provide more uniform incentives for import substitution. Easier access to imported inputs, licensing exemptions, and measures to contain increases in domestic demand in the aggregate are among the ways mentioned of enabling "thrust" industries (with demonstrable comparative advantages) to benefit from new technologies and economies of scale, and to enter export markets. Import liberalization, and deregulation of industrial capacity will also provide a needed spur to efficiency gains and technological upgrading in import-substitution industries.

1.31 Energy and Transport. The Seventh Plan acknowledges that scarce and unreliable power and transport resulted in losses of output during the Sixth Plan. The Plan looks to better utilization of existing capacity and to investments in productive infrastructure to provide needed services. Energy expenditures will continue (see Table 1.5) to account for almost one-third of Plan spending. During the Sixth Plan, the original allocation for the petroleum sector (see Table 1.5) rose by 40% in response to growth in recoverable reserves and in recognition of efficient management of the development program. Investment within the sector is to increase by a further 31% during the Seventh Plan. The focus of the program will shift increasingly from developing known fields to exploration since the reserves-to-production ratio continued to fall during the last five years. The share of investment in natural gas development within the overall sectoral outlay is expected to rise in order to exploit available reserves of recoverable free gas. Crude oil production, which rose from 12 million to 29 million tons during the Sixth Plan, is expected to reach 35 million tons (3.8% growth rate per annum) by 1989/90.

1.32 The Seventh Plan calls for a 69% increase in real public expenditure in the coal sector over that achieved during the Sixth Plan (Table 1.5) so that production can rise to 226 million tons by 1989/90 (9% growth rate per annum). Actual production of 147 million tons in 1984/85 fell short of the Sixth Plan target of 165 million tons. The Plan notes that delays in acquiring land and procuring equipment, irregular power supplies and poor management have contributed to relatively poor performance in recent years. The Plan suggests that timely initiation and completion of investments, improvements in capacity utilization and operational efficiency, and introduction of

^{1/} Seventh Five-year Plan Volume II p. 7.37.

appropriate mining technologies are critical to the achievement of output targets.

1.33 The power sector continues to receive the largest share of public expenditure, reflecting the high priority accorded to reducing power shortages. The Plan recognizes constraints which resulted in a shortfall of 26% in the expansion of generating capacity and increases in transmission losses during the Sixth Plan. Seventh Plan outlays are to be aimed at quickly enhancing generating capacity--the plan earmarks funds for the rehabilitation of power plants, acknowledges the need for the construction of relatively short gestation gas and other thermal generation plants. As was the case in the Sixth Plan, the bulk (63%) of projected power outlays will be for expanding generating capacity. The envisaged 60% rise in spending over actual Sixth Plan outlays is expected to yield a 53% increase in generating capacity. The generation of electricity both from new plants and more efficient use of existing facilities is expected to rise by 12.1% per annum, compared to 8.3% during the Sixth Plan.

1.34 Spending on the transport sector is set to rise by 40% over the actual level achieved during the Sixth Plan (Table 1.5). The sector's share of total public outlays (13%) is identical to that attained in the Sixth Plan. As with other sectors, the Plan gives priority to rehabilitation and replacement investments and to effecting operational improvements. During the Plan period, the volume (in tons) of port and railroad traffic is expected to be 37% and 29% higher, respectively, in 1989/90 than in 1984/85. The Plan recognizes the need for measures to moderate demand. Higher charges and user fees represent the primary means envisaged for controlling demand for infrastructural services. The plan would also exercise caution in approving investment projects which make heavy demands on power and transport facilities.

1.35 Social Sectors. The Seventh Plan puts special emphasis on raising the quality of and expanding access to education, health, and other social services. Social sector spending is projected to rise by roughly 50% over that achieved in the Sixth Plan. During the Plan period, enrollment in elementary education is expected to increase by 25 million, reaching 92% of the concerned age group by 1989/90 compared to the 22 million achieved during the Sixth Plan. Adult literacy programs will aim to reach all illiterates in the age group 15-35. The Seventh Plan aims at making available adequate drinking water sources to urban and rural residents alike; sanitation facilities will be provided to 80% of urban residents and to a quarter of the rural population. The Plan envisages expanded coverage of the immunization and family welfare programs. The proportion of couples in the concerned age groups practicing contraception is expected to rise from 32% (1984/85) to 42% in 1989/90. By the end of the Seventh Plan, the village-level infrastructure for primary health care required for present population figures will be fully operational.

D. Resource Mobilization and Balance of Payments Implications

1.36 Estimates of the resources to be mobilized to finance the public outlay with the Seventh Plan are shown in Table 1.6. The Plan looks primarily to additional resource mobilization and to "market" borrowings (including subscriptions to government securities, term loans from financial institutions, accruals to small savings and provident funds and miscellaneous

capital receipts) to assure the full funding of planned outlays. Steps to mobilize additional revenues are expected to yield Rs 447 billion. At current rates, revenues during the Seventh Plan are projected to fall short of non-Plan expenditures by Rs 52 billion. As revenue-generating measures, the Plan looks to initiatives to tighten administrative procedures and to rationalize the tax code to secure better compliance, to substitute ad valorem for specific excise duties, to review and possibly discontinue various tax concessions and subsidies to priority sectors, and to change the tax-structure to make it more income-elastic. The Plan proposes to review the rationale for different subsidies especially those whose growth is automatically tied to other factors and which are leakage-prone.

1.37 The Plan also envisages increased internal financing by public enterprises. On the basis of 1984/85 tariffs, fares, and product prices, operating surpluses in public enterprises are expected to yield Rs 355 billion for financing of the Seventh Plan. Various rate and price increases and steps to diminish overstaffing, improve maintenance, control expenditure, and reduce operational losses in public enterprises are expected to further support the funding of the Plan.

1.38 Government domestic borrowings to finance the Plan are expected to yield Rs 730 billion. A further Rs 140 billion (7.8%) will be obtained through "deficit" financing, i.e., borrowing from the banking system as a whole. Government recourse to private savings may have to be larger (assuming the investment program proceeds as planned) if targets for resource mobilization through the tax system and from public enterprise savings are not met. This raises concern that the financial resources required by the private sector to implement its part of the Plan would not be available.

Table 1.6: INDIA: ESTIMATES OF FINANCIAL RESOURCES
FOR THE PUBLIC SECTOR PLAN
(Rs billion at 1984/85 prices)

Public Sector Savings	750
Balance from Current Revenue at 1984/85 Tax Rates	(-)52
Additional Revenue Generation	447
Contribution of Public Enterprises	355
Borrowings	306
Domestic Sources	870
Private Sector	730
Reserve Bank	140
Foreign Sources	180
Aggregate Resources	1,800

Source: GOI, Seventh Five Year Plan.

1.39 The Seventh Plan also assumes that 10% of total public sector outlays will consist of (net) resources received from abroad. The latter figure is based on projected levels of exports, imports, current invisibles, and capital transactions. A summary view of the balance of payments projections for the Plan is provided in Table 1.7. Export volume is expected to increase

by almost 7% per annum during the Plan period, with industrial products, including engineering goods, readymade garments, and gems and jewelry, expected to account for over half of the expected rise in volume. The projected 5.8% volume growth rate of imports during the Seventh Plan exceeds the volume growth during the Sixth Plan. The category of non-bulk imports, encompassing capital goods and a wide range of intermediates used by the industry, is expected to grow by 5.8% annually in real terms. Bulk import requirements, including petroleum, metals, newsprint, and edible oils, are expected to rise in step with GDP.

Table 1.7: INDIA: BALANCE OF PAYMENTS PROJECTIONS
FOR THE SEVENTH PLAN
(Rs billion at 1984/85 Prices)

1. Exports	607
2. Imports	-954
3. Trade Balance	-347
4. Invisibles (net)	147
5. Current Account Deficit	200
Financing	
1. Net and Other Borrowing	209
2. Use of Foreign Exchange Reserves (- denotes increase)	-2
3. Loss from Changes in Terms of Trade	-7
Memo Items (percent)	
1. Debt Service Relative to Current Receipts	17.6
2. Current Account Deficit Relative to GDP	1.6

Source: GOI, Seventh Five Year Plan.

1.40 Significant invisible earnings are looked to as a means of (partially) offsetting the trade deficit. Expatriate remittances and tourism receipts are the dominant invisible items. Net invisible earnings are expected to cover less than half of the deficit on merchandise account, a smaller proportion than was the case for the Sixth Plan. The Seventh Plan envisages a current account deficit averaging 1.6% of GDP and anticipates Rs 209 billion of external borrowing during the period.

E. Overview

1.41 In conclusion, India's Seventh Plan suggests it is now possible by virtue of the accomplishments of the Sixth Plan to move rapidly towards self-sustained growth with social justice. To this end, policy adjustments (and operational improvements) are envisaged in industry, agriculture, and other sectors which will enhance productivity and product quality and result in growing exports. An important feature of the Plan is the recognition shown that a new phase of industrialization is in the offing in the country. Various trade, regulations, pricing and technology policies discussed in the Plan are framed with an awareness that rapid and broad-based industrial growth is critical to sustaining high rates of export growth and employment creation and meeting demands for inputs and consumption goods. The agricul-

tural strategy in the Plan reflects the sector's longstanding function as major employer and source of basic foodstuffs and emerging role as provider of high value goods to growing urban markets. The emphasis on completing ongoing schemes, exploiting existing irrigation works and enhancing productivity in rainfed areas are new and promising. Prudent expansion of capacity, efficiency improvements, and management of demand are critical to Plan strategy in energy and transport. The emphasis in the social sectors is on improving the quality of the services provided.

1.42 The Plan accords major responsibilities to the Government in achieving objectives in various sectors. Government is expected to help create an environment which promotes efficiency, higher productivity and faster growth. It is also expected to discharge strategic responsibilities such as protecting the poor, preserving the environment and safeguarding the interests of future generation. A pervasive theme in the Seventh Plan is that improvements in the efficiency and effectiveness of public sector programs are unavoidable if Government is to discharge its facilitative and strategic tasks. Similarly, public agencies will be unable to play a purposive role unless determined efforts are made to mobilize increased revenues for use on public account. Various aspects of the Seventh Plan are examined in greater depth in the following chapters.

Chapter 2

EVALUATION OF RECENT ECONOMIC PERFORMANCE

A. Introduction and Overview of Macro-Economic Developments

2.01 1985-86 was the first year of the Seventh Five Year Plan. During the year there was a very lively public debate in India both of the Plan itself and of the many fresh initiatives in economic policies which were introduced or foreshadowed. This debate was particularly centered around a number of important official committee reports and policy statements, notably the Hussain committee report on trade policies, the Narasimham Committee report on shifting from physical to financial controls, a report on the black economy, the Chakarvarty committee report on monetary policies, and a statement on long term fiscal policy issued by the Ministry of Finance. 1/ In this chapter we briefly review some of the principal areas of policy concern, in particular agriculture, infrastructure, industry, trade policies, taxation policies, monetary policies and poverty and human resources development, and attempt in each case to assess the impact of the policy framework during the year and its appropriateness for achieving the Plan objectives. More extensive discussions of all these policy questions in a longer term perspective will be found in Chapters 3, 4, and 5. Before turning to the discussion of policies, however, we present an overview of the principal macro economic developments during the year.

2.02 In the light of the Seventh Plan target for real GDP growth of 5%, growth during 1984/85 was disappointing. Principally due to a substantial downward revision of agricultural production, 1984/85 growth which in last year's report we considered would be in the 4-4.5% range, is now estimated at only 3.6%. On the basis of limited information available so far, 1985/86 GDP growth is likely to range between about 5.5% and 6.0% probably reflecting the impact of macroeconomic policy changes introduced during the last two years.

2.03 Foodgrain production is estimated to grow by about 2.0% p.a. to approximately 149 million tons in 1985/86 but will still be 3 million tons lower than the peak production reached in 1983/84. After allowing for other crops, agricultural GDP may grow at or slightly below the Seventh Plan target of 2.5%. It is likely that the growth of real value added in manufacturing and in the electricity gas and water sector will reach or slightly exceed the

1/ The official titles are as follows: Report of the Committee on Trade Policies, Ministry of Commerce December 1984. Public release August 1985. Report of the Committee to Examine Principles of a Possible Shift from Physical to Financial Controls, January 1985 (industrial licensing and MRTP) and April 1985 (capital goods imports, foreign collaboration, capital issues control, exchange control). Public release December 1985. Aspects of the Black Economy in India, National Institute of Public Finance and Policy, March 1985. Report of the Committee to Review the Working of the Monetary System, Reserve Bank of India April, 1985. Public release January 1986. Long Term Fiscal Policy, Ministry of Finance, December 1985.

Seventh Plan Targets of 5.6% and 8% respectively. However, the growth of the mining and quarrying sector will be well below the Plan target of 11.8%, principally due to a lower rate of growth of coal production. Within the mining sector the growth of crude oil production slowed considerably during 1985/86 to about the rate projected for the Seventh Plan.

2.04 An essential requirement for the economy to attain the Seventh Plan goals is that exports should grow at a distinctly faster rate than in the past so as to finance its projected need for imports. According to provisional trade estimates, the US dollar value of non-petroleum exports during the first six months of 1985/86 declined by 1.1% whereas there was a surge of imports which increased by 21.1% over the corresponding six months of 1984/85. 1/ Most of this increase in imports, however, was attributable to bunching of bulk imports by canalizing agencies (especially of petroleum products, fertilizers, fertilizer raw materials, iron and steel and sugar) as well as imports (including capital goods) by government departments and agencies such as ONGC. Only a small part of the increase was attributable to imports of capital goods and industrial raw materials which were subject to import liberalization measures in April 1985. During the third quarter, canalised imports declined and there was evidence that the growth of total imports for the financial year would be well below the growth rate for the first six months. There was also evidence of an improvement in export growth during the third quarter. 2/

	<u>% change in US dollar value of</u>	
	<u>Imports</u>	<u>Exports</u>
First quarter	+ 19.2	+ 3.4
Second quarter	+ 32.3	+ 1.6
<u>Third quarter</u>	<u>+ 0.2</u>	<u>+ 9.9</u>
First nine months	+ 16.8	+ 3.2

Source: IMF Direction of Trade data file. The industrial countries (which exclude the Soviet Union and Eastern bloc countries) account for about half of Indian imports and three quarters of Indian exports.

Allowing for a sharp decline in non-bulk imports (notably capital goods) during 1985/86 and for the declining rate of increase in crude oil import substitution, imports and export performance and the balance of trade during 1985/86 is likely to be in line with the underlying trends of recent years. However, as discussed in Chapter 5, these trends are not consistent with the

1/ On the basis of crude oil exports netted out from crude oil and petroleum produce exports, expressed in US dollars.

2/ Compared with the corresponding periods of 1984/85, India's trade with the industrial countries during the first nine months of 1985/86 varied as follows:

Seventh Plan projections, and underline the critical importance of accelerated export growth. The disappointing performance of export during 1985/86 was due to tighter and more competitive conditions in some of India's export markets combined with the fact that for most industries domestic export promotion and other policies had not sufficiently improved the profitability of exporting relative to domestic sales. In addition, price and exchange rate developments (the real exchange rate) did not improve for Indian exporters until the second half of the financial year.

2.05 Despite the probable increase in the trade deficit over last year's level of US\$4.7 billion, foreign exchange reserves declined by only US\$0.5 billion during the financial year, from US\$6.1 billion at the end of March 1985 to US\$5.6 billion at the end of January 1986, equivalent to about 4.5 months of imports. This relatively small decline was in part due to continued increases in worker remittances and investments in Non-Resident accounts. An increase in tourism receipts following a fall in 1984/85, has also been a factor.

2.06 As of December 1985, the annual rate of inflation as measured by the wholesale price index was running at an annual rate of about 5.6%. Increases in a number of administered prices during December, January, and February (for coal, fertilizer, some grains, petroleum, and railway freight) are not expected to significantly change these trends, which are about one percentage point below inflation in 1984/85. The main influence restraining price increases was adequate supplies of agricultural products, in the case of sugar and edible oils in part accounted for by substantial imports.

2.07 The 1985/86 Central Government budget provided for a 9.9 % increase in total expenditure over 1984/85. According to revised estimates, total expenditure will exceed budgeted expenditure by 9.7%, implying a very substantial increase of about 20.6% over 1984/85. Excess of expenditure over the budget is expected to occur in both non-Plan (+8.9%) and Plan (+10.7%) headings. Of the non-Plan overrun of Rs 24.6 billion, Rs 9.6 billion is accounted for by subsidies (principally for food and fertilizer), Rs 6.4 billion by grants and loans to the States and Union Territories, Rs 3.3 billion by interest and Rs 1.8 billion by defense. Of the Rs 19.9 billion increase in Plan expenditure over the budget, Rs 5.0 billion is attributable to increases in Central assistance for State and Union Territory Plans, and the balance to increases over budgeted levels in Central Plan outlays, mainly capital expenditure for the steel and mining industries and the railways, plus a substantial absolute and proportionate above-budget increase in spending (Rs 3.2 billion or 35%) on rural development programs. During 1985/86, tax receipts were quite buoyant and are estimated to exceed the budget estimates by 8.9%, and 1984/85 tax receipts by about 22%. Despite this, total receipts increased less than total expenditure, with the result that the overall budget deficit is expected to be Rs 44.9 billion, about 35% higher than the budget estimate. This is equivalent to 8.9% of total Central Government expenditure and to about 2.1% of GDP.

2.08 The 1986/87 budget proposes to contain increases in total expenditure to only 4.7% (less than probable inflation), while increasing tax revenue by 8.4% and total receipts by 6.9%, thereby reducing the overall budget deficit to Rs 36.5 billion. This dramatic decline in the rate of growth of total expenditure is proposed despite large budgeted increases for defense spending (+11%) and interest (+18.2%), which between them account for almost four-

fifths of total tax revenue, over half of non-plan expenditure, and one-third of total expenditure. These increases are to be accommodated by budgeted decreases of 3.7% in subsidies and a substantial reduction (by comparison with the 1985/86 revised estimates) in grants and loans to the States and Union Territories. The reduction in budgeted subsidies was made possible by two pre-budget increases in fertilizer prices and in public distribution prices for grains.

2.09 Given the Government's limited success in previous years in containing expenditure, considerable fiscal discipline will be needed in the coming year if the 1986/87 budget targets are to be met. A particularly serious and crucial issue is the extent to which the public enterprises will, in fact, succeed in raising their contribution to the financing of the Seventh Plan target of 53%. In 1985/86 this contribution was only 34%, and during 1986/87, after deducting proposed bond issues, it is budgeted at 33.9%. This and related resources mobilization issues are discussed in Chapter 4.

2.10. Despite the increase in the central governments' overall budget deficit, money supply during 1985/86 was growing at somewhat below the rate of the past two years. In January 1986 M3 had increased by 16.6% over January 1985, compared with average growth of 18.2% in 1984/85 and 18.1% in 1983/84. Important elements in this slower growth were: (a) a decline in the rate of increase of reserve money, principally attributable to a large absolute decline in Reserve Bank credit extended to state governments, which more than offset a substantial increase in Reserve Bank credit to the central government; (b) the decline in foreign exchange reserves; and (c) a decline in Reserve Bank credit to the commercial banks. The fall in Reserve Bank of India's credit to the states was mainly attributable to a new policy of no longer allowing overdraft facilities. To this end, Rs 16.2 billion of state government overdrafts with the RBI were converted into medium-term loans by the central government in October 1985.

B. Agricultural Policies and Performance

2.11 Trends in the foodgrain economy have, as usual, dominated Indian agricultural performance over the last 12 months. 1984/85 ended with hopes that, with a reasonable 1984 monsoon, overall foodgrain output would emulate, if not exceed, the record 152.4 million tons achieved in 1983/84. These hopes were belied, however, by an eventual out turn of 146.2 million tons - a 4% decline over 1983/84. The 1985 south-western monsoon began on time, but there was a prolonged dry spell in late July/early August. Good September rains led to widespread recovery of the Kharif crop, with the exception of large tracts of western India (W. Gujarat, Rajasthan, Maharashtra) where drought conditions caused outright crop failure in many areas. Late rains (which caused heavy flooding in Uttar Pradesh and other parts of eastern India) created favorable soil moisture conditions and excellent prospects for the winter (rabi) crop. Foodgrain production is expected to register some recovery from the 1984/85 level: total production of about 149 million tons range seems probable. Poor rainfall in mainly unirrigated areas also depressed oilseeds production to 11.6 million tons (compared with 13.1 million tons in 1984/85), and held back the expansion of cotton production, which it is estimated to be about the same level as last year, i.e. 8.5 million bales. Sugar conditions were tight throughout the year, following cane producers' decision to reduce planted area in 1984/85 in response to poor weather conditions and late payments by the sugar mills. Cane produc-

tion of 173.6 million tons in 1984/85 fell below the 1982/83 record of nearly 190 million tons for the second successive year, leading to sharp rises in free market sugar prices as demand carried on rising, the suspension of exports and imports of around 1.8 million tons. Planted area in 1985/86 has not risen significantly, so that supply constraints and additional imports can be expected over the next few months.

2.12 The use of modern inputs expanded further in 1985/86, with coverage of high yielding varieties, irrigated area, and consumption of fertilizers registering significant increases (Table 2.1). Continued intensification of agriculture has undoubtedly contributed to the relative stability of foodgrain production in the face of two years of variable weather. However, the benefits of additional expenditures on the public irrigation system still fall significantly short of potential due to low capacity utilization and operating inefficiencies. Another problem experienced in 1985/86 was slower than expected growth in fertilizer consumption due to the effects of weather. This caused excessive accumulation of fertilizer stocks, leading to inventory management and cash flow difficulties for fertilizer producers and distributors.

2.13 Recent shortfalls in foodgrain production have not had an undue adverse effect on overall food availability, which remains extremely comfortable at least in terms of effective domestic demand. Following record production of 152.4 million tons in 1983/84, and record procurement during 1984/85 (9.9 million tons of rice, 9.3 million tons wheat), public foodgrain stocks reached a peak of 29.2 million tons at the end of June 1985. This exceeded by about 8-9 million tons official estimate of minimum average stock needs and caused severe storage problems, particularly in the north-west. Public procurement up to December 1985 increased further beyond the 1984/85 level, but was more than offset by a 21% increase in the off-take from the public distribution system despite relatively high levels of private stocks. Nevertheless public stocks (24 million tons on December 31, 1985) remain excessive. In managing this situation, government policy makers will need to weigh many factors. For the near future, these include the high carrying costs of such large stocks and the resultant strong upward pressure on the food subsidy; the various options for disposal of public stocks, including exports, higher releases on the domestic open market, an enhanced Public Distribution System (PDS) or an expanded "payment-in-kind" public works program; and the level of wheat procurement to be aimed for after the current winter (rabi) season. In practice, short-term rigidities have precluded significant adjustments to date. One is the difficulty of selling the larger amounts of grain in a weak world market given the reluctance of the Government to subsidize such sales to any large extent. Small export contracts with some countries (including the USSR) and expanded releases of foodgrains through the National Rural Employment Program and other similar programs provided some relief. However, the burden has fallen so far primarily on the Central Government budget with the 1985/86 food subsidy estimated at Rs 16.5 billion. In order to keep the budgetary cost under control, the distribution issue prices for rice and wheat were increased by approximately 6% and 10%, respectively, in February 1986.

C. Energy and Transport: Policies and Performance

2.14 Electricity. During the Sixth Plan there was a considerable improvement in the performance of the power sector. Total power generation grew at

a compound rate of 8.5% per annum; the growth rate of thermal and hydel generation were 11.8% and 3.5% respectively. There was a particularly large increase in 1984/85 (the last year of the Sixth Plan), when the total power generated increased by 11.9% over 1983/84, with increases of 14.2% in thermal generation and of 7.8% in hydel generation. Over the period there was also an increasing trend in the average plant load factor, from 45.0% in 1980/81 to 50.1% in 1984/85. There was also some evidence of a declining trend in power shortages; the officially estimated power deficit was 6.7% in 1984/85 compared to 12.6% in 1980/81.

2.15 Despite this improved performance, the Seventh Plan recognizes the persistent shortages of power, the poor quality of its supply and the substitution of inappropriate and/or high cost alternative energy sources as continuing major constraints on the efficiency of the economy and on economic growth. The Plan's ambitious objective is to eliminate the power deficit by 1989/90 by installing new capacity at an increasing rate, by renovating and improving the efficiency and capacity utilization of existing plants, and by price adjustments. Measures aimed at implementing the Plan targets were in place or adopted during the year, and continuing improvements on past performance were apparent. During the first 10 months of 1985/86 electricity generate by public utilities increased by 8.2% on the corresponding period of fiscal 1984/85, compared to an increase of 13.1% between the same periods of 1983/84 and 1984/85. However, this decline in the rate of growth was due to an absolute decline of 5.1% in hydel generation following the indifferent monsoon in several catchment areas and lower water levels in the major reservoirs on account of lesser inflow and overdrawals during 1984/85. Electricity generated from thermal and nuclear power plants increased by 15.5%--roughly the same order of growth as in the previous year. Further improvements also occurred in the average plant load factor of thermal plants, which was 51.3% during April-January 1985/86 as against 48.6% during the corresponding period of 1984/85. For the remainder of the year overall growth is expected to be slightly above the actual growth during the Sixth Plan of 8.4%, but because of the decline in hydel generation below the 12.1% target for the Seventh Plan.

2.16 Two important objectives of the Seventh Plan are to reduce the persistent and substantial delays in the commissioning of new generating capacity and to renovate old equipment (see Chapter 3). During the first ten months of 1985/86, however, slippage in the commissioning of new capacity was still substantial and the State Electricity Boards had spent only a very small proportion of Central and State Plan funds available to them for renovation and modernization. This performance will need to improve considerably if the Plan targets are to be met. Another Plan objective is to increase electricity rates so as to earn at least a small positive return on capital invested. To this end, an amendment to the Central Electricity Supply Act was passed in 1983 and came into force in April 1985, which requires the State Electricity Boards to adjust their tariffs in order to earn at least 3% on their assets after depreciation, interest, and taxes. While some adjustments to electricity rates which take account of this objective were made during 1985/86 and during the previous few years, the Act does not provide any sanctions against SEBs which do not achieve this target, so that the provision on its own is unlikely to have much impact on the continuing and large SEB losses projected by the Seventh Plan. This and related issues to do with the structure of electricity rates are discussed in Chapters 3 and 4.

2.17 During the Sixth Plan there was a declining trend in the officially estimated power shortages and a further small decline to 6.0% is projected for 1985/86 compared to 6.7% in 1984/85. However this projection seems optimistic as the all-India deficit during April-November was 8.4%, with much higher deficits exceeding 20% in Bihar (27.9%), Karnataka (22.4%) and Haryana (26.5%), and in excess of 10% in Punjab, U.P., Tamil Nadu, West Bengal and Orissa. During 1985/86, as in previous years, the restrictions and other supply problem in many states were particularly severe for the industrial sector, which now accounts for 59.6% of total consumption. But if the power shortages were eliminated, it is unlikely that demand for industrial goods would expand by as much as the officially estimated power deficit. The principal increase in demand on the public power system would come from the replacement of standby and emergency generating facilities, increased employment of power-using processes, and increased demand for industrial products resulting from improved production efficiency and lower prices and/or better selling conditions. Correspondingly, while power shortages and interruptions undoubtedly increase costs and reduce industrial growth, there is no simple correlation between the severity of shortages and industrial production.

2.18 Coal. During the Sixth Plan there was a substantial increase in coal production, which grew at an annual rate of 7.2%. In 1984/85 production reached 147.4 million tons, an increase of 6.7% over 1983/84. While there was a substantial decline in shortages, attempts to grapple with a number of well recognized problems, including poor and declining coal quality, bad labor relations, poor coordination between production and the delivery capabilities of the railways and large operating losses, met with limited success. Furthermore consistent overestimation of demand by the Department of Coal and the Planning Commission, excessive rigidity of Coal India Ltd. (CIL) in sticking to production targets for collieries with inadequate handling facilities, and railway wagon shortages led to a large accumulation of pithead stocks which reached 29.2 million tons valued at over Rs 5 billion at the end of March 1985. At the same time there were shortages in several important consuming centers, especially of higher quality thermal and coking coal from deep underground mines. The Seventh Plan, which provides for a growth rate of coal production of 8.9%, recognizes these and other problems and proposes solutions which we discuss in Chapter 3. During 1985/86 the excess pithead stocks were cut back (to about 22 million tons at the end of January 1986) by reducing the planned increase of production. As a result, production this year is unlikely to exceed 153 million tons, or about 3.8% in excess of 1984/85 production. In January 1986 coal prices were increased by 14.7%, which approximately offsets the effects of inflation since the last increase in January 1984, and will reduce the combined deficit of CIL and Singarani coal company Ltd. (SCCL). Overall, except for some sporadic (mainly delivery and handling) problems, the supply situation during 1985/86 was satisfactory, but the problem of poor coal quality persisted. Because of the high ash content of washed coking coal, SAIL is expected to import about 2 million tons of coking coal for blending purposes during 1985/86, compared to 670,000 tons in 1984/85. Poor quality has also become a central point of dispute between CIL and the State Electricity Boards which have been withholding payments. CIL's total dues from the steel and the power sector at present under dispute are around Rs 5.6 billion.

2.19 Oil and Gas. During 1985/86 production from Bombay High was reaching a plateau and total crude oil production is expected to increase by about

only 3.5%, compared to an increase of 11.4% in 1984/85 and the growth of over 40% between 1978/79 and 1984/85. Assuming continuing exploration but no major new discoveries, the Seventh Plan projects an annual rate of increase of 3.5% between 1984/85 and 1989/90. In February 1986 it was announced that a new field had been discovered in the Cambay Basin in Gujarat, the significance of which still needs to be assessed. Preliminary indications did not suggest that the discovery would greatly alter the Plan projections.

2.20 A major development in the last quarter of the financial year was the collapse of international spot prices for crude oil, which by March 1986 had fallen below \$15 per barrel. If these low prices continue there will be a major benefit for the trade balance and for government revenue, both of which were of concern during the year. In particular, during the 1985/86 consumption of petroleum products was increasing at an annual rate of 7%, compared to 6.4% projected for the Plan period. Although the growth of consumption had slackened in the last quarter of the financial year, in order to curb consumption while contributing to central government revenue, in early February administered prices for petroleum products were increased by about 3 to 10%. ^{1/} Since net imports of petroleum products in 1985/86 were about 36% of total consumption, these increases combined with the new low import prices will increase total Government resources (tax revenues plus profits of the public oil and gas enterprises) from the oil sector considerably above the levels projected by the Plan.

2.21 During 1985/86, a series of major refinery expansions were completed and most local crude is now being refined in India. Consequently, crude exports and the offsetting product imports more or less ceased. A decision on bidding for the HBJ gas pipeline, which is the other major investment in the sector, was, however, delayed until the end of the financial year. Once completed, it will make a major contribution to fertilizer and electricity production. During 1984/85 43% of offshore gas was flaired, but in 1985/86 facilities were completed which allowed some of this gas to be used in the Bombay area. Further progress is expected in 1986/87. In order to further develop offshore production, international oil companies were invited to bid on offshore exploration rights on more favorable terms than previously offered in 1980/81 and 1981/82. But the attractiveness of new areas for exploration will obviously be reduced if very low world oil prices persist for any length of time.

2.22 Railways. The railway system has suffered from many years of inadequate spending on maintenance and replacement of obsolete rolling stock and other equipment. Despite this, in 1984/85 the railways reached their revised aggregate target for revenue - earning traffic of 236 million tons, an increase of 2.7% over the previous year. During the first nine months (April-December) of 1985/86 cumulative traffic reached 187 million tons, an increase of 9.1% over the corresponding period of 1984/85. Net ton kilometers of goods traffic carried increased even more sharply, by 14.4%, compared with a 2.2% increase during 1984/85 by comparison with 1983/84. Shipments of cement, coal, POL and fertilizers and almost every other commodity group

^{1/} Larger increases announced on January 31 were withdrawn following widespread public protests. The eventual increases were: gasoline 6.3%, diesel 3.6%, kerosene 7.4%, LPG 13.4%, aviation fuel 10.5%.

increased. During the year it was reported that there was a recession in the road transport industry which was in part attributed to the railway's improved performance.

2.23 The increase in railway traffic was made possible by greater operational efficiency as shown by noticeable improvement during both 1984/85 and 1985/86, in indicators such as wagon turn-around time and net ton kilometers carried per wagon per day on broad gauge lines. It also showed up in an estimated increases of 18.3% in gross traffic receipts over 1984/85, and 3.1% over the 1985/86 railway budget estimates, and in a small increase (3.2%) in net revenue over the budget estimate. Assuming that this improved performance would continue in 1986/87, no freight rates and only a few fares (mainly first class tickets) were increased in the 1986/87 budget.

D. Industrial Policies and Performance

2.24 Industry has a critical role in the Seventh Plan, which envisages a substantial increase in the rate of growth of industrial production - and in particular a much more rapid growth of manufactured exports - by comparison with the disappointing growth rates achieved during the Sixth Plan period. To this end, in its industrial policies (towards both the private and public sectors) the government is giving more emphasis than in the past to efficiency, productivity, competitiveness and technological modernization and relatively less emphasis to a variety of other objectives needed in the past that have been perceived as necessarily conflicting: for example, foreign exchange conservation, progressive indigenization, employment generation, protection of domestic technology, development of backward areas, monopoly control, and small scale industry development. There is now fairly widespread agreement that past policies which have attempted to simultaneously achieve a multiplicity of these other objectives--often defined in a very short term perspective--have not only stifled the growth and modernization of industry, but in the long run have been counterproductive in terms of the alternative objectives themselves. At the same time, a greater role is also envisaged for the private sector, partly in recognition of the poor performance of the public sector, and partly as a consequence of the tight constraints on the public investment budget. In the process, new opportunities have been provided for private firms - as in computers, electronics and communications - and enlarged private participation has been allowed in restricted sectors such as refineries, petrochemicals, oil exploration and steel.

2.25 In line with the new emphasis the government aims to place greater reliance on the price mechanism and on indirect policy instruments in preference to detailed physical controls. The Narasimham Committee set up to consider these questions recommended retaining the existing basic regulatory framework but suggested a number of liberalizing reforms in policies on industrial licensing, small scale industry, monopoly control, and capital goods imports. On industrial licensing, it rejected a proposal for a "negative list" (i.e. a list of licensed industries, with all industries not on

the list out of the scope of licensing) 1/ but recommended delicensing more industries, suggested criteria for doing so, and for industries subject to licensing, emphasised the need to take account of economies of scale, the desirability of broad definitions of capacity ("broadbanding") to allow flexibility to manufacturers in adjusting their product mix, and suggested that high cost import substitution industries should not be encouraged (i.e. presumably not licensed). On small scale industry, it recommended that reservation should be more selective and that industries in which scale economies and quality standards were important should be gradually dereserved. On monopoly control it recommended raising the asset limit and expanding the list of industries in which Monopoly and Restrictive Trade Policy (MRTP) companies can invest without special clearance. On capital goods, it recommended a phased transition from protection by quantitative controls to protection by tariffs. The committee also considered direct investment in India by foreign firms, but recommended no changes in the present selective policies, which are basically that foreign investment will not be allowed unless the accompanying technology is "highly sophisticated" and otherwise unavailable, or unless there is scope for export expansion. As regards foreign technical collaborations, it recommended that clearance procedures should be simplified and speeded up, but at the same time suggested other measures which, if adopted, would make present policies somewhat more restrictive and administratively burdensome. 2/

2.26 Last year's economic report described a number of measures (some of which had been initiated by the previous government) which are in line with the new policy directions, including the opening up of telecommunication equipment manufacturing to the private sector, fresh approaches to the development of the electronics and computer industries, and the broadbanding of the automotive and machine tool industries. Other changes announced during the March 1985 budget session raised the asset limit for MRTP and for small scale and ancillary activities, and increased the list of delicensed industries from 9 to 25. Further measures followed, and by the end of the financial year there was a clear decrease in the restrictiveness of the control system, including:

- A reduction (by 230) in the number of companies (to 1505) coming under the MRTP Act (as of December 1985);
- Considerably more scope for MRTP and established FERA (foreign equity) companies to expand and diversify with less control;

1/ A negative licensing list would represent a major shift in the approach to industrial controls. The Committee did not give any reasons for its rejection beyond commenting that it would be far reaching and difficult "on practical and administrative considerations".

2/ These were: that proposals to import technology should contain plans for local R&D activity; that renewals or extension of foreign technical agreements should not normally be allowed; and that a list of light consumer good industries should be established in which foreign technological collaboration would not be allowed.

- More liberal "reendorsement" rules allowing for capacity expansion without obtaining a license, and recognizing additional capacity resulting from modernization or replacement; 1/
- A substantial increase in the number of industries in which no license is required to install or expand capacity (delicensed industries);
- Increased flexibility to use installed capacity for alternative products as a result of an increase in the number of industries subject to "broadbanding";
- A series of administrative improvements that appears to have significantly reduced delays in obtaining clearances, especially for MRTP companies and foreign collaborations.

2.27 No substantive changes were made in policies on direct foreign investment and foreign technical agreements, but the established policies - which allow a large degree of discretion - were administered quite liberally by comparison with past practice, especially with regard to "thrust industries" (such as electronics, vehicle and machine tool manufacturing) for which technological modernization is considered crucial if they are to expand rapidly as envisaged by the Seventh Plan.

2.28 Another important development during the year was the announcement of a new long-term policy for the textile industry, which since independence has been subjected to an array of detailed controls which had the conflicting objectives of protecting the handloom sector and organized labor in the mill sector while providing cheap cotton cloth to low income groups. These controls led to substantial expansion of the largely uncontrolled powerloom sector and proliferation of problems in the mill sector, including poor and declining export performance, persistent excess capacity, technological obsolescence, and growing "industrial sickness". The new policy represents a major break with the past, by (a) removing the freeze on the mills' loom capacity which had been imposed in the 1950's, (b) discontinuing previous restrictions on the production and use of synthetic fibers and yarns (c) substantially reducing previously prohibitive excise taxes on synthetic fibers (d) shifting excise taxes to the yarn stage so as to remove one of the disadvantages of the mills in competition with the powerlooms. The policy also stated the intention to allow the closure of unprofitable mills, but - largely because of the absence of an appropriate labor policy - there were no concrete measures to actually implement this intention during the year. There are also other barriers which may make the transition to a less regulated, more efficient and competitive industry slower and more difficult. These include a new proposal to transfer the production of cheap subsidized cloth for low income groups from the nationalized mills to the handloom sector: still extremely high tariffs an excise taxation of synthetics (polyester fiber prices are currently about four times world levels); the

1/ The capacity "reendorsement" scheme which permitted limited expansion was allowed to lapse in March 1985. However it was replaced by a new, more liberal scheme in December 1985.

fact that the mill sector is still subject to normal industrial licensing (which in particular debar MRTP companies from expanding substantially without shifting location to a backward area); and a continuing prohibition and quotas on cotton yarn exports. 1/

2.29 A major problem in the industrial sector which has increased in severity over the past five years, is the high incidence of "sick" i.e. insolvent but still operating firms. As of December 1984 there were 93,282 units officially defined as sick, of which 91,450 were small scale (SSI) units, 1247 were medium and 545 large units (defined as firms with outstanding credit of Rs 10 million or more). Total short and long term outstanding bank credit to sick industries was about Rs 46 billion. The highest incidence of sickness in terms of outstanding bank credit is in textiles, followed by engineering and electrical, chemicals, iron and steel, jute, rubber and sugar. Previous efforts to deal with industrial sickness (including the establishment of the Industrial Reconstruction Corporation of India - IRCI - in 1971) having had little success, in 1984 the government enlarged the scope of IRCI and in 1985 enacted the Sick Industrial Companies Act, which established a Board and an appellate authority specifically to deal with industrial sickness. The main emphasis of this new policy is on (a) monitoring and early detection; (b) penalties for persons who mismanage or divert company funds; (c) fiscal and other reliefs from excise and sales taxes, import duties, interest rates, price controls, electricity tariffs etc.; (d) exemption of MRTP companies from the provision of the MRTP Act as regards taking over, modernizing and expanding sick companies. As the government recognizes, the first three of these measures deal with the symptoms of industrial sickness; only the fourth makes a beginning at tackling the underlying causes. The causes are compulsions on government authorities to protect employment, and their consequent unwillingness to allow firms to close, the complex of industrial regulations which prevents or limits restructuring, mergers and takeovers (especially by MRTP and FERA firms), the policies of the banks which provide more or less open-ended financial support, and the willingness of both the state and central governments to take over and nationalize ailing units which fail to revive. These policies provide a motivation for company owners to remove their assets from firms as soon as the possibility of future insolvency arises, or even if the firm is profitable but more profitable investment opportunities appear elsewhere. The long term solution to the industrial sickness problem will therefore depend on policy changes in each of these areas. In the meantime the new 1985 measures involve a fresh set of administrative, discretionary controls and case-by-case exemptions from or reductions of taxes and other charges, which run counter to the general liberalizing thrust of the government's industrial and fiscal policies.

2.30 During 1984/85 private corporate profitability improved considerably over the previous year and the improvement continued during 1985/86. Apparently in response to this and to the general optimism associated with the policies of the new government, after a flat calendar 1984 there was a sustained stock market boom during calendar 1985 in which the major indexes increased by over 80 percent. The increase for the largest FERA companies

1/ The export of medium and course counts of 40S and below is banned, while exports of finer counts between 40S and 60S are subject to quotas.

was greater than for the largest Indian controlled companies, possibly reflecting the expectation that they would be able to benefit relatively more from the new policy environment. At the end of December the average price earnings ratio for the 100 largest companies had reached a level (17.6) which would probably be unsustainable if the expectation of rapid future growth of profits were to change. Following further increases during January and February of 1986, there was in fact a reversal in stock prices after the 1986/87 budget, which disappointed corporate expectation in some respects.

2.31 The general buoyancy of the investment climate which the stock market boom suggests was corroborated by a number of other indicators during the year, including: (a) between April and December 1985, the registration of 1167 proposals for investment in delicensed industries with a total value of Rs 25 billion: 1/ (b) in calendar 1985 a 40% increase in the number of letters of intent above the average level of the preceding three years; (c) an increase of 36 percent (calendar 1985 over calendar 1984) in the number of foreign technical collaborations approved; (d) continued rapid expansion of the stock market as a source of new capital (mainly by debentures) for the corporate sector; (e) a substantial increase in capital equipment imports during the first six months of the financial year; (f) strong growth (a 9.3% increase during April-November 1985 over April-November 1984) in the production of capital goods industries. All these developments suggest that the manufacturing sector was responding to the new policy initiatives, although the payoff in terms of faster growth of manufacturing output was likely to occur with a lag. However, the role of new direct investment by foreign firms, while increasing, was still very small. 2/

E. Trade Policies

2.32 During the year, the Government released the report of the Hussain committee on trade policies; the Narasimham committee report which also dealt with trade policies and a statement on a long-term fiscal policy (LTFP) which set out the broad framework for future trade policies. The most important recommendation of the two committees was that the Government should give greater impetus to the liberalization of the trade regime which has been proceeding for a number of years, in particular by the removal of quantitative controls on imports so as to move to a regime in which most imports would be regulated by tariffs. The Hussain committee also recognized the fundamental problem that under the present regime effective incentives for import substitution are generally much higher than effective incentives for exports, and recommended that at least some of this difference should be offset by moderating protection in the domestic market while ensuring that the various export incentives fully compensate exporters for the tariffs, excise taxes and other measures which raise the cost of their inputs above world prices. This committee also emphasized the importance of maintaining the real effective exchange rate at a level which would maintain the competitiveness of exports. Both committees emphasized the advantage of a tariff-

1/ This data was not collected in previous years.

2/ In calendar 1985 the Rupee value of total approvals increased by 11% over calendar 1984, and were almost double their level in 1983 and 1982, but still totalled only about US\$100 million.

based system in reducing the burden on both firms and the Administration, of the present exceedingly complex, multi-layered and highly discretionary quantitative controls. Insofar as quantitative and other controls would remain, they recommended that they should be simplified and as far as possible made automatic and non-discretionary in their application. The Hussain committee underlined the importance of reasonably stable policies, and recommended that the import-export policy should be announced for a period of three years instead of every year.

