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RURAL POVERTY IN INDIA: INCIDENCE, ISSUES AND POLICIES

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PREFACE

Poverty eradication in particular and improvement in the standard of living of the population in general have been the avowed objectives of development planning in India. Even after four decades of planned development, poverty continues to persist in India. Much of the poverty is located in rural areas.

Many studies have analysed rural poverty in India. But, when Asian Development Bank (ADB) approached us to undertake one more study on rural poverty in India as part of their project related to some countries in Asia, we were glad to accept the offer because of three reasons:

a) poverty still persists in India and there have been many changes in the 1980s in the Indian economy in general and poverty in particular.

b) The study could be done in a comprehensive way which include inter alia, political economy of poverty, the impact of global environment on poverty etc.

c) Since the study is undertaken along with some Asian Countries under the framework given by the ADB, there are benefits of comparative evaluation of the policies of different countries.

The present study examines a number of issues relating to rural poverty in India based on the following questions.

1. How did India perform in terms of economic development during pre and post-independence periods?

2. What are the dimensions, qualitative and quantitative, of rural poverty?

3. What is the relationship between land resources and rural poverty?

4. What are the interconnections between human resources and rural poverty?

5. What are the macro economic policies followed so far for poverty eradication and how successful they have been?

6. What is the impact of global environment on poverty?

7. How does the political economy affect poverty in India?

8. What are the policy changes needed to achieve the goal of the eradication of poverty?

The study is divided into eight chapters. The above issues are examined from chapter I to chapter VIII in the same sequence.

A preliminary report of this study was presented at the ADB sponsored "Finalization Symposium: Priority Issues and Policy Measures to Alleviate Rural Poverty" held at Manila, 14-16 November, 1990. The study has benefited from the comments of the participants of the symposium and particularly the discussants on this report namely Professors T.N. Srinivasan, Robert Evenson and T.S. Papola. We would like to especially thank Dr. M.G. Quibria for his periodic reminders that have kept us adhere to the tight time schedule and his many comments and constructive suggestions. The written comments sent by Prof. K. Otsuka are gratefully acknowledged. We are grateful to the Asian Development Bank for providing financial assistance for undertaking this study.

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I. A PROFILE OF INDIAN ECONOMIC DEVELOPMENT

1.1 Introduction

India accounts for about 14 per cent of the world population. Among the developing countries, India has a population share of 24.5 per cent, while her share in the poor is about 37.6 per cent. The number of poor persons in India was about 420 million in 1985 (World Bank, 1990). This would imply a massive economic agenda if the poor are to be ensured a sustained improvement in their standard of living in the future. Since independence, India has set upon a path to liberate the millions of poor by consciously adopting economic planning for growth with redistribution in a mixed economy framework.

What are the results of such efforts? How far has India succeeded in ameliorating the conditions of the poor, particularly the rural poor who constitute about 80 per cent of the total poor in India? What are the issues and appropriate policies involved in chalking out a strategy for poverty alleviation? This study examines some of these questions. In this chapter we look at India's economic development since independence to provide a background for our analysis of rural poverty.

1.2 Conditions at the Time of Independence

India at the time of independence in August, 1947 was faced with problems of

(1) rehabilitating the economy disturbed by the Second World War and partition of the country, and
(2) achieving rapid economic growth, emancipation of the vast millions from poverty, hunger and malnutrition.

The economy was predominantly agrarian, with large inequalities in the distribution of resource endowments across regions and among people, prevalence of unemployment, unproductive underemployment, low level of saving, capital formation, income levels and also low living standards.

The pre-independence period was marked by stagnation particularly in the agricultural sector. The growth rate of agriculture was around 0.3 per cent per annum in the first half of this century. Aggregate real output increased at the rate of less than two per cent per annum during the period 1900-50; in per capita terms, it was less than half a per cent. There was some growth in the large scale manufacturing sector which was however nullified by the decline of traditional industries. Capital formation was only about six per cent of Net Domestic Product (NDP).