2.33 The long-term fiscal policy statement sets out in a more explicit way the direction the Government's thinking on the relative roles of tariffs and quantitative controls and the general structure of tariffs as envisaged. Broadly, it proposes that all capital goods, raw materials, components, and other intermediate goods should be freely importable subject to tariffs, except where the local industry is unable to compete, in which case either quantitative controls (including canalization by Government trading organizations) would be retained or higher duty structures allowed for a few years. However, the import of all "non-essential" consumer goods would continue to be banned: only a few essential consumer goods, such as life-saving drugs and edible oils would be imported, and then only by canalizing agencies. The highly complex structure of import duties would be replaced by a much simpler structure consisting of five basic rates which would increase with the degree of processing of the product, i.e., apart from zero or low duties on essential consumer goods, "universal intermediates" would be subject to the lowest rate, other more specific raw materials to a higher rate, and components and capital goods to a still higher rate. Duties on imports of non-essential consumer goods would presumably be at the highest rates, but are not mentioned, because it is proposed that no imports would be allowed.

2.34 The import-export policy announced in April 1985 covers a three-year period ending in March 1988. Because detailed up-to-date trade and production statistics are not available, and because in any case the classification of most items subject to import controls do not match the trade and production statistical classifications, it is difficult to assess the extent to which the policy changes which were announced have liberalized the trade regime. On the import side, it does seem clear that there was considerable freeing up of import controls on capital goods, which was accompanied by some substantial import duty reductions. In the 1986/87 budget, these reductions were partly offset by a tariff increase of 10 percentage points, but the following week the liberalization of quantitative controls continued with 29 machine tool items being placed on open general license. As regards imported raw materials and components, the effects of the policy changes are much less clear; except for items required by some industries, notably electronics and vehicle manufacture, there may not have been much change in the extent to which firms can import raw materials without first obtaining a license. Likewise, despite the deletion of 53 items of which the import is compulsorily "canalized" by State trading organizations, 139 items remain on the canalized lists, including all the important bulk imports (e.g., petroleum and oil products, edible oils, sugar, steel, non-ferrous metals) which still account for about half of total imports. Moreover, the restrictiveness of import policy was tightened in one little noticed but important respect, by cutting back on the scope for intermediaries to import raw materials on the Open General License (OGL) lists. This restriction adversely affects small scale producers who cannot afford the transaction cost of importing on their own account, and will reduce the effectiveness of competition from imports

for some local industries. On the other hand, the 1986/87 budget made a beginning in simplifying the tariff structure as envisaged by the long term fiscal policy, by reducing the previous eleven auxiliary duty rates to three rates of nil, 25% and 40%.

2.35 Regarding exports, the new Import-Export policy increased export incentives in some respects, and in others incentives were reduced. On the positive side, the principal measure was the introduction of a "passbook" scheme in connection with duty free imports used in export production. By comparison with the advance licensing scheme, which has been retained as an alternative, the passbook scheme has a considerably broader product coverage, is less restrictive as regards the inputs which can be imported duty free, and is intended to be administratively less complex. In addition, the number of exported products eligible for advance licenses was increased 1/ and some minor improvements were made in the replenishment license scheme. In September 1985, firms registered under the "100% export-oriented units (EOU)" scheme were allowed to sell up to 25% of their production in the domestic market. In July 1985 the ban on the export of cotton yarns less than 40S was lifted and replaced by a small quota; in January 1986 this quota and the quota on exports of cotton yarn of between 40S and 60S was increased. However, the total of these quotas amounts to only about 3% of total cotton yarn production. The 1985/86 budget introduced a new profit tax incentive and abolished export taxes previously applied to 12 exported minerals and agricultural products. However, the new profit tax incentive is not necessarily always more generous than the tax incentive which it replaces. Most of the abolished export taxes were substantial and potentially this was an important export promoting measure, but exports by all these industries are directly regulated by the Government (through canalizing agencies, commodity boards, etc.) and on their own these changes will not necessarily have much impact on exports. On the negative side, the advance licensing scheme, which has rapidly become by far the most important component of the export incentive mechanism, was tightened by increasing the minimum value added requirement. In addition, a number of facilities were withdrawn from export and trading houses, 2/ eligibility criteria for qualifying were made more stringent, and they were excluded from the new passbook scheme, and were disadvantaged from the new profit tax incentive. These measures mark a retreat from previous policies which aimed to promote the development of specialized export intermediaries; to facilitate and expand exports by small- and medium-manufacturing firms and to development of large private international trading houses on the Japanese and Korean models. Putting the posi-

1/ From 103 to 132.

2/ The new policy greatly reduced the value of additional licenses to export and trading houses. These were originally introduced as a special incentive to promote their development. "Third party" facilities and a special "flexibility" provision were also withdrawn in April 1985, but restored in February 1986. The former allow either the export/trading houses or the manufacturer to benefit from export incentives, while the latter allows exporters flexibility in the choice of raw materials imported under REP licenses. The April 1985 policy disallowed export houses which are also manufacturers from using this provision on behalf of their supporting manufacturers.

tive and negative sides together, on balance, the policy changes and some administrative improvements made during the year probably had only a marginal impact on the overall ease and profitability of exporting. Apparently recognizing this, in January 1986 the Government announced that it would establish a new schedule of more generous cash compensation rates and would review and simplify the duty drawback scheme. The 1986/87 budget also included a number of new (but in the aggregate, relatively minor) measures to promote exports, including the abolition of the export tax on unmanufactured tobacco, an increase in the drawback rate for garment exports from 7 - 1/2% to 10%, and import duty reductions on machinery used in the marine products and gem and jewellery industries. In April 1986 the Reserve Bank announced improved foreign exchange forward cover facilities and an extension of the period covered by concessional interest rates for export pre-shipment credit.

2.36 The trade policy developments described above were broadly consistent with the flat performance of export and the growth of imports during 1985/86. The principal impact of the recent trade policy reforms has been to increase the ability of domestic industry to respond to domestic liberalizing measures by modernizing through the import of machinery and equipment and, to a lesser extent, raw materials. Given the obsolete capital stock and lagging technologies of many Indian industries, this is a welcome development which is needed to reduce production costs, improve product quality, and increase competition and the general progressiveness of many industries. However, as we discuss in Chapters 3 and 5, many difficult trade policy issues will need to be dealt with in the future, especially the continuing bias in the incentive system against exports and the tendency (noticeable in a number of changes made in the 1986/87 budget) for tariffs to be set on a "made to measure" or "needs" basis. 1/

F. Taxation

2.37 During the year an influential report on the "black economy" became the focal point for active public debate on fiscal policies. A major finding of the report was that overall only one-third to one-quarter of taxable income was being declared to the taxation authorities. Allowing for the fact that black income generated through smuggling of goods other than gold and through black marketing of foreign exchange and price controlled commodities, was not taken into account, the study estimated that black income was at a minimum 18% of GDP at factor cost and mentioned the possibility that it might range as high as 30% of GDP. 2/ Among the reasons for the existence of the black economy the report mentioned the "awesome" range and complexity of economic controls, high levels of taxation and the complexity of tax structures, ineffectiveness of tax administration and lack of accountability of spending by governments and public sector enterprises. In order to reduce

1/ For example, the 1986/87 budget raised customs duties on 32 machine tools "where domestic production is established" to 110%, while reducing import duties on machines "where there is negligible production" to 35%.

2/ These estimates are of "tax-evaded incomes", some but not all of which are included in the national account estimates. Hence they are not the same as the amount by which the national accounts understate national income.

black income generation while increasing tax revenue, it recommended that the number and complexity of controls should be reduced, that tax rates should be brought down and tax structures drastically simplified, and that policies should be adopted to improve public administration generally and the integrity, efficiency and rigor of tax administration in particular.

2.38 In December 1985 the government announced its long term fiscal policy (LTFP) for the period of the Seventh Plan, the objective being to reduce speculation on future fiscal policies and to promote open debate on major tax proposals in advance of their implementation. The general thrust of the policy is in line with the directions suggested in the black economy report and by other government committees. The most important reforms proposed for the coming years relate to excise taxes and customs duties. The former involves drastically simplifying the excise tariff schedule and reducing the distortionary effects of cascading excise taxes by moving towards a modified value-added tax system (MODVAT). The latter will involve a major expansion in the role of tariffs in regulating imports, by replacing a range of quantitative controls by import duties which will be more uniform and lower than many present rates. On direct taxes, the basic objective is to reverse the decline of their share in total revenue by policies of lower rates combined with stricter enforcement. More specifically, barring emergencies, the new reduced personal income and wealth tax structures introduced in the 1985/86 budget (see below) are to remain unchanged for the next five years subject only to possible adjustments for inflation. However, it is proposed to further reduce corporate taxes by abolishing the present surcharge and surtax. The former will reduce company tax rates to a range of between 50 and 65%, while the latter will reduce the maximum marginal rate of tax on profits, (which at present can go as high as 81%) to the proposed new maximum average rate of 65%. On the other hand it is proposed that the present investment allowance should be discontinued and replaced by a scheme to allow corporate enterprises to claim a deduction up to 20% of their profits by first depositing the sum with the Industrial Development Bank of India (IDBI) or using it for investment in plant and machinery.

2.39 As we noted in last year's report the new Government's policy was already strongly emphasizing the general directions recommended in the black money report and by a series of earlier reports and studies. For individuals, the 1985/86 budget reduced income tax rates and abolished the surcharge on income tax. The highest marginal rate is now 50%, on incomes in excess of Rs 100,000, against 61.875% (including surcharge) earlier. Estate duty was abolished. Wealth tax rates were lowered with the highest rate now being 2% applicable to taxable wealth in excess of Rs 2 million, against 5% earlier on taxable wealth exceeding Rs 1.5 million. This is a major change which, together with the reduction in income tax rates, reduces the maximum marginal tax rate on income from wealth from approximately 112% to 70%. 1/

1/ Assuming a return of 10% from wealth.

The scheme of compulsory deposits by income tax payers was also abolished. ^{1/} In the 1986/87 budget further concessions and simplifications foreshadowed by the LTPF were made, relating to gift taxes, capital gains tax, and deductions from taxable income. However, as noted in last year's report the 1985/86 budget increased the personal exemption limit from Rs 15,000 to Rs 18,000, which significantly reduced the tax base. This trend continued in the 1986/87 budget which raised the standard deduction for salary earners.

2.40 Regarding companies, the 1985/86 budget reduced income tax rates by 5 to 10 percentage points, and the 1986/87 budget removed the surcharge. However, the promised removal of company surtax was deferred until the 1987/88 budget. Other tax changes of relevance to companies included: (a) the replacement of a tax incentive for exporters based on export sales with a provision based on profits from export sales; (b) the abolition (in the 1985/86 budget) of the 3.5% tax on gross interest receipts of scheduled banks; (c) the withdrawal of the investment allowance (effective from March 1987) and its replacement by the deduction for deposits with IDBI or investment in plant and machinery as announced in the LTPF; (d) the replacement of previous depreciation schedules for plant and machinery with a simplified schedules with only two rates (33 1/3% or 50%); (e) a new uniform 30% tax rate on income from royalties and technical fees rather than the previous 20% and 40% rates.

2.41 On excise taxes, the 1986/87 budget introduced the MODVAT proposals for 37 of the 68 chapters of the excise tariff. This is a reform of major importance which should greatly reduce inefficiencies resulting from the present cascading system which only provides for tax offsets for a limited number of products. A new more smoothly phased excise tax concession scheme for small scale industry was also introduced, which should reduce the incentive to avoid or minimize excise taxes by artificially splitting production units. The excise tariff schedule was simplified by the elimination of the special excise duties which previously applied to 132 items.

2.42 On customs duties, as noted previously, the 1986/87 budget commenced the process of simplification announced by the LTPF by reducing the number of auxiliary duty rates from 11 to 3. In addition, in response to revenues needs and industry demands both the 1985/86 and the 1986/87 budgets made the usual product-by-product adjustments of both excise and customs rates on individual products, not all of which were consistent with a simplified and more rational taxation and protection structure. From a revenue perspective the most important changes were an increase in the import duties on crude oil

^{1/} The scheme required people to make compulsory (3 year) deposits, (bearing 10% interest) with the rate of deposit rising from 4.5% with the size of taxable income, reaching a maximum of 15% in the case of taxable incomes exceeding Rs 70,000. Thus, if an individual had a taxable income of, say, Rs 50,000 in 1984/85, he was liable to make a deposit of Rs 4,100 in addition to his income tax liability of Rs 12,656. With the reduction in income tax rates, increase in the exemption limit and abolition of the compulsory deposit scheme, the total liability of such a tax payer now will be much lower--Rs 9,250.

from about 4-5% to about 22-25% ^{1/} increases in revenue from the new structure of auxiliary duties, and reductions of import duties on machinery and equipment for new projects and of duties on intermediate materials and components for some industries, notably the electronics and vehicle industries. In August 1985, in line with the previously announced new policy for the textile industry, substantial reductions were also made in excise taxes on synthetic fibers and yarns. In the the 1985/86 budget, however, the original taxes on yarn were partially restored.

2.43 On tax administration, a number of measures to simplify procedures and to reduce the possibilities for time-consuming appeals were announced. The Government also pressed ahead with the computerization of indirect tax accounts, which (starting in fiscal 1986/87) is aimed in providing better and much prompter information for the management of the customs and excise tax system, as well as for overall economic administration. ^{2/} Throughout the year, in public statements and administrative actions the Government emphasized its intention to enforce the law impartially and to root out corruption. A large number of officials were suspended, dismissed or transferred, and a series of highly publicized tax raids were carried out on large well-known business firms.

2.44 While it is too early to judge the extent to which these changes will permanently improve the elasticity of the tax system, it is encouraging that the Central Government's tax receipts during 1985/86 were running well ahead of last year and of the budget estimates, as follows:

^{1/} The increase was from a specific (auxiliary) duty of Rs 100/ton to Rs 300/ton plus 10% of the c.i.f. price. These were equivalent to the ad valorem rates indicated in the text for import prices prevailing during most of the year. Following the collapse of world oil prices in January 1986, the ad valorem equivalent rose considerably. At prices of US\$15 a barrel, it is approximately 32%.

^{2/} For Customs (starting with imports) the aim is to computerize the customs houses in about mid 1986. Computerization of excise tax collection is expected to start about the end of 1986. The prompt availability of detailed customs records which this promises will be a major improvement for economic management. At present the detailed trade statistics appear with a four year lag.

	% Share of Total Taxes (1985-86 Revised Estimates)	% Excess of 1985/86 Budget Over 1984/85 Revised Estimates	% Excess of 1985/86 Over 1984/85 (Revised Estimates)
Corporation Tax	11	+8.1	+22.0
Income Tax	8	-2.5	+24.0
Customs	33	+15.0	+32.0
Excise Duties	45	+10.2	+15.9
All Other Taxes	3	-8.2	-7.1
Gross Tax Revenue	100	+9.5	+22.3

It is now estimated that total tax receipts in 1985/86 will exceed budget estimates by about 9%. This increase will contribute substantially to state revenues through their share of personal income and excise taxes. However, it is improbable that this rate of increase can continue during the rest of the Plan period, since a good part is due to a rapid increase of imports during the year while some is probably due to previously undeclared black income being declare for taxation for the first time. 1/

2.45 Combined with measures already taken over the past year, the recent and proposed reforms, if implemented broadly as announced and combined with a continuation of the present more rigorous enforcement, should do much to reduce the present incentives for corruption and unproductive "rent seeking" activities while reducing some important economic distortions which at present impede efficient economic growth. As the government recognizes, in some respects the reforms will be difficult to implement, particularly the tariff reforms and the excise tax proposals. The former will run up against the usual problems of dealing with entrenched protected (and often high cost) producers and the employment consequences of the required adjustments, while the latter will reduce the excise tax advantages of small scale firms vis a vis larger firms and will presumably be opposed by them as well as by larger business interests which have been using the small scale industry (SSI) concessions as a means of tax avoidance.

2.46 In some respects, however, the changes in the tax policy includes some new measures which are not consistent with the general liberalizing thrust of the government's general policies and of the long term fiscal policy itself. One of these is a proposal under which half of the deposits in a second National Deposit Scheme would be deductible from personal income.

1/ Of course the combination of lower tax rates and stricter enforcement may continue to expose increasing amounts of the total of black incomes, but this may be subject to diminishing returns. Certainly this is likely as regards personal income tax, for which a tax "amnesty" expires in March 1986. Under this "amnesty" the government agreed to refrain from reopening previous year's assessments if much larger income declarations were made in 1985/86. However, personal income taxes are only a minor part of total tax receipts: the really important sources of increased revenue from reduced tax evasion are excise and customs taxes.

A second is the provision for corporate deposits with IDBI which are deductible from corporate income for tax purposes. Both these schemes involve tax concessions aimed at channelling private savings to the government and the introduction of further distortions in the already highly distorted capital market. The latter aims to promote new investment while minimizing loss of tax revenue than would be the case if corporate tax rates were reduced. This would lead to the introduction of new and difficult discretionary controls. The LTPF also proposes that the present policy of banning all imports of consumer goods should be continued, so that the move away from discretionary controls over imports will be confined to intermediate and capital goods, with the danger that the already high effective protection of local production of consumer goods may further increase. The government also does not contemplate any initiatives regarding the taxation of agricultural incomes which under the Constitution is vested in the States. Since for all practical purposes the States have not used this power, this constitutes a reduction of the tax base. These and other aspects of taxation and related policies are discussed further in Chapter 4.

G. Monetary Policies

2.47 In December 1985 the Reserve Bank (RBI) released the report on the working of the monetary system produced by a committee (Chakarvarty Committee report) which had been set up in December 1982 and submitted to the RBI in April 1985. The broad thrust of the reports' recommendations are in line with the simplifying the liberalizing intentions of the government's other policy initiatives, although in this case neither the RBI nor the government have so far indicated whether and if so when the principal recommendations will be implemented. If adopted, the recommendations would involve major changes in the approach to monetary policies and in the financial system, would correspondingly imply considerably more fiscal discipline on the part of the government and would make a major contribution to increasing the efficiency of the financial sector and the economy.

2.48 A major concern of the report is the continuing rate of increase of money supply in excess of the growth of real output, as a source of inflation. Thus it points out that between 1970/71 and 1983/84 real net national product grew at 3.7% whereas broad money (M3) grew at 17.2% and inflation as measured by the wholesale price index was 9.8%. The basic reason for the growth of the money supply is identified as continuing central government budget deficits financed by the creation of reserve money as a result of the purchase of treasury bills and other government securities by the RBI. The report considers that the transfer of resources to the government by inflation is highly undesirable, because it is regressive and disruptive, and because even moderate inflation carries the risk of getting out of hand.

2.49 In addition, the report criticizes a number of other aspects of the monetary system, in particular noting:

(a) That funds are obtained by the government at negative or low rate interest rates through the absorption of treasury bills (interest rate 4.6%) and medium and long term securities (maximum interest rate 10.5%) ^{1/} by the RBI and by the requirement that the banks invest a minimum proportion of their liabilities in liquid assets and government and other approved securities in accordance with the statutory liquidity ratio (SLR). The committee argues that the consequent availability of funds to government projects at less than their opportunity cost leads to distortions in spending, particularly the failure to fully take into account the economic cost of delays in project completion.

(b) That together with directed low interest loans to priority sectors, the tying up of large proportions of the commercial banks' assets (at present 37% of net demand and time liabilities) in relatively low yielding SLR assets has reduced their profitability and concomitantly has inhibited desirable increases in deposit rates (which have been negative in real terms during a number of the past 15 years) while artificially increasing the spread between deposit and non-priority lending rates.

(c) That the system has prevented the emergence of broad based markets for treasury bills and other short term instruments as well as for medium and longer term government bonds, which has in turn meant that the open market purchase and sale of the securities has not been a practicable means of credit control by the RBI.

2.50 In accordance with these findings the report recommends that treasury bills and government securities should be issued at interest rates which will make them attractive to banks, financial institutions and the general public. Most of the government deficit would be covered by the issue of medium and long term bonds; treasury bills would only be sold in small quantities to cover unanticipated variations in government revenue and expenditures. Targets for monetary expansion would be determined after taking account of "acceptable" levels of inflation (4% is suggested), projected real output growth, and the elasticity of the demand for money with respect to real output. The money supply would be managed by the RBI by varying the cash reserve ratio as at present, but in addition by open market operations in government bonds and by operations in what is envisaged to be a greatly expanded and more sophisticated short term money market.

2.51 The report is also critical of what it considers to be the excessive rigidity and the extreme complexity of the system of administered interest rates, and recommends a much simplified system in which the RBI would set a few key interest rates, all of which would be positive in real terms namely; the rate on treasury bills, the long term government bond rate, a maximum bank deposit rate, and a minimum basic bank lending rate. The present array of concessional interest rates would be reduced to two, one equal to the minimum basic bank lending rate and another "somewhat below" this rate. Subject to these constraints, interest rates would be flexible and would be determined by supply and demand including "controlled competition" between the banks. However the present system of sectoral quantitative credit

^{1/} Increased in 1985 to 11.5%.

allocations in accordance with Plan priorities would be retained, the difference being that (with the exception of priority sectors) interest rates would ration excess demand and thereby facilitate more effective use of the credit which is made available. At the same time the report envisages that the proposed system would allow interest rate policy to become an instrument for short term monetary management. As regards the banks, it notes that the elimination of price competition due to the present system of administered rates is an improvement in, customer service, while low controlled interest rates have undermined the motivation to provide adequate and timely credit to priority sectors. For lending to these sectors, rather than low interest rates the report emphasizes the importance of better coordination between the banks and development agencies, better training of bank personnel, and the urgent need to control the quality of bank portfolios and overdue loans.

2.52 Along the lines of earlier reports, the Chakarvarty committee recommends replacing the Indian "cash credit" system of the commercial banks with a basic loan and bill finance lending system, with special cash credit accounts limited to contingencies resulting from delayed payments by public sector units and government agencies, and other emergency contingencies. As regards the former it also repeats recommendations of earlier committees that interest penalties should be applied for delayed payments. However, despite the recommended move to a loan and bill credit system the report envisages retaining the present credit authorization system (CAS) under which the RBI exerts detailed controls over the commercial banks' lending.

2.53 In the 1986/87 budget speech it was announced that the government proposed to accept the principle of monetary targeting, as well as the broader definition of the budget deficit recommended by the Chakarvarty Committee which would include the Reserve Bank's purchases of long dated government securities as well as its purchases of treasury bills. But an unresolved issue in the Chakarvarty report and hence for monetary policy is whether monetary targeting can be reconciled with the recommendation that key basic interest rates should be controlled in real terms. A major difficulty for the government would also be the substantial increase in interest costs - already the largest single item in the central budget - that would be involved if budget deficits continue on the scale of recent years (see Chapter 4 for more detailed discussion of this issue). A more acceptable approach would possibly be to reduce the budget deficit by allowing government enterprises to cover increasing proportions of their plan expenditures by borrowing directly from the capital market. In February 1986 some indication that this policy might be followed was indicated by the approval of bond issues by three public sector corporations, and further such bond financing was provided for in the 1986/87 budget. This development is in line with efforts to improve the efficiency of public enterprises by giving them more managerial and financial autonomy, including autonomy in pricing decisions. However, it will be important to ensure that some discipline is imposed on their capital expenditure and operations by exposing them to private sector competition or competition from imports, or if neither of these are feasible, by broad but rigorous government auditing. Another problem is that the bond issues so far approved have tax exemption and other special features which threaten to disrupt the market for private corporate debentures.

H. Poverty: Recent Trends and Policies

2.54 National Sample Surveys (NSS) on household consumption expenditures, which provide the main data source for the assessment of poverty incidence and changes therein, are since the early seventies only held every five years, and the results in most cases become available only after a considerable time lag. In the context of the preparation of the Seventh Plan, the 1983 NSS Survey was however processed quickly. As interpreted and published in the Seventh Plan, the result is a significant reduction in poverty incidence since the last survey in 1977/78.

2.55 Over the past several years, the emphasis of the Government's direct anti-poverty programs has been aimed at improvement of quality of services provided rather than financial expansion. Over the last two years of the Sixth Plan, the annual amounts invested under the Integrated Rural Development Program (IRDP) rose by about 9% in real terms. ^{1/} At the same time, the total number of beneficiaries rose by about 15% to nearly 4 million, implying a reduction in the amounts per beneficiary by about 6%. During the Plan period, there has been a significant shift towards scheduled castes and scheduled tribes, so that in 1984/85, 44% of the beneficiaries belonged to these communities. On the basis of earlier experience, there has also been a continuous shift in this program away from the primary sector (especially milch cows) towards tertiary activities.

2.56 Presumably due to the tightening of the program content and a shift of emphasis from quantity to quality, during the first 9 months of 1985/86 (the first year of the Seventh Plan) only 1.53 million households were assisted as against the annual target of 4 million households. Of the total Seventh Plan outlay of Rs 18,640 million at 1984/85 prices, the revised estimate of expenditure for 1985/86 is Rs 2,870 million (Rs 2,730 million assuming an annual price rise of 5%), which amounts to 14.6% of the Plan outlay. The budget for 1986/87 stepped up the outlay to Rs 4,280 million (Rs 3,860 million assuming annual price increase of 5%), amounting to 20.7% of the Plan outlay. The budget retains the physical target of 4 million households, but the ratio of old recipients to new has been altered from 50:50 as given in the Plan to 75:25.

2.57 With regard to employment support, the employment provided under the National Rural Employment Program (NREP) in 1984/85 went back to the level of about 350 million mandays reached in 1982/83, after a decline in the favorable agricultural year 1983/84. In addition, from August 1983 onwards, the Rural Landless Employment Guarantee Program (RLEGP) has been instituted and under this program about 260 million mandays of employment were generated during the remaining 20 months of the Plan. This is therefore a significant expansion in the public employment program. Together with some State activities (notably the Maharashtra Employment Guarantee Scheme) these programs provide significant support for the poor in times of need, although they cannot of course hope to make a substantial contribution to the overall level of employment in the economy (about 50,000 million mandays per annum).

^{1/} For recent changes in allocation and actual expenditures on rural development, see para. 1.17.

2.58 A relatively recent development (Fall 1985) has been the decision to increase subsidized distribution of foodgrains. This is being attempted in several ongoing programs, especially the Integrated Tribal Development Program, but also the employment and women and children support schemes.

2.59 While not specifically aimed at the poor, the Minimum Needs Program encapsulates Government activities in elementary and adult education, nutrition, rural health, water supply, electrification, roads and housing, and urban slum improvement. Of course, in some of these sectors (e.g. education, health) most of the expenditure is non-Plan. Still, it is significant that over the last two years of the Plan, overall expenditures on minimum needs increased by nearly one-third in real terms. The increases were especially significant in education and nutrition.

2.60 At a more general level, price developments of course continue to be of great importance to the poor. On an annual basis, wholesale prices were increasing at a rate of over 9% p.a. in 1983/84. A similar rate of increase was occurring in the consumption price index for agricultural laborers, and an even higher one in the index for industrial workers. The very good harvest of 1983/84 brought the increase in foodgrain prices however virtually to a halt in 1984/85, and in the course of that year, wholesale prices decelerated to about 5% p.a. The consumption price index for industrial workers followed suit, and the one for agricultural laborers virtually stabilized. This was a very favorable development for large segments of the Indian population. After a brief flare-up early in 1985/86, due to an increase in administered prices, the rate of wholesale price increase has settled at about 5% p.a. Within this total, however, foodgrain prices have re-accelerated to an annual rate of nearly 9% p.a., with potential unfavorable consequences for the poor. However, up until the present, consumer prices for industrial workers have roughly stayed in line with the increase in wholesale prices, while the rate of price increases for agricultural workers has remained lower.

2.61 Finally, the Government's regulatory and trade policies, discussed elsewhere in this chapter, will also no doubt influence the poor. To the extent that they succeed in increasing efficiency in the economy and stimulating growth, the longer-term effect may be expected to be positive. This is the general experience in other countries, and is also strongly suggested by the recent reduction in poverty incidence in India during a period that per capita consumption was, in contrast to earlier periods, increasing relatively rapidly. However, the benefits will tend to accrue generally to the public at large in the form of lower prices and, eventually, higher employment and incomes. The costs of adjustment may however have to be borne largely by specific groups, and this raises obvious dilemmas for the Government.

Chapter 3

SECTORAL INVESTMENT AND POLICIES

A. Introduction

3.01 India's economic performance during the last decade can be given high marks for having avoided serious economic crises, despite severe economic shocks in the world economy. Unlike most other developing countries, inflation has never been out of control; debt service has remained at prudent levels; the real effective exchange rate has not been severely distorted; savings and investment rates have improved; and the overall allocation of investment among major sectors has by and large reflected economic priorities. Yet, overall economic growth has been unimpressive even among low-income countries with much lower investment rates.

3.02 As analyzed in detail in our previous reports ^{1/}, despite a significant increase in the investment rate (from about 11.0% in the 1950s to 23% in the early 1980s), the trend growth of output has remained more or less stable at about 3.5% to 4.0% per annum, implying high and rising capital output ratios. It is clear that the high capital output ratios are partly explained by changes in the composition of investment. The rate of growth of investment has generally been fastest in those sectors with the highest capital output ratios (i.e., power, mining and irrigation). In other words, investment has been shifting (with good economic justification) increasingly towards those sectors that use more than the average amount of capital to effect a unit increase in output, explaining, in part, the rise in the total ratio. However, no doubt, a large part of the rise in capital output ratios is also explained by deterioration in the efficiency with which existing and new capital is used.

3.03 Factors responsible for low returns to capital are many. They span the spectrum from inefficiencies in allocation of investment at the subsector level to poor maintenance practices at the plant level. The Seventh Plan conveys the critical need to improve economic efficiency more strongly than any previous Plan. The proposed changes are still difficult to read in numbers, because the distribution of public resources among principal sectors remains by and large unchanged. ^{2/} Yet those familiar with preceding plans could grasp the qualitative change immediately. The desire to intensify the economic process, to obtain more from the capital stock set up during the past decades including that still under construction, is translated into greater emphasis in maintenance of the existing capital, to better

^{1/} Economic Situation and Prospects of India, April 7, 1982.

^{2/} There is a marked increase in the shares of social sectors as well as communication, science and technology areas mostly at the expense of the mining and manufacturing sector. The shortfall in the public investment in mining and manufacturing is, however, covered by higher private investment reflecting Government's emphasis on greater private sector role in the industrial sector.

management, to complete ongoing projects before starting new ones. Hesitantly and guardedly, it favors market incentives, rather than directives and resolves to restore the full economic role to prices, costs, and wages. Courage to confront foreign competition is reflected in the Plan's accent on modernization of processes and equipment, and increases in the size of economic units. Finally, the realization that the bureaucracy neither holds answers to all questions nor possesses the keys to the future and that both depend on the initiatives of the more dynamic forces of the society is reflected in the willingness to open doors to the private sector, permitting it to enter sub-sectors it had limited access to, such as for example, road building or power generation. It is also reflected in attempts to remove slowly subsidies and similar budget transfers so as to make investors and producers in both the private and public sector directly responsible for results of their decisions, and therefore improve these decisions.

3.04 In Chapter 2, we have discussed policy initiatives taken during the past year to improve growth and efficiency in the economy. This chapter addresses the implications of current, anticipated and desirable sectoral policies, of past and planned investment, and their combined impact on growth and efficiency in six principal sectors of the Indian economy--agriculture, energy, manufacturing, transport, housing and urban development and, population.

B. Agriculture

The Sixth Plan

3.05 For India's agriculture, the Sixth Plan brought significant achievements not the least of which is the opportunity to reorient public policy to tackle the formidable problems that remain in the sector. During the Sixth Plan the agricultural growth rate accelerated from the 1.6% recorded during the previous decade to 4.5%. This figure probably overstates growth during the Sixth Plan because of especially low production in the base year (1979/80). Using a three-year moving averages, this increase is still impressive although less dramatic: Production grew at a 2.0% rate in the 1970s then rose to a 2.9% rate in the 1980s. Thanks to rapid growth in wheat production and notable successes in some areas with rice and coarse grains, a trend rate (using three-year moving averages) of growth in foodgrains of 3.4% was maintained during the Sixth Plan enabling the country to end large-scale imports of cereals and to accumulate a sizable grain reserves.

3.06 There were also noteworthy results in non-cereal crops. Oilseeds production reached a record level in 1983/84 which was sustained in 1984/85. There were also successive (1981/82, 1982/83) sugarcane crops of unprecedented magnitude (which led however to steep price reductions and a cyclical decline in production) and an extraordinary expansion of fruit and vegetable production. These advances in crop production were accompanied by broader changes in the rural economy:

- o Significant increases in the proportions of farmers applying high-yielding varieties (HYVs) and fertilizers, benefiting from controlled irrigation sources, and using tractors, pump sets, and other mechanical aids.

- o An enhanced capacity of farmers in both irrigated and unirrigated areas to sustain production levels in years of insufficient and/or irregular rainfall.

- o A buildup of storage, processing, and transport facilities, enabling producers in a number of areas to diversify and to cater to needs arising in the numerous fast-growing urban centers.

- o A reduction in agriculture's share of the labor force and other structural changes that suggest some marginal decline in the traditional (but still substantial) role of farming as the residual provider of income support to the poor.

3.07 However, these successes need to be viewed against an array of other somewhat more sobering facts. The number of rural poor remains very large. Agricultural performance has varied widely between states and regions. These areal disparities can be traced to sizable differences in yields between and, strikingly, within areas of irrigated and unirrigated farming. Low average productivity in India's growing expanse of irrigated agriculture is attributable in part to poor design and construction and to inefficiencies in system operation. With expansion of irrigation becoming more expensive and constrained by technical, social and environmental issues, the importance of greater efficiency in the use of existing infrastructure has increased. The lowest agricultural productivity is recorded in rainfed areas which make up 70% of gross cultivated area and account for 42% of foodgrain production and more than three-fourths of the production of commodities like oilseeds, pulses, fuelwood, and fodder for which increases in domestic supplies have lagged well behind demand. Rainfed yields are low even in the large areas (representing at least a third of total rainfed cultivation) of adequate and assured rainfall for which readily applicable technical packages could be made available.

The Seventh Plan

3.08 Productivity in irrigated and rainfed farming must be enhanced if Indian agriculture is to attain important sectoral objectives. A high priority in the Plan is ensuring that domestic foodgrain production (now that self-sufficiency has been attained) continues to increase at a rate that provides for the needs of a growing population. In setting target levels for foodgrain production (180 million tons) and publicly held grain stocks (23 million tons), the Plan exhibits considerable caution regarding the significance of recent trends in cereal production.

3.09 This cautious stance is understandable and appropriate given the broad objectives of national self-sufficiency and social justice (see Chapter 1), and in view of the difficulty of anticipating the future path of production. Nevertheless, the implied 3.7% target growth rate for foodgrains may be questioned on several grounds. First, this rate, which is higher than that achieved during the Sixth Plan and earlier Plans, will be difficult to attain -- at least at a reasonably low cost -- considering the fact that the Plan also calls for significant production increases in various crops which compete with foodgrains for land and other inputs. Secondly, the 3.7 growth target may underestimate the difficulties of disposing of current surplus stocks through exports (markets are weak and India is a relatively high cost producer) and expansion of "food for work" programs at home (there are sig-

nificant organizational impediments) and in view of the high financial costs and storage losses entailed in maintaining large public inventories. Setting India's requirements (taking account of the growth rates in population and per capita income expected in the Seventh Plan) against the costs of holding large stocks, a somewhat lower target growth rate for foodgrains production would seem to be appropriate.

3.10 While aiming at continued rapid growth in cereal production, the Plan sets ambitious targets for production of oilseeds, cotton, sugarcane, and other non-foodgrain crops for which demand is already high and expected to rise rapidly as per capita income grows. The Plan also attaches considerable importance to the goal of broadening the geographic profile of agricultural production. The Plan expects that a more balanced pattern of production by region would put increased purchasing power in the hands of the rural poor, thereby generating higher effective demand for cereal and reducing requirements for storing and transporting foodgrains. As discussed in Chapter One, the Plan looks to production breakthroughs in rainfed agriculture as the means of narrowing regional disparities and also increasing the availability of various dryland crops (oilseeds, pulses) which are in short supply. Finally, the Plan sets forth several significant qualitative goals including resource conservation and preservation of often fragile rural environments, and containing input subsidies, mobilizing greater revenues in rural areas, and limiting the scope (and proliferation) and complexity of Government rural development initiatives.

3.11 The Plan gives a broad sense of the physical inputs (fertilizer, area under irrigation) needed to reach different quantitative objectives and also enumerates various instruments and programmatic "planks" which are to be relied upon to attain different goals. The following paragraphs examine various issues that need addressing if the agricultural policy vehicles available to the Government are to be effectively utilized.

Irrigation

3.12 The Seventh Plan calls for rapid expansion of irrigation based on quick completion of ongoing projects, rapid utilization of potential, and better water management. The Seventh Plan target for expanding irrigation potential (13 million hectares) exceeds that accomplished during the Sixth Plan by 2 million hectares. The public resources allocated to irrigation in the Seventh Plan are 34% larger in real terms than what was actually spent during the previous Plan.

3.13 Unfinished major and medium-size projects capable of yielding full or partial benefits during the Plan period are to be funded on a priority basis. Completion of these surface projects is expected to consume nearly two-thirds of the irrigation allocation. New starts are to be restricted to medium-size projects and minor schemes in backward areas. Other stated irrigation objectives also focus on extracting the most from past investments and on achieving quick results: concentration on field channel construction, land-shaping, and the introduction of rotational water supply; investments in drainage to solve salinity and water-logging problems; sufficient funding for adequate maintenance of distribution systems; and accelerated groundwater development, particularly in the East and Northeast. These and other objectives are to be addressed through measures such as improving the performance of Command Area Development Authorities; reviewing water rates with respect

to their adequacy to meet the cost of operations and maintenance (O&M) and provide a reasonable return on investment; and increasing farmers' involvement in water distribution and management. The financing of minor irrigation is to come from the banking sector, which is expected to more than double its credit provisions.

3.14 The thrust of this irrigation program, that of completing ongoing projects and improving utilization of existing assets, is commendable. However, the measures proposed, essentially involving the allocation of financial resources primarily to completing works in progress, appear inadequate to achieve desired results. For one thing, expectations of rapidly increasing irrigated acreage by completing projects hinge on substantial progress in States such as Uttar Pradesh (UP), Madhya Pradesh (MP), and Bihar in which irrigation expenditures and the pace of development during the Sixth Plan were well below what was anticipated. A similar observation applies to the achievements expected for command area development, construction of field channels, land levelling. The anticipated expenditures and accomplishments in this regard in Bihar, Orissa, Gujarat, MP and UP appear unrealistic, since they are much above what was achieved in the past, assuming those achievements reflected the implementation capacity as well as the respective propensities or abilities of the states to concentrate scarce resources on completing priority investments.

3.15 Beyond the specific proposals of the Seventh Plan, it seems clear that a very serious effort needs to be made to assess what constraints (organizational, technical, etc.) were encountered in the States which fell behind during the Sixth Plan and to define what remedies are to be relied upon to pick up the slack in these States. The Plan does propose what might be a general starting point, the preparation by each State of a long-term irrigation program, that should yield valuable guidelines for State-level actions. This exercise could begin at the project level with an analysis of the services each system can reasonably be expected to provide and the factors contributing to current sub-par performance. This assessment could culminate in the formulation of new, realistic operational plans for different schemes covering the operation of main canals, arrangements for distributing water through minors and watercourses, mechanisms to monitor and enforce fulfillment of schedules, maintenance practices, and sanctions against rule breakers. This bottom-up approach should identify various physical changes ranging from relatively inexpensive alterations to more costly rehabilitation and modernization measures (lining canals, adding in-system storage) needed to execute revised operational plans. These endeavors can also be expected to bring to the surface gaps and inadequacies in the experience, skills and attitudes of irrigation department managers and staff.

3.16 To implement this approach, States would need to undertake pilot projects to familiarize staff with the engineering, administrative, economic, and social problems that need to be resolved in devising operational plans that fit the situation in individual commands. Such experiments can readily extend to groundwater and/or drainage activities. Since operational improvements will require organizational and attitudinal changes, capacity-building efforts, and capital expenditures, States would also need to take decisive steps to redirect irrigation departments towards operational problems and to establish clearcut priorities for irrigation spending. Training would need to be reoriented and intensified (the Plan acknowledges the need for training

but provides no investment allocation for this purpose); support services need upgrading, and planning wings and monitoring and evaluation cells need strengthening. It is suggested that reconstituted planning agencies be mobilized to draw up realistic assessments of the irrigation possibilities and constraints in each State. These inventories would compare expenditure options according to their expected returns and the extent of the preliminary pilot work, management and institutional adjustments, training measures, and resource mobilization. These options could comprise completing ongoing projects, revising operational plans in existing systems, encouraging groundwater exploitation, raising maintenance outlays, constructing drainage systems, and starting new projects, and upgrading of support services needed for execution. After review, these rankings of expenditure alternatives (and accompanying organizational changes) can be recast as State irrigation sector plans.

3.17 It is likely that such State irrigation assessments would identify new irrigation projects worthy of support during the Seventh or later Plans. Accordingly, the ban on new project starts during the Seventh Plan should not perhaps be seen as an absolute prohibition. It would be a mistake, of course, to invest scarce resources in upgrading and rehabilitating existing systems if additional potential can be created more economically by initiating new works. While allowing for exceptions (as just described), the restriction on new starts is worth preserving if States are thereby encouraged to improve returns from existing assets.

3.18 Groundwater measures suggested in the Plan may be difficult to implement on the scale envisioned. For example, the proposed expansion of lending to minor irrigation cannot avoid the problems which the institutional credit system is experiencing (see paras. 3.27-3.30). As regards Eastern India, what appears to be needed is not comprehensive groundwater surveys (there is too much water already in evidence) but measures to overcome the indivisibility of private tubewell technology. Pumps and wells are too big and costly for the many operators of small holdings in Eastern India. One possible solution is to set up and run public tubewells benefiting large numbers of farmers. A new technological and organizational approach to these schemes, which is being tested in Eastern UP and West Bengal, uses automatic distribution through underground pipes and dedicated powerlines to address problems of unreliable operation (because of power shortages, human interference) encountered in the past. Other possible solutions are also worth exploring on an experimental basis. For instance, land consolidation measures complemented by bank credit for minor irrigation may widen the field for private tubewell technology. Another approach meriting renewed consideration is group ownership and operation of tubewells, which has proven effective in some circumstances in Bangladesh.

3.19 Finally, it is not clear how Plan objectives such as raising financial allocations to ensure better maintenance of canals and distributaries, making sure water charges are adequate to meet operation and maintenance costs plus a reasonable return on investment, and involving farmers in water management and distribution are to be achieved. A possible way out is suggested in the Plan's proposal to earmark outlays to insure timely completion of major projects. This solution, that of earmarking revenues, could also be applied to the objectives of fixing and collecting water charges and managing and maintaining systems. This would entail a devolution of system operation from the state level to the users themselves. Establishing a linkage between

payment of water charges and services rendered would give farmers a reason to cooperate and to be involved. If the budget of each irrigation operations and maintenance circle depended on water-charge collections, engineers would have a heightened interest in both water charges and efficient operation. By establishing this linkage, the earmarking of water charges for operations and maintenance, system by system, would help achieve all three objectives. This series of changes conjures up the prospect of irrigation systems run as efficient public utilities by the users.

Agricultural Extension

3.20 The Seventh Plan recognizes that agricultural research and extension require streamlining and strengthening if productivity in irrigated and rainfed areas is to be enhanced. Concerning extension, a professional service utilizing the "Training and Visit" (T & V) System, which features fixed schedules of farm visits and regular in-service training for village extension workers (VEWs) has been adopted in 14 States. Initial experiences with this approach (which replaced an older system that relied on multi-purpose workers) have been favorable. Indicated organizational steps, such as establishing a single administrative line of command, setting up monitoring and evaluation units, and instituting supervision, recruitment, and training procedures have been completed. Generally, T & V has been well received in the State Departments of Agriculture, while the morale of VEWs has improved as they have gained confidence in their ability to assist farmers. Promising production outcomes and yield increases have been noticed in States which were early adoptors of the T & V approach to extension.

3.21 Despite these accomplishments, India's extension services remain vulnerable to various pressures which must be resisted if the reforms are to yield sustained benefits. One nagging problem is the continued involvement of extension staff in non-technical activities such as the distribution of inputs and the administration of target-oriented, subsidy-based programs. Disruptive demands on the VEW's time also stem from the emergency powers of the District Collector (who has supervisory responsibility over all district-based staff) to requisition staff from any department.

3.22 Looking beyond these residual "start-up" problems, a major technical challenge facing extension is to enhance steadily the specificity and utility of assistance provided to farmers. Improvements in extension quality will require higher entry qualifications for field positions and intensified in-service training efforts. For instance, Subject Matter Specialists (SMSs), who are critical actors in transferring technology in fortnightly sessions with VEWs, often lack the expertise needed to fulfill their responsibilities. SMSs must be added for topics, such as cultivation of oilseeds and horticulture, in which there is growing farmer interest. Many VEWs are unable to undertake the sort of diagnostic and prescriptive tasks required in advanced and relatively heterogeneous farming areas. As farmers become better educated and more sophisticated in their use of inputs and cultivation of different crops, VEWs will have to become increasingly knowledgeable and capable themselves.

3.23 Improvements in extension quality will require committed and imaginative management. T & V requires field level (technical and administrative) initiatives, receptivity to farmers' problems, and continuous interchange between departments and professions, and hence is at odds with a centralized,

seniority-bound bureaucratic culture. Accordingly, a successful transition to a flexible, field-oriented (devolved) and professional management system requires the explicit recognition of the need for such improvements by senior administrators.

Research

3.24 The challenge in the Seventh Plan will be to consolidate and extend the process initiated in the National Agricultural Research Project (NARP). NARP has begun to strengthen the capability of State Agricultural Universities to conduct location-specific research, the results of which can be disseminated through the extension service. By 1985, projects supported by NARP were underway or due to start in 82 of the 127 major agroclimatic zones that have been delineated in India. These investments were preceded by State-wise and zonal reviews to identify local production constraints and opportunities, provide information on yields and yield potentials, take stock of existing research work, and set tentative priorities.

3.25 With research stations due to be established in an additional 30 agroclimatic zones, the Seventh Plan provides an opportunity to capitalize upon various improvements introduced in the late 1970s. Worthy objectives directed toward improvement in research system planning and management include preparation of improved zonal inventories (to help establish priorities for research, extension, and other agricultural services) and the emergence of Zonal Research Advisory Committees as forums in which research and extension programs are formulated. In addition, the performance of research staff can be improved. Management and supervision procedures and incentives need to be devised which lead to intensified efforts to find solutions to farmers' problems.

3.26 The nature of the work done in the decentralized research system is likely to further evolve in the next five to ten years. Awareness is growing, for instance, of the high costs of creating research stations in different farming environments. The 121 zones which have been delineated only approximate the diversity of agricultural settings within the country. Since constructing facilities for all circumstances is neither possible nor necessary, the capacity of researchers (and extension agents) to undertake on-farm experiments, trials, and demonstrations needs enhancing.

The Institutional Credit System

3.27 The Seventh Plan acknowledges that the agricultural credit system after 20 years of institutional proliferation, geographic expansion, and rapid growth in lending, is in a "sad state." The Plan draws attention to symptoms, such as low rates of loan recovery, and identifies contributory factors, including willful default, interference by State Governments, and uncertain leadership by the National Bank for Agriculture and Rural Development (NABARD), which serves as a refinancing agency for short- and long-term farm credit. Despite recent operational difficulties, the Seventh Plan envisages a doubling of disbursements during the next five years. The Plan looks to innovative steps by NABARD and improved coordination of the credit system's component institutions to avoid further strains as the volume of lending grows.

3.28 In the past, the longstanding problem of poor loan recoveries from farmers was addressed by restraining NABARD and its predecessor agency, the Agricultural Refinance and Development Corporation (ARDC), from refinancing those rural bank branches with high levels of overdues. However, the criteria thus introduced typically allowed even the weakest lending institutions to remain eligible for almost unlimited refinancing from ARDC. At times, these "eligibility" standards were augmented with rehabilitation measures designed to improve the institutional performance of weak Land Development Bank branches. Rehabilitation programs all fell short of expectations because they did not address the staffing and procedural shortcomings and financial and institutional weaknesses of the participating banks.

3.29 Current problems seem so severe as to require measures that go well beyond past steps. For instance, NABARD could use the autonomy and oversight powers that would enable it to assist cooperative and commercial banks in improving staff training and making it more relevant to the realities of rural banking. Also in need of strengthening within the apex institution and branch levels are reporting, monitoring, and evaluation procedures to ensure corrective feedback, adequate supervision, and improved loan performance. NABARD seems unlikely to bring about needed procedural and institutional changes unless its own management is strengthened, and unless the objective of continuously expanding disbursements is very much more tempered by consideration of the consequences for loan appraisal, supervision, and recovery. It would also help if NABARD was permitted to exercise effective control over the total volume of institutional credit flows to agriculture so that corrective actions can take hold.

3.30 These and other matters are to be addressed in a program of institutional development, starting in July 1986. The steps intended to be taken include introduction of revised eligibility criteria governing the flow of funds from NABARD to rural bank branches; strengthening of NABARD's planning, monitoring, and control functions and training and rehabilitation activities; a pilot scheme to explore ways of using branch-level staff to increase the volume and quantity of lending; and execution of a comprehensive review of the credit system to provide recommendations and guidelines for further changes in policy.

Forestry and Resource Conservation

3.31 The Seventh Plan continues to focus attention on the social forestry programs launched and pursued with good results during the Sixth Plan. The most successful social forestry initiative has been farm forestry. Private farmers have reacted vigorously to market opportunities for poles, small timber, pulpwood, and to a lesser extent, fuelwood. This response was encouraged by subsidized distribution of seedlings, extension advice and other material and financial incentives from State Governments.

3.32 Assuming that demand for poles, small timber, pulpwood, and fuelwood remains strong, it should be possible to de-emphasize subsidies which, in any case, appear to have accrued (contrary to intentions) mainly to wealthier farmers and which inhibit the development of privately-owned nurseries selling seedlings and offering other services. Government agencies might, instead, concentrate on intensifying research activities in forestry and agro-forestry, certifying the quality of stock made available through private channels, and improving the geographic scope and effectiveness of farm

forestry extension advice. There is clearly a case for bringing farm forestry into the ambit of the Training and Visit system of agricultural extension which is in place in most States. This is already occurring in Gujarat and in several other States. As regards other aspects of social forestry, challenges remain in respect of such objectives as developing the means and institutional capacity to satisfy more effectively the fuelwood requirements of the rural and urban poor and to enhance environmental conservation.

3.33 Though considerable emphasis has been properly given to social forestry in the last five years, forestry for revenue generation (on public lands) and environmental protection has been relatively neglected. As about half of the land gazetted for forestry is treeless, and demand for forest products is rising (including for those products unlikely to be produced on a small scale private basis), it appears that tree planting by Forest Departments and others on Government lands needs to be considerably increased. This is an important complement to farm forestry by private individuals, and also an important public vehicle to help meet fuelwood production needs of the landless and those with incomes at a level which precludes purchase of fuelwood from private sources. The Seventh Plan recognizes that Government leadership and investments are indispensable if these goals are to be attained. The priority attached to forestry is reflected in a resource allocation which is more than twice in real terms what was set aside for forestry in the Sixth Plan.

3.34 The timber, fuelwood, and fodder provision, environmental conservation, and related goals of social forestry will not, however, be easily achieved. There are major technical concerns to be addressed before public initiatives can be fashioned. For instance, research needs to identify tree species which are appropriate for different ecological settings and for various economic ends. There are also intricate social and organizational challenges to resolve including finding effective ways of preserving the livelihood of tribal groups while rehabilitating degraded lands and eliciting public participation in planting, maintaining and harvesting woodlots on common lands, and developing publicly-owned wastelands.

3.35 Addressing these and other tasks will depend on further improvements in forestry organizations and related institutions. Many States have established social forestry wings which now require strengthening in respect of their planning, training, extension, management, coordination (with private voluntary organizations) educational, and monitoring and evaluation capacities. The recently established National Wastelands Development Board, which has been made responsible for formulating plans and programs for the development of wastelands, as well as plans to create a Social Forestry Support Office in the newly established Ministry of Environment and Forests should give impetus to institutional development in forestry.

The Policy Environment

3.36 Efforts to improve the effectiveness of various functional systems and services could be considerably enhanced by a reappraisal of price, market (including trade) and subsidy policies. The Seventh Plan recognizes that agricultural input and food supply, storage and transport costs have become financially burdensome and that foodgrain procurement policies have resulted in a production imbalance. Output and public stocks of superior foodgrains

have grown rapidly while, because of unfavorable relative returns, shortages persist for oilseeds, pulses and other crops. The remedy suggested in the Plan, that of providing guaranteed markets at remunerative prices for these other commodities by mounting procurement operations similar to those in place for rice and wheat, may be insufficient (and costly) in itself and may not be required if other measures are adopted.

3.37 There are four areas of policy which could warrant further consideration. First, the foodgrain economy appears to be in considerable disequilibrium as evidenced in the high carrying costs being incurred to hold large public stocks by the Government and its seemingly limited options (weak export markets, organizational constraints on expanding "food for work" programs at home) for disposing of surplus supplies. As suggested above, it may well be that the production environment has changed from a setting of chronic domestic deficits in foodgrains to one in which over a period of good and bad years the likelihood of aggregate surplus have considerably increased. In this context, the Government can endeavor to improve the organization and efficiency of instruments to distribute foodgrains to the poor, through schemes such as the Rural Landless Employment Guarantee Program and the Employment Guarantee Scheme as practised in Maharashtra. At the same time, development of export markets (in wheat, if not rice) and a reassessment of optimum public stock needs, given the improved overall level of food security now achieved, could form important elements of public policy. A basic instrument for influencing the composition and location of foodgrains production will, however, be agricultural price policy. For the 1985/86 season, the procurement price for paddy (common variety) was raised by 3.6% from Rs 137/quintal to Rs 142/quintal, while for wheat the procurement price per quintal rose from Rs 157 to Rs 162 (an increase of 3.2%). This increase in procurement prices was followed by an increase (effective January 31, 1986) averaging 10%, in the retail price of fertilizer. In nominal terms, the net effect of these two changes amount to a marginal reduction in farm profitability. Meanwhile, the implied reduction in profitability appears appropriate in view of the excess supply situation discussed above. Looking ahead, prospects for parity between foodgrain supply and demand in India remain uncertain. Much of the additional production must come from eastern India where yields are low but potential is high and where, in recent years, there have been signs that this potential is starting to be realized. Price policies will need to take account of this objective, while avoiding the accumulation of excessive public foodgrain stocks and recognizing the objective of encouraging more rapid productivity increases in other crops such as oilseeds and cotton.

3.38 Second, the type of encouragement to be provided to producers of non-foodgrain crops needs careful review. The Plan's proposal to initiate procurement operations for oilseeds, pulses, and other major crops which remain "unprotected" is somewhat worrisome, since mechanisms in place for crops such as cotton, sugar, and jute have proven expensive and largely ineffective (judged by the lack of price stability and sharply fluctuating output levels). While the aims and intended scope of current and proposed marketing interventions are not set out clearly in the Plan, the apparent goal of providing stable and favorable returns for a range of crops could eventually saddle the country with a rigid pricing and production structure in which comparative advantage, whether for individual farmers, localities, or the economy as a whole, disappears from view. In fact, the Plan itself

cautions against the efficiency risk of developing entrenched "cost plus" systems elsewhere in the economy.

3.39 Third, public marketing interventions in other spheres are worth reviewing. Central and State-owned seed corporations have operated fairly inefficiently and have not succeeded in providing adequate supplies of good quality seeds. If permitted, private farms could take over the bulk of production and distribution activities leaving to public agencies to focus more on such important functions as maintaining a gene bank, certification and quality control. Another key policy has been to promote cooperatives as favored market intermediaries. This approach is perpetuated in the large Seventh Plan allocation to the cooperative movement (covering equity contributions, loans, investment, and part of recurrent spending). The Plan calls attention to the successes of cooperatives in several states. However, there are numerous instances in which cooperatives have not flourished. Further assessment of the reasons for success or failure seems warranted; consideration needs to be given not only to managerial and training issues but also to the impact of various regulatory and directive interventions of Government.

3.40 Fourth, input subsidies have been rising rapidly. The Plan observes that a portion of the subsidy benefits has been accruing to operators of larger holdings who can afford to pay prices which reflect the full costs of providing inputs and who should probably be encouraged to make more efficient use of water, fertilizer, and electricity. Shortfalls in resources for agricultural investment and recurrent expenditures could surely be eased if levels of subsidy payments were more quickly contained. As the Plan notes, this could be achieved in part by withdrawing subsidies to those with the wherewithal to pay for inputs and services.

C. Energy

3.41 The Sixth Plan was drafted at the time of the second oil price shock. It was then generally assumed that oil prices would continue to rise, and one of the most pressing problems India faced was to reduce the high cost of oil imports which in 1980/81 had reached almost 80% of export earnings. In response to this situation, the Government adopted a two-pronged strategy, which aimed at increasing domestic energy supplies, in particular the output of oil, and at restraining the growth of petroleum product consumption. To achieve these objectives, the Government re-allocated a large share of public investment resources to the exploration and production of oil, coal and power, and implemented measures to reduce the overall growth in energy consumption and to encourage the substitution of oil products with other fuels.

3.42 As a result of these efforts, domestic production of crude oil and natural gas increased nearly 2.5 times during the Sixth Plan (Table 3.1). India's dependence on crude oil and oil product imports declined from more than 60% to 30%; coal output increased by more than 40%, and power output by about 50%. Despite increases in energy supplies, widespread and frequent shortages of both power and coal remain, and efforts to slow the growth of oil product consumption have been largely unsuccessful. In particular the demand for middle distillates (kerosene, diesel oil and turbine fuel) continued to grow quite rapidly. On the other hand, additions to oil reserves have not kept pace with the growth of domestic oil production. With domestic oil production leveling off now and a reserves-to-production ratio of about

17 years, India's oil industry operates on a rather narrow margin, and unless India succeeds in discovering new reserves, its dependence on oil imports is likely to rise substantially by the early 1990s. At the same time, the growing scarcity of fuelwood and other "traditional" fuels places increasing pressure on hydrocarbon and power supplies.

Table 3.1: FIVE-YEAR PLAN TARGETS AND ACHIEVEMENTS

	<u>1979/80</u>	<u>1984/85</u>		<u>Actual</u>	<u>1989/90</u>
	<u>Actual</u>	<u>Sixth Plan Targets</u>	<u>Actual</u>		<u>Seventh Plan Targets</u>
		<u>Original</u>	<u>Revised</u>		
Crude Oil					
Production (mill. tons)	11.8	21.6	29.4	29.0	34.5
Natural Gas					
Production (bill.cm)	2.8	N.A.	N.A.	7.2	14.9
Coal					
Production (mill.tons)	103.9	165.0	152.0	147.4	226.0
Electric Power					
Capacity (Gigawatt)	28.4	48.2	42.5	42.5	64.7

Sources: Sixth Five Year Plan, 1980-85; The Seventh Five Year Plan, 1985-90; Indian Petroleum and Petrochemicals Statistics.

3.43 The years ahead will undoubtedly strain the capabilities of the energy sector as it aims to meet the energy needs of an economy growing at a rate of 5% a year. To the extent possible, India will try to meet these energy needs from indigenous energy resources and without further major increases in the allocation of public investment resources to the energy sector. The Seventh Plan responds to this challenge by emphasizing:

- (a) the accelerated exploitation of coal, hydro and nuclear power resources;
- (b) the intensification of exploration for oil and gas;
- (c) implementation of appropriate policies to assure the efficient utilization of large gas resources;
- (d) the management of energy demand, in particular with respect to the growing demand for oil (through formulation of a national transport fuel policy, the implementation of efficient petroleum product pricing policies), etc.; and incentives for energy conservation and inter-fuel substitution; and
- (e) the exploitation of renewable energy resources through reforestation and expanded use of biogas, biomass, wind, and solar energy, to meet in particular the energy needs of rural communities.

3.44 To provide companies and institutions in the energy sector with the means to meet the targets of the Seventh Plan (Table 3.1) the Government will need to:

- (a) improve the efficiency with which existing capital and labor resources are used in the energy sector, particularly in the power and coal subsectors;
- (b) streamline the regulatory environment in which energy sector companies operate, to accelerate the implementation of projects and improve the efficiency of their operations through measures that would ease the process of land acquisition, imports of spare parts, obtaining of permits and clearances, etc.; provide managers of energy sector companies and institutions with the autonomy they need for the efficient management of these enterprises;
- (c) put in place an energy pricing policy that would not only provide companies with sufficient internal resources, but also encourage energy conservation and substitution of petroleum products by other fuels; and
- (d) accelerate reforestation and implement dissemination strategy for cost-effective renewable energy technologies.

Some of these objectives are mentioned in the Seventh Plan, although not specifically as part of the energy strategy. Other objectives, in particular the need for streamlining of the regulatory environment and greater autonomy for energy sector companies and institutions, while not mentioned in the Plan, are the subject of intense discussions within the Government.

3.45 The following sections briefly outline achievements during the Sixth Plan, the targets of the Seventh Plan, and key issues that will need to be addressed in each of the major energy subsectors.

Oil and Gas

3.46 During the Sixth Plan, the two domestic oil companies, ONGC and OIL, were able to raise domestic oil production at an average annual rate of about 20%. Much of this increase was due to the growth of output from the Bombay High oilfield. Production from this field, which accounts for almost 70% of current domestic oil output, has now reached a plateau, and during the Seventh Plan growth of India's oil output will slow down to less than 4% a year. At the same time, demand for petroleum products, in particular for middle distillates, continues to accelerate. Much of this growing demand reflects India's low levels of consumption and the acceleration of its economic growth in recent years. ONGC's and OIL's exploration efforts, which have led to the discovery of only relatively small fields during the Sixth Plan, have not been able to reverse the steady decline in the reserves-to-production ratio, from almost 35 years in 1980/81 to 17.6 years in 1984/85. Thus, India faces again the spectre of rising petroleum imports. To deal with this challenge, the Government has four major options: (a) to expand the use of secondary and tertiary oil recovery techniques in existing oilfields; (b) to accelerate and encourage greater efficiency in petroleum exploration; (c) to expand the utilization of natural gas, so as to replace at least part of the demand for middle distillates; and (d) to implement stricter conservation measures aimed at reducing the growth of petroleum product consumption. The Government's current strategy for the oil and gas sector in the Seventh Plan combines these four options. Taking into account

the resource requirements, the risks and the impact each of these options has on the principal objective in the oil and gas sector--namely to minimize the dependence on imported oil products--GOI gives the highest priority to increasing oil supplies by accelerating exploration and introducing schemes aimed at improving oil recovery from existing fields. We believe that the recent decline in international oil prices is likely to be short-lived and that prices will begin to rise again by the early 1990s at the latest. Thus, there seems to be no need to adjust the basic thrust of GOI's long-term strategy for the oil and gas sector, unless developments in international oil markets lead to a longer-lasting collapse of oil prices.

3.47 Oil and Gas Exploration. Both ONGC's and OIL's exploration capabilities are fully utilized. To accelerate oil exploration in the face of tight resource constraints, there is a need to expand and strengthen these capabilities and to improve the efficiency of ONGC's and OIL's exploration efforts. This will be particularly critical under the Seventh Plan as ONGC and OIL extend their exploration activities increasingly into marginal areas where exploration will be more difficult, costly and risky, and prospects appear to be greater for small to medium-sized finds. Involvement of foreign oil companies in exploration and development could greatly ease the strains on ONGC's and OIL's exploration capacities. The Government has recently extended an invitation to foreign oil companies to participate in India's efforts to develop its oil resources. The terms of the proposed arrangements are far more favorable than those of the previous two efforts, in 1980 and 1981, which attracted few offers.

3.48 Natural Gas Utilization. About half of India's prognosticated hydrocarbon resources are estimated to be in the form of natural gas. The Seventh Plan recognizes the importance of gas reserves not only in terms of their contribution to India's overall energy supplies, but more importantly in terms of the possibilities these resources offer to contain the growth in oil product imports (through greater use of LPG and other natural gas fractions). The Seventh Plan projects natural gas production to increase from 7.2 billion cubic meters (bcm) in 1984/85 to 14.9 bcm in 1989/90. The 14.9 bcm would be equivalent to almost 14 million tons of oil, about the current level of crude oil imports. Production of LPG is projected to rise from 0.87 million tons to 2.54 million tons over the same period. To achieve these production targets, the development of known gas reserves and the construction of gas transportation and handling facilities will need to be accelerated. Construction of these infrastructure facilities will take up a large share of the investment allocation to the oil and gas subsector. To ensure a maximum return to these investments and the optimal use of natural gas resources, particularly in view of the likelihood of additional gas reserves being proven up in the future, the Government will need to review its current gas utilization policies and develop a perspective plan for the long-term development and use of gas. Such a plan would ensure that upstream and downstream efforts are coordinated, and thus avoid the costly flaring of gas or delays in the development of newly-discovered gas fields due to the lack of gas markets. It would also assess the impact of the use of gas on the demand for other fuels, in particular on coal and oil products, and thus on the investment needs of the coal industry and refinery sector. Finally, it would provide an estimate of the resource requirements for an adequate gas transport and distribution infrastructure, and thus ensure that appropriate resource allocations are made for the long term development of the gas industry.

3.49 Expansion of Refinery Capacity. The Government's refinery policy continues to aim at self sufficiency in the refining of crude oil. On the basis of the current rate of growth of middle distillates consumption, the Seventh Plan projects that India would need to build three to four new refineries in order to maintain its self sufficiency. During the past year, India has completed a major refinery expansion and modification program that allows the country to process crude oil from its Bombay High oilfields, eliminating swaps of crude oil. To meet the projected increase in the demand for oil products, in particular middle distillates, the Government plans major expansions and further modifications of refinery capacity in the years ahead. The investment requirements projected for this sector are huge. In view of the decline in international product prices and refining margins, the economic viability of major new refinery investments will need to be re-examined.

Coal

3.50 The dominant role of the oil industry derives primarily from the fact that the scope for replacing oil products in many end uses is limited by technical and efficiency considerations. Road transport, in particular, and many industries, need hydrocarbons in liquid form. Despite these limitations, coal and power have increasingly replaced oil products since the steep rise of oil prices in the 1970s. Coal remains India's most important commercial fuel, and in the years ahead, coal is expected to continue to meet more than half of India's commercial energy requirements. Thermal power plants, which provide about 65% of India's power, account for almost 50% of coal consumption. About 75% of coal output is moved by rail. The Seventh Plan recognizes the close link between the coal, power and transport sectors, and unlike its predecessors, makes an attempt to harmonize the objectives and strategies of these three sectors.

3.51 The willingness to view the coal, power and transport sectors as a single 'system' is due largely to the increasing strains these sectors experienced in their efforts to meet the targets of the Sixth Plan. One of the principal aims of the Sixth Plan was to narrow the gap between power demand and supply, primarily through the expansion of thermal power capacity. The burden of providing the necessary coal supplies for this expansion fell on the coal industry and the railways. To meet the additional demand for coal, the Government relied heavily on the expansion of open-pit mining, on improvements in the efficiency of underground mining, and on mechanization of mining operations. As a result, open-pit mines provide now almost half of India's coal output (compared to 24% in 1973). However, the large coal deposits being developed with open-pit mines have mostly lower grade coal (Grades D, E and F) resulting in a decline of average coal quality. In addition, the increasing reliance on highly mechanized open-pit mines, together with insufficient coal handling plants has led to increased contamination of coal by waste material. The increase in coal production also

placed a heavy burden on the railways. 1/ The lack of rail transport has been a major factor behind the steady rise in pit-head stocks during the Sixth Plan period. Despite heavy investments in the mechanization of underground mines, productivity--in terms of tons of output per manshift (OMS)--has remained at its 1979/80 average level of 0.55 tons for underground mines. On the other hand, investments in open-pit mines have resulted in a steady increase of labor productivity. The OMS in open-pit mines has increased from 1.27 tons in 1979/80 to 2.08 tons in 1984/85. However, capital productivity is low because equipment availability and utilization are still well below international standards.

3.52 In the Seventh Plan, the main thrust of the Government's coal sector strategy has shifted from expanding coal production at almost any cost, to meeting the country's coal needs--both in terms of volume and quality--as efficiently as possible. While the expansion of coal production will remain the primary objective of the coal industry, the emphasis on improvements in labor and capital productivity and coal quality, will need to be stressed in the allocation of investment resources and the choice of new mining projects.

3.53 To meet the production targets of the Seventh Plan, the Government continues to rely on: (a) the rapid expansion of thermal coal production through developing large coalfields with shallow deposits, using state-of-the-art surface mining technologies and equipment; and (b) the rehabilitation and mechanization of deep underground (especially prime coking coal) mines, mainly to augment domestic supplies of coking coal and, thereby, reduce the need for additional imports. In implementing this strategy, the industry will need to deal with two major problems: the continued decline in the quality of coal and the low productivity of its labor.

3.54 Declining Coal Quality. The unreliable and deteriorating quality of India's coal has led to rising operational and maintenance expenditures for coal consumers. The supply of oversized coal, underfilled wagons, the presence of extraneous material such as shale and stone, the rising ash content, wide fluctuations in coal quality, the low calorific value, and the low coking property of prime coking coal supplies to steel plants, have caused increased wear and tear of plant and equipment and prolonged plant downtime, particularly in the power sector. They account also for part of the increase in the cost of coal transport as consumers need to ship larger quantities of coal to make up for its lower quality. The deterioration of the quality of coal is largely a consequence of (a) the shift towards open cast mining; (b) the increased mechanization of coal mining without sufficient provisions for coal handling and quality control; (c) the comparatively low productivity of the two coal companies (Eastern Coalfields Ltd. (ECL) and Bharat Coking Coal Ltd. (BCCL) with the largest resources of superior quality coking and non-coking coal; and (d) the poor coordination between the collieries, the transport sector and the power sector, which results in coal shipments being diverted to "unlinked users" that are not equipped to use the

1/ Coal makes up more than 35% of the railways' total freight traffic and more than 75% of coal output is shipped to consumers by rail. Road transport, ropeways, merry-go-round rail systems and, to a limited extent, coastal barges, account for the remaining 25%.

coal they receive efficiently. More recently, consumers have been dissatisfied with inadequate weighing arrangements and frequently complain about having to pay for full wagon loads even when wagons are not fully loaded.

3.55 In July 1982 the Government appointed a high level committee (Fazal Committee) to examine the issue of coal quality and to propose solutions. In late 1983 the Fazal Committee presented a set of recommendations, including: (i) the preparation and maintenance of a reliable thermal coal demand data base; (ii) the development of mechanisms for reviewing, updating and improving coal mine and power plant linkages; (iii) the increased use of coal handling plants and appropriate coal beneficiation equipment; (iv) stricter mine management procedures; (v) accelerated use of appropriate technology and procedures for loading, transporting, and unloading coal efficiently; and (vi) the introduction of coal supply contracts, between CIL and all major consumers, that contain provisions for quality bonus/penalty payments and joint sampling. Most of the recommendations were accepted by the Government. There is an urgent need to implement these recommendations now as speedily as possible, considering that coal supplies are planned to increase by more than 50% in the Seventh Plan period and that most of these supplies will come from large open-pit mines, the main source of low quality coal.

3.56 Low Labor Productivity. Coal India Ltd. (CIL), which produces more than 90% of India's coal output, has suffered financial losses in four of the six years since the beginning of the Sixth Plan. These losses were concentrated in two CIL subsidiaries: ECL and BCCL. Although these companies produce comparatively high quality coal which sells for correspondingly higher prices, most of this coal is mined in underground mines where labor productivity is very low by international standards and thus production costs are much higher than prices. The main reasons for this low labor productivity, in addition to poor management, are inefficient labor practices and excess employment.

3.57 Coal price increases without simultaneous improvements in efficiency, would only pass the high production costs to users. Large coal users, such as thermal power stations and the steel industry, have been increasingly reluctant to accept coal price increases, and thus have contributed to the worsening of the coal industry's financial position and made it even more difficult to implement investments and measures aimed at raising operational efficiency. Considering that coal will remain India's major energy resource for decades to come, the Government will need to provide the coal industry with a policy framework that would allow it to deal with these issues effectively. Resolution of the twin challenges--declining coal quality and low labor and capital productivity--would contribute greatly towards a reduction in power shortages and greater efficiency in the power sector.

Power

3.58 The power sector plays a key role in the Government's efforts to accelerate the development of indigenous energy resources and to make them available to consumers throughout the country. The power sector fulfills this dual role through the generation of power from hydro-electric resources, through the conversion of coal (and other fuels) into electricity, and through the expansion of its transmission and distribution network. Reflecting the importance the Government attaches to this role, the power sector continues to receive the largest allocation (19%) of public investment

resources of all sectors of the economy. Almost two-thirds (61.5%) of power sector expenditures under the Sixth Plan were allocated to the expansion of power generating capacity. Despite an additional diversion of resources from transmission and distribution to investments in generating capacity, the actual expansion of capacity was still about 26% below the Sixth Plan target. Inadequate allocation to investments in transmission and distribution were mainly responsible for the further increase in system losses from 20% in 1984/85 to 22% net of generation. As a result of slippages in the expansion of power generating capacity, slow progress in improving the operational efficiency of thermal power stations, and slow growth in transmission lines, power shortages ^{1/} continue to plague the economy. Thus, closing the gap between power demand and supplies remains the Government's principal objective in the power sector.

3.59 The Seventh Plan explicitly recognizes the constraints that have impeded the expansion of generating capacity under the Sixth Plan and outlines measures to ensure, in particular, the timely implementation of the investment program. To accelerate the expansion of generating capacity the Government has earmarked Rs 5 billion for the rehabilitation of thermal power plants and permitted the construction of shorter gestation gas and oil-fired plants. As under the Sixth Plan, the bulk (62.2%) of projected outlays allocated to the power sector will be for the expansion of generating capacity. Although projected outlays are only 20% in real terms above actual expenditures during the Sixth Plan, the Seventh Plan envisages a 53% increase in generating capacity: thermal power capacity is projected to increase by 59.1%, hydro capacity by 38.7%, and nuclear power capacity by 64.4%. Achievement of these rather ambitious targets will depend largely on the extent to which the Government succeeds in reducing implementation delays for both hydro and thermal power projects, in particular those of ongoing projects. To meet the rapidly growing demand for power the Government needs to: (a) assist the States in their efforts to improve the financial performance of State Electricity Boards (SEBs) so as to ensure that the sector can generate the resources it needs for the efficient operation and expansion of the power system; (b) ensure that existing facilities, both plant as well as transmission and distribution lines, are used efficiently, and (c) take the necessary measures to accelerate the development of hydro resources.

3.60 Financial Performance of SEBs. SEBs currently own and operate about 75% of installed power-generating capacity. Although SEBs were originally set up as autonomous organizations, they are now tightly controlled by State governments and depend heavily on State subsidies for their operations and for implementation of their investment programs. After receiving these subsidies, SEBs as a group achieved about a 3% return on their capital investment (valued at historical cost) during the Sixth Plan. Without these subsidies, internal resource generation would have been negative. The principal cause for the generally poor financial performance of the SEBs is the

^{1/} Over the Sixth Plan period India has made considerable progress in reducing power shortages, from an average of about 12.6% at the start of the plan to 6.7% in 1984/85. However, actual power shortages may be much higher since official estimates consider only the demand for power from existing consumers and thus ignore the demand from consumers that would like to use electricity if it were available.

approach that the States take with respect to pricing of power. In general, domestic and agricultural consumers, which together account for about 26% of power consumption, are heavily subsidized. While industrial consumers pay on average 90% of the long-run marginal cost of power, domestic and agricultural consumers pay only 36% and 27%, respectively. The rationale for these low and subsidized tariffs lies primarily in social objectives, such as the desire to make power available to the poor and to farmers who are thought to be unable to pay higher tariffs. However, there is little evidence to suggest that the poor do indeed benefit from these lower tariffs; and the fact that farmers without access to electricity use considerably more expensive diesel pumpsets or maintain them as backup for periods when power is cut, would indicate that they have a much greater ability to pay than is generally assumed.

3.61 In effect the State governments are, through the SEBs, subsidizing these consumers, and as a consequence, SEBs are starved of the financial resources they need to expand generating capacity and supplies to keep pace with demand. In many States the mounting losses of the SEBs place an increasingly heavy burden on already strained State budgets. In the absence of economically efficient pricing policies, the demand for power will continue to exceed supplies in the foreseeable future, and SEBs have no choice but to continue to impose physical rationing of power supplies. 1/

3.62 In parallel with the need for change in the current pricing policy for power, there is also a need to liberalize the regulatory environment in which SEBs (and other power companies) operate in India. Many of these regulatory requirements--ranging from import restrictions and burdensome licensing requirements to inflexible work and employment practices--impinge directly or indirectly on the operational efficiency of SEBs, contributing to their losses. Thus, appropriate changes in pricing policies and regulatory requirements should create an economic environment which would not only restore to the SEBs much of the autonomy lost over the years, but would allow them to generate the resources needed to meet power demands without draining State revenues.

3.63 Power Plant and Transmission and Distribution Efficiency. Improvements in the efficiency with which power plants as well as transmission and distribution facilities are currently used could make a significant contribution towards closing the gap between power demand and supplies, and at the same time, reduce the cost of power generation. Although SEBs, as a group, succeeded during the Sixth Plan in raising the average plant load factor from 44.7% in 1979/80 to 50.1% in 1984/85, it has remained far below the level of 55.9% achieved in 1976/77. A host of reasons, ranging from power plant design problems and poor maintenance to the poor quality of coal, account for the low plant load factors. Towards the end of the Sixth Plan, both Central and State governments have drawn up programs to deal with these issues. Implementation of these programs needs to be accelerated during the Seventh Plan not only to raise the efficiency of existing plants, but also to ensure

1/ Frequent power outages and poor voltage conditions have already forced many consumers, industrial as well as domestic, to invest in their own generation and voltage stabilization facilities.

that plants coming on stream will achieve the plant load factors envisaged under the Plan.

3.64 Increased allocation of public investment resources to the expansion and improvement of existing facilities for power transmission and distribution (T&D) would not only reduce India's comparatively high T&D losses, but allow, at the same time, the more efficient utilization of existing power plants through the transfer of power from surplus to deficit regions, and provide a greater incentive to tap India's hydro resources. In parallel with the increase in the allocation of resources for T&D facilities, there is need to improve the institutional arrangements for the transfer of power across State lines.

3.65 Development of Hydro Resources. India has a hydro potential of about 89,830 MW of which only 16% has so far been developed or is under construction. The development of hydro resources has been fraught with implementation delays and cost overruns. Over the past ten years, the ratio of hydro electric power to thermal power has persistently declined, from 40:60 at the end of the Fifth Plan to 34:66 at the end of the Sixth Plan. By the end of the Seventh Plan, this ratio is projected to drop further to 31:69. The accelerated development of hydro resources has two major advantages for India: it would reduce the increasing dependence on coal resources, and ease the management of peak load demands on the power grid. To ensure that least-cost hydro projects are developed first and that the power from these projects can be evacuated, the development of hydro resources needs to be carried out in the context of a long-term perspective plan for the sector that includes a plan for the integration of regional grids. Such a plan was drawn up under the Sixth Plan, but now needs to be updated to reflect the experience gained in implementing the power investment program, in particular the lengthening of gestation periods for hydro, the greater reliance on thermal power generation, and the widening gap between power generation and transmission and distribution capacities. Another factor that contributed to the slowing in the construction of hydro capacity has been inadequate financing. Establishing a central funding agency such as the proposed Power Finance Corporation, which could guarantee the allocation of funds to approved projects, would insulate the financing of large hydro projects from the vagaries of State budgets.

Traditional Fuels and Non-Conventional Energy Resources

3.66 As electrification of the country, as well as access to other 'conventional' fuels, remain elusive goals, a large share of the Indian population continues to rely on 'traditional' fuels, such as fuelwood and agricultural wastes, to meet their energy needs. Biomass fuels, such as fuelwood, charcoal, crop, and animal residues, are estimated to account for about 40% of India's current energy consumption. While this share is declining with the increased use of conventional fuels in rural and poorer urban households, it nevertheless represents a large part of India's energy resources.

3.67 The Government has essentially three policy options: (a) to provide incentives for increasing fuelwood supplies through commercial fuelwood plantations, social forestry projects, etc.; (b) to encourage the more efficient use of fuelwood; and (c) to encourage substitution of fuelwood with commercial fuels. Low incomes in rural areas and the relatively high cost of

distributing commercial fuels will tend to limit the scope for replacing fuelwood with commercial fuels in these areas. In addition, experience with the use of more fuel efficient stoves has not been encouraging. While efforts in these areas should not be abandoned, the Government will need to focus on the implementation of incentives and policy measures that would, in parallel with the continued expansion of social forestry programs, (a) increasingly attract the private sector into fuelwood production; (b) encourage the substitution of fuelwood consumption in urban areas with commercial fuels; and (c) accelerate the dissemination of alternative renewable technologies (solar, wind energy, etc.) in end uses where it can cost-effectively replace both biomass and petroleum fuels.

Managing Energy Demand

3.68 In implementing its energy strategy GOI has traditionally placed a greater emphasis on the development of indigenous energy resources than on ensuring their efficient use. Even when 'compelling' circumstances, such as the steep increase in international oil prices, offered both incentive and opportunity to put in place a comprehensive policy framework for managing energy demand, GOI narrowed its focus on reducing the demand for oil products and took limited action. The two main elements of GOI's strategy were a sharp increase in the allocation of public investment resources to the oil industry and an upward adjustment of most oil product prices to their import prices. For social reasons, kerosene prices were kept below their import parity. To finance this subsidy, GOI placed a heavy tax on gasoline. Together, the various adjustments in oil product prices assured refineries a positive margin over the cost of imported crude oil. While this pricing policy contributed significantly to resource mobilization in the oil and refining industry, it has had a comparatively small impact on the demand for oil products. The demand for middle distillates and fuel oil has continued to grow, albeit at a slower rate than during the Fifth Plan. Average growth of petroleum product consumption slowed from 6.2% p.a. under the Fifth Plan to 5.2% p.a. under the Sixth Plan, middle distillate consumption from 8.8% to 6.5%, and fuel oil consumption from 6.0 to 2.1% a year. Only the consumption of light distillates (LPG, motor gas, and naphtha) continued to rise at a faster rate during the Sixth Plan, namely by 7.1% compared to 5.5% during the Fifth Plan.

3.69 The slowdown of petroleum product consumption during the Sixth Plan was largely due to rationing, as well as conservation measures that limited the use of oil products to certain end-uses. The role of pricing policies was greatly diminished by the highly inelastic demand for oil products, which is largely due to the increasingly limited scope for replacing oil with non-oil fuels, and to a certain extent limited competitive environment and the widespread practice of cost-plus-pricing which allow producers to pass on cost increases to consumers in the form of higher prices. To maintain the momentum that has been created in recent years with respect to oil conservation, the Government will need to maintain their excellent oil pricing policy which has kept average domestic price of oil products above border prices. In addition, in order to enhance the effectiveness of pricing policies and to ensure the efficient use of energy resources, the Government will need to phase out the practice of cost-plus-pricing and implement an energy pricing structure that reflects the correct relative prices of energy resources. This will require the (gradual) elimination of subsidies that are currently contained in tariff structures for power and other fuels. In view

of the recent sharp decline in international oil prices, the price adjustments will be increasingly difficult to implement and may have to be phased over longer periods, and possibly linked to improvements in the efficiency of energy production.

3.70 In addition, there is a need to examine the impact of a further expansion of energy-intensive industries on overall energy demand. The industrial sector accounts now for about one-third of total commercial fuel consumption and for somewhat over 50% of power consumption. About 80% of India's industrial demand for power is consumed in energy intensive industries, such as aluminum, iron and steel, chemicals, fertilizers, cement, paper and collieries. Many of these industries were set up and expanded as part of India's policy of self sufficiency and import substitution. Considering the high cost this policy places on the energy sector and other sectors the policy of further expanding energy-intensive industries needs to be carefully reviewed.

D. Manufacturing Industry

3.71 As noted, growth of the manufacturing sector and manufactured exports during the Sixth Plan was disappointing. The growth rate of value added in manufacturing was only 4.3% p.a., well below the projected growth rate of 6.5%. The shortfall in growth targets was widespread among basic manufacturing industries. Steel production, for example, only reached 8.8 million tons in 1984/85 compared with the target of 11.5 million tons; cement production reached 30.1 million tons (target 34.5 million tons) and nitrogenous fertilizer 3.9 million tons (target 4.2 million tons). The share of manufacturing in total GDP has reached only 14.7% by 1984/85, a negligible increase from the 13.9% for 1960/61. The productivity has also been lower. Manufacturing sector's labor productivity (including cottage industries) is only 7% higher than that of the economy as a whole.

3.72 The major factors responsible for poor performance in industrial growth and productivity is well known to the Government and others who have studied the issue. Apart from chronic factors like low demand (uneven and frequently slackening demand of rural areas for wage goods) and infrastructure constraints (especially shortages of power and transport facilities), the key reasons for low growth in industrial output are found in the industrial policies pursued. These policies include restrictions on entry and exit; the use and expansion of production capacity; location of new capacity; quantitative limits on imports of capital goods and other inputs; and high tariffs.

3.73 As we have discussed earlier (Chapter 2, paragraphs 2.21-2.31), in recent years, the Government has initiated important changes in both trade and industrial policy which have aimed at greater reliance on the price mechanism and other indirect policy instruments in preference to extensive physical controls. After a short discussion of the Seventh Plan's targets and strategies in the industrial sector, this section attempts to present in broad terms what remains to be done.

Targets

3.74 The overall target growth rate for minerals and manufactured output in the Seventh Plan at 8.3% per annum in gross terms, and only at 5.5% per

annum in terms of value added growth, is only moderately higher than the 4.3% per annum growth rate of value added achieved in the Sixth Plan. ^{1/} For individual subsectors, the projected annual gross output growth rate varies widely with 3.9% for cloth, 7.6% for steel, 10.2% for cement, 22.6% for PVC, and 39% for electronics. Manufactured exports are projected to expand at a rate similar to that for gross output (about 8% p.a.) which is a substantial increase over the growth rate achieved during the Sixth Plan period.

3.75 The anticipated rates of growth for manufacturing industries is projected to lead to a modest increase in the share of manufacturing in GDP, from 14.66% in 1984-85 to 15.03% in 1989-90. Mining, in contrast, has a higher projected rate of growth in gross value added (11.7% p.a.) and hence a proportionately larger expected increase in its share in GDP, from 3.47% to 4.73%.

3.76 Manufacturing employment is projected to expand by 4.6% p.a. during the Plan period to generate an increase in employment of 6.676 million standard person years. It is anticipated that 17% of additional employment will be in manufacturing whereas only 14% of current employment is in manufacturing.

Strategy

3.77 The Plan anticipates that the higher growth targets will be achieved by a combination of increased capacity utilization, which is particularly important in older industries including steel and textiles, and expanded capacity, which is more important in automotive, machine tools, electronics, and nitrogenous fertilizer. The projected average annual increase of 7.8% in steel production, for example, is based upon a planned 3.4% average annual increase in capacity, coupled with an increase in capacity utilization from 70% in 1984/85 to 85% in 1989/90. Thus, more than half the projected increase in output is expected to come from higher capacity utilization. The projected average annual increase of 10.9% in nitrogenous fertilizer, in contrast, is based upon a planned 12.2% average annual increase in capacity, coupled with a modest decline in capacity utilization from 75% in 1984/85 to 71% in 1989/90, before rising again in the early 1990s.

3.78 As a springboard for increase of production, the Plan envisages a sharp increase in the role of private industry, with private industrial investment expected to approximately double in real terms compared to the Sixth Plan period. Recent and planned industrial and trade policy improvements, coupled with improved power supply, are seen as a spur to increased investment and entrepreneurial initiatives. In this context the

^{1/} There is a large differential between the gross output and value added growth rates during the Seventh Plan. In the past four years this differential amounted to only 0.3 percentage points and it is difficult to foresee a rapid acceleration in inter-industry linkages and in imported inputs which would have made this differential increase by a factor of nine within a span of only five years. The difference may be largely due to the significant increase in the ratio of indirect taxes to value added in the manufacturing sector.

Plan for shadows further industry and trade policy improvements to ensure that financial incentives reflect underlying economic returns.