Altogether there had been little change in the occupational structure over the previous 100 years. The character of poverty was largely rural, bound by resource inadequacies and

institutional constraints. Urban poverty was negligible; there were no migrant poor from the rural sector inasmuch as what Harris-Todaro (1970) model calls the "Pull-factors" were practically absent.

The colonial government was primarily concerned with the maintenance of law and order, defence and tax-collection and lacked an explicit development policy. Public investment decisions were governed more by profitability considerations than by any concern for long run growth or equity. Main areas of public investment were railways and irrigation. A railway network was set up to facilitate raw material transport and military movements. A limited amount of irrigation investment was undertaken in regions like western Uttar Pradesh, coastal Andhra and Tamil Nadu which were better endowed with resources. As a result, regional imbalances were marked. However, railways promoted markets for primary products and helped in evening out regional disparities in per capita availability of food grains. Severe famines were frequent in the 19th Century during bad harvests, but became rarer over time.

Local enterprise was confined largely to trade and commerce which flourished mainly in and around port cities like Bombay, Calcutta and Madras. Industrial centres also grew around these cities because of easy accessibility to markets and availability of banking facilities mainly through private entrepreneurship. Independent India inherited a small manufacturing sector consisting of two types of enterprises. There were many artisans and small-scale industries, some on decline, but still with a large share in national income. Large factories were less numerous, but were growing faster. While they produced consumer goods like textiles and sugar, intermediates like steel, cement, and jute, machinery were mostly imported. Large industries were initially heavily export-oriented, but rapid growth started occurring in the 1930s when limited tariff protection induced import-substitution in the home market.

Social indicators were equally poor. Illiteracy was as high as 84 per cent; public health services were inadequate to face epidemics such as influenza, malaria and cholera. Some efforts were made by the state to prevent epidemics like malaria. Still, the mortality rate remained high at around 27 per 1000 in 1947 (Centre for Monitoring Indian Economy, 1989).

It was in 1938, a decade before Indian independence, that the Indian National Congress constituted a National Planning Committee headed by Jawaharlal Nehru, and consisting of well known industrialists, financiers, economists, professsors, scientists and representatives from the Trade Union Congress and the Village Industries Association. The Committee declared that the social objective should be "to ensure an adequate standard of living for the masses, in other words, to get rid of the appalling poverty of the people". The Committee recognized that "there was lack of food, of clothing, of housing and of every other essential requirement of human existence. To remove this lack and ensure irreducible minimum standard for everybody, the national income had to be greatly increased, and in addition to the increased production there had to be a more equitable distribution of wealth" (Nehru, 1946).

The Committee recommended a ten year plan with the following objectives:

(1) Improvement of nutrition - attaining a balanced diet of 2,400 to 2,800 calories per adult worker.
(2) Improvement in clothing involving an increase in consumption from 15 yards then to 30 yards per capita per annum.
(3) Attainment of a standard of housing of at least 100 sq.ft per capita.

The progress in development was to be measured, inter alia, by per capita income, life expectancy and literacy rate.

1.3 Development Strategy and Objectives

India has adopted planning as a specific strategy to surmount some of the structural constraints on its growth process. A major constraint was deficiency of capital formation caused by low capacity to save and low income levels. Simultaneously, there was the problem of ensuring the channelisation of available savings into investment in desirable forms. Left to the market forces, increased savings, even if made possible by following a proper policy-mix, might not be realized into investment, that too in socially high priority areas. The problem was to avert a situation where the production pattern gets determined by a demand pattern thrown up by the existing skewed income distribution. Thus, the problem of development, as perceived by the Indian Planners boiled down to the following questions. How much to save? Where and in what forms to invest?

Almost all the five year plans have aimed to achieve:

(1) Economic growth
(2) Social justice
(3) Self reliance
(4) Alleviation of poverty
(5) Industrialization; and
(6) Improvement in productivity

The relative emphasis on different objectives has varied between plans. In particular, the objectives of poverty alleviation and reduction in inequality has received greater weightage in recent plans, especially since the Fifth Five Year Plan (1973/74 to 1977/78).