3.79 Major expansion in private sector investment and activity is anticipated in cement, fertilizer, industrial machinery, automotive products, consumer durables and electronics. In contrast, it is anticipated that public sector investment in industry would fall to only one-fourth of industrial investment. The thrust is towards increasing the efficiency of existing capital assets by concentrating on completion, modernization and some expansion of existing enterprises. Few major new public projects are envisaged during the Seventh Plan period. Seventy percent of the total central outlay for industry is on basic, capital intensive industries; steel (49%), fertilizer (18%), petrochemicals (5%), non-ferrous metals (12%) and cement (5%). Only 17 public sector enterprises requiring over 2 billion rupees each, are expected to use about 75% of Seventh Central budget outlays for public enterprises.

3.80 The Seventh Plan emphasizes the need to improve efficiency and productivity of public sector units. However, its focus remains largely on physical aspects: the need to reduce delays in commissioning plants, the need for balancing and modernization to increase capacity utilization in order to supply basic inputs to Indian industry. More importantly, public sector enterprises are expected to rely largely on internal resources and commercial borrowing, rather than on budget outlays, in funding their fixed investment requirements. If implemented, this would help create the needed pressure for public enterprises to proceed with managerial, financial and physical restructuring changes to reduce costs, improve quality and alleviate pressures on the budget (see Chapter 4, paras 4.98-4.111).

Outstanding Issues

3.81 Internal Competition. While it is acknowledged in the Plan that "excessive regulations and persistence with outdated controls can be counter-productive", efforts to adjust industrial regulations to increase productivity by enhancing flexibility and competitive pressure have to date been relatively ad hoc. Although the "need for a fresh look at the policy of reserving a large number of items for the small scale sector" is acknowledged, for example, there appears to be limited willingness to relax these controls. On the other hand, while there has been an increase in the asset limit for MRTP companies from Rs200 million to Rs1 billion, this has been able to correct only the impact of inflation since the inception of the regulation. Moreover, the increased asset limit was partially offset by a concurrent broadening of the assets to be considered as inter-connected. It is apparent that the Plan's objectives could be more easily met if the focus of the MRTP Act was changed from structural aspects relating to the potential for monopoly behavior to actual trade practices and market behavior of firms.

3.82 The benefits of delicensing selected industries is also limited by associated caveats relating to location of new industries. Moreover, while licenses for certain items, including two- and three-wheeled vehicles, have been broadbanded they are still subject to limits on size which often inhibit the attainment of economically efficient economies of size. Such restrictions are in conflict with the Plan's thrust to improve productivity and efficiency. Analysis in light engineering and electronics has demonstrated that small industry reservations and the use of industrial licensing to

disperse capacities has undermined cost and quality competitiveness of Indian goods, and hampered efficient ancillary relationships between firms. To the extent that licensing practices persist there is a clear need for greater consideration to be given to economies of size and the effect of locational restrictions on competitiveness. Existing firms need to be given even greater freedom to modernize, and expand if necessary, to respond to increasing competitive pressures.

3.83 In view of the Plan's objectives for increased efficiency and productivity there is a need to allow small-scale industries to grow to medium scale. This has been facilitated to some extent by the recent increase in the small scale industry (SSI) investment ceiling and by the excise tax changes for small scale industries introduced in the 1986/87 budget. However, the need for a fresh look at the policy of reserving large numbers of items for the small scale sector, with the view to more efficiently achieving the objectives of such protection, persists.

3.84 There is also an ongoing need to more effectively address the constraints, in areas like market access and knowledge, material supplies, training and finance, that have hampered small scale industry development. However it is not essential that Government fill the role of intermediary itself. Relaxing present controls which inhibit the development of intermediaries to provide for the imported input and marketing needs of small scale producers, together with increased freedom to develop ancillary relationships between small and larger firms would contribute significantly to overcoming these impediments.

3.85 While the Plan rightly acknowledges that the displacement of inefficient units by more efficient ones is a natural concomitant of industrial development, regulations persist which prevent the exit of insolvent firms or even those that are as yet solvent but are inevitably headed for difficulty. There are now more than 90,000 such units of which 1,250 are medium-sized firms and 450 are large units. The highest incidence of industrial sickness is in the textile sector, which accounts for 36% of large and medium-size sick units, followed by engineering with 22%. Outstanding bank credit to sick industries stands at around Rs36 billion, two-thirds of which is to large units.

3.86 While indicating that the public sector will no longer be a repository for unviable units and that sick industries with no prospect of becoming viable should not be maintained at high cost, the Plan doesn't go beyond prescribing that "special institutional arrangements are needed to deal with this complex problem." The desire to preserve employment is a valid and important concern. However, it is clear that continuing to operate low productivity units deprives more efficient ones of market opportunities and hence inhibits the generation of new employment in such firms. Moreover, the continued financing of such units absorbs financial resources which could be productively deployed elsewhere in generation of output and employment. There is a need to recognize fixed investments as sunk costs and for financial institutions to avoid advancing further credit to insolvent units. While there have been positive steps taken to resist Central Government takeover of more "sick" units and the Sick Industries Act of 1985 was introduced in an effort to speed the takeover, merger, rehabilitation or liquidation of such units, the exit of insolvent firms should be made easier as it is an inevitable part of adaptation to the emerging environment for

industrial development. Firms facing continuously adverse market developments or deteriorating resource base, for example, should be free to exit before they become insolvent.

3.87 One encouraging cooperative approach to this problem is that involving a set of 10 textile units in Gujarat where the State Government, mill owners, labor unions, and financial institutions are working together on a rationalization plan. However, increased discipline in financial markets, coupled with modifications to labor negotiations, appear to be important aspects of any longer term solution. Some degree of dislocation and redeployment would be an unavoidable corollary of industrial adaptation. Allowances for retraining may be a useful addition to existing retrenchment compensation and would help enhance the flexibility of industrial employment. There are already some indications that financial institutions are tightening their project appraisals and strengthening underlying market assessment capability. Continued tying up of increasingly large amounts of scarce financial resources in "nursing" programs is not an adequate long term solution.

3.88 While considerable attention is given to the need to update technology as a means of raising productivity and overcoming slow growth, initiatives taken so far do not respond fully to the challenge. A dearth of competition, both internal and external, results in few pressures to acquire or master better technology in industry; as many enjoy a persistent seller's market. Further policy and institutional improvements are needed to increase competition and thereby encourage upgrading of technology as international evidence shows that such incentives are of greater importance than any contribution the Government can make as a conduit for new technology. Such changes would increase the effectiveness of direct Government support for technology upgrading.

3.89 The rate of technological change in Indian industry has suffered from a technology development strategy founded on the basic premise that indigenous technological efforts would be stimulated by protection against foreign investment and imports of capital goods. Moreover, technology development and dissemination have been seen to be an activity of Government. The change implied in the Seventh Plan is a combination of increased incentive for technological improvement arising from increased competition coupled with greater access to new technology.

3.90 Price controls have also been an important element of the control system for certain industries including fertilizer, aluminum, cement, sugar and paper. Such controls have in some instances such as fertilizer, limited competitive pressures and hence the associated incentive for efficiency improvements. In others, such as cement until recently, they have limited financial returns to such an extent that new investment was suppressed. Progressive reform of such pricing policies which are all too frequently based on cost plus, either for individual firms or industry as a whole is important if the desired increase in competitive pressure and reward for efficiency improvements are to be attained.

3.91 While there have been significant moves to increase the freedom to pursue market opportunities thereby raising competitive pressures, there remains a wide array of regulatory controls which inhibit productivity increases directly or at least reduce the competitive pressure to increase

both technical and allocative efficiency. These need to be progressively replaced with indirect fiscal measures as a means of influencing investment. The recent rapid growth of the cement subsector, for example, has been largely due to changes in pricing policy, output controls and distribution policy. The realization of ambitious private sector growth projections for telecommunications equipment will similarly depend on the lifting of size constraints and broadbanding to facilitate the efficient use of production facilities along with modifications to government procurement procedures and the abandonment of centralized procurement of technology.

3.92 Finally, credit controls and mandatory allocations of credit continue to severely limit the discretion of commercial banks to respond to expanding demand for private investment. It is important that the system and levels of credit allocation be reviewed as an integral part of efforts to improve incentives for economically efficient investment in industry.

3.93 External Competition. The Government's plan is to replace quantitative import restrictions with tariffs so as to expose domestic industry to a reasonable amount of external competition. Replacing quantitative controls with tariff rates which are low enough to allow some degree of import competition and reasonably uniform effective rate of assistance, would, together with a relaxation of internal industrial regulation, greatly enhance allocative efficiency and increase the incentive for technology upgrading and productivity improvement over time. Such increases in allocative efficiency, cost competitiveness and product quality are all necessary if the Plan's growth targets and more efficient industrial development are to be realized.

3.94 As noted in Chapter 2, while direct import competition for Indian manufacturing industries unimpeded by quantitative import controls has increased in recent years, the overall impact is still quite limited and mainly affects some engineering and machinery industries and a few industries producing intermediate raw materials. A clear and coherent program for moving to a tariff based and more competitive and neutral policy environment still remains to be developed. In devising such a program a number of difficult issues will need to be resolved.

3.95 First, guidelines or benchmarks will need to be developed for acceptable levels of nominal and effective protection, and in particular for setting the five basic tariff rates envisaged by the long term fiscal policy. The most difficult part of the process will be the treatment of high cost industries which at present require excessively high levels of protection to be profitable. At the same time it will be important to reduce the present high average level of import substitution protection, which is not compatible either with efficient production for the domestic market or with the development of a real thrust in manufactured exports. In order to lessen the impact of the removal of quantitative import controls and high tariffs, while at the same time providing a uniform non-discriminatory increase in the profitability of exporting, the real exchange rate could be adjusted downwards as the reductions in import substitution protection proceed.

3.96 Second, attention will have to be paid to the present large variance of effective protection between different import substitution industries. Some recent changes have probably been in the wrong direction by increasing the effective protection of some already highly protected industries (such as automobile and television assembly) while further reducing the effective

protection of other industries (such as some machinery industries) which already had low or negative effective protection. Devising and following through on a practical strategy for achieving a more uniform incentive structure as proposed by the long-term fiscal policy statement, will be one of the major challenges of the coming years. In this regard, it should be noted that reasonable uniformity of nominal incentives such as import duties is generally necessary if large variations in effective incentives are to be avoided. However, the structure of import duties recently adopted for industries such as electronics and also proposed in the LTFP statement, increases with the degree of processing, with the import of the final product in the chain being banned altogether if it is a consumer good. This kind of escalated protection is not easily reconcilable with the objective of uniformity of effective incentives.

3.97 Third, by recommending that tariffs should replace quantitative import controls on intermediate and capital goods, the long term fiscal policy has served notice that industries producing these goods will no longer be automatically and permanently insulated from world markets and will need to meet import competition subject only to the price penalty on imports coming from the tariff. But the need for such discipline is equally and perhaps more important for consumer good industries, since the absence of import competition at this final stage not only hurts consumers directly, but has consequences in terms of the prices, quality, delivery and other standards demanded by these industries of their suppliers. Import competition is all the more important for the many Indian industries--again including consumer industries--where the domestic market is and will remain small in the foreseeable future, relative to the economies of scale required for efficient production.

3.98 Fourth, as noted in Chapter 2, the recent trade policy changes have actually diminished the role of private importers and reinforced the basic policy that only "actual users" or government canalizing agencies are permitted to import. An important motivation for this policy has been the desire to prevent private traders from participating in the economic rents inherent in the system of quantitative import controls. Moreover, it has been necessary to make possible the complex tariff structure where multifaceted "exemptions" often mean that the same or similar materials or machines are imported at widely differing tariff rates depending on the industry in which they are used or the exact use to which they are put. However, insofar as import controls are removed and tariff structures are uniform at least for the same good in different uses, this reason for banning private importing activity does not hold and it is highly desirable to remove the "actual users" conditions, not least in the interest of small and medium firms which can ill afford the transactions costs of directly importing raw materials and equipment in small quantities. Furthermore, in the case of many domestic industries--most notable consumer good industries--effective import competition can only be credible if imports by intermediaries are permitted.

3.99 Fifth, the objective of reducing the administrative complexities of the import-export policies so far has been achieved in only a relatively minor way with the addition of new items to the Open General License (OGL) Lists. Otherwise the policy itself is more, not less complex, than previously. Furthermore as emphasized by the LTFP, major simplifications also need to be made in the customs tariff. But the complexity of the rules

and of their administration --especially those surrounding the export incentives - are in large measure the consequence of attempts to control smuggling and diversion of imports into the highly protected domestic economy. Indeed, the withdrawal of important facilities and incentives for export and trading houses during 1985/86 was a direct response to this kind of activity. Consequently, the objectives of simplifying the trade regime and the objective of reducing domestic protection, would be complementary.

3.100 Sixth, the objective of a stable trade policy was not fully achieved by announcing a three year instead of the usual one year Import-Export Policy. Changes to the policy have been made continuously since the policy was announced, while in any event import licenses are only granted on a yearly basis. But stability in this literal sense of no substantive change is incompatible with the objectives of Government policy, and needs to be reinterpreted as meaning stability in the direction of change. In this sense it is indeed critically important that major reversals of the general trend to liberalized trade policies be avoided. Otherwise business and consumer expectations may make the process much more difficult.

3.101 Finally, as noted in Chapter 2, the April 1985 policy changes decanalized only a small part of the business of the canalizing agencies, and they still account for about half the value of annual imports. A less discretionary tariff-based import regime will require a review of the role of these agencies, the performance of which has suffered for similar organizational, managerial and staff motivation problems as other public enterprises. For bulk commodities, such a review would need to take account if the government policies which the agencies are required to implement. Improved performance in importing and exporting and the development of a generally more competitive trading and industrial environment will require further decanalization and/or a more autonomous role--perhaps in competition with private trading houses--for these agencies.

3.102 On the export side, the Plan recognizes that the needed breakthrough in export earnings will not be achieved if exports are treated as an enclave separated from the rest of the industrial structure. Policies that have eroded cost and quality of goods destined for the domestic market have undermined export prospects as well. This approach implies that export growth also depends heavily on improvements in import policy and internal competition.

3.103 As discussed in greater detail in Chapter 5, there is a welcome awareness of the need to provide manufacturing exporters with better access of duty free imported inputs and to effectively compensate them for the tax component of the cost of domestically procured inputs, in order to achieve more rapid export expansion. To this end, there have recently been changes such as the new pass-book scheme, an increase in the number of items on the REP license list and a streamlining of procedures. However, these improvements are relatively minor and have essentially been confined to established manufacturer exporters. There remains an urgent need to extend such arrangements to new and indirect exporters and make them more automatic to facilitate more rapid broadly based export expansion. Moreover, compensatory schemes need to be made adequate to cover direct and indirect taxes and duties and export and import procedures simplified further.

3.104 The continued presence of relatively high rates of protection to foster import substitution industries automatically places a substantial burden on export industries even if they are provided with duty free access to imported inputs. Exchange rate management which is more responsive to the need for a relatively wide range of manufacturing industries to be competitive is an important aspect of policy which is too frequently neglected.

3.105 In sum, while the Plan correctly points to the need to increase competitive pressures both from within the country and from abroad to achieve the much needed technology upgrading and productivity improvement, policy initiatives implemented to date only begin the long process of adjusting the trade and industrial policy environment to generate such a situation. Much remains to be done to fully transform the environment within which industry operates and thereby elevate India's industrial sector performance to international standards.

3.106 Without such initiatives it would be very difficult to attain the Plan's targets with respect to manufacturing sector. While the plans for increased investment seem likely to be fulfilled with a continued increase in the importance of the private sector it seems unlikely that the increases in productivity which are inherent in the Plan targets will be realized without further substantial improvements in the policy and institutional environment.

E. Transport

Transport Demand and Capacity

3.107 Transport demand in India has been growing at an average annual rate of about 6 per cent over the past twenty years, with annual growth in road and civil aviation being considerably higher, at around 10 per cent. Demand is expected to continue growing at about this rate and to more than double by the year 2000. While road and air transport will continue to grow more rapidly than other modes, rail will still play a major role, especially in longer hauls of bulk goods, and is likely to experience close to a doubling of traffic. Port traffic is expected to grow further at its recent rate of 6 to 7 per cent per year, but there will be a significant change in the composition of traffic, with large increases expected in bulk and container cargo.

3.108 As a result of past underinvestment and continuing institutional weaknesses, the transport system is ill-equipped to satisfy existing demand efficiently, let alone cope with a prospective doubling of demand and likely changes in traffic patterns. Some 20,000 kms (or 20%) of Indian Railway's (IR's) total track-kms are overdue for renewal, contributing to a doubling of rail failures over the past three years. A further 11,000 kms will become due for renewal by 1990. Motive power is obsolete, with thirty-year old designs, and underpowered. The outmoded rolling stock designs in use restrict speeds (and thus effective use of scarce track capacity), cause high track and wheel wear and are inefficient carriers of bulks, which already account for three-quarters of freight traffic and will become even more important. India's road density per head of population is well below (typically less than half) that of all other Asian countries, except Bangladesh, and is in fact only two-thirds that of China. Moreover, one-third of its limited and heavily trafficked national highway system is still one lane, and

more than a third of that network is rated to be in poor condition. Most of the existing vehicle fleet is of outmoded and inefficient designs. Ports are not adequately equipped to handle the envisaged quantities of bulk (both dry and liquid) and containers, and deeper drafts will be required at selected ports. The extremely low labor productivity also needs to be addressed.

3.109 Faced with this relatively grim picture, the Seventh Plan document takes stock of the main issues affecting the sector and proposes to step up investment and realign priorities. Recognizing funding constraints, the Plan appropriately assigns priority to replacement, rehabilitation and maintenance over net additions to capacity. Furthermore, the Plan correctly indicates that improved performance of the transport sector will require more than investment expenditure. The main issues affecting the sector (other than size of investment) and possible corrective measures are discussed in paragraphs (3.126) through (3.136).

Investment

3.110 Transport's share of total Plan expenditure declined steadily from around 23% in the 1950s and early 1960s to 13% in the 1980s. In real terms, transport investment grew rapidly during the first three Plans, but this was followed by a long period (1966-78) of contraction for railways, during which annual investment expenditure was little more than half the level prevailing in 1956-66. Investment in the other modes continued to grow but generally more slowly than previously, and more slowly than the aggregate demand for transport services by each mode. Moreover, the changing structure of transport demand (an increasing proportion of bulk and container traffic) required new specialized facilities. Under the Sixth Plan, public investment in transport--especially road and rail--increased significantly, but funds fell short of requirements for capacity expansion, modernization and replacement.

3.111 Table 3.2 shows the Seventh Plan outlay approved for transport sector public investment ^{1/} and actual expenditures during the Sixth Plan, broken down by sub-sectors. The Seventh Plan revised outlay totals to Rs 242 billion, an increase of almost 50 percent over actual expenditure during the Sixth Plan, provided the real value of the Seventh Plan allocations can be maintained throughout the Plan period. The sector's share of total public investment stands at 13.4 percent, which is similar to the percentage reached during the Sixth Plan. Thus, it provides a halt to the past steady decline in the transport sector's share in total public investment.

^{1/} The figures include additional allocations of Rs 12 billion for Indian Railways and Rs 3.5 billion for National Highways approved after the Draft Seventh Plan was issued.

Table 3.2: COMPARISON OF SIXTH AND SEVENTH PLANS TRANSPORT PUBLIC INVESTMENT
(Rs billion in 1984/85 prices)

	Sixth Plan Actual Expenditure		Revised Seventh Plan Outlay		Real % Increase in Revised Seventh Plan Compared with Sixth Plan
	Total	%	Total	%	
Railways	76.9	47.7	135.4	56.1	76.0
Roads					
Center	8.9	5.5	13.7	5.7	54.5
States	35.6	22.1	41.8	17.3	17.5
Road Transport	14.4	9.0	19.9	8.2	37.8
Ports	8.4	5.2	12.6	5.2	50.4
Shipping	5.6	3.5	8.3	3.4	48.2
Inland Water Transport	0.8	0.5	2.3	0.9	186.1
Civil Aviation	10.7	6.7	7.6	3.1	-29.4
Total	161.3	100.0	241.5	100.0	49.7

Source: Planning Commission

3.112 But even though funds allocated are significantly higher than in previous plans, sectoral technicians agree that the amount is inadequate to remove all transport bottlenecks, create additional capacity for anticipated growth, and make up for a slack in past investments on modernization and rehabilitation of existing facilities. Thus, it is important to adequately prioritize and select investment projects. But even more so, the major thrust for augmenting the transport capacity should be on improved productivity of existing facilities through technological improvements as well as improvement of management practices rather than build up of additional capacity. The main long-run objective of the economy--and the Plan document underlines this emphatically--should be to minimize transport coefficients, that is ton-kms per unit of economic output. This would require appropriate location of industries, beneficiation of minerals and ores, and pit-head thermal generation of electricity among others.

3.113 The allocation of funds among the various modes appears generally appropriate, although a reallocation from shipping to roads is likely to yield increased benefits, and perhaps the rail and road allocations could be increased at the expense of road transport if private participation in the latter is pursued more vigorously.

3.114 Railways. Gross investment by Indian Railways (IR) has failed to keep pace with traffic growth, and in fact for the period 1966-80 (when traffic increased 66 per cent), average annual investment in real terms was little more than half the level prevailing from 1956-66. Although investment levels increased significantly during the Sixth Plan (1980-85), the long period of under-investment, exacerbated by extremely slow decision-making and implementation, has left IR with large arrears of asset renewal and replacement and an urgent need to modernize and improve productivity if the anticipated doubling in rail demand by the year 2000 is to be satisfied efficiently. Some 20,000 km or 20 per cent of IR's track is overdue for

renewal, contributing to a doubling of rail failures over the last three years; another 10 per cent of the track will become due for renewal during the Seventh Plan period. As already noted, IR's locomotive fleet is outmoded, consisting of inefficient and under-powered units not suitable for hauling the heavier trains that are necessary to reduce haulage costs and economize on scarce track capacity. The wagon fleet uses old fashioned bogies, does not exploit to the maximum the loading dimensions available on broad gauge, and is seriously deficient in specialized bulk units, which with accompanying terminal modernization would greatly reduce transport and handling costs for bulks (three-quarters of rail freight traffic). Production and maintenance facilities need to be modernized and rationalized; the proliferation of multi-activity units needs to be reduced by greater specialization and integration, buy/make analysis of all components, and more standardization; concepts of industrial group management and plant control need to be introduced.

3.115 This modernization task is an enormous one, resulting from years of under-funding and slow decision-making and implementation within IR, and cannot be accomplished within one Plan period. However, the Seventh Plan provides IR with the resources to make substantial improvements, provided the requisite changes in management attitudes are also forthcoming. The allocation of Rs 135 billion ^{1/} for railways falls far short of the Rs 185 billion requested by Indian Railways. However, it represents an 80 percent real increase in actual expenditures during the Sixth Plan, which in turn was double (in real terms) the average annual expenditures for the preceding 15 years. Care needs to be exercised when making such comparisons, because the general GDP deflator understates (especially in the last three or four years) the rate of price increase in many rail investment items (especially steel and imported items). Nevertheless, the Seventh Plan provides for considerable improvement over physical targets and achievements under the Sixth Plan:

^{1/} The railway allocation has been increased from the figure of Rs 123 billion shown in the Seventh Plan.

Table 3.3: INDIAN RAILWAYS: PHYSICAL TARGETS AND ACHIEVEMENTS

	Sixth Plan		Seventh Plan	
	a/ Target	Achievement	Request	Target b/
Procurement of Rolling Stock				
(a) Wagons (in '000 4-wheel equiv.)	100	73	155 c/	96
(b) Locomotives	780	927	1,345	1,235
(c) Coaches	5,680	5,326	12,914 d/	6,970
(d) Electric Multiple Units	606	707	1,390	950
Track Renewals (Km)	14,000	9,541	21,000	19,000 to 21,000
Electrification (km)	2,800	1,522	3,400	3,400

Source: Indian Railways.

- a/ These were the original targets which were revised during the plan period.
- b/ Targets relate to plan allocation of Rs 123 billion.
- c/ Of which 77,000 are replacements.
- d/ Of which 10,605 are replacements.

3.116 Within the constraints of the total amount allocated for railways, the Seventh Plan targets represent a reasonably well-balanced program. The track renewal program is adequate for immediate requirements, ^{1/} though there is no provision for the further 11,000 kms which will become due for renewal by 1990. The locomotive target, while 8 percent less than IR's request (because of higher productivity and lower traffic assumptions) is essentially adequate. Importantly, it provides for importing 220 electric locomotives to rectify an emerging shortfall of electric locomotives relative to the track electrification program, despite the latter falling well behind schedule. There is a "throw-forward" of 1,400 kms of outstanding electrification works from the Sixth Plan, so that the Seventh Plan target of 3,400 kms allows for only 2,000 kms of new projects.

3.117 The most serious under-provision in the Plan appears to be wagons. The Plan document (p. 215) claims that the targets will suffice to phase out overaged rolling stock and provide additional capacity for traffic growth but it is difficult to see how this can be achieved when wagon replacement alone will require 77,000 wagons (80% of the wagon procurement target) and traffic (in originating tons) is expected to grow by 29% over the 1984/85 performance. By contrast, the allocation of Rs 13 billion for line capacity works and Rs 3.5 billion for new lines seem generous, and part of these allocations would probably be better spent in other areas such as modernization of rolling stock and terminals.

^{1/} The program entails a doubling of IR's annual track renewal program, and there are doubts about the capacity of the Indian steel plants to supply the required rail. At the moment, IR overcomes rail shortages when they arise by resorting to re-using old rail, but this can be an inefficient process (see following footnote), and it would be better to import the required steel.

3.118 The principal implementation risks relate to: (a) a tendency to spread available resources thinly over too many projects, so that completion of each individual project is unduly delayed, along with the benefits (e.g., some track electrification projects have taken up to twelve years to complete); (b) a tendency to persevere with outmoded technology (e.g., inappropriate and inefficient wagon designs, underpowered locos, inappropriate track renewal practices ^{1/} and conservative operation practices); and (c) failure to pursue a systems approach (e.g., mismatch between track electrification and motive power, or non-integrated workshop modernization program).

3.119 Thus, while IR would benefit from larger Plan allocations, there is considerable scope for getting larger returns from the present allocations by improving the speed and quality of IR decision-making, project planning and implementation, and operating practices.

3.120 Roads. Past road expenditure has emphasized expansion of the network over maintenance. Insufficient maintenance has caused higher vehicle operating costs (including higher fuel consumption), and higher capital investment in road rehabilitation. Recognizing funding constraints and inadequate allocation of funds in the past, the Plan appropriately gives priority to upgrading and maintaining better the existing system rather than further network expansion. Further expansion of the system will be allowed only for completion of ongoing schemes, rural road projects, and construction of missing links. Since maintenance is not included in the Plan expenditures, it is not possible to tell whether maintenance funding is being stepped up significantly in accordance with the Plan's stated objective. However, the Government's recent decision to assess maintenance needs on an economic basis should contribute to more adequate funding for maintenance.

3.121 The Plan allocation of Rs 12.5 billion for National Highways comprises Rs 2.6 billion for carry-over works, Rs 9.8 billion for new work on existing National Highways, and Rs 0.1 billion rupees for works on new National Highways. The allocation falls well short of that required to carry out economically warranted improvements to India's National Highway system, which as noted earlier, is extremely modest.

3.122 Finally, the emphasis on rural road development under the minimum Needs Program and the National Rural Employment Program envisaged for the Seventh Plan is appropriate. However, within these programs an effort should be made to use the funds more judiciously based on comprehensive master plans so as to get the best connections covering the largest number of villages. Several States have already prepared these plans while others are being

^{1/} For example, a common practice in track renewal is to reuse old 45 kg/m rail (for reasons of economy or unavailability of heavier rail), welded into continuous lengths and placed on concrete sleepers in re-ballasted track. This seems a very inefficient use of considerable expenditure in labor, machinery, and field welding equipment. The 45 kg. rail will last no longer than ten years (probably less because old bolt holes have been subjected to the heat of Thermit welding) while the concrete sleepers which last 40-50 years cannot subsequently be used for IR's new standard 60 kg/m rail because of the latter's wider rail base.

prepared under the supervision of the road wings of the Ministry of Transport.

3.123 The Plan appropriately assigns priority to the completion of ongoing schemes, rehabilitation and modernization of facilities, and on providing additional capacity particularly for handling POL and container traffic. The most important projects are continuation of ongoing works at the new Nhava Sheva Port, the upgrading of iron ore facilities at Vizag (including modern equipment and deepening the draft) in order to accommodate larger ships, and the modernization of infrastructural facilities in the Calcutta/Haldia docks areas.

3.124 Priority given to developing container handling facilities at various ports is welcome, because India is poorly equipped to handle container traffic on a large scale. At present, only 15% of the general cargo passing through the ports (Cochin, Madras, Bombay and Haldia) is containerized. Low containerization is partly due to the high cost of container handling in India on account of inefficient utilization of assets, insufficient container handling equipment, surplus labor, stuffing/destuffing at ports as in the case of break bulk cargo. Port handling charges hover at about US\$350 per container, compared with US\$53 to US\$100 in neighboring ports. Insufficient containerization may hamper the country's exports which cannot take advantage of transport cost reductions which are available elsewhere in the world. The Plan provides for establishment of container freight stations, inland container depots, and standardization of equipment to facilitate container transshipment. A target has been set to handle at least 50 per cent of the general cargo in containerized form. Achievement of this target would imply unutilized capacity at break bulk facilities. The Plan does not indicate what will be done with these facilities. These facilities could be modified to handle container traffic as an interim measure, while a proper appraisal is done of the more costly proposals to provide new full-fledged container facilities.

3.125 The Plan also indicates that port productivity is a matter of major concern. It identifies bunching of arrivals of vessels and low labor productivity as main reasons. Others are perhaps as important such as: weak management and administration, labor unrest, vehicular congestion, stuffing/destuffing of containers inside the port, and obsolete equipment. These issues are currently being addressed by a Port Reforms Committee, whose report is expected soon.

Other Main Transport Issues and Possible Corrective Measures

3.126 Previous Bank and Government work have identified other major issues affecting the sector. The Seventh Plan refers to some of these and makes proposals aimed at their solution. Other major issues affecting the sector include: (a) the need for better planning and coordination of intermodal investments; (b) lack of cost-based pricing; (c) inadequate utilization of already available transport capacity at the operational level; (d) weak management of public transport enterprises particularly in traffic forecasting, maintenance engineering, safety and investment planning; (e) excessive regulation which limits freedom of intermodal choice for the user and constrains private sector investment in the sector; (f) lack of adequate economic evaluation for a large number of projects; and (g) freight equalization policies which distort location decisions and increase real

transport costs to the economy. The policy and organizational measures needed to eliminate these constraints on transport efficiency can be grouped into two broad categories: those related to improving the efficiency and financial performance of parastatals; and those in the area of regulatory framework--planning, coordination, and deregulation measures.

3.127 Parastatals. Few public transport undertakings earn sufficient revenues to cover operating costs and provide for asset renewal, let alone finance capacity expansion. IR, the country's largest undertaking in any sector, is expected to have arrears in asset replacement of Rs 67 billion by FY87 (expressed in FY87 prices). State road transport undertakings fail to generate internal resources, and the major ports are expected to finance only 42% of their expenditures during the Seventh Plan. The enterprises need to be put on a more commercial footing, and given clear-cut financial targets, with management held accountable for performance in relation to these targets. Improved financial results will require revenue measures (including rationalization of tariff structures to eliminate cross-subsidizing) but even outside these measures much can be done to cut costs. Economically obsolete assets (such as IR's four-wheel wagons, 1/, or many items of port equipment), which are not capable of earning sufficient revenue to cover their maintenance and operating costs, should be retired, even if they have not reached the end of their book lives in accounting terms. Staff rationalization is much more difficult, but it is nonetheless essential that a start be made by identifying the staff numbers and profiles required by 2000 and beginning to work towards that ultimate target by attrition, retraining and, as a last resort, retrenchment.^{2/} Workshops need to be modernized in terms of both their physical facilities and the procedures and methods employed, which frequently have not been adapted to the lower maintenance requirements of modern equipment, and fail to exploit the advantages of unit exchange system.

3.128 Speedier decision-making and implementation will also improve the enterprises' efficiency. Some major productivity-improving measures have been delayed not by lack of funds, but simply by lack of will to promptly implement them (e.g., an operations information system for the railways). Frequently, too, available funds are dispersed over too many projects, delaying completion and accrual of benefits from the individual projects (e.g., some rail electrification and telecommunications projects have taken 12-15 years to complete).

3.129 Planning and Coordination. Historically, transport planning in India has suffered from lack of economic analysis, which precludes informed assessment of the consequences of alternative levels or compositions of transport investment. Recently, a start has been made with the establishment of a Highways Planning Group (supported under the National Highways Project), which aims to relate both capital and maintenance expenditure more closely to economic measures of need. There is a need for similar initiatives in the

^{1/} These four-wheel wagons account for 50% of IR's wagon holdings, but produce only 10% of freight gross revenue.

^{2/} It may be necessary to develop training schemes to equip workers for jobs outside the enterprises.

other modes, especially rail, which has the largest investment budget, but also the greatest need to plan investment on an integrated systems basis.

3.130 The recent grouping of all transport modes under a single Ministry of Transport (railways and aviation were each formerly in separate ministries) should better facilitate inter-modal coordination, which is necessary not only in investment, but also in pricing, regulation, and documentation, especially for efficient movement of containers. Much of the coordination, however, can and should be left to market forces, so long as these are operating in an undistorted manner.

3.131 Role of the Private Sector. Faced with resource constraints and perhaps recognizing that some services are best provided by private enterprises, the Government has highlighted in the Seventh Plan an inclination towards a larger role for the private sector in transportation. Private sector participation will be allowed in the construction and maintenance of roads, provision of certain port services and dredging facilities, and in ship repairing. Furthermore, the Plan clearly indicates that further nationalization of passenger road transport undertakings will not be allowed, and that future growth of passenger road transport will occur in the private sector.

3.132 The Plan's emphasis in promoting private sector participation is welcome, especially in urban road transport and ports, where the private sector is likely to have a comparative advantage via more efficient operation and maintenance of equipment, speedier procurement of spares, more disciplined labor, and the flexibility to reward scarce skills appropriately.

3.133 Road Transport Deregulation. Road transport is regulated through the Motor Vehicle Act of 1939. As a result of amendments over time, the Act has become cumbersome and complicated. The Ministry of Transport is preparing a new Motor Vehicle Act, which will require Parliament's approval once completed. The new Act is expected to simplify procedures for issue of permits, driving licenses, and others; standardize its enforcement by all States; and apply stricter road safety regulations.

3.134 Inter-State movement of public carriers is also restricted by two important regulations: the existence of limits on the number of national, zonal and other inter-State permits for movement of long distance freight and passenger traffic on the highways, and the existence of octroi in several States and a system of multiple check points which impede efficient movement of vehicles.

3.135 Freight Equalization. The freight equalization scheme was introduced in 1956 for bulk commodities such as cement, iron and steel, fertilizers and foodgrains. The intention of the scheme was to promote industrial development of areas located far away from major sources of raw materials and production centers in an effort to promote balanced regional development. The scheme averages out the cost of transport of a certain commodity so that the commodity is charged the same transport rate regardless of the distance transported. The carrier, usually the railways, does not give any subsidy because it charges for freight at normal tariff rates. The equalization is later made by the concerned Ministry (usually Industry or Agriculture) through self-financing accounts. The main repercussion in the transport sector is the possible increase in the total number of ton-kms of the com-

modities affected due to the non-optimal location of industries with respect to either raw material sources or consumption centers. The optimality of the location of industries is affected because transport costs are not allowed to play any role in determining industrial location.

3.136 Trends in originating traffic and average leads for selected commodities transported by railways show that the average leads for cement, steel, and foodgrains, all under the freight equalization scheme, have increased steadily over the years. In contrast, the average lead for coal, not subject to the scheme, has shown a decline. Many reasons could explain these patterns, but the scheme must have played an important role. After examining the growth of industrial employment in various States between 1965-75, the National Transport Policy Committee concluded that freight equalization had little effect in generating employment activity in backward areas, and given the effect on real transport costs, recommended its phasing out. The Government should review all the available information and set up a timeframe for its gradual phasing out.

F. Housing, Urban Development and Water Supply

3.137 The Seventh Plan recognizes that urban land, infrastructure, shelter and municipal services will continue to be required on a massive scale. Even with the somewhat optimistic assumption that the urban growth rate will decline from an average of 3.9% during 1971-81 to 3.6% during 1981-2001, India's urban population will more than double from 160 million in 1981 to 326 million in 2001. The percentage of population in cities will rise from 24% to 32% during the period; about 54% of the total addition to India's population will be urban. The benefits of urbanization to the economic development process are recognized, and there is a constructive awareness that, in view of the inevitable magnitude of urban growth, existing policies for housing and urban development require a close look.

3.138 Issues regarding the distribution of urban population are not as well defined. The contention that large cities are growing much faster than smaller cities is not borne out in fact. When the composition of size categories is held constant from one period to the next, a more even growth pattern is revealed. ^{1/} In spite of this misperception, past emphasis on the need to stop the growth of large cities, which has not proven practical, is largely avoided in the Seventh Plan. A centrally-financed infrastructure development program for the Integrated Development of Small and Medium Towns (IDSMT) is being continued from the Sixth Plan. Central funding for the program is somewhat reduced, and it can now be used to assist somewhat larger cities (below 300,00 population instead of 100,000) which will enable assistance to be targeted more effectively to more rapidly growing cities. There is, however, no mention of how past problems with the planning, implementation and maintenance of these investments will be addressed.

^{1/} Cities in the largest category are growing at 3.6% instead of the 4.6% per year resulting when cities are allowed to graduate to higher categories.

Land and Shelter Development

3.139 At present, only about 10% of investment in land and shelter is by the public sector. The remainder is by formal and informal elements of the private sector. The Plan document recognizes that most housing investment will continue to have to be met by the private sector, and it targets two of the main constraints to the expansion of private sector housing for special attention; the lack of an adequate housing finance system and an inadequate supply of developed land.

Housing Finance

3.140 The Plan notes that the organized capital market has largely neglected housing finance. There is a large amount of direct investment in housing from household savings. This limited financial intermediation in housing investment is inefficient; it constrains the timing and limits the quality of housing investment. The challenge is not to increase present levels of investment in housing but to improve efficiency through increased financial intermediation. The rapid expansion of the Housing Development Finance Corporation (HDFC) has shown that well structured private housing finance agencies can prosper in India, but many details of a broader housing finance system remain to be determined. The Plan calls for the creation of a National Housing Bank with an equity contribution of Rs 500 million and a series of local housing finance institutions. This is the most significant difference in housing investment from past Plans. However, more important than large capital contributions will be the establishment of an adequate regulatory and legal environment. If the housing finance system is to have access to capital markets, it will require good quality collateral (e.g., satisfactory mortgage instruments, the ability to foreclose on bad debts, default insurance, etc.). Constraints to the entry of new housing finance agencies such as discrimination in access to capital markets have to be reduced. After these basic building blocks of a housing finance system are in place, it would be possible to assess over the longer term how potential sources of capital should be tapped (e.g., through savings schemes, on the one hand, or access to capital markets through various borrowing instruments, secondary mortgage markets, etc.).

3.141 Since adequate rates of return are necessary in order for housing investments to compete in the capital market, constraints to profitable investment have to be addressed. These include the inadequate supply of urban land for both public and private development, rent control, which limits the potential returns on housing investment, and the planning and development regulations of most States which make legal land and shelter development affordable to most of the urban population. There is considerable mention in the Plan of the need to adopt low-cost construction techniques, but the much greater potential economies from improved land use planning and development are overlooked. Although the Plan mentions the need to modify rent control laws, a meaningful program to accomplish this is not outlined.

Land Development

3.142 The Plan correctly emphasizes the need for public agencies (housing boards, etc.) to concentrate much more on land development and less on house construction, which can be done by the private sector and households.

However, there is the presumption that all land acquisition and development can be done by the public sector. In fact, it would be far beyond the capacity of public agencies. Where public development has been undertaken on a large scale, it has often proven inefficient. If the serious constraints to the functioning of urban land markets and the development of land by the private sector (the virtual freezing of urban land by the Urban Land Ceiling Act, unaffordable development regulations, inadequate provision of trunk infrastructure by local authorities, inadequate and expensive urban land registration and transfer, etc.) are not removed, the vast majority of the urban population will continue to have no alternative to illegal settlement in inadequately serviced community.

3.143 There are inconsistencies with regard to Housing and Urban Development Corporation (HUDCO). Housing agencies are urged to concentrate on land acquisition and development and sites and service projects for weaker sections at a cost of Rs 5,000 per unit. However, the cost ceilings on social housing schemes to be financed by HUDCO (through these same agencies) have been raised to include housing units costing up to Rs 75,000. One suspects, therefore, that large amounts will continue to be invested by public agencies in middle income housing, in spite of statements to the contrary. If subsidized funds remain available for housing at these levels, they will tend to undermine the establishment of viable private housing finance systems. The supposition that all weaker section housing must be subsidized also needs to be questioned. Experience in India has shown that, with efficient planning and plot pricing, low cost development can be undertaken without large subsidies, relieving public agencies of a large financial burden and thus enhancing the replicability of these programs and their access to capital markets.

Municipal Development

3.144 The Plan includes a large and necessary emphasis on improving the financial and administrative capacity of local bodies. It also includes the provision of Rs 500 million in initial capital for a new National Urban Infrastructure Development Finance Corporation, which would finance investments in municipal infrastructure and in water supply and sanitation. A central intermediary for infrastructure finance would provide an important funding source for municipal governments which is now lacking. It would assist in achieving more uniform development strategies for infrastructure and water investments and in improving the standards of project preparation and implementation. It could be an important conduit for international assistance in the urban and water supply sectors. If the creditworthiness of investments in the sector can be improved, the establishment of the Corporation could be a first step in local governments gaining broader access to the capital market. However, the provision of capital funding should not be over-emphasized to the neglect of adequate provision for operation and maintenance, as in similar past cases where capital financing has been made available from State to local agencies.

3.145 The best way to improve the provision, operation and maintenance of municipal infrastructure is, as the Plan notes, the strengthening of local finances and administration. However, few insights are provided into the difficult decisions related to this task. Much more effort needs to be taken to increase local tax and tariff collections. The property tax, which is the largest potential source of enhanced local revenue, is based on annual rental

values, and the effect of rent control has been especially devastating to the local tax base. Thus, change in rent control are especially urgent to mitigate effects on municipal finance. If this cannot be done, States would need to circumvent the effects of rent control by redefining the basis of valuation for the property tax.

3.146 The Plan provides continued support for the environmental improvement of slums. An important new emphasis and budget allocation have been added for community participation. The per capita allocation for slum improvement has been raised from Rs 250 to Rs 300, but the amount allocated in the Plan (Rs 270 million) falls short of the Rs 6,500 million to Rs 7,500 million (in 1982 prices) requirement estimated by a Planning Commission Task Force to make a meaningful improvement on all slums within a 15- to 20-year period. This limitation in scale is due in part to the absence from the program of the important elements of cost recovery, upon which long-term replicability at the required scale would depend, and provision of land tenure, which is important to encourage permanent investment in housing and provide collateral.

Water Supply and Sanitation

3.147 The Plan calls for continued large scale investments with roughly the same outlay in real terms as the Sixth Plan from the Central Plan. In the past, the achievement of physical investment targets has largely been accomplished. A range of issues related to efficiency, administration, cost recovery and operation and maintenance have proven more difficult.

3.148 The Plan recognizes that, the large financial deficits in water supply and sewerage operations often lead to inadequate operation and maintenance, thus that more of the cost should be met from charges to beneficiaries, particularly in urban areas. This objective can be met from cost reduction through greater operational efficiency, as well as from improved billing and collection and increased tariffs. Although improved community participation is suggested as a means of controlling waste, additional measures to improve operational efficiency and conservation should also be considered, including improved water pricing, the introduction of metering (beginning at least with bulk supply), leak detection, more routine inspection of plumbing, and flow restrictions. Improvements in billing and collection, as well as increases in water tariffs are also suggested, and these warrant serious consideration in many cities. Where volumetric charges are not used, the water tax is related to property valuations, and it is also distorted by rent control. This underlines the need for rent control/property tax reform and/or the introduction of other charging systems. The suggestion of greater reliance on capital charges for direct cost recovery merits consideration, but cost recovery policies placing less incentive for conservation would have to be carefully considered.

3.149 Institutional arrangements, especially the division of responsibilities between State and local agencies, have often fragmented accountability. In some cases, they have led to reduced incentives for operations and maintenance and cost recovery. Given the diverse institutional arrangements and histories in the States of India, it may not be practical to achieve uniform institutional arrangements, as suggested in the Plan. However, certain principles should be kept in mind in determining the appropriate arrangements for each State. Agencies should be more accountable

to the public for the cost of the service they provide. This is not the case where responsibilities are unclear or where costs are not properly accounted for and recovered. They need to be able to recruit and retain adequate technical and administrative staff which may require higher pay scales. They need to be able to collect sufficient funds for operation and maintenance and for debt service and they should have the capacity to expand or improve services as required. The suggestion for improved project monitoring and management information systems merits support.

3.150 The emphasis on alternative means of sanitation is positive to reduce both capital and maintenance costs. However, low cost sanitation programs have been slow to develop. Now that technical solutions are generally accepted, much more emphasis needs to be placed on establishing appropriate administrative and financial arrangements and incentives at the State and local levels to ensure their application at the required scale.

3.151 The provision of up to 10% of Plan funds for the maintenance of rural water systems and the possibility of maintenance charges are positive suggestions for addressing this difficult problem. The definition of appropriate administrative and financial arrangements for assuring the maintenance of massive past and proposed investments in rural water supply remains a serious issue to be resolved.

G. Population and Family Planning

3.152 In recognition of the adverse effects of rapid population growth (see discussion in Chapter 1, paragraphs 1.09-1.10) the Seventh Plan sets aside substantial resources (Rs 32.6 billion which is twice in real terms what was actually spent during the Sixth Plan) to support the Family Welfare Program. This program makes family planning services available through clinics, primary health centers and other facilities and by means of outreach activities and special campaigns and camps. Dissemination of information on family planning, motivational work, and incentive payments to acceptors are also part of the Family Welfare Program.

3.153 The Seventh Plan's objective is to increase the proportion of couples in the reproductive age group using effective contraceptive methods by nearly a third (from 32% in 1985 to 42% in 1990). The goal appears to be feasible but difficult considering that the effective Contraceptive Prevalence Rate (CPR) after remaining at about the level achieved during the Emergency (24%) in 1976-77 rose by 2.7 percentage points annually between 1982 and 1985. Moreover, it should be kept in mind that with very high CPR levels already being recorded in States like Maharashtra and the Punjab, future advances will necessarily have to be concentrated in States such as Bihar and U.P. and within population sub-groups which have not been effectively reached with family planning services and in which no strong demand for such services is apparent.

3.154 The Plan's call for urgent reductions in maternal and infant mortality rates and the concomitant need to improve and expand Mother and Child Health (MCH) services is well-founded but short of specifics. The Plan gives high priority to the development of MCH activities which are to be provided on the basis of a "high risk" approach. The Plan very rightly suggests that "the MCH component of medical and paramedical training needs to be carefully planned and implemented." In response to high maternal mortality, the Plan

also calls for the augmentation of the dai training program. The Plan's proposals, however, do not go to the root of the problem; until field workers' priorities really do include the provision of MCH services and a broad range of contraceptive methods, and until they and their supervisors adopt priority outreach strategies focussed on those most at need, no amount of training or program expansion will have a significant impact on maternal and infant mortality.

3.155 The Plan reiterates the longstanding objective of achieving greater community involvement in the program with specific reference to voluntary organizations, women's groups and youth groups. In the past, this approach has had uneven success because the distribution and quality of such organizations varies widely throughout India, and community involvement is, in any case, difficult to implement. Although the Ministry of Health and Family Welfare is already endeavoring to involve voluntary organizations, greater flexibility and decentralization of authority are required to allow States to tackle problems caused by complex administrative procedures which inhibit the participation of voluntary organizations in the program. The proposed creation of special cells to deal with voluntary organizations, as has been done under a Bank-assisted population project in West Bengal is only an initial step towards strengthening voluntary organizations and fully utilizing their potential contribution to the program. Further means of enhancing the role of voluntary organizations need to be identified and put into place.

3.156 Apart from eliciting greater community involvement, there are other actions which need be taken to improve the effectiveness of State-level family welfare programs. First, rigid GOI insistence on identical organizational and staffing norms in the name of equity has paralyzed development in many States. Fixed all-India norms, should be replaced by needs-based planning at State level. This would not only assure an equitable distribution but would also lead to a more effective utilization of financial resources. The Plan rightly calls upon State Governments to implement demand generation activities, to systematize reorientation and inservice training, and to strengthen monitoring, evaluation and research activities. But performance of these functions hinges on vastly improved planning at the State level. State health organizations need to be reviewed, along the lines of reviews carried out in Karnataka and Maharashtra, to ensure that capacity to deliver health and family welfare services is in line with the Plan's stated policy of concentrating on primary health care (which includes family welfare). Improved planning and performance need to encompass the budgeting process. Capital investments in facilities are not fully utilized because of short-falls in recurrent expenditure.

3.157 Other recommendations pertain to training and research. Training deserves greater attention. All aspects of training require urgent attention and a comprehensive review should be a high priority for GOI. The present administration and organization of training throughout India are quite inadequate for the program, and prospects for the achievement of Plan targets are not good unless GOI and State Governments give training the priority it needs. Similar observations apply to research and technology development which are briefly referred to in the Plan. The need for a greatly extended capability for operational research, as an essential adjunct of program implementation, is not fully explored in the Plan.

3.158 All in all, the policies, strategies and administrative actions in the Plan does not really provide a comprehensive framework to achieve the proposed targets. What is missing, in part, is a clear statement of national population policy. Secondly, the role of the Centre in determining overall strategy needs to be reinforced, while the responsibilities of State Governments with respect to applying policies and implementing programs need to be clearly defined. The Centre must devise means whereby State Governments are held to account for program performance. This requires the introduction of State-level incentives and disincentives which go well beyond those now in place. Accountability could be achieved by insisting on the preparation of annual operational plan by each State. Thirdly, program managers need to be able to respond flexibly and quickly to the operational problems which are inevitable in undertaking of the scale of the Indian population program. The Government is currently putting together a new policy thrust in both population and education fields which is expected to deal with the key issues identified above.

Chapter 4

DOMESTIC RESOURCE MOBILIZATION

A. Introduction

4.01 The Seventh Plan calls for total expenditure of Rs 3,481 billion and for a public sector outlay of Rs 1,800 billion (Table 4.1). Of the latter, 42% is to be financed through the public sector's own resources, compared to the 37% that was financed with the public sector's own resources in the Sixth Plan. In addition to the 42% from own resources for public outlay in the Seventh Plan, domestic borrowing would provide 48% of the required resources; the remaining 10% would come from external sources (Table 4.2). Attaining this increased level of self-financing will be one of the Government's most formidable challenges in implementing the Seventh Plan. A challenge which it has already taken steps to meet through major changes introduced through the past two budgets and through other administrative efforts.

4.02 To accomplish this self-financing goal, set in the Seventh Plan, the public sector would have to increase the funds available from its own resources from the 4.8% of GDP realized during the Sixth Plan to 6.1%. To attain this while simultaneously allowing a sharp deterioration in Governmental current non-plan budgetary surplus (from 2.6% to 1.3% of GDP) and expecting an even sharper increase in public enterprise savings (from 2.2% to 4.8% of GDP) could create problems (Table 4.2).

4.03 This strategy raises a number of critical questions: First, what can be done to assure that the budgetary resource mobilization performance does not deteriorate beyond the 1.3% of GDP level? Without additional resource mobilization (ARM) measures, according to the Seventh Plan the budgetary surplus would fall to a -0.4% of GDP. Second, what are the prospects for increasing the public enterprise contribution to Plan outlay from 2.2% of GDP to 4.8% in such a short time period? Third, what would be the economic implications of a continuation of recent trends, which would imply an even sharper deterioration in budgetary resource mobilization than planned, and less public enterprise resource mobilization? Fourth, what are the risks involved in increasing the already high level of public sector borrowing in the domestic market to 5.9% of GDP? Finally, is this strategy, which calls for total public sector outlay (non-Plan as well as Plan) to increase from 32% of GDP in the Sixth Plan to 37% in the Seventh Plan (with an upwards trend that could take it close to 40% by the end of the Plan period) consistent with a strategy which calls for an increasing role for the private sector.^{1/}

^{1/} See Tables 4.8 and 4.9a. These show the sources and uses of funds for the consolidated public sector in the Sixth and Seventh Plans and the trends in public expenditure from 1979/80-1989/90.

**Table 4.1: INDIA: Seventh Plan Outlay
(Rs billion)**

<u>Source of Funds</u>	<u>Public</u>	<u>Private</u>	<u>Total</u>
Own Resources <u>a/</u>	574	2,449	3,023
Transfers from Domestic Sectors	788	-788	-
Foreign Financing	180	20	200
Total Investment	1,542	1,681	3,223
Current Outlays <u>b/</u>	258	-	258
Total Outlays	1,800	1,681	3,481

a/ Net of current outlays (Rs 258 billion) and inclusive of financial institution savings (Rs 83 billion); hence, differs from "internal resources" shown in Table 4.2.

b/ Current expenditures associated with Plan investments are included as part of total Plan outlay. "Internal Resources" to finance Plan outlays are thus Rs 749 billion or 42% of total outlay (Rs 574 billion + Rs 258 billion - Rs 83 billion).

Source: Seventh Plan, p. 48, Table 4.3.

Table 4.2: INDIA: Financing of Public Sector Plan Outlays

<u>Source</u>	<u>Percent of GDP</u>	
	<u>6th Plan /a</u>	<u>7th Plan</u>
Public Sector - Internal Resources	4.8	6.1
Budgetary Current Surplus <u>/b</u>	2.6	1.3
(of which ARM measures)	(2.4)	(1.7)
Public Enterprise Savings	2.2	4.8
(of which ARM measures)	(1.5)	(1.9)
Borrowings	8.3	8.5
Domestic Sources	7.3	7.0
Market <u>/c</u>	5.5	5.9
Reserve Bank	1.9	1.1
Foreign Sources	1.0	1.5
Total Resources	13.1	14.5

/a Revised estimates.

/b Calculated as current revenues less non-Plan current expenditures.

/c Including miscellaneous capital receipts (net).

Source: Tables 4.8.

4.04 These questions guide the analysis in this chapter, which examines the steps that would be required to achieve these resource mobilization goals, while at the same time improving the efficiency and equity of the fiscal system. For the Central Government, the main challenges will be to (a) continue efforts already underway to carry out reforms of the direct and indirect tax systems along the lines laid out in the LTFP; (b) further improve non-tax revenues (which will depend on better performance of the public enterprises and on charging higher interest rates for onlent funds); and (c) increase efforts to control the expansion of non-developmental current expenditures, particularly on defense, interest, and subsidies, which constitute about three-fourths of the total non-plan expenditures of the GOI.

4.05 Because of the major role that public enterprises are expected to play in generating savings during the Seventh Plan, the chapter devotes considerable attention to them, and looks specifically at the potential for additional resource mobilization by the fertilizer and steel units at the Central Government level, and by the water and electricity boards at the State level. Finally, since State Governments account for roughly half of Government expenditures and revenues in India, and as their financial performance directly affects overall public sector savings, the prospects for additional resource mobilization by state governments are examined.

4.06 The main conclusions of the chapter are that, if fiscal reforms along the lines already initiated by the Government can continue to be carried out successfully, if there are major improvements in the profitability of public enterprise, and if the investments are executed in an efficient manner so that the anticipated GDP growth is realized, the nation should be able to finance the Seventh Plan as indicated without undue economic difficulties. The success of these efforts is critical, however, for if fiscal trends of the past few years were to continue, the public sector's own contribution to Plan outlays would fall well short of the mark. If the Plan were nevertheless implemented in full, serious economic problems would arise. For example, if the resource gap were met by borrowing from the banking system and monetary expansion were held within prudent bounds, the incremental net credit available to the private sector would fall from the past level of about 3.2% of GDP to -0.7% of GDP by 1989/90. If instead the gap were closed by additional monetary expansion (borrowing directly from the Reserve Bank), the resulting inflationary pressure could push the inflation rate up by at least 4.0% per year by the end of the Plan period. The interest burden of domestically held public debt, which is in any event expected to increase by 57% with respect to GDP between the Sixth and Seventh Plans, could rise even higher by 1989/90, creating a situation where the Government would have to borrow to pay interest on outstanding debt, which in turn would build up at an increasing rate leading to a variety of economic problems and distortions. The level of deficit which could be sustained without getting into a situation of endlessly rising debt service burdens depends on a variety of factors including the interest rate, the rates of inflation, GDP growth, etc. However, using some moderate assumptions (5% GDP growth, 7% inflation, 10% interest rate, and 20 years maturity), it appears that a public sector borrowing requirement (savings/investment gap) of 3-4% of GDP could be sustained indefinitely. Thus Government's efforts to reduce the borrowing requirement from the present level of around 7% of GDP are of very great importance.

B. The Domestic Resource Prospects for the Seventh Plan

4.07 As indicated earlier, the Seventh Plan calls for investment totalling Rs 3,224 billion (25.3% of GDP) 1/ in 1984/85 prices, compared to about 24.5% of GDP realized during the Sixth Plan. Of the total allocation, Rs 1,542 billion would come from the public and Rs 1,681 billion from the private sector (these figures exclude the Rs 258 billion of current outlay included in the total Plan of Rs 3,481 billion--see Table 4.1). This is the first time that a plan has allocated a higher investment share to the private than to the public sector. 2/

4.08 Given the significantly higher rate of investment proposed for the next five years: (a) will the proposed investment generate the forecast level of GDP, from which the savings are to be made; and (b) if it does, can the necessary rate of savings relative to GDP be realized?

GDP Base of Savings

4.09 The GDP from which the savings required for financing the Seventh Plan are to be made is forecast to grow at 5% p.a. over the period 1985/86-1989/90. Achieving this rate, however, will be a challenge. First, overall capital output ratios have been rising markedly since the late-1970s. The 5% growth forecast in the Plan requires that the incremental capital output ratios (ICOR) be reduced from 5.4 in the Sixth Plan to 5.0 in the Seventh Plan. Second, although a growth rate of slightly over 5% was realized between the base and last year of the Sixth Plan, GDP in the base year (1979/80) had fallen by 5.2%, which inflates end-year growth rates for the Sixth Plan. Thus attaining the targeted 5% growth rate actually means raising the trend growth by 1%, compared to the 0.5% attained in the last 5-10 years--and with a very small increase in investment relative to GDP. If the proposed investments do not generate the anticipated 5% annual GDP growth but the investment takes place anyway, the national income needed to generate the required savings and to repay the loans taken out to finance the projects will not be there. This could lead to both inflationary domestic borrowing and excessive external borrowing.

Savings Prospects

4.10 Assuming for now that the ICOR can be reduced from 5.4 to 5.0 as assumed in the Plan and that a 5% growth rate will be attained, is the economy likely to be able to realize the projected savings rate of 24.5% of GDP by the end of the Seventh Plan (Table 4.3.)? There are at least two

1/ The commonly quoted figure of 25.9% (or 26%) is for the final year of the Seventh Plan (ref. P7, p. 26).

2/ Although the public sector has been given a slightly smaller share in the allocation of investment for the next five years than in the past, the public sector's role in the economy is proposed to increase. Non-Plan current expenditures are expected to increase from 9.8% of GDP in the Sixth Plan period to 11.5% during the Seventh Plan. Public investment, though a smaller percentage of total investment than in the past, is proposed to increase relative to GDP.

reasons for concern. First, the projected savings rates are considerably higher than rates generally attained in the past and much higher than for other countries at India's level of per capita income. Second, the implicit marginal savings rates in the Plan are high. This is particularly true for the public sector, which is expected to save over 40% of its incremental income. The overall marginal savings rate for the economy is 28.3 and for the private sector 25.3, clearly a challenge for a country at India's per capita income level.

Table 4.3: INDIA: TRENDS IN SAVINGS AND INVESTMENT
(% of GDP) /a

<u>Item</u>	<u>79/80</u>	<u>80/81</u>	<u>81/82</u>	<u>82/83</u>	<u>83/84</u>	<u>84/85</u>	<u>Sixth Plan</u>	<u>Seventh Plan</u>
Domestic Savings	22.7	21.0	21.0	21.7	21.7	21.4	21.6	22.9
Net Factor								
Income	0.2	0.2	-0.1	-0.5	-0.4	-0.5	-0.1	-0.5
Current Transf.	1.4	1.7	1.4	1.5	1.4	1.3	1.5	1.3
National Savings	24.3	22.9	22.3	22.7	22.7	22.2	23.0	23.7
Foreign Savings	0.2	1.8	2.2	2.0	1.5	1.2	1.5	1.6
Gross Investment	24.5	24.7	24.5	24.7	24.2	23.4	24.5	25.3

Source: Statistical Appendix, Table 2.2.

/a Calculated from current price data, except for Seventh Plan figures, which are based on 1984/85 prices. Sixth Plan figures are average of percentages for each year. Net factor income and current transfers data for 1984/85 onwards are staff estimates based upon the World Bank BOP model. Domestic savings are derived accordingly.

4.11 The national savings rate declined from 24.3% in 1979/80 to 22.3% in 1984/85. Attaining the targeted national savings rate of 23.7% will thus require a reversal of recent trends. This may have to be accomplished in the absence of the external factors (especially high workers remittances) which were important to achieving past high rates. For example, in the Seventh Plan it is assumed that at best expatriate remittances will stay constant in nominal terms, which implies a fall in real terms and relative to GDP. If world oil prices stay well below the Sixth Plan levels, however, the projected national savings rate will be substantially easier to achieve. Success in achieving the Seventh Plan global savings target will thus depend very heavily improving savings performance in the public sector--where savings have been declining for a number of years and are currently very low.

4.12 Achieving the targeted savings rates will also be made difficult by the widely perceived need to raise average per capita consumption levels and thus the standard of living of the common man. With a 1983 GNP per capita of only \$260, India ranks among the 15 poorest countries in the world (WDR, 1985, p. 174). Given India's high savings rate--nearly four times that of other low-income countries excluding China--the average 1983 per capita consumption was even lower--under \$200. Raising the growth rate to 5% is important because it will mean that consumption levels can be improved at the

same time savings are being increased. The task for policymakers is thus to increase the productivity of savings and investments, as well as the rates of savings and investment.

4.13 Public Sector Savings. The targeted savings rates assumes a radical improvement in the public sector's savings performance. As of 1983/84, the public sector gross revenues were about 22% of GDP. ^{1/} Out of these resources, it managed to save the equivalent of only 3.2% of GDP. Overall public sector savings reached a two-year average peak of 5% of GDP in 1976/77-77/78, but by 1980/81-81/82, this average had fallen to 4.3%. Private household savings are expected to remain at about 20.5% of disposable income, and the private corporate sector will, by definition, continue to contribute 100% of its depreciation allowances and undistributed profits to savings. The public sector is called upon, however, to increase its savings from 28.8% of estimated income in 1984/85 to 32.5% by the end of the Seventh Plan, which implies a marginal savings rate of 41%. ^{2/} Is this feasible? Only with marked improvement in resource mobilization at all levels including the Central Government, the State Governments and the public enterprise units. Most of the remainder of this chapter is dedicated to a detailed analysis of the causes of the inadequate resource mobilization in the public sector and the measures that will be needed to assure that adequate non-inflationary financing is available for the Seventh Plan. First, however, it may be useful to show the relative financial importance of these key components of the public sector (ref. Table 4.4).

4.14 Several important implications arise from this table regarding prospects for achieving the savings rates targeted in the Seventh Plan. First, State Government is about the same size as the Centre in terms of command over current resources (revenues and expenditures). Thus policies to improve resource mobilization should focus as much on the States as the Centre. ^{3/}

4.15 Second, the savings effort of Government has deteriorated markedly in the past decade--to the point that Central Government is now borrowing to finance even current expenditures. Since the start of this decade, neither the Centre nor the States have done well in terms of their savings effort. The current budgetary deficit of the Centre has roughly doubled relative to GDP since 1979/80 and the budgetary surplus of the States has declined steadily. Of even more concern than the individual savings performance of either the Centre or the States is the fact that, collectively, they no longer generate current budgetary savings. The appropriate source of government savings can be debated, but there is no doubt that sound financial

^{1/} Revenues of government plus savings of public enterprises, or current income. This excludes domestic and foreign borrowing.

^{2/} Seventh Plan, Table 4.1.

^{3/} This is not to say, however, that the savings performance should be the same at both levels; various political and administrative factors may dictate, for example, that revenues should be collected by the Centre and be passed on to the States for disbursement. In the aggregate, though, substantial savings effort on the part of Government is required.

management of the economy requires non-inflationary financing for investment in the form of overall Government savings. It is therefore encouraging to note that the deficit-prone State Governments, with strong encouragement from the Centre, took substantial measures during 1985/86 to control expenditures. This effort, combined with buoyant income tax revenues (of which States get about 85%) and medium term loans from the Center to clear outstanding state overdrafts, resulted in a situation by the end of 1985/86 where no state was on an overdraft position.

**Table 4.4: INDIA PUBLIC SECTOR INDICATORS
(% of GDP)**

	Government			Non-Financial	
	Central	State	Total	Public Ent.	Public Sector
Financial Size - 1984/85					
Current Income	10.8	9.0	19.8	-	-
Current Expenditures	10.9	8.2	19.0	-	-
Investment	1.9	3.7	5.6	6.7	12.3
Savings Performance /a					
1974/75	1.2	1.3	2.5	0.9	3.3
1979/80	0.9	2.0	2.9	0.9	3.8
1984/85	-	0.8	0.8	1.7	2.5
1989/90 /b	1.2	1.0	2.2	2.2	4.4

a/ Defined as current revenues less expenditures for Government, and as gross profits before depreciation but after tax for public non-financial enterprises.

b/ Bank estimates based on Seventh Plan assumptions.

Source: CSO National Accounts Statistics.

Table 4.5: PROFITABILITY OF CENTRAL GOVERNMENT NON-DEPARTMENTAL ENTERPRISES

	<u>72/73</u>	<u>73/74</u>	<u>74/75</u>	<u>75/76</u>	<u>76/77</u>	<u>77/78</u>	<u>78/79</u>	<u>79/80</u>	<u>80/81</u>	<u>81/82</u>	<u>82/83</u>	<u>83/84</u>	<u>84/85</u>
<u>Rate of Return on Capital Employed /a</u>	(percentage)												
A. Total Manufacturing Enterprises	3.84	5.70	7.70	7.60	8.76	5.01	6.06	6.31	6.64	12.67	14.51	13.05	13.66
Steel	-0.33	1.65	4.77	3.94	5.92	2.52	6.22	3.39	4.01	4.50	1.83	-2.30	2.34
Minerals & Metals /b	-0.84	3.11	-5.44	1.36	2.23	-4.37	-7.82	-0.92	6.83	3.51	2.96	-2.28	3.44
Power											6.01	6.23	9.14
Petroleum	16.51	17.21	29.58	26.07	26.08	32.50	21.81	18.75	14.07	38.12	46.01	44.23	36.69
Chemicals	3.82	2.68	6.01	1.29	1.08	-1.84	3.01	0.71	0.25	5.17	6.74	5.33	7.14
Engineering Goods	6.02	8.18	10.65	11.65	13.05	7.03	8.01	8.44	6.22	11.58	11.45	13.52	12.86
Others	-3.28	0.47	2.41	2.89	1.90	-0.19	5.80	17.27	10.99	-5.12	5.79	-19.60	-14.24
B. Total Service Enterprises	8.25	7.95	10.13	7.11	10.09	11.38	10.02	10.80	10.05	10.92	10.02	9.74	10.91
C. Total Running Enterprises	5.10	6.33	8.40	7.42	9.29	7.58	7.67	8.03	7.79	12.10	13.06	11.94	12.74

Notes:

/a Capital employed is fixed assets less depreciation, plus working capital excluding items under construction or expansion.
 Capital employed is as at the end of the year.
 Gross Profits represents excess of income over expenditure after depreciation but before tax and interest on loan.
 Return on Capital Employed is computed by dividing Gross Profits by Capital Employed.

/b Including Coal.

Sources: Bureau of Public Enterprises, Public Enterprises Survey, various issues.

4.16 The third major concern is the very mediocre savings performance of public enterprises (Table 4.5). Despite the massive investments that have been made in these enterprises, their returns do not amount to much. Take, for example, the Central Government enterprises. Between Independence and March 1984, some Rs 336 billion had been invested in them. The return (after depreciation and interest) on this much of investment amounted to only Rs 22 billion in 1984/85 (7%). What is more, 96% of this return was from the oil sector which is benefiting not only from fairly good management, but also from present pricing policies (domestic oil prices were set at international prices of several years ago; today the margins on both domestic and imported oil are very comfortable). The return on non-oil public enterprise in 1984/85 was only Rs 0.8 billion. As low as this was, it represents a considerable increase over previous years.

4.17 Financing an investment program of the size proposed by the Seventh Plan thus presents a considerable challenge given the rising trends in incremental capital output ratios, the likely fall in net transfers from abroad, the sources of the past growth in savings rates, and the past poor performance of both Government (State plus Centre) and public enterprise in generating savings. This chapter next looks at critical components of public sector savings at the Centre and State levels.

C. Tax Revenues

4.18 The Government managed to increase the yield of India's tax system from 13% of GDP ten years ago to around 16.5% in the period 1981/82-1982/83. However, during the past two-three years the growth of taxes relative to GDP stopped; taxes in fact fell slightly--to just over 16% of GDP. The Government is currently taking substantial measures to improve the elasticity of the tax system. Other areas where efforts are underway to improve the system include measures to increase its efficiency by reducing its administrative costs and biases in the price signals given to producers and consumers. In making these changes, the Government is also seeking to maintain and improve the equity of the system, both as it affects different income classes and as it affects different individuals (or corporations) in the same economic group.

4.19 Elasticity. The rising share of total taxes relative to GDP in the past decade demonstrates a buoyancy that has been attained through fairly regular increases in tax rates. However, the system has certain intrinsic inelasticity which has made it necessary for the Government to continue adjusting tax rates and coverage in order to increase tax yields relative to GDP. 1/

4.20 Since changes in the tax laws are always taking place in India, measurement of the system's intrinsic ability to keep up with GDP growth is difficult. However, the Government's tradition of reporting budgeted taxes

1/ Buoyancy measures the actual ability of the tax system, including changes in rates, coverage, etc., to keep up with the growth of GDP. Elasticity measures its ability to keep up without changes. An elasticity or buoyancy greater than unity indicates a rising share relative to GDP, and vice versa.

in terms of yields at current rates separately from yields due to "Additional Resource Mobilization" (ARM) measures provides some insights. For example, without ARM between 1980/81 and 1984/85 (the period of the Sixth Plan), taxes would have fallen with respect to GDP (P7, p. 67). Even with ARM, which at the Centre alone accounted for additional taxes equivalent to 1.6% of GDP during the Sixth Plan, Central taxes only rose by 0.14% of GDP. Without ARM they would have fallen by about 1.5% of GDP.

4.21 An inadequately elastic tax system causes many problems, most of which derive from the need to make frequent changes in the tax laws. For example, changes almost always involve raising taxes, which inevitably generates political resistance. The resulting negotiations necessary in a democratic country are time-consuming and often unpleasant. Changes consequently tend to be postponed as long as possible, resulting in falling tax ratios and the need for even more severe measures once action becomes unavoidable. Much preferred is a system that, because it is elastic, can also be stable.

4.22 Efficiency. The Indian tax system has in the past led to various types of inefficiency; First, the system does not always give "efficient" signals to producers, which may encourage activities that are not economically efficient. For example, excise taxes have traditionally been applied in a cascading fashion which tends to favor vertical integration, even at uneconomic scales of production, rather than fostering specialization and development of economically sized ancillary units. To reduce the inefficiencies of a cascading tax system, the 1986/87 Budget announced the introduction, effective March 1, 1986, of a Modified Value Added Tax (MODVAT) which basically eliminates cascading of excise taxes for nearly 37 manufactured product categories (see also. para. 4.49). Excise duties in the past have been applied at widely varying rates, which have caused marked differences between the economic and financial profitability of certain lines of production. Again recent tax reforms have been undertaken to begin reducing the variation of rates (see also. para. 4.48). Many other examples of aspects of the traditional tax system that have induced inefficiencies can be cited including treatment of various categories of expenditures (e.g. for executive salaries and travel), differential sales taxes among states that encourage economically needless transport of goods, high and widely varying import duties, etc. Differential tax rates may, of course, be intended to take into account the differing externalities of various activities and in such cases can contribute to both economic and social objectives. However, the impression one gets from an examination of the Indian tax system suggests that the results of the widely varying nominal and effective tax rates have for the most part been unintended.

4.23 Primarily because of (a) the common perception in India that the system was intrinsically unfair and discriminatory, and (b) the widespread reliance on discretion rather than rules in the application of the system, the system has been administratively less efficient than desirable. The Government has recognized over the past several years that elements of the system could be improved and has begun to make changes accordingly. For example, it has been reducing the marginal rates of direct taxation which,

including the wealth tax, could exceed 100% on income from wealth until last year. 1/

4.24 The problem of reliance on discretion instead of clearcut rules was seen, for example, in the classification system used for excise duties until the reform of the classification system that was introduced in December 1985. Under the old system, products could sometimes be logically classified under more than one heading, and when the rates applicable vary substantially, the incentives to influence the classification process illegally were severe.

4.25 The recent report on black money in the Indian economy highlighted this aspect of the current tax system, calling for a move to a simpler tax system depending more on rules and less on discretion. 2/ It is against this background that many of the current changes are being made.

4.26 Equity. A third aspect of the Indian tax system which the Government is seeking to correct is its equity. Equity is very hard to define and is affected by many factors other than the tax system. However, there are at least two equity-related aspects of the present system which most would agree could be improved. First, the system has been depending more and more on indirect rather than direct taxes. Indirect taxes rose from about 78% in the mid70s to about 85% of Government tax revenues more recently, while direct taxes have fell from about 22% of Government tax revenues in the mid70s to about 15%. As direct taxes tend to be more progressive than indirect taxes, a tax system that moves away from taxation of income and wealth and towards taxation of goods tends to become less progressive. However, evasion and avoidance of direct taxes by the wealthy in practice limit the progressivity of direct taxes; in addition indirect taxes can be designed to exempt basic consumption goods and tax more heavily the items consumed by the rich. Thus the usual generalization about direct taxes being more progressive than indirect taxes must be applied with caution. Also, from an equity point of view (as well as encouraging private savings) there may be a case for indirect taxation of consumption expenditures rather than taxing income per se.

4.27 Besides the move towards generally less progressive indirect taxes, the equity of the current Indian tax system has been reduced by the fact that agricultural incomes, which constitute about one-third of national product, are essentially tax free. There are caveats to this statement as discussed below, but the essential fact remains that the burden of income taxation is borne by some 4 million taxpayers out of a work force of about 300 million people. Nearly 40% of income taxes are paid by salaried workers, 3/ who have few ways to shelter their incomes, while agricultural incomes -- at least

1/ Assuming a return of 10% from wealth (the maximum rates of income tax and wealth tax were 61.875% and 5% respectively; they are currently are 50% and 2% respectively which reduces the maximum marginal rate to 70%.)

2/ National Institute of Public Finance and Policy, "Aspects of the Black Economy in India," 1985.

3/ GOI, Central Board of Direct Taxes, All India Income Tax Statistics 1981/82, (New Delhi, 1984), pp. 47-49.

part of which accrue to reasonably well-off individuals -- largely escape taxation.

4.28 Further progress in improving the elasticity, efficiency and equity of the Indian tax system will be important, especially as the Seventh Plan calls for the Central Government tax ratio to rise from the current level of 16.3% of GDP to 18.3% by 1989/90. A similar increase in the tax ratio was targeted in the Sixth Plan, but the actual increase was only 0.2%. The resulting shortfall in resources was one of the key reasons for the nearly 20% shortfall in real public investment.

4.29 The following sections examine measures that will be required in the areas of direct and indirect tax policy to keep this from happening again in the Seventh Plan.

Direct Taxes

4.30 The various direct taxes on income, property and wealth in India, which have been declining over time in relative importance as noted above, amounted to 2.9% of GDP in 1984/85. Of this the key components are corporate income tax (1.3% of GDP), personal income tax (1.0%) and taxes on wealth and property (0.6%). Corporate income taxes are exclusively a revenue for the Centre. Taxes on personal incomes are for the most part collected by the Centre, but over three fourths of the total is passed on to the states. ^{1/} Taxation of agricultural income, which is reserved to the States, is negligible.

4.31 The following sections on corporate and non-corporate income taxes examine the factors which have led to the decline of direct taxes on income from 3.4% of GDP in 1975/76, the steps being taken by the Government in the recently announced Long-Term Fiscal Policy (LTFP), and further measures needed to improve the elasticity, efficiency and equity of the direct tax system.

Corporate Income Tax

4.32 Elasticity. The corporate income tax does not seem to be intrinsically as elastic as the personal income tax for two reasons. First, unlike the personal income tax, it is not progressive (this is consistent with corporate tax laws on many other countries). The rates do not escalate with the size of profits. India's corporate tax system does include, however, an "excess profits" surtax which in theory introduces a certain progressivity

^{1/} As per the recommendations of the Eighth Finance Commission, 85 per cent of the net income tax revenue collected by the GOI is passed on to the States. As net income tax revenue is calculated after making certain deductions (e.g. cost of collection), the actual amount transferred to the States in recent years worked out to about two-thirds of the total collections from income tax. With the recent abolition of the income tax surcharge (which is not shareable with the States), the percentage of collected income taxes going to the States should rise closer to the 85% mark.

based on the degree of profitability--but not on the absolute size of profits.

4.33 The second reason for the lower intrinsic buoyancy of the corporate income tax is that its natural elasticity has been undermined by widespread tax expenditures. ^{1/} As a result of these two factors--plus widespread tax evasion--corporate income tax collection fell from 2.5% of non-agricultural income in 1977/78 to only 1.8% in 1980/81. The Government's recent efforts to tighten up enforcement of existing tax laws help account for the increase of corporate tax yields to 2.3% of non-agricultural incomes that occurred in 1983/84. However, much of the improvement is due to the rapid growth of taxes on the public sector oil companies like ONGC and OIL, whose corporate income taxes have grown ten fold since 1978/79 and now account for nearly 37% of all such tax receipts (LTFF, p. 24). Income taxes on private corporations fell from 1.02% of GDP in 1979/80 to 0.64% in 1983/84. ^{2/}

4.34 The Government has begun a reform of the corporate tax system that should improve its elasticity. First, corporate tax rates were reduced in the 1985/86 Budget by 5%. The strategy has been to reduce the incentives to evade tax while at the same time making it more dangerous to do so through more strict enforcement of tax laws. Recent experience indicates the merits of this approach--total income taxes rose by over 25% during the first 7 months of 1985/86.

4.35 The Government has also sought to increase corporative income tax yields by reducing and eliminating various tax expenditures such as the investment allowance. Tax expenditures related to corporate income tax are estimated to cost the country at least Rs 5 billion in foregone revenues annually and have created many zero tax companies (some very large and profitable companies pay no corporate income tax).

4.36 Efficiency. Although substantial improvements have recently been made, the present corporate income tax system could still be improved in terms of both its administrative and economic efficiency. The present system has been difficult to administer because of its complexity in terms of special rules related to the deduction of various types of allowed and disallowed expenses, multiple classes of assets depreciable at varying rates (recently simplified), special allowances for investment (which vary depending on industry, regional location, source of technology, etc.), special treatment of earnings from exports, etc. All of these tax expenditure provisions were originally introduced for very good reasons. However, rather than getting at the roots of the problems, this multiplicity of rules and regulations has often added new problems related to economic incentives. For example, the special treatment of export earnings was introduced to make production for exports more attractive. It has had this effect, but only where there are profits to be taxed. The system does nothing to correct the

^{1/} "Tax expenditures" includes not only exemptions of income (or goods) from taxation, but concessional rates, deductions, etc.

^{2/} GOI, Public Enterprises Survey 1983-84 - Highlights. p. 17. Explanatory Memorandum on the Budget of the Central Government for 1985-86, p. 144, and CEM 1985, p. 14.

basic problem, which is that the high degree of protection for local production together with the current exchange rate make export production relatively unattractive, and in many cases, absolutely not profitable, thus discouraging not only use of excess capacity for exporting at the margin, but also discouraging investment specifically for export production. Thus, the present system does not address the underlying problem.

4.37 The recent changes in the law related to the investment allowance is another good case in point. In the 1986/87 Budget, the Government implemented a replacement for the investment allowance which had allowed investors to deduct a portion of new investments from the taxable income. Under the new scheme an investor can deposit up to 20% of otherwise taxable profits into a special account with IDBI or some other chosen institution. The deposits, on which 10% interest would be paid, could only be withdrawn for investment and certain other purposes. Various new administrative controls such as checks over an eight-year period on the actual location and use of plant and machinery purchased with the deposited funds will have to be put in place to reduce the risk of abuse under the new system. The LTFP states that the main argument for continuing the investment allowance through the IDBI deposit scheme, despite its negative impact on the direct tax yields, is that "it cannot be denied that the investment allowance has played a role in the industrialization of the Indian economy." This is hard to deny. The question that should be asked is: Is it an efficient means of accomplishing the Government's objectives? In some ways the system is an improvement over the previous investment allowance. First, being tied to profits rather than investment, it creates less of a bias to capital intensity and tends to encourage productivity. Second, the bias towards excessive capital intensity is expected to be further lessened by the fact that there is less pressure under the new system for immediate investment decisions to get the tax benefits by the end of the year - the money can be put on deposit, then be withdrawn at a later date once an efficient, profit oriented investment plan has been worked out. While there is certainly considerable merit in these arguments, it needs to be asked whether or not direct investment incentives through tax expenditure is needed at all.

4.38 If the need for an investment incentive is real, there should be strong evidence that, without the incentives, the overall level of investment would be lower than economically desirable. Since investment incentives are already in place, it is difficult to say what level of investment would take place in their absence. However, the following points should be considered. First, investment as a percentage of GDP is higher in India than in any other low income country in the world except China and a few very small countries where special factors (e.g., a large foreign enclave sector) are present. India's level of investment also exceeds the average for all other groups of countries except the high income oil exporting countries, and even there it falls short by only a few percent of GDP. Second, ICORs have been rising sharply in recent years, particularly in the industrial sector. While some increase may be inevitable with the growing sophistication of the economy, there is considerable evidence that this reflects excessive emphasis on adding new investment instead of making good use of existing investment. Third, and in support of the previous point, capacity utilization rates in many sectors suggest that installed capacity may in some areas exceed domestic demand. Thus, aside from the cases where balancing and modernization investment is needed to increase capacity utilization rates, emphasis should be given to encouraging better use of capacity and to lowering production

costs to expand market demand--including export demand. Increasing the level of investment relative to GDP may per se have a relatively low benefit--and can be costly both directly and in terms of the tax expenditures used to induce it. Direct tax measures that give favorable treatment to incremental production through lower tax rates are thus to be favored over those stimulating more fixed investment through investment incentives. Fourth, investment incentives make capital goods and capital intensive processes relatively cheap, thus biasing decisions against more labor intensive investments that would generate more employment and make more efficient use of the nation's resources.

4.39 If the key objective of the investment allowance is to increase the rate of economic growth and not just the rate of investment, a close examination of the key constraints to growth is needed. The evidence of the past several years cited above indicates that the key physical constraint is not investment in production facilities per se. Instead it appears to be inadequate infrastructure facilities, particularly power, but also communications and transport. Investment incentives could actually make this situation worse: (a) they encourage investment even if adequate infrastructural support is lacking for its efficient use--the tax savings make it worth taking the risk; and (b) the loss of direct tax revenues reduce the resources that Government needs to make the necessary infrastructure investments. In sum, an examination of the possible reasons for offering specific investment incentives through direct tax expenditures indicates few persuasive arguments for them and many problems. Even less clear is the desirability of replacing the present system with another that, while better in certain aspects, may prove to be as difficult to administer as the present one. A straight tax rate reduction coupled with a phasing out of the investment allowance as proposed in the Budget last March still seems preferable in terms of both economic and administrative efficiency. It could be argued that this approach could result in higher consumption other than increased savings, since there is no direct tie to investment as there is with the investment allowance. However, if an attractive investment climate is maintained through generally favorable economic policies, adequate supporting infrastructure etc., the promise of future profits will be the best possible assurance that those benefitting from decreased income tax rates will increase their savings and investment rather than their consumption out of the additional resources available. The Government was also concerned that a reduction in the marginal tax rate would result in windfall profits, rewarding companies for past investments (upon which the taxable profits were made) rather than stimulating new investment.

4.40 One policy change that would provide incentives to investors without creating the problems noted above would be to introduce the facility of calculating depreciation on the basis of replacement rather than original cost. Replacement cost accounting is highly desirable because it helps prevent the erosion of corporate capital stock and provides the basis for more appropriate pricing. Accelerated depreciation rates can have a similar effect, but are not as clean and simple--they are only a surrogate for the

proper instrument. 1/ To reduce the chance for abuse, certain norms would probably have to be set regarding the allowable deflator for calculating capital replacement costs. Such norms would often technically be "wrong" in that actual inflation might be somewhat different. The Government is aware of the merits of asset revaluation but has been reluctant to introduce it in India because of (a) the complexities which are involved (viz. the experience in other countries where this has been tried) and (b) the impact which this would have on prices. While recognizing the truth of the first point, it may be noted that the Government has recently grasped courageously the nettle of introducing a MODVAT system because, despite the numerous difficulties involved, in the end the MODVAT system will be superior to the present one. The second point cuts two ways. On the one hand, there is the very legitimate concern about introducing policies that increase prices. On the other, however, it is precisely because using unvalued assets leads to prices which are too low, that an asset revaluation scheme is needed. Low prices based on inadequate depreciation allowances make it impossible for firms to generate the cash flow required to maintain and replace assets as they reach the end of their economic lives. As a result, the efficiency of these firms drops as they struggle along with worn-out equipment. The result, of course, is higher economic costs of production. These costs may not show up in the prices of the output because of the way prices are set and controlled, but the economy as a whole pays the price -- in the form of slower economic growth, inefficient use of complementary inputs, and higher capital/output ratios (the same nominal capital stock produces less because it is beyond the end of its economic life). In short, keeping down prices by making inadequate allocations for capital stock replacement results in higher, not lower costs. Thus, while the initial impact of measures to make adequate provisions for replacement of capital stock at current prices may have to be buffered through a phased introduction to avoid popular outcry, the economics of asset revaluation are very sound and, in the end, anti-inflationary. However, the error would be much less than that resulting from ignoring inflation entirely. In sum, elimination of various tax expenditure provisions such as the investment allowance together with better enforcement of tax laws would improve the elasticity of the corporate income tax. These changes along with others to reduce the multiplicity of rates for direct taxation, depreciation, etc., would also make the system easier to administer and would remove some of its economic distortions.

4.41 Personal Income Tax. The problems of elasticity/buoyancy, efficiency and equity noted above with respect to taxes in general clearly affect the personal income tax system as well. 2/ The personal income tax system's lack of buoyancy is seen in the decline of personal income taxes from 1.9% of GDP

1/ Accelerated depreciation means an earlier conversion of physical into financial assets. If financial assets earn positive real rates of return, they are protected from the ravages of inflation, whereas unvalued physical assets become increasingly undervalued each year. Recent measures to rationalize and liberalize depreciation allowance provisions should contribute to at least some degree to an improvement in the way depreciation is calculated.