While the objectives have remained more or less the same through the successive five year plans, the strategies adopted have varied depending upon planners' perception of constraints and opportunities. In addition, the short run incompatibility between different objectives has necessitated varying emphasis on these objectives. For instance, the first three five year plans attempted to improve the living standards of the people largely by reliance on the growth process. Radical instruments like redistribution of assets and wealth were not resorted to lest they should

adversely affect saving and the incentive to invest. This was made explicit in the First Plan (Planning Commission, 1951).

The First Five Year Plan (1951/52 to 1955/56) was not really a plan, in the sense of a set of internally consistent investment decisions in relation to certain well defined objectives. On the theoretical plane, it attempted to examine the growth potential of the economy by specifying a saving function within the framework provided by Harrod-Domar model. In accordance with the spirit of this model, the Plan laid a relatively large emphasis on aggregate investment, mainly public investment, and economic growth. Public investment was concentrated in the areas of infrastructure and agriculture.

A planning framework in India has developed during the formulation and implementation of the Second Five Year Plan (1956-61). This period saw a clear articulation of development strategy, planning methodology and policy instruments for realizing plan targets. The outlines of an industrial policy have already been drawn in the Industrial Policies Resolutions of 1948 and 1956. The objectives of industrial policy were: reduction of foreign dominance, building up of indigenous capacity, encouraging small scale industry, bringing about balanced regional development, prevention of concentration of economic power and absolute control of the economy by the public sector. Given the critical conditions of development, risks would be high, capital requirements large and returns very low. In view of this, it was thought that the public sector must provide the infrastructure and leadership for the industrial development. Specific priorities and strategies were spelt out in successive five year plans. These objectives and priorities were to be implemented by:

(1) A system of licensing provided for by the Industries (Development & Regulations) Act, 1951 and

(2) A system of import licensing and foreign trade policies meant to promote import substituting industrialization.

While licensing has been an instrument to ensure that the physical targets for capacity creation set by the plans are realized, the trade policies - particularly import control policies - laid considerable stress on protecting and promoting domestic industrialization by physical allocation of imports by products. Thus the basic logic of the whole system has been such that the planning mechanism perforce has to be concerned with physical planning and its subsequent evolution has been more on lines of perfecting this particular approach.

Operating within the framework described above, the Second Five Year Plan developed a model of industrialization. The model assumed a closed economy by virtue of the twin premises of limited export possibility and strict import allocation. It suggested that maximizing long run growth would necessitate an investment strategy, called Mahlanobis Strategy, weighted in favour of the capital goods sector. To mitigate the adverse effects of such a strategy on employment, the Plan evolved a scheme for promoting growth in consumer goods sector employing labour intensive techniques.

Towards the end of the Second Five Year Plan, there was a sharp deterioration in the balance of payments resulting from stagnant exports and liberal imports. The Third Five Year Plan (1961-66) took explicit cognizance of the foreign exchange constraint on the growth process. At the same time, mounting food shortage, inflation and unemployment led planners to revise their priorities in favour of agriculture, laying emphasis on community development programmes, national extensions and irrigation. On the demographic front, the government formulated a policy to check the growth rate of population by organizing family planning programmes.

The first three five year plans period constituted an important sub-period in the development era of India. The three plans were very much similar in spirit and emphasis. The underlying strategy was based on a thesis similar to the Lewis (1954) development model wherein agricultural sector supports industrialization by providing cheap labour and food. They laid uniform emphasis on growth by focussing on factors promoting savings and capital accumulation. But the plans overlooked the possibility of increasing the size of the capital stock by redistributing consumption in the labour surplus context a la Ragnar Nurkse (1953). Little attention was paid to policies that would directly increase the poor's access to wage goods.

Policies for promotion of economic equity were formulated along the following lines. Some attempts were made during the 1950's to abolish landlordism, distribute land through imposition of ceilings, protect tenants and consolidate land holdings. These measures were also intended to remove the institutional constraints on the growth process in the agricultural sector. Other measures to promote equity consisted of discriminatory policies such as the provision of highly subsidized health facilities, reservation, and scholarships and other forms of financial assistance to the economically backward and underprivileged classes. In addition job reservation was also made available to these classes following the completion of their education and training. Further, it was felt that a strategy of industrialization based on a progressive increase in the size of the public sector would eventually lead to a decrease in the proportion of property income accruing to private sector and hence a reduction in the concentration of wealth and income. Simultaneously, measures to promote productivity and employment in the agricultural sector, small and village industries were believed to gradually lead to a socialist pattern of society with sustained improvements in living standards.