2/ This tax category includes taxes on incomes of unincorporated businesses and thus is technically a "non-corporate" income tax.

in 1975/76 to only 1% in 1984/85. In the past, with marginal tax rates (including wealth taxes) rising to over 100% of income from wealth and attempts to audit virtually all returns, there were serious problems of both economic and administrative efficiency. Rates have gradually been reduced over the past few years; with the further reduction in the 1985/86 Budget to a maximum rate of 70% (including wealth tax) and with the announcement that returns on incomes of up to Rs 100,000 will be accepted without routine audit (they will however still be subject to detailed audit on a random basis), progress has been made towards a system that is both economically and administratively more efficient. The announced intent to keep rates stable for at least five years should lead to confidence in the system and improve compliance. Measures to rationalize regulations related to capital gains taxation, gift taxes, and asset valuation should also help. Considerable scope exists, however, for improving the equity of the system among various groups of tax payers. For example, agricultural incomes are exempt from taxation (except to a very minor degree in a very few states), and the number of personal income tax payers has remained stagnant at about 4 million for years; about 98% of the workforce pays no income tax. In order to achieve greater elasticity, efficiency and equity in the personal tax system, further measures in four areas need to be taken: broadening of tax base, reduction in tax rates, taxation of agricultural incomes, and improvement in tax administration.

4.42 Broadening of Tax Base. The current exemption limit for individuals for the purposes of non-agricultural income tax is Rs 18,000, which is fairly high--about eight times the per capita income. The tax code has many other provisions which further erode the tax base, ^{1/} making it possible for many people to manage their affairs to have little or no tax liability. For example, a salaried person with an income of Rs 35,000 a year will have no tax liability if he avails of the full benefits available under the provision relating to house rent allowance and makes a contribution of Rs 6,400 to his provident fund account. By investing in capital investment bonds, one can earn an unlimited amount of income and still pay no tax. However, with a yield of only 7% these bonds have not been particularly attractive given current tax rates and yields on other assets. If larger resources are to be raised from non-agricultural income tax, it will be necessary to reduce or at least control erosion of the tax base resulting from the proliferating tax expenditure provisions. Also, demands for further increases in the exemption limit must be resisted, except to the extent that changes are necessary to prevent bracket creep due to inflation.

^{1/} For example, (a) standard deduction, (b) house rent allowance, (c) exemption in respect of income from interest on capital investment bonds, (d) deduction in respect of life insurance premium, contribution to provident funds, etc., (e) deduction in respect of investment in equity shares of new industrial companies and public housing finance companies, and (f) deduction in respect of interest on certain securities, dividends, etc.

4.43 Reduction in Tax Rates. Some modifications in the present personal income tax rate may be justifiable. 1/ The lowest rate is on the high side--the tax rate applicable to an individual upon joining the tax paying fraternity should be kept low so that one does not mind too much joining. The highest rate also appears to be high--considering that India also levies a tax on wealth, with the marginal rate rising from 0.5% to a maximum of 2% on taxable wealth exceeding Rs 2 million, the marginal burden of wealth and non-agricultural income taxes on income from wealth can, as noted above, be as high as 70%. 2/ This suggests a case for lowering the top rate applicable to non-agricultural incomes.

4.44 Taxation of Agricultural Incomes. Under the Constitution of India, the power to tax agricultural incomes rests exclusively with the States. As things stand at present, the States have not done much to tax agricultural incomes; the total revenue from agricultural income tax presently works out to less than 0.1% of the agricultural gross domestic product at current factor cost. Even some of the agriculturally prosperous states like Haryana and Punjab do not raise resources through the agricultural income tax, though they do make very effective use of market (mundi) taxes on agricultural products, which have the advantage of visibility, relative ease of administration and a certain degree of progressivity since the taxes are applied only to the marketable surplus. Despite the various strong arguments for taxing agricultural incomes, the LTFP indicates that the Centre has no intention of seeking to be given the right to tax such incomes. Aside from understandable concerns about the political pressures that would arise from introduction of such taxes, the Government's main concerns have been that, because of (a) the land ceiling act which restricts the size of agricultural holdings, (b) the multiple ownership of many of these holdings, and (c) the fact that the tax would be on individual rather than joint incomes; the vast majority of agricultural incomes would fall below the exemption limits, resulting in very low yields for such a tax. However, evidence based on reports of the agricultural income that is reported under regulations which oblige assesseees with both agricultural and non-agricultural incomes to add their taxable non-agricultural income on top of the non-taxed agricultural income when calculating their tax bracket indicate that there may in fact be a considerable revenue potential in such taxes. The issue needs more detailed empirical scrutiny. Although the Centre cannot tax agricultural incomes under the Constitution, it could, if estimated yields were shown to justify the effort, encourage State Governments which are not taxing agricultural incomes at present to start doing so. One method would be a matching grants program whereby a pool of funds could be set aside for transfer only to States raising specified amounts through taxation of agricultural incomes. The ratio between State efforts and Centre transfers could vary according to state per capita income levels to protect equity considerations.

1/ The current schedule of non-agricultural income tax rates applicable to individuals consists of four rates: 25%, 30%, 40% and 50%, applicable to income slabs of Rs 18,001-25,000, Rs 25,001-50,000, Rs 50,001-100,000 and over Rs 100,000, respectively.

2/ The marginal burden can be still higher if the rate of return from wealth is less than 10%, and vice versa.

4.45 Improvement in Tax Administration. There is a very strong case for continuing to make the enforcement of tax laws stronger and more effective. Considering that assessed income amounts to only 6% of GDP at current factor cost, whereas tax-evaded income may amount to at least 15% of GDP ^{1/} substantial sums can be raised if the procedures used for catching tax evaders are systematized and if all that is due under the law as tax, interest and penalty is collected. Such measures would also improve the equity of the tax system. Measures along these lines have already been initiated by Government--witness the widespread and well publicized tax raids in recent months. Additional efforts, including better computerization of tax records, would further improve administrative efficiency.

4.46 Indirect Taxes. As important as direct taxes are in terms of their potential for providing a better basis for generating government revenues in the future, the heart of the tax system today in India is indirect taxes. These are expected to account for over 85% of all tax collection in 1985/86, which is above average for countries in India's income group. ^{2/} Efforts to increase the elasticity, efficiency and equity of the Indian tax system must clearly focus on indirect taxes. Domestic Indirect Taxes Excise taxes are the most important tax on domestic commerce by a considerable margin, accounting for virtually all revenue collected by Central Government (Table 4.6). This reflects the fact that excise taxes are reserved to the Centre while sales taxes, except for a few items, are reserved to the States.

^{1/} Black Money Report, Note that report carries numerous caveats about the precision of these numbers, which are, at best, educated guesstimates regarding topic where quantification is extremely difficult.

^{2/} In a study of 21 such developing countries, Tanzi found that on average indirect taxes accounted for 72% of tax revenues (ref. Vito Tanzi, "Quantitative Characteristics of Taxes in Developing Countries" in D. Newberry and N. Stern (eds.). Tax Policy for Developing Countries, World Bank, forthcoming.

Table 4.6: INDIA: INDIRECT TAX REVENUES - CENTRAL GOVERNMENT
(Rs billion)

	<u>1980/81</u>	<u>1984/85(RE)</u>	<u>1985/86(BE)</u>
International Trade	34.1	71.0	81.7
Imports (gross)	34.1	71.5	-
Exports (gross)	1.2	0.9	1.1
Other (net of drawbacks)	-1.2	-1.4	-
Domestic Commerce	39.8	71.2	74.5
Union Excise Duty (net)	37.2	66.4	69.4
Total	65.0	111.7	123.1
State Share	27.8	45.3	53.7
Sales Tax	1.6	2.8	3.1
Other	1.0	2.0	2.0
Total	73.9	142.2	156.2
	====	=====	=====

Source: Ministry of Finance, DEA. Indian Economic Statistics: Public Finance (December 1985), and RBI, Report on Currency and Finance, Vol. II (1983/84).

4.47 Three major problems have been identified with the current excise tax system in recent years: (a) It has been economically inefficient--its cascading structure composed of widely varying rates have distorted production incentives by creating large divergencies between nominal and effective rates for specific products ^{1/} and between effective rates for different goods. (b) The excise tax system has been administratively inefficient--hundreds of different product categories and scores of different rates, coupled with a complex web of exemptions and deductions, made the system an administrative nightmare--and a major source of corruption and black money. (c) The system has been inefficient in that producers of the same product, and producers of different products often face widely different tax rates and thus production incentives. There has also been concern about the elasticity of the excise tax system since much of it is based on specific rather than ad valorem rates. However, with constant adjustments in rates, the buoyancy of the system has been maintained--Union excise tax revenues rose from 4.9% of GDP in 1982/83 to 5.4% in 1984/85 (including states' share). The Government recognizes that the excise tax system developed serious problems as layer

^{1/} Nominal rates are the published book rates on the finished product. The effective rate reflects, in addition, taxes paid on all inputs to the product. The nominal excise tax on a certain class of PVC armored cable, for example, is 5%, but because of the heavy taxation on inputs, the effective rate is nearly 40% of the finished product price. In the case of artificial silk fabrics, indirect taxes paid on inputs raise the nominal rate of 15% to over 45%.

upon layer of classifications, rates, and exemptions were added. As far back as 1968, for example, the Boothalingam Committee recommended replacing the multiplicity of rates (which has since gotten worse) with a flat 10% ad valorem tax. More recently the Jha Committee ^{1/} recommended a substantial expansion of the tax deductibility system to reduce the cascading effect of the excise tax system. As indicated in the LTFP, the system in place at the end of 1985 provided three forms of relief from taxation of inputs that limited cascading effects somewhat: "First, all inputs from Tariff Item 68 are eligible for set-off, provided the inputs are used in the production of excised commodities. Second, under Rule 56-A, within each Tariff Item, duty paid on inputs within the same item is available as proforma credit. Third, there are a number of other provisions granting duty relief for specified inputs used in the production of selected excisable commodities".

4.48 The Long-Term Fiscal Policy (pp. 36-40) proposed a series of reforms in the present system of which the majority are now in place: (a) Merge the various current types of excise duties into a single tax (except additional excise duties levied in lieu of sales tax). ^{2/} (b) Introduce a revised nomenclature for the Central Excise Tariff that would conform broadly with the Harmonized System of Classification for the Customs Tariff. (c) Reduce the number of basic rates of duty in the Central excise. (d) Reduce the cascading effect of excise taxes by relieving inputs from excise and counter-vailing duties under the proposed modified value added tax system (MODVAT), which is based on deduction of duties paid on inputs from taxes due on outputs. (e) Reform small-scale industry concessions, including a move towards a uniform system of excise concession for all commodities. (f) Reform duty drawback for exports to base them only on industry rates rather than also using brand-specific rates. (g) Improve elasticity of excise taxes by introducing a semi-automatic system for upward revision of specific duty rates to keep pace with price changes where a move to ad valorem rates not feasible. (h) Computerize tax records to improve administration and enforcement of system. All of these proposed changes are most welcome and are highly consistent with the objectives of improving the elasticity, efficiency and equity of the system. Of these, the first five are fully or largely in place, and active work is underway on the latter three. Most are fairly straightforward, at least in principle, and do not require further comment here. A few observations may be warranted, however, with regard to the points on the move towards a MODVAT system and reduction in the number of excise duty rates, and on reform of the duty drawback system for exports.

^{1/} GOI, Ministry of Finance, Report of the Indirect Taxation Enquiry Committee (New Delhi, 1978).

^{2/} At present, excise duties are levied by the Centre in various forms: basic excise, special excise, additional excise in lieu of sales tax (under the Additional Duties of Excise Act, 1957), and additional excise on textile and textile products for financing the controlled cloth scheme and cesses earmarked for special purposes under various acts. Basic and special duties of excise are shared between the Centre and the States. The proceeds of additional excise in lieu of sales tax are passed on to States, after deducting the share of Union Territories and the costs of collection.

4.49 MODVAT and Reduction in Number of Duty Rates. This is unquestionably a good move. However it will be necessary to identify a set of rates which would (a) provide roughly the same revenue as the current system (assuming the goal is structural reform and not tax enhancement or concession); (b) move the system towards greater equality of taxation among products (and thus to fewer economic distortions) without moving suddenly to a uniform rate that would destroy the productive structure which has been built up; ^{1/} (c) be at least as equitable as the present system in terms of taxation of the lower income groups; and (d) reduce the administrative complexity of the system and the incentives to corruption. A key problem in designing a new MODVAT system is that, while nominal rates on final use products will clearly have to be considerably higher than they are today once the cascading effects of taxes upon taxes on the inputs are removed, it is difficult to determine exactly what the new rates should be because of the complexity of the effects of the current cascading system. As noted above, nominal and effective rates are often sharply different for a product, and the degree of difference varies widely depending on the product, its input structure, and the direct and taxes paid directly and indirectly on these inputs. The simplest approach to setting the nominal rates would be to divide the desired level of revenue receipts by the value of production subject to excise. However, as a transitional step it may be necessary to move to a structure of say three to six rate categories and place products in these with reference to present effective rates paid. It will also be necessary, as recent experience has shown, to work out a myriad of administrative details.

4.50 Reform of Export Duty Drawback System. The proposed approach of "eliminating the option of brand rates and operating the scheme solely on the basis of industry-wise rates" (LTFP, p. 39) seems attractive in that it would eliminate many of the administrative problems associated with the present scheme. The LTFP argues that flat industry drawback rates have an important advantage in that they "benefit those firms which economize on the use of dutiable inputs and penalize those that don't" (LTFP., p. 40). The rationale for this is not entirely clear. Depending on the structure of the import and excise duties, this policy could induce manufacturers to use inputs which, in the absence of such taxes, would be more costly and less efficient ^{2/} from an economic point of view.

^{1/} The present system of production has been built up on the basis of prices distorted from an economic point of view by, among other things, excise duties at widely varying rates. Some time (e.g., 2-4 years) will be required for the structural adjustments to take place that would be needed under a more uniform scheme of taxation. Ultimately the goal should be to have a single excise tax rate applicable to all goods, except that items of consumption for the poor would be exempt and luxury items would be subject to an additional sumptuary tax.

^{2/} Assume, for example, that a manufacturer is making a product for which plastic or metal could be used and that the price without taxes of each, respectively, is 40 and 50 per unit of output. If plastic carries a duty of 80% and metal only 10%, the producer will face tax-paid price of 72 and 55, respectively. Thus, he would use the basically more costly metal as an input.

4.51 Under the MODVAT system, this issue should disappear for excise duties; any excise duties paid on inputs will be transparent. Thus the real issue is for imported goods. Given the wide variation in import tax rates among products, it is not clear that a flat industry rate would lead to the most appropriate input choices, though it might be administratively desirable as an interim measure. Ultimately the best solution would be to move to import duties that are lower (with a compensating exchange rate adjustment) and more uniform so that the issue of distortions does not arise. 1/

Indirect Taxes on Foreign Trade

4.52 As noted above, import duties are a major source of revenues for the Central Government, accounting for over 50% of all indirect tax receipts in 1985/86 (ref. Table 4.6). Reform of the Indian system of protection for import substitution industries and of export incentives has been a major concern for a number of years and several influential committees 2/ have recommended fairly sweeping changes which are all in the direction of reducing the use of discretionary, quantitative controls, reducing very high levels of import substitution protection and streamlining and improving the efficacy of export incentives. The reasons for these reform initiatives largely stem from the recognition that the present system is in large measure responsible for the poor performance of Indian industry and in particular its disappointing export performance. It is generally agreed that the system has led to inefficient resource allocation in major ways, in particular by biasing industrial incentives against exports and by creating very disparate levels of incentives and associated economic efficiency within the industrial sector, while the proliferation of controls and the extreme complexity of the import-export policies and of the customs tariffs has involved high transactions costs for both the Administration and for the firms affected, private and government. This complexity and the pervasiveness of case-by-case decision-making have in turn provided both incentives and opportunities for illegal activities and payments, including smuggling, under and overinvoicing and illegal diversion of imported materials. Less well recognized but also of major significance is that the system in all probability has involved an overall bias of incentives in favor of manufacturing and against agriculture and mining, despite some important input subsidies (e.g., fertilizer, water, electricity, credit) going to agriculture. 3/

4.53 Together with industrial licensing and other domestic controls, and problems in the organization and management of public enterprises, it is also

1/ Revenues lost through import duty reduction could be made up in the short run by an equivalent across-the-board increase in excise duties. In the longer term, direct taxes would ideally generate the additional revenues required.

2/ Notably the Alexander Committee in 1977 and the Hussain and the Narasimhan Committees in 1985.

3/ There are also large disparities within agriculture, however. For example, long staple cotton prices in recent years appear to have been 20-40% below world prices while domestic natural rubber prices are about double world prices.

generally agreed that the system has been responsible for the poor quality and high costs and prices of many manufactured products, the impact of which extends to low income as well as to middle and higher income groups. For example, imported dyes which compete with local dyes in the local market and which are used in the textile industry are subject to import duties of 281%. Synthetic fibers and yarns of all kinds are subject to both high protection and high additional duties corresponding to excise taxes. Even after recent reductions, the combined customs auxiliary and additional duties on polyester fiber are about 310% of the c.i.f. price, making polyester cotton blended fabrics prohibitively expensive even though in the rest of the world the cheapness of the polyester and the durability and other properties of these fabrics make these the textile products ideal for mass consumption. High protection of plastic materials such as PVC and polyethylene has restricted the consumption of cheap plastic articles and implements. Again, high protection, high production costs and frequently poor quality in a range of basic industries such as steel, steel products (e.g., stainless steel and ball bearings) and aluminum and chemicals substantially increase the costs of mass consumption products such as building materials and bicycles and of basic services such as public transport. In order to deal with the problems discussed above, the Government's basic objective is to progressively reduce the role of quantitative restrictions in regulating imports and correspondingly to increasingly rely on tariffs. For this purpose it proposes to simplify the tariff structure by greatly reducing the present multiplicity of customs duties, and to move towards a more uniform structure which would involve a limited number of basic rates. As with all trade policy and tariff reforms, the LTFP proposals have been formulated subject to a variety of constraints which have made compromises necessary. 1/ Nevertheless, even if the proposals cannot be fully implemented in their present form, their direction and general thrust represent a major improvement over the present protection and tariff system. Moreover, while improving resource allocation and efficiency in the economy, the reforms have the potential to significantly increase government revenue from tariffs. This is because:

- By using tariffs instead of quantitative controls the government should be able to collect economic rents which at present are going to the recipients of import licenses. 2/
- Given the objective of reasonably uniform effective protection of value added, it will probably be necessary to increase some very low or zero import duties.

1/ Proposals which reflect such compromises and sacrifice of economic efficiency objectives include the following: (i) the continued banning of imports of all consumer goods (except a few "essential" goods); (ii) the proposed escalation of tariffs by degree of processing, which does not follow from the observation that different domestic industries have grown up with different levels of protection in the past; (iii) the proposal to retain quantitative restrictions on some "essential intermediates" and on some capital goods; (iv) the proposal to retain canalization of essential consumer goods.

2/ Some indication of the level of these rents is provided by premia on the sale of replenishment licenses.

- The sweeping simplification of tariffs which is proposed should greatly reduce opportunities for misclassification of imports.
- The eventual reduction of presently very high duties should reduce incentives for smuggling, under invoicing and similar practices. 1/
- The reforms are to be accompanied by stepped up anti-smuggling measures aided by improved information systems in the Customs and Excise Department. 2/

4.54 More generally, as the Government moves away from past policies of import substitution more or less regardless of cost, towards a more uniform incentive system which encourages the development of those industries in which the economy has a comparative advantage, it can be expected that the share of exports and imports in GDP will increase. This should allow the Government to maintain or even increase total import duty receipts with lower average levels of customs duties. At the same time the increases in production efficiency associated with a more competitive environment will allow increased collections from domestic taxes (such as excise taxes and profit taxes) without necessarily increasing prices to consumers. Although moves towards a more open trade regime may result in temporary surges in imports, and export development will generally lag behind the introduction of new incentives, it is very important that such transitory development not trigger the reimposition or tightening of quantitative import controls, for this would clearly involve large revenue losses as well as being economically inefficient. Adjustment by increasing export incentives and/or import duties, or by allowing the exchange rate to move in line with the foreign exchange situation, or a combination of these, would be more efficient economically, and less costly for government revenue than the reintroduction of quantitative controls.

D. Non-Tax Revenues

4.55 Non-tax revenues, which currently contribute over 27% of Central Government revenues (as of 1984/85), come from a variety of sources including interest receipts (64%), dividends and profits of public enterprise units (10%), fiscal services (9%), foreign cash grants (8%), general services (4%), social services (3%), and economic services (2%).

4.56 In today's environment there is little hope of major increases in foreign cash grants, and fiscal services likewise is not likely to offer much scope for substantially increased returns. Interest receipts can and should

1/ It is generally accepted that at present that smuggling is extensive and in particular that there are large scale smuggled imports of synthetic textiles.

2/ More rigorous customs enforcement was already underway during 1985, including the suspension of a number of customs officials and raids on some major business enterprises for allegedly under invoicing imports as well as evading excise taxes.

be increased by charging borrowers rates that are close to market rates as recommended by the Chakravarty Committee. However, the volume of lending may not increase notably relative to GDP if efforts to improve the capacity for self financing of state Governments and public enterprise units are successful. Thus the paltry 10% of non-tax revenues coming from public enterprise dividends and profits is the area requiring the greatest attention in terms of increasing future Government non-tax revenues.

4.57 Public Enterprise Profitability The ability of the Government to finance the planned level of investment during the Seventh Plan will depend heavily on the performance of public enterprises. Without the ARM of Government, public enterprise savings would be the only source of earned resources going into the Plan (Table 4.7). Of the Rs 749 billion that is not to be borrowed to finance public investment in the Seventh Plan, Rs 589 billion will have to come from the public enterprise sector (the planned Rs 198 billion current budgetary surplus from state governments is partially offset by the Rs 38 billion current budgetary deficit of the Central Government).

4.58 Of the planned contribution of public enterprise to financing the Seventh Plan, Rs 517 billion is expected from Central units; the contribution of State enterprises will be only about Rs 72 billion. The performance of public enterprises will have to be improved sharply if they are to meet the challenge of providing the targeted amount for the Seventh Plan. The Sixth Plan called for a contribution from public enterprise (including ARM) of Rs 221.6 billion in current prices. ^{1/} The actual contribution was only Rs 186 billion (of which Central Government enterprises contributed Rs 181 billion). As a result of this poor performance, central public enterprises financed only 28% of their development outlay from own internal resources. The situation among state enterprises was far worse; they managed to finance hardly 3.5% of their development outlay from internal resources.

4.59 A failure to realize the targets could have major negative effects on the Seventh Plan's implementation--as happened during the Sixth Plan. It would also create dangerous pressures to resort to increased deficit financing. The expected contribution of public enterprise is equivalent to 4.8% of projected GDP during the Seventh Plan, compared to 2.2% during 6th Plan. The majority of this increase is expected to come from increased depreciation allowances rather than improved profit performance, according to GOI sources. However, if this increased contribution does not materialize, additional deficit financing of this amount, either internal or external, would be difficult to manage.

^{1/} The Plan expressed the target as Rs 181.7 billion in constant 1979/80 prices. However to compare with current price actuals, target has been converted to current prices by assuming one-fifth of the ARM target was to be realized in each year and then applying the GDP deflator accordingly. Deflators from 79/80 on were 89.8, 100, 109.4, 117.9, 131.1, or 100, 111.4, 121.8, 131.3, 146.0 in 1979/80 prices. This understates the problem. If one assumed a growth year by year in ARM, more of the target would be realized in the later years where a higher GDP deflator applies. Also, using the investment deflator rather than the GDP deflator would also result in a higher current price target. GDP deflator would also result in a higher current price target.

**Table 4.7: PUBLIC SECTOR CONTRIBUTION TO PLAN OUTLAYS
(Rs billion)**

	1980/85 Estimates # /a			1980/85 Actuals * /a			1985/90 Projections** /b		
	Centre	State	Total	Centre	State	Total	Centre	State	Total
Government	95.7	174.3	270.0	87.0	133.3	220.4	-37.5	197.7	160.1
Trend	11.8	133.0	144.8	-44.3	63.2	18.9	-120.1	67.6	-52.5
ARM	83.9	41.3	125.2	131.3	70.1	201.5	82.5	130.1	212.6
Public Ent.	138.1	43.6	181.7	181.2	5.2	186.3	516.9	72.3	589.2
Trend	99.1	-5.2	94.0	124.2	-66.1	58.1	374.5	-19.7	354.8
ARM	39.0	48.8	87.8	57.0	71.2	128.2	142.4	92.0	234.4
Total	233.8	217.9	451.8	268.2	138.4	406.7	479.3	270.0	749.3
Trend	110.9	127.6	238.8	78.9	-2.9	77.0	254.4	47.9	302.3
ARM	122.9	90.1	213.0	188.3	141.3	329.7	224.9	222.1	447.0

All values in Rs billion; # = 1979/80 prices; * = Current Prices; ** = 1984/85 prices.

/a Seventh Plan, p. 7, and p. 49, Table 4.7.

/b Ibid, p. 7, and pp. 51 ff.

4.60 Causes and Remedies for Low Profitability: The sources of the poor financial performance of public enterprises are not hard to find. They may be broadly categorized as (a) pursuit of multiple, conflicting objectives, (b) physical barriers to productivity such as poor inputs and inadequate equipment, (c) pricing policies that do not make possible adequate rates of return, and (d) use of the public sector as a hospital for sick units, which commonly brings into play the other three problems.

4.61 The potential for higher profits and greater resource mobilization from public sector units clearly exists. And there are strong reasons that this potential should be realized to its full extent: First, all investments in directly productive activities, including those by the public sector, should yield a financial rate of return at least equal to the opportunity cost of capital (which is clearly greater than the roughly 7% return implicit on replacement value of assets currently earned. Failure to accomplish this implies a waste of resources and a loss in overall economic growth. Second, appropriate financial returns to public enterprise units generally indicate that they are following pricing policies that tend to assure optimal economic use of their products (e.g., power, transport services). Third, a higher return from public enterprise units means that (a) they can make a better contribution to financing their own new investments; (b) there will be less need for deficit financing (which generally implies at the margin inflationary pressures and/or an increased external debt service burden); and (c) there will be less pressure to raise taxes to generate current savings for financing investment. This provides more flexibility in restructuring the current tax system to improve its efficiency, equity, etc.

4.62 Sick Units: Of the 214 central government enterprises, the majority were started as public sector corporations. However, at least 42 of them were taken over from the private sector, either in an effort to control the

commanding heights of the economy (as in the case of certain oil companies), or more commonly because the units had fallen sick in the private sector and the government, largely to prevent major layoffs of workers, took over the units. In a recent study of 42 major central government enterprises taken over from the private sector since the late 1960, it was found that these accounted for 18% of total central government public enterprise investment, 22% of the sales, and 45% of the employment. The collective losses of these units, of which 80% were in coal mining and cotton textiles, accounted for the vast majority of the losses of central government units. The practice of taking over sick units has clearly been a major source of the poor financial performance of the public sector. The problems accounting for their poor performance are also common to other loss-making public sector enterprises--non-economic considerations in deciding upon plant location, poor project planning, delays in implementation, enthusiasm for new investments that leads to neglect of maintenance in existing units, non-economic pricing policies, changes and vacancies at the top of the management structure, lack of labor discipline, and government interference in plant management. Although one of the key arguments for taking over plants like those in this group is to prevent unemployment, the 900,000 people employed in the non-oil, loss-making units that have been taken over account for only about 4% of the 24.5 million persons in the organized sector, and only about 0.3% of the roughly 300 million persons in the work force. Thus while employment is certainly a valid concern, especially for those that would be affected by closure of sick units, the costs to the economy of "golden handshakes" and of creating productive new jobs for the excess employees might not be as great as the long-term economic costs of keeping them employed in loss-making units, though this would need study on a case-by-case basis. The next two sections on fertilizer and steel examine specific cases of poor financial performance and demonstrate the potential that exists for improved resource mobilization in public enterprise. In addition, the potential for further resource mobilization in the state electricity boards and irrigation water boards will be discussed below in the section on State Government finances.

4.63 Fertilizer. India has 106 fertilizer plants, producing 5.2 million nutrient tons, or 70% of India's requirements of straight nitrogenous, straight phosphatic and complex fertilizers. While 19 of these plants operate as small scale units, a good number of them have large installed capacities, some of which are of internationally competitive size. ^{1/} The public sector plants account for 42% of the production. The major public sector fertilizer producers are: Fertilizer Corporation of India (FCI), National Fertilizers Limited (NFL), Madras Fertilizers Limited (MFL), Hindustan Fertilizer Corporation (HFC), Rashtriya Chemicals and Fertilizers (RCF), and Fertilizer and Chemicals, Travancore (FACT). These companies operate 19 plants and account for about 90% of the fertilizer production in the public sector. Put together, they have reported losses of Rs 0.7 billion

^{1/} Examples of plants with large installed capacities are: Gujarat Narmada Valley's plant at Bharuch, Fertilizer Corporation of India's plants at Ramagundam and Talchur, Indian Farmers Fertilizer Cooperative's plant at Phulpur, National Fertilizers' plant at Bhatinda, Rashtriya Chemicals and Fertilizers' plants at Thal Vaishet, and Krishak Bharati Cooperative's plants at Hazira.

for 1983/84, 1/ raising their accumulated losses to Rs 9.2 billion, equal to 43% of their net worth. The losses would be higher if appropriate adjustments were made for (a) the difference between depreciation based on historical costs of assets and that based on replacement costs, 2/ and (b) the concessional interest rates on loans to public sector enterprises. The reasons for the depressing financial performance of public sector fertilizer producers are not far to seek: low capacity utilization 3/ and high production costs. If these 19 plants operate together at say, even 80% capacity utilization and if their costs of production stay within the norms specified under the GOI's Fertilizer Retention Scheme 4/ they would, rather than incurring losses, start making profits after tax of at least Rs 3.2 billion a year. The measures which will have to be taken to realize this potential include: rehabilitation of the FCI's Ramagundam and Talchur plants; 5/ modifications/replacements of equipment in the FCI's plant at Gorakhpur and in HFC's plants at Barauni, Durgapur and Namrup; and, above all, improvements in the management of all plants, designed to reduce unit costs of production by economizing on not only feedstock but also on energy, labor and other inputs. If all the fertilizer plants were to meet the performance standards set by the retention price scheme, the Rs 3.2 billion that they would earn

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- 1/ 1983/84 is the latest year for which the relevant data are presently readily available.
- 2/ Law and traditional accounting practices in India do not provide for revaluation of assets to reflect current replacement costs when calculating production costs and profits (ref. para 4.40 above). As a result the financial resources need to (a) replace and modernize existing plant and equipment and (b) expand investment for further growth are eroded by two factors. First, prices are set too low. Second, taxable profits are artificially inflated, which leaves even less adequate after tax resources for reinvestment. This is a particularly important issue in a country like India where, unlike in many developing countries, the industrial sector is relatively large and parts of it are very old, which means that there is a lot of grossly undervalued equipment that needs replacement.
- 3/ Only six of the plants producing nitrogenous fertilizers in the public sector could achieve capacity utilization of over 80% in 1984/85, with all the other plants operating at lower levels. The result was that average capacity utilization in the public sector plants worked out to only 60.2% as against 90% in private sector plants and as high as 107% in cooperative sector plants.
- 4/ The scheme provides for a retention price for each fertilizer plant, based on a capacity utilization of 80% of the ammonia plant and a combination of norms and actuals in regard to the consumption of raw materials, utilities and other inputs, maintenance and other costs. The prices are set so that, if these norms are met, the plant will earn a post-tax return of 12% on net worth.
- 5/ These coal-based plants are facing major technological problems and as a result operated at only 24.2% and 41.6% of capacity respectively in 1984/85.

annually would amount to 100% of the plants' average annual planned investment during the Seventh Plan. One should note, however, that this does not necessarily mean that the present retention price formula is appropriate. Also, to the extent some plants are based on outmoded technologies, it may be necessary to treat capital costs as sunk, in which case the target would only be to cover variable costs--or to shut down the plant.

4.64 Steel. The steel industry in India had its origins at the beginnings of this century with the establishment of Tata Iron and Steel Company (TISCO) in 1870; in the 1920s, the Indian Iron and Steel Company (IISCO) was also set up. During the 1950s, TISCO and IISCO expanded, and greenfield integrated steel plants were established by the public sector at Rourkela, Bhilai, and Durgapur. Bokaro was constructed during the late 1960s. In January 1973, the Steel Authority of India Limited (SAIL) was set up as a holding company for the four public sector integrated steel plants plus IISCO.

4.65 The resource mobilization of the steel sector is currently very poor. Internal resource generation as a percentage of gross resource mobilization rose from a low of 15% during the Annual Plans period to nearly 40% during the Fifth Plan. By 1980/81 it had fallen to almost nothing. Steel sector gross profits after interest but before depreciation have moved as follows since 1980/81.

	<u>1980/81</u>	<u>1981/82</u>	<u>1982/83</u>	<u>1983/84</u>	<u>1984/85</u>
Gross Profit (Rs mls)	1034	1513	196	-810	2226
Return (% of equity)	3.7	4.7	0.6	-2.4	6.0

4.66 The improvement in SAIL's 1984/85 performance looks quite impressive. However, the following factors must be kept in mind when assessing its need to continue to improve its capacity for resource mobilization and self-financing during the Seventh Plan period. First, steel prices have been raised three times since July 1983. Prices now average US\$470/ton at the retail level compared to US\$396 in Japan. (However, producer prices average \$300-400/ton, substantially the same as in UK and Japan, and 10-25% above average Japanese export prices delivered to India.) The significance of price increases in explaining the increased revenues of SAIL during the past few years is underlined by the fact that the observed growth in gross revenues has occurred even though there has been only a 2% p.a. increase in the volume of output of saleable steel from SAIL plants during the period since 1981/82. A second argument for very considerable improvements in the financial performance of the public sector steel plants during the Seventh Plan despite the apparent improvement in profitability during the past year is that these profit figures have been raised markedly by a variety of special concessions. These included interest waivers, interest holidays, and other exemptions, concessions worth in total about Rs 1,380 million to SAIL. Without them the gross profit for the year before depreciation would have been only Rs 846, not Rs 2,226, and there would have been a net loss after depreciation of Rs 1,338 million instead of a net profit of Rs 42 million. Fourth, SAIL employs a much larger number of workers than are actually required in plant operations. Substantial savings could be realized in the labor cost per ton of steel by reducing over-manning and by removing strictly social functions such as health, education and security in the township from the plant responsibilities and accounts.

4.67 Simple ceteris paribus estimates indicate that, if SAIL were to realize a gross profit of 12% on gross block 1/ during the Seventh Plan (instead of continuing to operate with the very thin margins that have marked the past five years), and if interest payments stayed at the average levels of the past 5 years, the total funds available as gross profits after interest and before depreciation (funds available for investment)--would be equal to nearly Rs 22,000 million over the Seventh Plan period in constant 1984/85 prices, an additional resource mobilization effort of Rs 17,700 million. With the ARM, SAIL would be able to finance 56% of the Rs 31,500 million of public investment planned for the steel sector in the Seventh Plan, compared to only 14% that would otherwise be financed through internal resources.

4.68 Given the shortage of investment resources for the Seventh Plan, such additional resource mobilization would obviously make a major contribution. Unfortunately, the adverse effects that further increases of domestic steel prices above world prices could have on the cost structure of the economy and the potential for export, particularly of engineering goods, mean that price increases alone cannot be counted on to generate the desired additional resources. (In fact, there may be a case for reducing prices in real terms). At the same time, since the low productivity of the existing SAIL plants reflects to a considerable degree a stock of equipment that is often technologically obsolete and grossly inefficient, and since only part of the investments required to modernize and make the existing plant and equipment more efficient can be financed during the Seventh Plan period, it will be impossible for SAIL to accomplish all the hypothetical additional resource mobilization on the basis of increased efficiency.

4.69 However, in the case of India, there is a third way in which some additional resources could be mobilized for the plants: There is currently an average price difference between ex works and selling prices for steel equal to nearly 40% of the ex works price (in the case of wire rods, for example). Of this margin, 11% is excise duty, 12% the Steel Development Fund, 3% the Engineering Goods Exports Assistance Fund, 14% the Freight Equalization Fund charge and 1% miscellaneous charges. 2/ Some improvement in the resource mobilization of the more efficient plants would result from reducing or eliminating the Steel Development Fund charges so that the more efficient plants could have access to the funds which they have generated and use them for reinvestment.

4.70 In sum, given the physical status of the SAIL plants, the over-manning and extensive social overhead costs, and the shortages of investment

1/ Assets in operation including working capital. This figure excludes IISCO as well as the large block of works in progress.

2/ A common charge for freight is levied on steel in India regardless of destination. Supposedly this fund shows a zero balance each year, making neither a profit nor loss with respect to actual freight costs. Thus the Government's plans to abolish the freight equalization at some point would not affect overall resource mobilization, though it should result in more efficient location of steel-using plants and thus in national transport costs.

Table 4.8
INDIA

Consolidated Public Sector Sources and Uses of Funds

	Sixth Plan (Rs bns. current prices)	% of GDP	Seventh Plan (Rs bns. 1984/85 prices)	% of GDP	Difference between Col. 5 and Col. 3
1	2	3	4	5	6
Sources					
Tax Revenues	1,233.46 /a	14.6	2,183.37 /b	17.6	3.0
Non-Tax Revenues	351.00 /a	4.1	437.70 /a	3.5	-0.6
Total Current Revenues	1,584.46	18.7	2,621.07	21.1	2.4
Public Enterprise					
Gross Savings	58.10 /b	0.7	354.85 /b	2.9	2.2
Sub-total from Exist.Sys.	1,642.56	19.7	2,975.92	24.0	4.6
Addl.Res. Mobilization					
(Budgetary)	329.70 /b (201.46) /b	3.9 (2.4)	447.02 /b (212.50) /b	3.6 (1.7)	-0.3 (-0.7)
(Public Enterprises)	(128.24) /b	(1.5)	(234.52) /b	(1.9)	(0.4)
Total Internal Gen.	1,972.26	23.3	3,422.94	27.6	4.3
Market Borrowings, etc.	385.70 /b	4.6	604.44 /b	4.9	0.3
Misc. Cap. Recpts (Net)	73.65 /b	0.9	126.18 /b	1.0	0.1
RBI Deficit Financing	156.84 /b	1.9	140.00 /b	1.1	-0.8
Total Domestic Borrowing	616.19	7.3	870.62	7.0	-0.3
External Borrowing	85.29 /f	1.0	180.00 /b	1.5	0.5
Total Sources	2,673.74	31.6	4,473.56	36.0	4.4
Uses					
Interest	239.34 /c	2.8	543.73 /a	4.4	1.6
Subsidies	116.70 /a	1.4	168.05 /b	1.4	
Defense	274.11 /c	3.2	450.05 /b	3.6	0.4
Other Non-Plan Exp.	935.38 /d	11.0	1,511.78 /b	12.2	1.2
Total Non-Plan Exp.	1,565.53	18.5	2,673.56	21.5	3.0
Total Plan Exp.	1,108.21 /b	13.1	1,800.00 /b	14.5	1.4
Total Uses	2,673.74	31.6	4,473.56	36.0	4.4
GDP	8,467.54 /e	100.0	12,411.13 /e	100.0	-

/a Source: DEA.

/b Source: GOI, Seventh Five Year Pla. Vol. I pp. 49, 50 and 61.

/c Source: GOI, Indian Economic statistics - Public finance (1985) p. 1.

/d Arrived at by subtracting the sum of expenditures other than "Other Non-Plan Expenditure" from total expenditure.

/e Source: Table 4.8a.

/f This figure includes only external borrowing channeled through the budget. Direct foreign borrowing by public enterprise is excluded.

/g Of this figure, Rs 145 bln. represents external borrowing through the budget (comparable to the 6th Plan figure of Rs 85.29 bln), with the remaining Rs 35 bln to come through direct foreign borrowing by public enterprise units.

Table 4.9

INDIA

Public Sector Expenditure in India
(Rupees billions)

Year	Total Public Sector Expenditure	GDP (At Market Prices)	Public Sector Expenditure as (% of GDP)
1979/80	311.17 /a	1,071.60 /d	29.0
1980/81	368.45 /a	1,274.90 /d	28.9
1981/82	437.38 /a	1,475.00 /d	29.7
1982/83	527.47 /a	1,647.40 /e	32.0
183/84	608.29 /b	1,938.41 /e	31.4
1984/85	732.15 /b	2,131.83 /e	34.3
1985/86	781.57 /c	2,239.98 /f	34.9
1986/87	834.33 /c	2,354.33 /f	35.4
1987/88	890.64 /c	2,475.25 /f	36.0
1988/89	950.76 /c	2,603.14 /f	36.5
1989/90	1,016.26 /c	2,738.43 /f	37.1

/a At current prices. Source: GOI, Economic Survey 1984/85, p. 43, and Economic survey 1984/85, p. 47.

/b At current prices; furnished by GOI to 12/85 IMF Mission.

/c At 1984/85 prices; estimated using the 1984/85 figures as the base and applying the growth rate projected for public sector expenditure during the Seventh Pla.

/d At current prices. Source: 1985 CEM, Vol. II Table 2.1.

/e At current prices. Source: GOI, Press Information Bureau, Press Note, January 28, 1986, p. 8.

/f At 1984/85 prices; estimated.

resources during the Seventh Plan, increased resource mobilization in the sector will be a major challenge and is likely to fall far short of the targets indicated above. 1/ The figures do indicate, however, the costs of having let the steel sector get into its present run-down state and the resources that could become available once the sector is restored to full productivity.

4.71 In summary, the financial performance of public sector units must be improved if the Seventh Plan is to be financed without excessive recourse to deficit financing. This improvement is implicit in the Plan's targets for public enterprise contributions to financing Plan outlays. The financial performance of these units can be improved through measures that make it clear that their primary objective is financial performance, that other highly desirable goals such as employment generation, provision of low cost goods, and development of backwards areas are likely to be in conflict with a reasonable return to the public sector on its investment, which in turn makes it very difficult for the Government to finance the other activities that could contribute more effectively to supporting both economic and social objectives. With the possible exception of a few activities which should be financed by budgetary transfer, the public enterprise units should be free to focus on what should be the primary objective of any company--to earn a competitive return on capital employed by producing goods efficiently and selling them at a competitive price.

E. Current Expenditures

4.72 The Government expects a substantial additional resource mobilization effort to help finance the Seventh Plan. However, unless there is at the same time a major effort to control the growth of current expenditures (or "revenue expenditures" as they are identified in Indian budgets), there will be no increase in budgetary savings available to finance the Plan.

4.73 Current expenditures have risen rapidly both absolutely and relative to GDP during the period since the end of the 70s. In ways this is more significant than the growth rate of revenues in explaining the declining and, more recently, negative current budgetary savings. Overall revenue receipts are now equivalent to around 19.5% of GDP, roughly the same level that they were at the end of the 70s. On the other hand, revenue expenditures have risen from an average of 17.7% of GDP during the last three years of the 70s to 19.7% in 1984/85, reflecting a buoyancy of 1.6 with respect to GDP for the period 1982/83 to 1984/85.

4.74 The majority of this growth in current expenditures came from the Central Government, where a buoyancy of nearly 2.3 boosted current expenditures from 10.4% of GDP in 1980/81 to 13.3% by 1984/85. Current expenditures at the state level have also increased, but only marginally -- after rising from 11.7% of GDP in 1980/81 to 11.8% in 1982/83, they have fallen back to 11.5%.

1/ The 12% target for gross profits used here is actually a very weak standard for it is taken to include depreciation. If average plant life were calculated at 10 years, annual depreciation would be 10% of assets, resulting in a real return on assets of only about 2%.

4.75 At the Central Government level, a variety of factors have driven current expenditures up relative to GDP. The importance of these factors varies from year to year, but of the 1.3% of GDP increase in current expenditures relative to GDP over the period 1980/81 to 1984/85, rising grants to states have been most important, accounting for an increase of 0.8% of GDP. Increased development expenditures (0.5%) and non-developmental expenditures (0.2%) explain the remainder, with other elements offsetting slightly these increases.

4.76 It is not possible here to draw specific conclusions about the merit or demerit of various types of revenue expenditures or their appropriate levels. However, the following observations regarding the pattern of expenditures on subsidies, grants to states, interest payments, and defense may raise relevant questions.

4.77 Subsidies. The growth of subsidies since the beginning of the 1970s has been quite different at the Centre and State levels. State subsidies, according to Center for Monitoring Indian Economy (CMIE) estimates, ^{1/} were two and one half times the level of Central Government subsidies in 1970/71. However, since then, Central Government subsidies have increased from 0.2% of GDP to 2.0% in 1984/85, while those at the State level have only grown from 0.5% to 0.9% of GDP. Central subsidies therefore are now the more important issue.

4.78 Long lists of central government subsidies have been drawn up -- subsidies go to everything from khadi industry development to shipbuilding. But two subsidies account for over 70% of the total -- food and fertilizer. Fertilizer subsidies are by far the largest -- about Rs 19 billion in 1984/85 vs. Rs 11 billion for food. They are also the most rapidly growing, having risen by 70% per year in nominal terms between 1981/82 and 1984/85. The GOI also provides an interest subsidy to public sector fertilizer companies which amounted to Rs 0.5 billion in 1984/85. Further subsidies of various types come from the State and Union Territory Government; information on the amounts involved are not available, but it appears that they are not insignificant.

4.79 Of the budgetary subsidy currently provided by the GOI, nearly 60% represents payments under the Fertilizer Retention Price Scheme (FRPS). ^{2/} The remainder represents subsidy payments to domestic manufacturers of single super phosphate fertilizer, payments under the Fertilizer Freight Subsidy scheme, and subsidy on imported fertilizer. The retention prices allowed to fertilizer plants under the Scheme depend to a large extent on the feedstock prices they face -- the higher the feedstock price, the higher the retention price. And given the fact that the farmgate price of fertilizer, which is

^{1/} Cited in ASSOCHAM, Integrated Fiscal Policy, 1985, p. 35.

^{2/} The Scheme provides for a retention price for each eligible fertilizer plant, based on a capacity utilization of 80% of the ammonia plant and a combination of norms and actuals in regard to the consumption of raw materials, utilities and other inputs, maintenance and other costs, and provides for a post tax return of 12% on net worth.

uniform all over the country, does not change automatically with changes in the retention prices payable to fertilizer producers, any increases in retention prices requires an equal increase in the fertilizer subsidy. The fertilizer subsidy was reduced about 20% by the increase in fertilizers announced in late January this year. However, they are likely to go back up again rather sharply as retention prices are adjusted to take into account of higher natural gas prices announced in February 1986. For example, the price of gas payable by Gujarat State Fertilizers Company has gone up from Rs 320 to Rs 2,160 per 1,000 standard cubic meters. As a result, the retention price of urea allowed to this company would go up by nearly 54% -- from Rs 2,038 per tonne at present to about Rs 3,142 per ton.

4.80 It has been argued that the fertilizer subsidy is predominantly a user subsidy. But a careful scrutiny of the available information suggests that the fertilizer subsidy issue is a complex one. First, defining the relevant price of imported fertilizers for use as a basis for comparison is difficult. As of late 1985, for example, f.o.b. price of urea imported by India was Rs 1,244 per material ton. The average f.o.b. price for 1985/86 imports to February 1986 has been about Rs 1,560 per ton, while the average farmgate cost for imported fertilizer was about Rs 2,700 per ton. This margin leads to a user subsidy on imported urea fertilizer of about Rs 350 per ton.

4.81 Second, the apparent domestic fertilizer subsidy depends heavily on the price of feedstocks, and there is considerable uncertainty about their true economic opportunity costs. To the extent that feedstock prices (e.g. natural gas) differ from the true economic value, the net economic subsidy will differ from the direct output subsidy.

4.82 Third, the current retention price scheme is such that, as long as capacity utilization and input norms are met, plant capital and input costs not controlled by the plant do not affect profitability. There is a need for producer price changes to improve incentives for further productivity changes.

4.83 Given the strong case for increasing the efficiency of pricing policy and controlling the growing fertilizer subsidy, it will be of utmost importance to look into the above issues, to determine how much of the present subsidy is to the user, to the producer, and to others such as the middlemen so that appropriate measures can be designed and implemented. Evidence from recent studies indicates that the effect of halving the fertilizer subsidy (as of 1980/81) and passing the full price increase on to the farmers would on average reduce rural per capita incomes by less than 1%, with the majority of the burden falling on the richer farmers (who use more fertilizer). ^{1/} With the higher subsidy levels prevailing today, the impact would be somewhat more, but would still almost certainly fall largely on the better-off farmers, not on the poor.

4.84 Grants to States. A vertical fiscal imbalance is natural, even desirable, in a federal nation like India. It would thus be wrong to say

1/ Jaime Quizon. "Withdrawal of Fertilizer Subsidies: An Economic Appraisal," EPW, 9/29/85, pp. All7 ff.

that the doubling of grants-in-aid to States and Union Territories is per se a problem. However, it should be noted in discussions of the relative fiscal performance of the States and the Centre that these grants, amounting to 2-3% of GDP in recent years, are one of the main reasons that the States have shown current budgetary savings while the Centre has shown deficits averaging about 1% of GDP since 1979/80. 1/

4.85 Interest Payments and Defense. Interest on the national debt is fast approaching defense as the biggest item in the Central Government's revenue budget. In 1984/85, for example, interest payments had risen to 3.0% of GDP, compared with 3.3% for defense expenditures. 2/ Each is larger than total current expenditure on development. Defense spending alone amounts to 20% of total expenditure.

4.86 Interest payments have risen very rapidly about the past decade from the 1.7% of GDP they represented in 1975/76 to the present levels of 3% of GDP. At the same time they have risen from 15% of revenue receipts to over 25%. This reflects both the growing national debt and rising interest rates -- two very closely related factors. Public debt has risen from Rs 215 billion to Rs 871 billion between 1975/76 and 1985/86 (from 29% of GDP to 40% of GDP). Of this increase, most important was domestic debt, which has risen from 19% of GDP to 31% over the same period.

4.87 While part of the much higher interest burden today can be explained by the larger absolute size of the national debt, the remainder of the explanation must be sought in its terms. Treasury bills have for the past ten years accounted for somewhat less than half of total domestic debt; the interest rate on this debt has been held at the artificially low rate of 4.6% since 1974. The Government's market borrowings, which account for somewhat over half of the outstanding domestic debt of Government, are carrying increasingly higher interest rates -- recently around 11.5%. This is still considerably less, however, than even the best corporations have to pay in the market for their money; the prime lending rate charged by industrial finance corporations in 1983/84, for example, was 14%. 3/

1/ Treatment of Centre grants to States as a capital transaction as is done in many countries would result in very strong budgetary savings by the Centre and deficits by the States.

2/ The LTFP indicates that the interest burden will outstrip defense within two years (p. 13).

3/ Other sources of lower cost of funds which the Government taps are the various schemes such as the Special Bearer Bonds Scheme, Capital Investment Bonds Scheme, National Deposit Scheme and National Saving Certificates Scheme, carrying interest rates much lower than those payable by even reputed private sector companies. (For example, while the interest rate on 7- to 7.5-year debentures issued by private sector companies is 15%, that payable by the Government on the comparable capital investment bonds is a mere 7%). The Government is able to attract large funds under these schemes largely because of the generous tax concessions which go with them.

4.88 The move towards higher interest rates on domestically held public debt, while it increases the debt service burden, is basically a very positive development. There is no reason that the Government should get money more cheaply than others who need to borrow funds. ^{1/} In fact, the Chakravarty Committee has recently recommended further moves towards paying market rates on Government debt. The discipline of paying competitive interest rates on borrowed funds should lead to more care in deficit financing and to be better resource allocation in the economy.

4.89 The rising burden of debt service relative to Government revenues and to GDP can only be reduced in the final analysis by measures that reduce deficit financing. Such measures have a two-pronged effect. First, they reduce or at least stabilize the total volume of debt relative to GDP that the Government has to service. Second, by lowering borrowing from the banking system, thus reducing the rate of monetary expansion, inflationary pressures in the economy will be lessened, which should result in lower interest rates. ^{2/} The prospects for progress along these lines, however, are not bright. The LTFP indicates that current expenditures are likely to rise, not fall, relative to GDP during the Seventh Plan and domestic market borrowings are proposed to rise from 5.4% to 5.7% of GDP. Over a five year period, net borrowing of 5.7% of GDP each year would result in a stock of additional public debt equivalent to 28.5% of GDP, which at a real interest rate of 6%, would add an additional annual interest burden equal to about 1.7% of GDP, or 8.5% of revenue expenditures. The risk of an internal debt trap will become increasingly real unless strong measures are taken to reduce the need for deficit financing.

4.90 Another factor which may make it difficult for the Government to keep non-Plan current expenditures of the Centre from growing by more than the increase from 11.1 to 11.9% of GDP over the Seventh Plan period as indicated in the LTFP is the impending Pay Commission recommendations, which have not been taken into account. These could significantly increase the cost of wages, which in 1983/84 constituted over 60% of public sector consumption expenditure.

^{1/} If it were argued that the value of money in the hands of Government is socially more valuable than that in private hands, the answer would be to pay higher--not lower--interest rates and to recover the funds needed to pay the higher rates through taxation, user charges, pricing, etc. In fact, if one considers the tax revenues foregone by the Government in making interest on various Government borrowings tax exempt, it may well be that the net cost to Government of funds is at or above market rates.

^{2/} Some persons, noting rates of monetary expansion averaging 18% p.a. over the past decade while domestic prices are reportedly rising at only 6-7% per year, have concluded that deficit financing does not cause inflation. A recent paper by Ghose, Madhur and Roy indicates, however, that the close link between money supply expansion and inflation can be seen if one examines the relationship over a suitable length of time that allows for lagged effects and uses appropriate measures of the money supply. "Has Monetarism Failed in India? The Case of Missing Inflation", (mimeo), July 1985.

F. State Finances

4.91 Since State Governments account for fully half of total government in India, and since most of the above discussion focussed on the Central Government, a brief look at State finances is needed to round out the picture.

4.92 The financial position of the States has deteriorated significantly in recent years: a) the tax revenue buoyancy dropped from 2.4 in 1979/80-1982/83 to 0.6 in 1982/83-1984/85; b) dependency on grants from the Centre has risen from an average of about 2% of GDP at the beginning of the 1980s to nearly 3% of GDP in 1984/85; c) the current revenue surplus has dwindled from 1.4% of GDP in 1979/80 to 0.35% of GDP on average during 1983/84-1984/85 (without grants from Centre, the surplus figures would have been -0.8% and -2.20% respectively); and d) a number of States have in the past couple of years depended increasingly on overdrafts with the Reserve Bank of India.

4.93 Buoyancy. Despite the inelasticity often associated with the indirect taxes allowed to the States, during the period 1982/83-1984/85 they managed through additional resource mobilization measures to attain rates of growth in their tax revenues that were generally equal to if not greater than those of the Central Government.

4.94 The long-term solution to this problem lies in improving the revenue base of states and improving the elasticity of existing taxes rather than in depending on repeated new resource mobilization measures. At present, the great majority of State revenues are from taxes on goods and services. Many of these taxes are on a specific rather than ad valorem basis, which makes them non-buoyant in the absence of additional resource mobilization measures. Measures need to be taken to: (a) change from specific to ad valorem rates; (b) reduce the dependence of the states on indirect taxes by making better use of the Constitutional right of States to tax agricultural incomes; (c) integrate more fully central and state taxes in areas such as sales and excise with appropriate mechanisms for sharing these revenues with the States; and (d) increase non-tax revenues by improving the performance of State enterprises.

4.95 Specific to Ad Valorem Rates. The recent LTFP document of the Central Government recognizes the intrinsic superiority of ad valorem rates but rightly explains that specific rates are often administratively better than ad valorem rates in an environment where enforcement is difficult. However, shifts to ad valorem rates can be made easier by reducing the number of different rates and their range of variance, for this reduces the incentive to cheat in reporting. Where the change to ad valorem rates is not possible, the States should follow the suggestion made in the LTFP -- regularly and more or less automatically increase specific rates in line with inflation. Errors will be made by using general price indices for this purpose, but the errors can be reduced by appropriate selection of the index. In any event the errors will be less than those implicit in leaving the rates unchanged. Furthermore, the political problems which often delay such adjustments in specific rates will be less if the changes are reasonably frequent, regular and automatic.

4.96 Taxation of Agricultural Incomes. Earlier in this chapter it was noted that, despite the equity that would result, the Centre has, in the LTFP, rejected proposals that it seeks to transfer to itself the States right to tax agricultural incomes. The LTFP did not, however, reject the possibility that States make far better use of this right than they have done in the past.

4.97 Integration of State and Central Sales Taxes. Because sales tax under the Constitution is a State subject and States levy the tax at varying rates on similar goods, people often purchase goods in other low-tax states when the extra freight incurred works out to be less than the saving in sales tax. For example, electronic goods are subjected to sales tax at 10% in Delhi, but at 16.5% in Gujarat which encourages people in Gujarat to purchase expensive electronic goods in Delhi and transport them to Gujarat. Further inefficiencies are induced at the manufacturing stage by the fact that the sales tax applies to intermediate goods as well as finished products; this encourages the same type of distortion found above with the cascading excise tax. Two policy measures could help to reduce the inefficient activity induced by the present sales tax system. First, especially in the case of intermediate inputs, a deductibility system could be established whereby sales taxes on all inputs could be offset against sales taxes on finished products (ref. discussion of excise taxes). Second, steps could be taken by State Governments with coordination through a strengthened Joint Council for Sales Tax to ensure that the rate of sales tax applicable to a commodity does not differ much from State to State. The State Governments could also voluntarily agree to put nation-wide ceilings on the sales tax rates applicable to different commodities. The States would be free to vary tax rates so long they didn't exceed the limits.

4.98 Improved financial Performance of State Enterprises. Of total State revenues, about 10% come from non-tax revenues. In addition, grants from the Center and other miscellaneous transfers contribute nearly 20% of state revenues (Album, Table 3.1, 1984/85 Budget Estimates). There is little the States can do in the short term to change the levels of grants from the Centre (these are allocated primarily on the basis of quinquennial Finance Commission awards; in any event, increasing the level of grants simply moves the problem from one level of government to another.)

4.99 The States could do a lot, however, to improve the performance of the other non-tax revenues. These revenues come largely from interest income and various services; the net earnings of public enterprises at the state level are negative and have been at least as far back as 1974/75. As can be seen in Table 4.10, the exploitative forest operations are the only significant source of income from public enterprise at the state level; enterprises in virtually every other sector run at a loss. The worst loss-makers are the State Electricity Boards, the irrigation projects, the departmental power undertakings and the multipurpose river projects (which provide both irrigation water and power). Any improvement in the resource mobilization effort of States in non-tax revenues will depend crucially on improving the financial performance of the State operations supplying irrigation water and power.

4.100 Water Boards. The Seventh Plan states that water rates shall be reviewed periodically "so that they are adequate to meet the cost of operation and maintenance and provide a reasonable return on investment". These

objectives are excellent and fully consistent with the objective of efficiency and equity.

Table 4.10: INDIA: NON-TAX REVENUES OF STATE GOVERNMENTS, 1974/75-1984/85
(Rs billion)

<u>Item</u>	<u>1974/75</u>	<u>1979/80</u>	<u>1983/84</u>	<u>1984/85</u>
Non-tax Revenues	7.8	15.0	25.2	27.9
Net Contribution of Departmental Public Enterprises	-0.4	-0.9	-2.0	-2.2
Forest	1.4	2.8	4.9	5.0
Irrigation	-1.2	-2.7	-4.8	-5.3
Multipurpose	-0.5	-0.6	-0.9	-1.0
Power /a	-	-0.3	-0.7	-0.8
Transport	-0.1	-0.1	-0.6	-0.4
Dairy	-0.1	-0.3	-0.4	-0.3
Industry	-0.1	-0.1	-0.1	-0.1
Mining	-0.1	0.2	0.2	0.3
Other	0.1	0.2	0.4	0.4
Services	4.8	9.0	15.5	17.3
Interest	3.3	7.0	11.7	12.8
<u>Memo</u>				
State Electricity Boards /b			9.7	-11.2

Source: GOI/DEA. Indian Economic Statistics - Public Finance, New Delhi (12/84), pp. 28-29.

/a This excludes State Electricity Boards which are non-Departmental.

/b See 1/ below.

4.101 Water rates, however, are a state matter, and national plan objectives in this area are far removed from what happens in reality. While the situation varies greatly from state to state, and while a large but unknown percentage of water rates assessed are never collected, nominal irrigation charges overall are far from covering even the actual (much less the desirable) O&M of most surface systems, without speaking of any contribution to return on investment. The most recent estimate by the Centre for Monitoring the Indian Economy (based on state data for 1982/83) is that irrigation water charges and analagous charges such as betterment levies

1/ Planning Commission: Review of Performance of State Electricity Boards in the Sixth Five Year Plan Period. p. 17.

cover 24% O&M costs plus interest on capital expenditures. 1/ For 1981/82, the Eighth Finance Commission put gross receipts as a percentage of working expenses alone for major and medium irrigation schemes at only 69%. 2/

4.102 The ultimate resource generation potential of the state-level irrigation activities is difficult to measure, but the following may be indicative of some approximate orders of magnitude. Roughly Rs 100 billion was invested in major, medium and minor irrigation during the Sixth Plan (CMIE, 9/85, V.2, Tables 4.14-4.15). This added about 11 million hectares to the nation's irrigated potential or roughly 15% of the total today. At present (6th Plan) replacement cost, this would imply a cumulative total investment in irrigation of about Rs 670 billion. A return of 10% on this would be equal to about 25% of total revenue receipts of the states in 1984/85. Even if the historical cost of Rs 193 billion for irrigation investments since Independence were taken as a basis, a 10% return would still be about 7% of revenue receipts. Either way, there is clearly a major resource in irrigation infrastructure which could be used to markedly increase revenue generation by the States.

4.103 This would entail substantial increases in water rates and better recovery/collection practices. There is clear evidence that substantial increases could be accommodated without causing undue hardships for the farmers concerned. For example, when farmers pump water with diesel pumpsets from their own wells, the cost is Rs 1,250-Rs 2,500 per hectare. Within Punjab, for example, the rates charged for flow irrigation vary from as little as about Rs 14 per hectare for wheat to Rs 80 per hectare for sugarcane, while in Maharashtra the rates for the same crops are Rs 75 and Rs 750 per hectare respectively. 3/ In either case, the rates are far below what farmers willingly pay for water from their own diesel pumpsets. By charging such low rates, the States artificially constrain their revenues and thus their ability to make water available to more farmers on a more reliable basis. They are also making themselves highly dependent on resources from the Central Government (which ultimately must resort to potentially inflationary borrowing financed through monetary expansion).

4.104 The low water rates in most states and the significant delinquencies in paying them are closely related to the way in which many of India's irrigation systems function. Many systems do not provide the adequate, reliable service they are supposed to provide. It is not therefore surprising that farmers in such areas often refuse to pay water charges. There is in any event a tendency to consider irrigation water as a gift rather than as an investment whose cost should be recovered, so that the service can be extended to others. This tendency is reinforced by the lack of connection between benefits and charges/costs. In reality sales taxes rather than water charges have become about the only way in which State Governments recover

1/ CMIE. Basic statistics relating to the Indian economy. Vol II, Table 4.17.

2/ Report of the Eighth Finance Commission, 1984, Annexure III-19.

3/ Basic Statistics Relating to the Indian Economy, Vol 2: States, Bombay: CMIE, September 1985, Table 4.16.

even part of the costs of public irrigation systems. It can be argued that sales taxes do have some advantages over water charges. First, they are more progressive because they tax the incremental marketed surplus, not incremental production (which is often consumed at home). Poorer farmers who barely manage to assure their families' sustenance pay little in the way of sales tax. However, they often must sell crops at harvest time to pay debts, then buy back subsistence requirements (at gross of tax prices). Second, sales taxes are related to results. Water charges are levied whenever an irrigation potential is created; market taxes on incremental production have to be paid only when the system works. However, it is unclear whether such sales taxes are actually borne by the farmers who use the water or by the consumers. Appropriate water charges and their equitable collection remain priority matters.

4.105 State Electricity Boards. Next to the operation of irrigation water boards, State Electricity Boards (SEBs) are the largest single source of losses for State Governments. In addition to the direct SEB losses, which in 1984/85 amounted to Rs 11 billion, the States have been providing subsidies (largely for rural electrification) which have amounted to an estimated Rs 9.9 billion over the Sixth Plan, or about Rs 2 billion per year. 1/ Total commercial losses after depreciation and interest amounted to about Rs 45 billion over the Sixth Plan period (despite Plan estimates that they would only be Rs 10 billion); losses in 1984/85 alone were over Rs 11 billion.

4.106 This very poor financial performance reflects the fact that SEB revenues from sale of power have regularly fallen short of covering operating costs including depreciation and interest (in 1984/85 they fell short by 20%). Overall there are no returns on investment. Consequently the internal resources of the SEBs (even including the Rs 9.9 billion of subsidies during the Sixth Plan period), only financed about 3% of capital expenditures during the period. The rest had to be financed largely through loans from Government and other sources. Given the scarcity of both domestic and foreign funds, their high cost, and the critical need for improved power supplies, improving the SEBs' financial performance must be given very high priority.

4.107 Analysis of the financial position of the SEBs indicates that, with appropriate action along the lines indicated below, the current losses of the SEBs could be eliminated and that if on average the boards were to attain the 18% rate of return on assets in operation before interest and taxes earned by the Orissa SEB, they could increase revenues by an amount equivalent to nearly 40% of their expected investment requirements for the Seventh Plan period (Rs 300 billion in 1984/85 prices). 2/ This analysis was done to provide some reasonably realistic estimates of the scope for resource mobilization by the SEBs and to indicate the types of action that could make the greatest contribution towards attaining an overall 18% return before interest

1/ Planning Commission. Review of Performance of State Electricity Boards in the Sixth Five Year Plan Period, 1985, Annex 28.

2/ The 18% return in Orissa is not out of line with actual performance in several other SEBs. Other SEBs with high returns in 1983/84 included Kerala (14%), Karnataka (14.4%), and Gujarat (16.6%).

and taxes. The performance targets for the analysis were set in terms of standards actually attained by certain SEBs within India. While there are many reasons why other boards may never come up to the standards of the best boards, (e.g., differences in State per capita income levels, social priorities such as employment and supply of low cost electricity to selected elements of the population, availability of hydro-electric resources, etc.), the analysis at least indicates the scope that exists. The performance goals used for testing hypothetical resource mobilization scenarios included the following:

- (a) Tariff Rates. SEBs on average charged 90% of the tariff rate for each major class of consumer that is charged by the SEB with the highest rates;
- (b) Transmission and Distribution Losses. SEBs on average reduced transmission and distribution losses to 15%;
- (c) Staffing. SEBs on average reduced staffing to 20 per megawatt of installed capacity;
- (d) Revaluation of Assets. SEBs revalued the book value of assets by 30% as a proxy for revaluation to current replacement costs and earned their current rates of return;
- (e) Fuel Efficiency. SEBs on average reduced their consumption of coal and oil to "best practice" levels;
- (f) Reduction of Arrears. SEBs on average reduced their proportion of revenues in arrears to "best practice" levels; and
- (g) Plant Load Factor. SEBs on average increased their plant load factor in thermal plants to 55%.

4.108 The impact of attaining each of these targets on the additional resources that ceteris paribus would be mobilized, expressed as a percentage of planned investment during the Seventh Plan period, is as follows: 1/

1/ Because of the probable interactions that would occur if these measures were applied simultaneously, it is not possible to add the results--the cumulative effects would almost certainly be smaller than those shown here on a ceteris paribus basis. Further work is needed to determine the actual feasibility of these measures for individual SEBs.

<u>Target</u>	<u>Percent</u>
Tariff Rates	29.5
Transmission & Dist. Loss Reduction	5.8
Staffing	5.1
Asset Revaluation	5.1
Fuel Efficiency	4.9
Arrears Reduction	3.4
Plant Load Factor	2.3

4.109 This analysis indicates that by far the greatest contribution to attaining a satisfactory rate of return on SEB assets would be to charge and collect more appropriate tariffs. This conclusion is subject to certain caveats, however. The contributions shown here depend heavily on the targets set. These are not necessarily the technological limits; rather they reflect the best levels currently being attained in India. Different targets could quickly change the ranking of the measures. Second, the analysis assumes immediate shifts to attaining these levels; in reality such improvements would take place over an extended time period.

4.110 There are at least three reasons to believe that there is nevertheless scope for very significant increases in effective, realized tariff rates. First, all of the tariff rates used here in this analysis are actually below rates currently being charged in India (the rates used in the analysis are only 90% of the current highest rates). Thus the rates are shown to be feasible in India. Second, a major share of the losses (especially before subsidies) come from sales of power to the agricultural sector. The very high value of power for irrigation, as shown by farmers' willingness to install and operate high cost diesel pumpsets, indicates that farmers would be able to pay considerably higher rates than they do at present for reliable power supplies. Third, some farmers in India are already paying relatively high rates for power. For example, while those in Andhra Pradesh paid only Rs 0.08/kwh in 1984/85, those in Gujarat paid Rs 0.49/kwh. Overall, the agricultural rate is only 40% of the average rate of SEBs in India. Given the very great importance of improving the financial position of the states and of assuring the financial strength of the SEBs so that they will have the resources needed to undertake major expansions in the supply of electricity within India, actions to improve the financial health of the SEBs should be given high priority.

4.111 In sum, States need to reverse the current pattern of rising losses among State enterprise units, particularly those in irrigation and power. Action to improve the rate of return of these enterprises would help foster economic growth by assuring a better supply of power and water. Such efforts would also help achieve a more equitable pattern of growth: with more adequate financial resources coming from those benefiting from the provision of water and electricity, the boards supplying these services would be able to expand the supply network to those not currently able to enjoy the very substantial benefits accruing to those with access to these vital inputs.

G. Domestic Financing Prospects

4.112 The picture that emerges from this chapter is one of an increasingly difficult domestic resource position. The degree of deficit financing that

the Government has undertaken during the past few years, largely from domestic sources, has created a debt burden that already generates interest payment obligations equal to 27% of Central Government current and non-Plan expenditures 2.6% of GDP.

4.113 The rising share of public expenditures in total GDP--from 32% during the Sixth Plan to 37% in the Seventh--is not consistent with bringing the dependency on deficit financing under control. Unfortunately, over one-third of the expected increase is due to the rising interest burden anticipated during the Seventh Plan, and this will be hard to reverse immediately (Table 4.8). Given the absence of current budgetary savings at least during the first couple of years of the Plan, the Government is effectively borrowing to pay interest on past debt. This is often a sign that a country is entering into a debt trap. Such a situation is alien and unacceptable in India, which has traditionally followed very responsible, even conservative, economic policies.

4.114 What can be done to avoid actually sliding into a debt trap? Since the danger clearly lies with domestic and not foreign debt (the country has been very careful not to borrow excessively abroad), policy actions must focus on domestic economic performance.

4.115 This chapter has laid out in considerable detail the areas where action is required--improvements in central and state revenue performance, control of current expenditures, and perhaps of greatest importance, improving the financial performance of public enterprise, for these are now a major drain on domestic resources because of their failure to earn rates of return on average sufficient to finance a substantial share of their own gross investment requirements.

4.116 The Seventh Plan and the Long-Term Fiscal Policy paper lay out a scenario that shows the overall domestic resource mobilization picture improving by the end of this decade. Critical to this scenario are increasing the tax burden from 16.3% to 18.3% of GDP, and raising public enterprise savings from 2.2% to 4.6% of GDP. Given the experience with similar targets set out at the beginning of the Sixth Plan, there is reason to believe that these targets may not be achieved. At the same time, there is reason to hope that the Government will be successful in its efforts. First, Government has explicitly recognized the nature of the problems. The Plan itself and the LTFP are very frank about the challenges that lie ahead. With this candor, one hopes that the public in general will come to recognize the seriousness of the problem and thus be willing to support Government efforts (such as higher prices for goods and services produced by the public sector) that will be needed to avoid the serious problems that would arise if efforts to set right the domestic resource balance should falter or fail.

4.117 The second reason for optimism is that the Government has already indicated its willingness and ability to start taking the required measures. Evidence of this is seen in the long list of actions during the past fiscal year and measures announced in the 1986/87 budget (Chapter 2).

4.118 The Plan and LTFP documents indicate that the Government's view of the broad contours of the macro-economic scene over the next five years, but do not lay out the details behind the broad aggregates. In order to see what the implications would be for action at a somewhat more disaggregated level,

a domestic financial flows model has been developed to complement our normal balance of payments model. Here it may be sufficient to show only some of the general indicators deriving from two of the scenarios that were developed with the model--one reflecting as closely as possible the assumptions of the Seventh Plan, and the other reflecting what would happen if the planned improvements do not materialize, if there is simply a continuation of past trends (1982/83-1984/85) with respect to the buoyancies of government revenues and current expenditures. In both cases, it is assumed that the public investment targeted for the Seventh Plan is implemented.

4.119 The key parameters for the period 1985/86-1989/90 with respect to the elasticity (buoyancy) of Government current revenues and expenditures in the two models are as follows:

<u>Item</u>	<u>Plan Case</u>		<u>Trend Case</u>	
	<u>Centre</u>	<u>State</u>	<u>Centre</u>	<u>State</u>
Current Revenues	1.65	1.65	1.31	0.89
Current Expenditures	1.43	2.01	1.87	1.46

The main results of the two scenarios as of 1989/90 in terms of critical macro-economic indicators are as follows:

<u>Indicator</u>	<u>Plan Case</u>	<u>Trend Case</u>
	<u>-----% of GDP-----</u>	
Current Budgetary Savings	2.2	-0.4
Overall Financing Requirements	9.5	11.8
Domestic	7.5	9.8
Market	5.8	8.2
Reserve Bank	1.6	1.6
Foreign Loans and Grants	2.0	2.0
Credit Flow Available to Commercial Sector <u>/a</u>	1.7	-0.7
Inflationary Impulse <u>/b</u>	1.5	3.9

/a Increase in commercial bank credit outstanding to private sector as a percent of GDP; average for 1982/83-1984/85 was 3.2%. Expressed as a percentage of the increase in money supply (M3), the respective figures for the two cases are 42% and -13% compared to an average for 1982/83-1984/85 of 50%.

/b Calculated as the additional credit expansion, as a percent of GDP, required to meet government borrowing requirements while maintaining incremental credit to the private sector at 3.2% of GDP. The actual inflation would depend on how the credit was created, willingness to hold money balances, monetary velocity, physical supply conditions in the country, etc. The inflationary impulse calculated on the basis of maintaining new credit available to private sector at 30% of incremental M3 works out to 0.4% and 3.5%, respectively, for the two cases. As this measure ignores all secondary effects (which are particularly important in the case of reserve money creation), the actual inflation is likely to be much higher.

4.120 From the above it is very clear that without the program of additional domestic resource mobilization that the Government envisions for the

Seventh Plan the private sector would be squeezed out of the credit market, with Government taking up all net credit expansion available, given monetary and inflation targets to finance its deficit borrowing requirements. Alternatively, if money supply were expanded to assure an adequate credit to support planned private sector growth and development during the Seventh Plan, the inflationary potential would reach unacceptable levels. Thus the Government's efforts to improve the financial health of the public sector must be given highest priority and strong support from all concerned.

Chapter 5

EXTERNAL RESOURCES FOR DEVELOPMENT

A. Achievements and Targets

5.01 India's balance of payments was not a serious constraint to its development efforts during the Sixth Plan. Despite disappointingly low export volume growth (4.5% per annum) ^{1/} and significant liberalization in imports of capital goods, raw materials and components (volume growth of about 9.0% per annum), India was able to end the Sixth Plan period with a relatively small current account deficit (1.2% of GDP) and a low debt service ratio (15%) in 1984/85.

5.02 Numerous factors were instrumental in compensating for the serious shortfall in export performance. First, growth in the volume of imports declined as a result of successful import substitution in petroleum, fertilizers, cement, foodgrains, and non-ferrous metals. Second, transfer payments from Indian workers abroad, as well as the flow of non-resident deposits, remained buoyant, despite the recession in the oil-exporting countries of the Middle East. Third, the sizeable decline in unit values of bulk import items (POL, fertilizers, and iron and steel) during the later part of the period helped India's terms of trade. Finally, India borrowed relatively large amounts from the IMF (US\$4.5 billion) and commercial markets (US\$3.0 billion) to boost its capital account.

5.03 Since the 5.5% GDP growth rate during the Sixth Plan period was achieved from a low base year (1979/80), the 5% GDP growth target for the Seventh Plan is essentially a more ambitious target requiring higher imports and a much stronger export performance. ^{2/} The foreign exchange requirements are expected to be higher not only because of higher overall growth but specifically because of the much higher industrial growth target--6.6% per annum compared with only 4.6% per annum growth during the Sixth Plan period. The Seventh Plan aims to meet this challenge through a 6.8% per annum volume growth in exports; a relatively faster (5.8% per annum) overall import growth compared to 3.6% in the Sixth Plan and; by borrowing US\$9.5 billion (US\$1.9 billion annually) from commercial markets over the next five years. This is expected to push the debt service ratio close to 19% and the current account deficit to GDP ratio is expected to reach to a period average of 1.6% (Table 5.1).

^{1/} Estimated by deflating the Reserve Bank of India series on export receipts to 1978/79 prices.

^{2/} See Chapter 1 paragraph 1.1.

Table 5.1: INDIA: KEY BALANCE OF PAYMENTS INDICATORS

	Sixth Plan 1979/80-1984/85	Seventh Plan Targets 1985/86-1989/90
1. Selected Growth Rates (% per annum)		
GDP (fc)	5.6	5.0 /d
Agriculture	4.5	2.5 /d
Industry /e	4.6	6.6 /d
- Manufacturing	4.3	5.5 /d
Exports /a	4.5	6.8
Imports	3.6	5.8
- Bulk Commodities /b	4.1	5.1
- POL /c	-7.2	10.3
- Capital & other imports	9.0	6.9
2. Memo Items:		
Total net commercial borrowing /f	5.5	9.5
Workers Remittances (billion US\$)	12.6	13.1
	<u>1984/85</u>	<u>1989/90</u>
Current Account Balance/GDP (%)	1.2	1.6
POL Imports /c/Consumption Ratio (%)	20	38
Debt Service Ratio (%)	14.9	18.7

/a Net of crude oil exports.

/b Fertilizers, edible oils, iron and steel, non-ferrous metals.

/c Net of crude exports.

/d Seventh Plan figures (not adjusted for figures in Quick Estimates).

/e Industry includes manufacturing, mining, construction and utilities.

/f Disbursements from supplier credits and private financial markets.

Source: Seventh Five-Year Plan; Sixth Plan Balance of Payments estimates based on Economic Survey and Quick Estimates.

5.04 As indicated in the Seventh Plan document, "The projected trade profile does not leave much room for risks entailed by unforeseen developments." Indeed, India is entering the Seventh Plan period with relatively limited scope for further import substitution in crude oil and other bulk import items; lower concessional aid flows; higher debt service obligations to service IMF and commercial borrowings contracted during the Sixth Plan; a deepening recession in the oil-exporting countries of the Middle East that is likely to curtail both remittances and Indian exports to the region and finally, growing protectionism among India's trading partners. On the brighter side, there are strong indications that crude oil prices are not likely to increase in real terms, at least in the next few years. This combined with recent decline in import prices of edible oils and relatively mild escalation in prices of India's other bulk import items will improve India's terms of trade during the Seventh Plan period. Moreover, interest rates are projected to decline slightly or at worst stabilize at current

levels. However, the most encouraging positive development that could bolster the chances of meeting the foreign exchange requirements of the Seventh Plan is the recent changes in Government policy towards trade and industrial policy. As we have indicated in our earlier economic reports, while India's balance of payments position will be sensitive to fluctuations in interest rates, prices and world demand, success in maintaining a viable balance of payments in the long run will depend more heavily on trade and industrial policy framework and its effective implementation (which is very much in its control) and much less on developments in the world economy which is beyond its control.

5.05 Taking into consideration the external and domestic factors outlined above, this chapter attempts to shed some light on the following two questions: how realistic are the balance of payments assumptions of the Seventh Plan discussed above and; what are the policy actions needed to assure their realization? The chapter first reviews key parameters of the Seventh Plan's balance of payments projections, i.e., imports exports, non-factor services, transfer payments and borrowing requirements. Later, the Plan's balance of payments projection is reconstructed to take into account recent changes in oil prices and the policy implications of the substantially improved balance of payments outlook is analyzed. Finally, the recent trends in the level and terms of external aid and the case for more concessional aid is discussed.

B. Import Requirements and Policy Options

5.06 In the past, imports have played a critical role in the Indian economy more by virtue of their scarcity than their abundance. The myriad import controls and regulations which have been a fundamental element of India's economic policy have been found to constitute a major obstacle to industrial efficiency and growth. The import regime has also influenced the composition, growth and stability of Indian exports.

5.07 As indicated earlier, despite the poor export performance, during the Sixth Plan period, India has taken significant steps to accelerate the import liberalization effort initiated in 1978. Although total merchandise imports were reduced from about 10% of GDP in 1980/81 to about 7.3% in 1984/85, thanks to a successful import substitution effort in key bulk commodities (crude oil, fertilizers, cement, foodgrains), imports of non-bulk commodities (capital goods, raw materials, components etc.) which are essential for improved efficiency and growth, especially in the industrial sector, grew at an average annual compound growth rate of 9.0% between 1979/80 and 1984/85. The Seventh Plan projects the total merchandise imports to decline a bit further, from an estimated 7.3% of GDP in 1984/85 to about 7% in 1989/90.

5.08 The projected fall in the growth in total imports is primarily due to a slower non-bulk imports growth of about 6.9% per annum compared to the 9.0% growth during the 1980/81-1984/85 period. Thus the implicit import elasticity of non-bulk imports with respect to GDP is assumed to drop from 1.6 during the 1979/80-1984/85 period to about 1.4 during the Seventh Plan period. The projected drop in non-bulk imports are actually much sharper since the Seventh Plan's non-bulk import projections are based on an unusually low base year (1984/85) and higher industrial growth.

Table 5.2: INDIA: VOLUME GROWTH OF NON-BULK IMPORTS AND IMPLIED ELASTICITIES (%)

	<u>1979/80-1983/84</u>			<u>1984/85-1989/90</u>		
	<u>Growth per annum</u>	<u>Elasticity w.r.t. Industrial</u>		<u>Growth per annum</u>	<u>Elasticity w.r.t. Industrial</u>	
		<u>GDP</u>	<u>v.a.</u>		<u>GDP</u>	<u>v.a.</u>
Non-Bulk Imports <u>a/</u>	14.0	2.8	3.7	6.9	1.4	1.0
Capital goods	11.1	2.2	2.9	6.1	1.2	.9
Other Imports	16.3	3.3	4.3	7.3	1.5	1.1
Industrial Value Added	3.8			6.6		
Real GDP	5.0			5.0		

a/ Excluding foodgrains and gems and jewelry.

Sources: The Seventh Five Year Plan; Reserve Bank of India and World Bank estimates.

5.09 As illustrated in Table 5.2, when compared to the first four years of the Sixth Plan, the Seventh Plan's non-bulk import elasticity with respect to GDP is actually assumed to drop by almost 50%. More importantly, the Seventh Plan's implicit elasticities with respect to industrial value added are projected to be equal to unity and many-fold below recent experience. As indicated in the Seventh Plan, the estimated sharp drop in non-bulk imports in 1984/85 could be "attributable partly to the pent up demand for consumption and inventory build up from the period before the introduction of selective import liberalization in the mid-seventies." Nevertheless, it is difficult to be sanguine about the projected decline in volume growth of non-bulk imports, especially at a time when ambitious targets are set for both overall GDP and industrial growth. The low non-bulk import growth assumptions of the Seventh Plan are a critical and serious concern for continued progress in improving not only the efficiency and growth of industry but also prospects for higher export growth.

5.10 The Plan's bulk import projections are, by and large, optimistic about import substitution prospects, especially in edible oils and non-ferrous metals. However, given the recent slump in crude oil prices, the Seventh Plan's assumption of a 6% annual increase in rupee prices of crude oil will need to be downgraded significantly. During the next five years, India is likely to save about US\$6.2 billion on original estimates of its oil import bill. Similarly, fertilizer prices are not likely to recover from the sharp price decline observed during the past year and further help reduce the import bill.

5.11 Fertilizer consumption, which grew at an 9.3% per annum during the Sixth Plan is seen as rising at a 10% per annum rate during the Seventh Plan, bringing estimated total consumption from 8.2 million tons in 1984/85 to about 13.5-14.0 million tons in 1989/90. During the same period, domestic production is expected to increase from 5.2 to 8.7 million tons. Thus the import requirements for the Seventh Plan period are estimated to increase from 3.6 million tons in 1984/85 to between 4.8 and 5.3 million tons. The

increase in domestic production is to come from newly commissioned or still to be completed plants and from assumed improvements in operational efficiency in existing plants. Based on recent performance of the fertilizer sector and project implementation experience, prospects for achieving the domestic production targets looks good. However, the envisaged rise in imports appears to be large on account of the expected rapid growth in demand. First, demand is likely to be affected by weather in the next four years. Unfavorable rainfall has already curtailed growth in consumption in 1984/85 (consumption fell by 1.5% during rabii season and the overall growth was only 6.5% in 1984/85) and is likely to adversely affect offtake again in 1985/86 due to a disappointing North East monsoon. Second, the 10% price increase announced in February 1986 and subsequent increases are bound to have a modest restraining influence on demand. Third, projected rapid increase in consumption assumes that growth will take place in largely rainfed areas of low current use. This would require arrangements for an effective distribution system that is difficult to establish and sustain in the short run.

5.12 In the case of edible oils imports, the Plan projects a constant volume of 1.1 million tons of imports annually based on a very optimistic growth in domestic production (6.7% per annum), that increases from 13 million tons in 1984/85 to 18 million tons in 1989/90. This growth in production is based on an assumed 8% increase in area sown to oilseeds, a 28% increase in crop yields, establishment of price support schemes and large scale procurement operations. While the measures that are being taken to raise production are sound and necessary, they are unlikely to be sufficient to rapidly boost output to the 18 million ton level by the end of the Seventh Plan.

5.13 The Plan's non-ferrous metals import projections are based on relatively buoyant domestic production mostly on account of increases in capacity utilization. For example, capacity utilization is expected to increase from 77% to 86% in aluminum; 60% to 90% in zinc, 47% to 90% in lead and; 85% to 90% in copper. Alleviation of power shortages through further investment in captive power generation is seen as the key factor in attaining the planned improvement in capacity utilization. The actual level of production and imports will to a large extent depend on timely commissioning of new plants and expansion schemes (Orissa Aluminum Complex, Ghatsila smelter etc.) as well as improvements in management and labor productivity in the sector.

C. Export Performance, Targets and Policies

5.14 Export performance during the Sixth Plan was disappointing. Total merchandise exports grew by only 4.5% per annum in volume. This was significantly lower than the 6.3% per annum volume growth achieved during the previous decade and 9% target set by the Sixth Plan. While volume growth in garments, gems and jewelry, engineering goods and processed foods were at or above the 7.5% growth level, growth in manufactured exports as a whole was only 5.0% due primarily to poor performance in textiles, leather products and other manufactures. Primary goods exports stagnated in almost all key items. Both domestic and external factors have contributed to the poor performance of exports during the Sixth Plan period. The adverse impact of external developments can be summarized as follows: (a) debt crises in many developing countries, especially in Africa where India had a beach-head in exports, have

TABLE 5.3: INDIA IMPORT SUMMARY
(US\$ Million at Constant 78/79 Prices)

	1980/81	1981/82	1982/83	1983/84	1984/85	Growth Rates	
						6th Plan	7th Plan (Target)
Foodgrains	110.0	433.0	380.0	751.0	292.0	24.6	-100.0
Edible Oils	1049.0	967.0	564.0	745.0	619.0	5.9	5.4
POL	2677.0	2166.0	1977.0	1672.0	1585.0	-7.2	8.3
Total Fertilizer	910.0	710.0	352.0	475.0	1381.0	13.3	10.6
Iron & Steel	1025.0	1591.0	1387.0	1104.0	1000.0	-4.3	-1.8
Non-ferrous Metals	418.0	752.0	483.0	537.0	388.0	4.2	1.7
Capital Goods	1857.0	1777.0	2206.0	2300.0	1877.0	4.4	6.1
Other Imports	1881.0	2297.0	2339.0	3279.0	2956.0	7.9	7.3
TOTAL MERCHANDISE IMPORTS	10348.0	11279.0	10797.0	11964.0	11112.0	3.6	5.8

Note: Growth rates for the 6th Plan period are derived from the 78/79 based constant price series, while those for the 7th Plan period are based on 84/85 prices. Import figures and the Sixth Plan growth rates for individual commodities are based on "custom series" while total import figures and growth rates reflect adjustments for statistical discrepancy.

Sources: The Seventh Five Year Plan; 1980/81 - 1983/84 DGCI&S and RBI; 1984/85 World Bank estimates

eroded their purchasing power for imports. Indian exporters could not compete with credit and other facilities provided by exporters from developed countries in order to maintain their share; (b) the decline in oil prices have weakened traditional markets in oil exporting countries of the Middle East; and (c) recession in the industrial countries have lead to increased protectionist policies. Although domestic supply constraints and the above adverse developments in the world market have played an important role in the poor export performance, despite relatively good macroeconomic management the key obstacle to export growth continues to be the trade and industrial policy environment, including the relatively stable real effective exchange rate, which did not increase the poor profitability of export sales.

5.15 The factors responsible for the stagnation in India's exports and the decline in its share of world non-oil trade have been studied extensively by the Bank, Indian scholars, and Government committees. There is wide spread agreement that the basic reason for the poor past performance has been the "inward looking" economic strategy pursued. ^{1/} Exports have been discriminated against through extensive and across-the-board protection of import competing industries. Industrial output and efficiency has been adversely affected by bias against large firms and the industrial capacity has generally been geared to meet relatively limited domestic markets. As a result, Indian industry has been wrestling with the problems of too many plants of inadequate scale, producing myriad products. Moreover, the security of producing in protected markets have caused Indian firms to place inadequate emphasis on quality and innovation, factors that are essential to maintaining international competitiveness.

5.16 Export promotion policies have been inadequate in the past. Compensation schemes to cover direct and indirect taxes paid by the exporters has been inadequate and delayed. Access to imported inputs has been largely restricted. Other benefits such as export credits and tax concessions have been limited.

5.17 As indicated in Chapter 2, there was significant progress in Government policies towards liberal imports, industrial delicensing, lower tariffs and easier access to imported inputs for exports in recent years. Nevertheless, export growth was by and large unaffected partly because these measures have been introduced late in the period; many have not yet been fully and forcefully implemented; and perhaps more importantly, the process of changing the overall framework of trade and industrial policy has only begun.

Seventh Plan Export Targets

5.18 The Seventh Plan projects a 6.8% export volume growth which is significantly higher than what was achieved during the last decade. Manufactured products in general and engineering goods, chemicals, garments and gems and jewelry in particular are projected to lead the projected export drive.

^{1/} J.N. Bhagwati and T.N. Srinivasan, Foreign Trade Regimes and Economic Development, 1975; IBRD, India, Export Performance, Problems, Policies and Prospects, 1977; The Hussain Committee Report, 1984.

TABLE 5.4: INDIA EXPORT SUMMARY
(US\$ Million at Constant 78/79 Prices)

	1980/81	1981/82	1982/83	1983/84	1984/85	Growth Rates	
						6th Plan	7th Plan (Target)
PRIMARY EXPORTS	2612.0	2477.0	2403.0	2311.0	2150.0	-2.7	4.5
Agricultural Products	2202.0	2063.0	2049.0	1958.0	1766.0	-2.7	4.0
Ores & Minerals	409.0	414.0	355.0	364.0	384.0	3.5	7.1
MANUFACTURED EXPORTS	5093.0	4928.0	4909.0	5438.0	5752.0	5.0	8.1
Chemicals	409.0	529.0	464.0	526.0	537.0	0.0	10.0
Textiles	1078.0	886.0	844.0	811.0	965.0	0.2	4.8
TOTAL MERCHANDISE EXPORTS	7551.0	7366.0	7628.0	8026.0	8395.0	4.5	6.8

Note: Growth rates for the 6th Plan period are derived from the 78/79 based constant price series, while those for the 7th Plan period are based on 84/85 prices. Export figures and the Sixth Plan growth rates for individual commodities are based on "custom series" while total export figures and growth rates reflect adjustments for statistical discrepancy.

Sources: The Seventh Five Year Plan; 1980/81 - 1983/84 DGCIS and RBI; 1984/85 World Bank estimates

5.19 Achievement of this export growth target is of critical importance not only for meeting the 5% GDP growth target set by the Plan but more importantly, for sustaining the Government's efforts to liberalize trade and industrial policy. We will discuss the implications of a significant shortfall in the projected export targets, and policy options available to the Government to deal with it, later in the chapter. Let us now focus on the question: what is the prospect for achieving the export target?

5.20 The demand constraints that have played an important role in suppressing export growth during the Sixth Plan period are likely to ease but not vanish altogether. Unless "project exports" are effectively supported through credit and tax incentives, demand for Indian exports in the oil exporting countries of the Middle East is not likely to grow significantly in a period of declining oil prices. Recovery from drought, combined with higher concessional flows may revive markets in Africa. On the brighter side, there are strong indications that the demand in the industrial countries may pick up in the early part of the period.

5.21 The power and transport bottlenecks that have constrained industrial production and export growth in the past will continue to pose problems. Although recent improvements in capacity utilization of thermal power plants and relatively larger growth in new generating capacity are likely to alleviate the power shortages, problems relating to port congestion and rail transport are expected to persist.

5.22 Many of the problems that constrain India's exports are closely related to the structure of the industrial policy. India's industries are by and large fragmented into too many plants of inadequate scale. Industrial fragmentation has emerged as a result of several factors: licensing which limited the size of new undertakings, restricted the growth of "large houses", and foreign-controlled firms; allocation of essential imports directly to firms (which curbed the growth of the efficient firms and protected the inefficient); and direct support for failing firms. These restrictions on size, growth, entry, and exit of firms combined with quantitative restrictions and high tariffs on imported inputs and curbs on collaborative agreements and on import of technology, caused Indian firms to place inadequate emphasis on cost, quality, and innovation.

5.23 Therefore, success in achieving the Plan's export target will to a large extent depend on how fast these policies will encompass the broad spectrum of the industrial sector and how effectively they will be implemented in the face of the expected resistance by those who stand to lose from the new structure. It would however be naive to think that the policy structure of the Indian industry could be changed dramatically within the span of four to five years. In order to get results in the short term, benefits from changes in the structure of industrial policy need to be complemented by direct export incentives, especially an exchange rate policy that would enhance relative profitability of export sales.

5.24 The most important elements of the existing export-promotion policy are cash assistance, import replenishment, the duty drawback schemes, which can be characterized as partial compensation for customs and excise duties paid by exporters. Exporters, researchers and those implementing the duty drawback system all agree that the system suffers from substantial rigidities regarding eligibility, coverage, heavy Government discretionary powers and

serious delays in payments. Moreover, the Cash Compensatory Support scheme does not fully compensate sales and other indirect taxes (mainly state) and duties not covered by the drawback scheme.

5.25 India's export promotion policies were recently reviewed by the "Hussain Committee" appointed by the Government. If implemented quickly and effectively, the following recommendations of the Committee could go a long way in stimulating export growth during the next few years:

"The duty drawback system should be rationalized in such a manner that it provides an expeditious and complete reimbursement of taxes paid on inputs that enter into export production. For this purpose, the delays in the disbursement should be eliminated through a simplified payment scheme; the average-industry-rates should give the benefit of doubt to exporters; the request for specific-brand-rates should be considered wherever the exporter claims that the existing drawback is not sufficient; the rates of drawback, whether average or specific, should be fixed within a stipulated period; the multiplicity of drawback rates should be reduced."

"The regime of cash compensatory support must be maintained so that the export sector is not at a disadvantage on account of either unrebated indirect taxes or the cascaded structure of taxation."

5.26 Currently, there are four duty exemption schemes for exporting firms: the new import-export passbook scheme, duty free replenishment decrees, bonded warehouses, and advanced licenses. To varying degrees, these schemes extend duty-free access to exporters for imported inputs, including those for which imports are normally restricted. The schemes have restrictions regarding the categories of firms which are eligible, and the types and amounts of inputs which can be imported, based largely on each firm's historical exports. In most cases, officials have considerable discretion affecting the imported inputs allowed and the procedures often cause considerable delays, which reduces the reliability of exports from India. It is now time to push for the broad principle that imported inputs should be available automatically and swiftly free of duty and without significant bonding costs to any exporters with an irrevocable letter of credit or equivalent order for exports or with a substantial record as a significant exporter. A step in the right direction will be the speedy implementation of the import-export passbook scheme announced in October. This scheme will use somewhat flexible import coefficients for export products. A further positive step would be to expand the duty-free replenishment scheme by adding new products to the present small list and allowing better access to new and rapidly growing export firms. Simplified administration of free trade zones is also needed.

5.27 Assuring exporters access to adequate credit would also help the export effort. Today, export credit is not a serious problem for firms with well-established and steady exports but it presents a problem for new or rapidly growing firms with relatively more vulnerable financial positions.

5.28 The extensive biases in the industrial policy structure described earlier require constant attention to the relative profitability of exports. There is significant evidence that in India during periods of demand buoyancy, exports have tended to decline and during periods of domestic slump in demand they have increased. This implies that by and large domestic

markets have been more profitable for potential exporters at prevailing levels of output for most commodities. As long as distortions in the system give more incentive to investment to expand domestic sales than export sales, the impact of policy measures which affect absolute profitability of exports such as export taxes, subsidies and exchange rates will be extremely important in providing the necessary support for export growth in the next few years.

5.29 The movement of nominal and real effective exchange rates (RER) since 1970 is illustrated in Graphs 5.1 and 5.2. Between 1971 and 1979, the rupee depreciated by about 32% in real terms against the currencies of India's major export markets. This no doubt was a key factor in the relatively fast growth of exports during the same period. 1/ The trend both in real and nominal effective exchange rates dramatically reversed in 1979. Between the last quarter of 1979 and third quarter of 1981 the real and nominal effective exchange rates appreciated by about 10.0% and 3.5% respectively implying a major decline in export profitability and/or competitiveness. There was, however, correction in the last quarter of 1981, whereby the real and nominal exchange rates depreciated by 7.6% and 4.7%, respectively. Since then, there has been a steady increase in the nominal exchange rate, while the real effective exchange rate did not change significantly until the end of 1984/85. 2/

5.30 Since the behavior of exchange rates are generally neutral between exports and import substitutes (a given increase in the price of foreign currency makes both exports and imports dearer in terms of local currency, thereby giving similar incentives to exports and import substitution), a depreciation in the real effective exchange rate during the Seventh Plan, especially in the initial years, would not only provide a powerful stimulus to export growth but also could reduce pressures on the import bill.

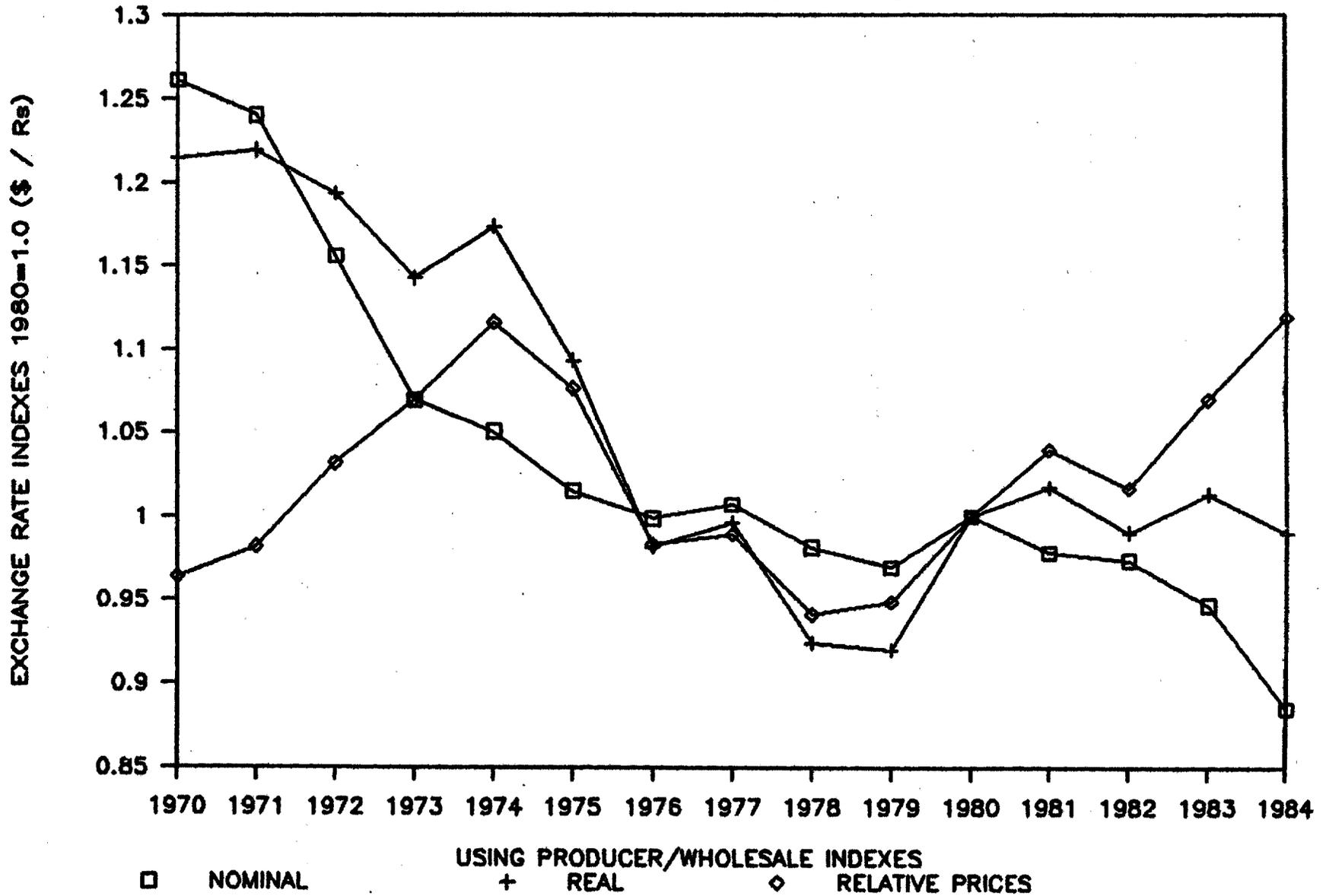
1/ Except for 1978-79 when severe input shortages (cement, steel etc.) as well as infrastructure bottlenecks (power, transport) depressed export growth.

2/ The real effective exchange rate (RER) is based on the relative wholesale prices of ten industrial countries with the maximum imports from India using export weights. Rise in REER denotes appreciation of the rupee and fall denotes depreciation.

GRAPH 5.1

NOMINAL & REAL EFFECTIVE EXCHANGE RATES

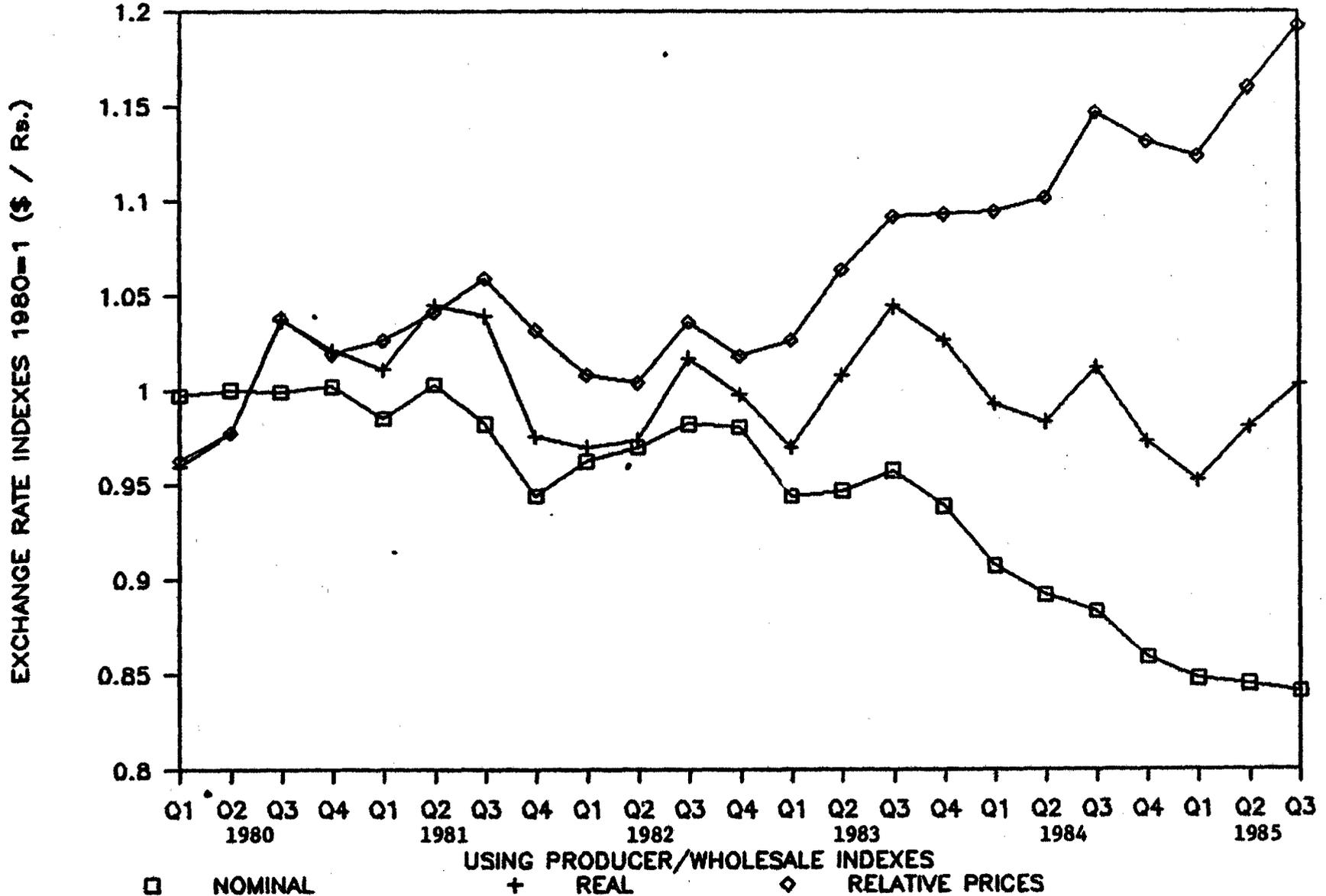
1970-1984 USING 1981-83 EXPORT WEIGHTS



GRAPH 5.2

NOMINAL & REAL EFFECTIVE EXCHANGE RATES

1980-1985 USING 1981-83 EXPORT WEIGHTS



D. Prospects for Non-Factor Service and Transfer Payments

5.31 The significance of non-factor services and current transfers in India's balance of payments has increased very rapidly over the last decade. The share of net receipts from non-factor services and transfer payments has increased from 14.3% of total merchandise imports in 1975/76 to about 25% in 1983/84 (Table 5.5). An important component of non-factor service receipts is earnings from tourism (38%) followed by net receipts from transport and insurance (18%) and other miscellaneous receipts (44%). Almost all of the net current transfer receipts (US\$2.4 billion in 1984/85) are from workers remittances.

Table 5.5: INDIA: THE SHARE OF NET RECEIPTS FROM NON-FACTOR SERVICES AND TRANSFER PAYMENTS IN TOTAL MERCHANDISE IMPORTS (%)

	Actuals					Seventh Plan	
	73/74	75/76	77/78	80/81	83/84	Est. 84/85	Proj. 89/90
Non-Factor Services	1.8	5.7	10.7	8.6	7.0	7.9	7.4
Tourism	1.5	3.5	8.8	8.6	5.6	8.2	7.5
Other	0.3	2.2	1.9	n.s	1.4	-0.3	-0.1
Current Transfers	4.5	8.6	16.6	17.4	17.8	17.9	13.0
<u>Sub-Total</u>	<u>6.3</u>	<u>14.3</u>	<u>27.3</u>	<u>26.0</u>	<u>24.8</u>	<u>24.8</u>	<u>20.4</u>
(as % of GDP)	(0.3)	(0.9)	(1.7)	(2.6)	(1.9)	(1.8)	(1.5)

Sources: The Seventh Five Year Plan, DGCIS.

5.32 The Seventh Plan projects a modest increase in net non-factor service receipts. The net tourism receipts are expected to grow at an average annual rate of 12% in nominal terms from an estimated 1984/85 level of US\$1.1 billion. This is based on an assumption of a 7% annual increase in tourist arrivals and no real increase in per-capita expenditure by arriving tourists. The net outflow in transport and insurance flows is projected to decline from about US\$212 million in 1984/85 to about US\$100 million by the final year of the Seventh Plan. Net current transfers, on the other hand, have been estimated to increase by 3.5% per annum during 1984/85 and projected thereafter to remain constant in nominal terms.

5.33 The growth in tourism receipts in the next five years will depend largely on how well the fundamental policy changes proposed in the Seventh Plan are implemented. The Plans proposal to accord "industry status" to tourism to benefit the sector from several credit and tax concessions normally given to industrial establishments as well as proposals to develop holiday tourism in non-traditional areas such as trekking, wildlife tourism and beach resort tourism are all measures with significant potential. Even moderate success in these areas, combined with modest world economic recovery, and some increase in per capita tourist expenditure could easily push tourism receipts beyond the Plan projections.

5.34 The prospects for maintaining current real level of workers remittances in the medium term looks uncertain, given the recent sharp

decline in oil prices. Significant numbers of unskilled emigrant labor in the oil exporting countries of the Middle East have already returned home as a result of the deep recession in the construction sectors. However, demand for skilled and semiskilled labor has not weakened significantly, given the need to service and operate the infrastructure, production capacity and services developed in the earlier years. India has been in a better position to meet this skilled manpower demand compared to other developed and developing countries given its relatively large and diversified skilled manpower stocks. The change in the skill composition of the Indian labor in the Middle East could have already taken place and this probably explains the relatively stable flows to India over the past four years compared to the deterioration in the flow of remittances to some other labor exporting countries to the Middle East.

5.35 Yet, the recent sharp decline in crude oil prices is bound to result in a drastic cut in economic activity in the labor importing countries of the Middle East. Although India may still fair better compared to some other labor exporting countries, it is highly unlikely that the Seventh Plan's assumption of a constant real growth in transfer payments during the Seventh Plan period could be achieved. A constant nominal growth now seems to be the best that could be realized. Uncertainty about petroleum prices and related developments in the Middle East make projection of remittances almost equally uncertain.

E. Foreign Exchange Requirements and Policy

5.36 The Seventh Plan projects the current account deficit to reach about US\$16.3 billion over the five-year period and the current account deficit to GDP ratio to average 1.6%. The external borrowing requirement is set to about US\$17 billion over the period and the debt service ratio is estimated to remain below the 20% level.

5.37 However, the Plan's projection of current account deficit reflects an outlook for commodity prices prevailing about eight months ago and does not reflect the significant price movements in oil and other primary and manufactured goods. The Seventh Plan's price assumptions have, for example, estimated oil prices to increase by 6% per annum or remain constant in real terms. Similarly, prices of other bulk import items such as fertilizers, edible oil and non-ferrous metals have been assumed to recover relatively quickly. As a result, the Plan's projections assume a loss of about US\$600 million (in 1984/85 prices) on account of the worsening terms of trade during the five year period.

5.38 When the Plan's balance of payments projections are reconstructed in light of the recent price developments, the picture changes significantly. Mostly due to the increased sensitivity of India's terms of trade to international oil prices, the terms of trade improves by about 13% and the terms of trade gain in 1989/90 reaches about US\$2.1 billion or 1% of GDP. The current account deficit to GDP ratio declines from 1.2% in 1984/85 to about 0.1% in 1989/90. The debt service ratio (including amortization of the IMF) remain at comfortable levels, increasing from 17.6% in 1985/86, peaking at 19% towards the end of the period and sharply declining, thereafter (15% in 1992/93) as the IMF amortization burden is alleviated.

5.39 No doubt, the Government will take advantage of this breathing room created by the improved terms of trade to expand the availability of imported inputs to improve industrial efficiency, exports performance and overall growth. The balance of payments projections presented below (Table 5.6) reflect both the recent price movements and takes the Plan's 1.6% average current account deficit to GDP ratio as the ceiling for expanding non-bulk imports (Table 5.6). This enables the volume growth of non-bulk imports to increase from 6.9% per annum level to 10% per annum level and raises the elasticity with respect to GDP to a more realistic level of 2. The overall volume growth in imports of goods would then increase from 5.8% per annum to 7.5% per annum. However, the outlook for petroleum prices over the medium term is far from clear. Substantive variations seem more likely than a stable level or trend in real prices. India's economic policies will necessarily have to be adjusted to respond to these and other changes in the international economic environment. The analysis indicates, however, that a current account deficit to GDP ratio of 1.6% should not give rise to significant debt servicing problems.

5.40 The foreign exchange requirements to finance the projected current account deficit (excluding transfer payments), debt service and the need to keep a minimum three months imports equivalent in reserves would then be US\$38.1 billion during the Seventh Plan period. Factor payments would increase from US\$0.8 billion during the Sixth Plan to about US\$6.5 billion during the Seventh Plan, reflecting the recent hardening in the terms of borrowing. Amortization of debt is also projected to be higher (US\$11.5 billion, compared to US\$3.8 billion during the Sixth Plan) due primarily to the higher levels of commercial borrowing and the amortization of the IMF loan which amounts to US\$3.1 billion during the five-year period. The details of the estimated foreign exchange requirements for the Sixth and Seventh Plans are compared in Table 5.7.

5.41 Inflows from private transfers, which accounted for around 14% of total foreign exchange requirements during the Sixth Plan period, will continue to be important but decline during the latter half of the 1980s. The non-resident deposit schemes, whereby attractive interest rates payable in foreign exchange are offered on time deposits of hard currency has attracted approximately US\$1.9 billion in the 1980/81 to 1984/85 period. New inflows under this scheme should still be substantial and reach US\$4.4 billion. Direct foreign investment in India is allowed subject to the 40% limit except in some high technology and export-oriented sectors. The amounts involved, however, will continue to remain small. These sources together could be expected to provide some US\$13.0 billion. The remaining US\$25.2 billion will have to come from official sources in the form of grants and concessional and non-concessional loans and from borrowing in the international capital market.

5.42 Concessional aid, which represented a major source of finance in the past, is projected to be far less important under the Seventh Plan. In the present unfavorable climate for concessional assistance there is a strong possibility that the amount available to India will decline in real terms. This projection assume that the level of IDA commitments will be maintained in nominal terms while bilateral concessional aid held constant in real terms. As Table 5.7 indicates, this would imply disbursements of grants and concessional loans of some US\$10.4 billion during 1985/86-1989/90. Under these circumstances, India would need disbursements of non-concessional

borrowings of some US\$14.7 billion during 1984/85-1989/90. Over this same period, disbursements of IBRD, and other official non concessional funds could be expected to amount to US\$6.8 billion, which means that suppliers, buyers and export credits, and Euro-dollar syndicates and floatations would need to account for the remaining US\$7.9 billion. This would imply that disbursements from commercial sources would have to average about US\$1.6 billion a year with new loan commitments in the range of US\$2.0 billion a year.

5.43 India's experience in the recent past would indicate that it would face no difficulties in raising the projected amounts in the commercial market. In the past, India has found it advantageous to borrow in the commercial market for project-related purposes. This will continue to be the major basis for commercial borrowing under the Seventh Plan, particularly with respect to the financial needs of the industrial, transport and energy sectors. To maximize the advantages inherent in commercial borrowing for project-related purposes. India will have to increase its efforts in developing a sufficiently large disbursement pipeline.

5.44 The balance of payments projections imply a growth of about 7.0% per annum in debt outstanding and disbursed (DOD) during the Plan period. However, the ratio of DOD to GDP is projected to decline from 16.4% in 1984/85 to about 13.0% in 1989/90. The debt service ratio is estimated to increase from 17.6% in 1985/86 to about 20.3% in 1989/90. Similarly, the ratio of interest payments to current receipts is projected to be at a relatively comfortable level of about 8.5% during the period.

Table 5.6: INDIA: BALANCE OF PAYMENTS

(at current prices - US\$ million)

	81/2	82/3	83/4	84/5	85/6	86/7	87/8	88/89	89/90
1. EXPORTS (q+nfs)	11174	11205	11607	11712	12159	13957	16039	18491	21413
2. Merchandise (fob)	8477	8386	8667	8931	9159	10527	12124	14013	16274
3. Non-Factor Services	2697	2819	2940	2781	2999	3430	3915	4478	5139
4. IMPORTS (q+nfs)	17028	16269	16241	15148	16453	17421	20256	23064	25558
5. Merchandise (fob)	15333	14385	14360	13398	14400	15095	17633	20105	22271
6. Non-Factor Services	1695	1884	1881	1750	2053	2326	2623	2959	3287
7. RESOURCE BALANCE	-5854	-5064	-4634	-3436	-4294	-3464	-4216	-4573	-4145
8. Net Factor Income	-135	-801	-777	-922	-1030	-1314	-1496	-1770	-2017
9. Factor Receipts	912	525	546	614	641	489	489	402	427
10. Factor Payments	-1047	-1326	-1323	-1536	-1671	-1803	-1985	-2172	-2444
11. (N< Interest Paid)	-751	-840	-630	-712	-806	-924	-1098	-1292	-1371
12. Net Current Transfers	2317	2504	2630	2352	2352	2045	2045	2045	2045
13. Transfer Receipts	2338	2526	2655	2379	2379	2099	2099	2099	2099
14. Transfer Payments	-21	-22	-25	-27	-27	-54	-54	-54	54
15. CURRENT BALANCE	-3672	-3361	-2782	-2006	-2972	-2733	-3667	-4298	-4116
M< CAPITAL INFLOW									
16. Direct Investment	10	65	63	62	63	67	72	77	82
17. Net M< Loans	2208	2107	2229	2478	2643	3018	3227	2949	3038
18. Disbursements	3368	3278	3107	3449	3696	4227	4569	4664	5285
19. Repayments	-1159	-1172	-878	-970	-1052	-1210	-1342	-1715	-2246
20. Other M< (net)	0	0	0	0	0	0	0	2351	2199
21. Net Short-Term Capital	0	0	0	0	0	0	0	0	0
22. Non-Resident Deposits	198	454	773	490	496	532	568	607	649
23. Capital Flows NEI	0	0	0	0	0	0	0	0	0
24. Errors and Omissions	-1832	-720	-673	-831	-369	-412	-458	-509	-567
25. Change in Reserves	2398	-505	-881	-261	354	-2	1027	-299	-541
26. Net Credit from IMF	689	1960	1271	67	-216	-471	-770	-879	-745
27. Purchases	689	1960	1341	210	0	0	0	0	0
28. Repurchases	0	0	-70	-143	-216	-471	-770	-879	-745
29. Other Reserve Changes	0	0	0	0	0	0	0	0	0
30. Gross reserves at Year End	4461	4965	5846	6107	5753	5754	4728	5026	5568

Table 5.7: SUMMARY OF FOREIGN EXCHANGE REQUIREMENTS AND SOURCES
(US\$ billion at current prices)

	<u>80/81-84/85</u>	<u>85/86-89/90</u>
<u>Foreign Exchange Requirements:</u>		
Imports	82.1	102.7
Goods	73.4	89.5
Services	8.7	13.2
Net Factor Payments	0.8	6.5
Amortization	3.8	11.5 ^{1/}
Increase in Reserves	-1.1	-0.5
TOTAL	85.6	120.2
<u>Foreign Exchange Sources:</u>		
Exports	56.9	82.1
Goods	42.8	62.1
Services	14.1	20.0
Private Transfers and Remittances	12.5	10.5
Official Grants	1.9	1.7
Direct Private Investment	0.2	0.4
Medium & Long-Term Borrowing (Gross Disbursements)	17.7	23.5
Official Concessional	7.6	8.7
IDA	4.2	4.3
Bilateral	2.5	4.3
Multilateral	0.9	0.2
Official Non-Concessional	2.0	6.8
IBRD	1.6	5.7
Bilateral	0.4	1.1
Total Official Loans	9.6	15.5
Private Loans	2.9	7.9
Suppliers' Credits	0.2	1.5
Financial Institution Loans	2.7	3.0
GAPFIL Loans	0.0	3.4
IMF	4.5	0.0
Total Non-Concessional	10.1	14.7
Non-Resident Deposits	1.9	4.4
Errors & Omissions	-5.5	-2.4
TOTAL	85.6	120.2

^{1/} Including US\$3.1 billion repurchases from the IMF.

5.45 In sum, the above balance of payments projection indicate prudent levels of borrowing and the projected import levels are realistic with respect to the industrial and overall growth targets. There is even some room for adjustment to modest adverse developments in transfer payments, interest rates, terms of trade, and import substitution, provided that all these factors do not coincide.

5.46 Export performance will be the most critical factor in maintaining a viable balance of payments position. It is clear that unless the average annual growth in exports is close to the Plan's target of 6.8%, commercial borrowing requirements and the concomitant debt service levels would be prohibitive to maintain import levels necessary to attain the industrial and overall growth targets of the Plan. For example, assuming no change in concessional aid flows, non-factor services, transfer payments and import level, if only a 4.8% export growth is realized, India would have to borrow approximately US\$6.1 billion more in commercial markets during the period to retain the projected import and GDP growth rates. The current account deficit to GDP ratio in this case would rise to about 2.4% and the debt service ratio to 26.4% in 1989/90.

Average Annual Export Growth (1985-89) (%)	Total Commercial /a Borrowing (1985-89) (US\$ billion)	Debt Service Ratio (1989/90) (%)	Current Account Deficit/GDP 1989/90 (%)
6.8	11.5	22.0	1.2
5.5	15.4	24.7	1.7
4.8	17.6	26.4	2.4

/a Disbursements.

Source: World Bank projections.

5.47 Although in each of the lower export cases illustrated above there would be some room for cutting bulk imports at the outset, the pressures on prices, drop in capacity utilization and delays in project implementation may soon become prohibitive, forcing the Government to curtail capital goods and other imports and thus slow down the projected industrial and export growth.

F. Trends in Level and Terms of External Aid

5.48 The level of commitments by the bilateral consortium donors in their national currencies is shown in Table 5.8 below, comparing the average level in recent years with the average in the early 1970s (before the first oil crisis), both in nominal and in real terms. While most countries have increased their commitments in nominal terms, the real level has in the majority of cases declined considerably over the past decade.

5.49 It can be seen from Table 5.9 that in spite of the fall in the real level of bilateral consortium commitments, total commitments from the consortium group have been maintained at about the same level in real terms. This has been mainly due to the large increase in IBRD commitments, as well as some increase in contributions from other multilateral donors (UN,EEC and

IFAD), which have together made up for the fall in IDA and bilateral consortium commitments. Commitments from non-consortium countries, mainly USSR and the OPEC group, have not changed very significantly, so that total official commitments have remained at about the same level in real terms as in the early 1970s. On the other hand, commitments from private commercial sources have increased very rapidly; as a result, total capital commitments have increased by more than 20% in real terms over the past decade. This is, of course, to be expected as India's investment and import needs have increased considerably over the past decade.

5.50 The terms of loans can be measured by the grant element, which is the grant equivalent of the loan commitment expressed as a percentage of the total loan commitment, where grant equivalent is defined as the loan amount less the discounted present value of future debt service (using a 10% discount rate). In the case of grants, the grant element is 100%. Table 5.10 shows the change in the average terms of major donor groups, and their relative share in the total.

5.51 The most significant hardening of terms has taken place in the case of the Bank Group, where the average grant element has decreased from 75% to 33%. This decline has been caused by the fall in the share of IDA within the Bank Group, as well by the hardening of IBRD terms (interest rates have averaged above 10% in the 1980s). However, even if no hardening had taken place in IBRD terms and its grant element had remained at 13.4% in the 1980s, it can be calculated that the fall in share of IDA would still have brought down the average grant element of the Bank Group from 75% in the early 1970s to 41% in the 1980s; in other words, the decline in the share of IDA accounts for more than 80% of the overall deterioration in average terms of the Bank Group.

5.52 In the case of other members of the consortium, average terms have actually improved, mainly due to a significant increase in the proportion of grants in the mid-1970s. However, as the total level of commitments from the consortium members (other than the Bank) lagged behind India's overall external resource needs, their share in total capital commitments fell from 54% to only 26%.

Table 5.8: BILATERAL CONSORTIUM COMMITMENTS
(in millions of respective donor currencies)

	<u>At Current Prices</u>		Percent Change	<u>At Constant 1980 Prices</u>		Percent Change
	Average Level	Average Level		Average Level	Average Level	
	72/3-73/4	81/2-84/5		72/3-73/4	81/2-84/5	
Austria	62	38	- 39	97	33	- 66
Belgium	238	263	+ 11	406	245	- 40
Canada	91	125	+ 37	186	100	- 46
Denmark	43	303	+605	88	239	+170
France	296	422	+ 43	627	314	- 50
Germany	307	421	+ 37	436	377	- 14
Italy /a	93	352	+279	304	202	- 33
Japan /a	158	563	+256	268	526	+ 96
Netherlands	93	148	+ 59	156	134	- 14
Norway	32	130	+306	61	100	+ 63
Sweden	193	340	+ 76	414	286	- 31
Switzerland	25	17	- 31	32	15	- 53
U.K.	74	128	+ 73	220	103	- 53
USA	90	162	+ 80	158	139	- 12

Sources: World Bank and Department of Economic Affairs

Table 5.9: LEVEL OF TOTAL CAPITAL COMMITMENTS
(in US\$ million)

	<u>At Current Prices</u>		<u>At Constant 72/3 Prices /a</u>		
	Average Level	Average Level	Average Level	Average Level	Percent Change
	72/3-73/4	81/2-84/5	72/3-73/4	81/2-84/5	over 10 years
Bilateral Consortium	701	1,117	592	305	- 48
Bank Group	503	2,346	438	646	+ 47
IDA	(442)		(385)	(249)	- 35
IBRD	(61)	(909)	(53)	(397)	+649
Other Consortium	39	(1,431)	32	68	+113
<u>Total Consortium</u>	<u>1,243</u>	<u>3,706</u>	<u>1,062</u>	<u>1,019</u>	<u>- 4</u>
Non-Consortium	51	111	36	31	- 14
<u>Total Official</u>	<u>1,294</u>	<u>3,817</u>	<u>1,098</u>	<u>1,050</u>	<u>- 4</u>
Private	73	1333	63	367	+483
<u>Grand Total</u>	<u>1,367</u>	<u>5,150</u>	<u>1,161</u>	<u>1,417</u>	<u>+ 22</u>

/a Deflated by the unit value index of India's imports in dollar terms.

Source: World Bank and Department of Economic Affairs

**Table 5.10: AVERAGE TERMS OF AID
(%)**

	<u>1972/73-73/74</u>	<u>1981/82-84/85</u>
<u>Bank Group</u>		
Share in Total	36.8	45.5
Average Grant Element	74.6	33.4
IDA Proportion	87.9	40.2
IBRD Grant Element	13.4	0.0
<u>Other Consortium</u>		
Share in Total	54.1	26.4
Average Grant Element	70.2	84.2
Grant Proportion	22.2	51.8
Grant Element of Loans	62.4	67.2
<u>Non-Consortium</u>		
Share in Total	3.7	2.2
Average Grant Element	53.9	45.5
<u>Private Loans</u>		
Share in Total	5.4	25.9
Average Grant Element	17.8	0.8
<u>Total Capital</u>		
Average Grant Element	<u>68.6</u>	<u>38.6</u>

Source: World Bank and Department of Economic Affairs.

G. The Need for Concessional Aid

5.53 Continued large flows of concessional aid to India are needed primarily because of the persistence in the country of poverty of an unacceptable degree and extent. With nearly 40% the population living below the poverty line. India harbors about one third of the world's poor and remains one of the world's poorest countries. ^{1/} As indicated earlier, the international community, which has long been cognizant of the dimensions of poverty in India, has responded with assistance that has helped the country implement a realistic and effective development strategy. India's development achievements include the maintenance of high national savings and investment rates,

^{1/} Poverty line is modestly defined as per capita expenditures of Rs 102 (US\$11.0) per month for rural and Rs 118 (US\$11.5) per month for urban areas in 1983/84 prices.

prudent management of the macro economy and the external sector marked recently by a growing willingness to rely on market signals rather than physical and administrative controls, and a considerable acceleration in the aggregate economic growth in the country. On a sectoral basis, noteworthy increases in petroleum production have been attained since the mid-1970s, and agricultural growth has accelerated significantly. Government social programs have been instrumental in reducing infant mortality and increasing life expectancy, and initiating and sustaining a secular decline in fertility. Concessional aid has provided valuable financial and technical backing for the Government's social sector initiatives. These loans have supported innovative health and family planning projects, improved water supply, sewerage, waste disposal and housing facilities in India's metropolitan cities. Like the health sector initiatives, these projects serve as vehicles for needed institutional development and policy change.

5.54 India's most striking development accomplishments have occurred in agriculture, a sector which accounts for over a third of GDP and provides employment to roughly two-thirds of the labor force. The significant acceleration in the agricultural growth rate that occurred in the early 1980s is largely due to the diffusion of high yielding cereals varieties and the more intensive application of fertilizers and pesticides.

5.55 Concessional aid support for agricultural development in India has been wide-ranging and important in quantitative and especially in qualitative terms. For instance, concessional assistance was instrumental in the rapid expansion of irrigation facilities and the growth of the institutional credit system in the 1970s and early 1980s. While providing needed incremental investment resources, concessional aid's major contribution to India agriculture lies in the catalytic, risk bearing role it has asserted through its involvement in experimental initiatives of great promise which might not otherwise receive sufficient attention and through close attention to the design and implementation of specific investments. To achieve the required evolution in Indian agriculture strategy, concessional resources and technical inputs are vitally needed to improve irrigation efficiency and cropping intensity.

5.56 Continued agricultural development through initiatives such as those just outlined will help India in accommodating the projected 14% growth in the working age population of 422 million by the end of the Seventh Plan (1985-90). But whatever proportion of work force entrants is absorbed in cultivation and related activities, this figure is likely to fall considerably short, because of resource constraints within the farm sector. Accordingly, the Seventh Plan looks beyond agriculture to industrial expansion as the means of increasing the GDP growth rate to 5%. This pace of growth is seen as the minimum the country must achieve if it is to continue to deal effectively with the challenge of poverty alleviation and employment generation.

5.57 Of critical importance for India's prospective industrial expansion is the ongoing reform of trade policies, initiated as part of the adjustment program implemented between 1981 and 1984. India's increasingly liberal

trade regime is expected to provide access to the imported raw materials, capital goods and technologies required by a rapidly growing industrial sector. Increased imports will be funded to some extent through suppliers', buyers' and export credits and through foreign market borrowing. As we have indicated earlier, India has already increased its commercial borrowing on a considerable scale to finance the import bill that resulted from the liberalization of trade in the early 1980s. But the maintenance of import flows at required levels will largely depend, in the Government's unfolding strategy, on rapidly growing exports.

5.58 Enactment of the program just outlined promises immense benefits in the medium- to long-term. But in the near term, this approach is replete with risks--it may be noted that analogous risks associated with India's earlier adoption of an agriculture-centered approach were surmounted with the assistance of the international community. The industrial strategy could go awry because of contingencies such as adverse trends in the country's terms of trade, smaller-than-expected increases in private transfers and remittances, and export growth rates significantly below that required to maintain 5% GDP growth rate. Developments such as these, especially a failure of exports to increase at the needed pace, could compel India to limit economic growth to below that needed to eradicate extreme and persistent poverty in the country.

5.59 In sum, the justifications discussed above for continued large-scale concessional assistance to India involve consolidating and reorienting the development strategy pursued effectively for the last decade. First, given the dimensions of want and deprivation that persist in India, it is essential that the Government persevere with critical elements of the anti-poverty program now in place. Concessional assistance, embodied in innovative, replicable project designs, reinforced in policy dialogue with concerned agencies, is needed to help India increase the efficiency of its irrigation system and to sustain and exploit efforts to establish agricultural research and extension on a professional basis. Concessional resources and leadership are indispensable to prepare for an eventual refocusing of agricultural development on rainfed/dryland farming areas. Concessional support is also needed to assist in a risky but promising transition from a largely stagnant and inefficient industrial structure to a faster growing, economically efficient sector. While the Government implements an admirable and wide-ranging liberalization of trade and industrial policies, concessional aid can provide a cushion, a vitally needed degree of maneuverability to attain the required overall growth rate.