During the Third Five Year Plan period, the government got really concerned about the distribution of benefits of growth. In 1962, it set up a committee under the chairmanship of Mahalanobis to examine changes in the levels of living as a result of planning. The committee could not reach unambiguous conclusions for want of data. Another working group set up by the Planning Commission looked into the question of raising the minimum level of living. The group distinguished between public consumption like expenditure on health and education and private consumption. It recommended a private consumption expenditure of Rs.20 per capita per month at 1960/61 prices as the national minimum level of living. Against this background, Pitambar Pant with Perspective Planning Division drew out 'Perspective of Development' for the economy for the period 1961-1976. The study examined the various implications of "planning for a minimum level of living. Under some plausible assumptions, the study showed that to

ensure a nutritionally adequate diet to the bottom three deciles national income would have to grow at the rate of seven per cent per annum during 1965 to 1975.

Exogenous shocks - wars with China in 1962 and with Pakistan in 1965 and the successive monsoon failures in 1965 and 1967 - caused substantial changes in the Indian plan priorities and strategies. While the former involved a cut-back in public investment leading to excess capacity in the capital goods sector, the latter brought planners' attention to the emerging supply-demand imbalances in the food sector. Thus, the three Annual Plans of 1966/67, 67/68 and 68/69 that followed the Third Five Year Plan contained a new agricultural strategy that was carried over into the postponed Fourth Five Year Plan (1969-74).

The new strategy of agricultural development popularly called 'Green Revolution' was based on a change in the perception that it was technological rather than institutional constraint that was impeding agricultural growth. The new agricultural strategy involved a shift in emphasis from major to minor irrigation, change in the input-base of agriculture, involving the use of modern inputs like fertilizer, power and fuel and high yielding varieties of seeds.

The adoption of the new strategy in agriculture was, in the initial year, confined only to infrastructurally better endowed regions like Punjab, Haryana and Andhra Pradesh. The new technology, though confined only to wheat in the early seventies, broke the stagnation in agriculture. Total cereals production increased from 62.4 million tonnes (mt) in 1965/66 to 96.6 mt in 1970/71; wheat production increased from 10.4 mt to 23.8 mt during the same period.

The Green Revolution was not an unalloyed blessing. The new technology was "size neutral" but not "resource neutral". The benefits of increased output flowed largely to the rich farmer in the progressive regions like Punjab accentuating inter-regional and inter-personal income disparities. There were also fears that the new technology would result in gradual displacement of labour which could not be accommodated in the non-primary sectors. These problems coupled with the question of sustaining the increased marketable surplus generated by the new technology, led to reformulation of the development strategy with emphasis on redistribution during the Fifth Five Year Plan.

The Fifth Five Year Plan (1974-79) aimed at achieving growth with redistribution and self-reliance. It sought to raise the average per capita consumption of the bottom 30 per cent of the population to a pre specified level. However, the oil crisis and the harvest failures in 1972/73 led to a dilution of the emphasis on redistribution objectives and policies.

The experience of the Fifth Five Year Plan showed that the planning production structure in accordance with a desirable income distribution per se is no guarantee of reduction in poverty. Rather, direct intervention is required to bring about desired changes in the living standards of the masses. Accordingly the Sixth Five Year Plan (1980-85) which aimed at bringing down poverty to 30 per cent of the population in both rural and urban sectors provided a number of measures for the eradication of poverty.

These were programmes that augmented the income levels of the poor by enhancing their self employment opportunities. These included programmes like the Integrated Rural Development (IRDP), Training Rural Youth for Self Employment (TRYSEM), National Rural Employment Programme (NREP). The Plan also provided for asset redistribution through some land reform programmes. The Minimum Needs Programmes launched in the mid-seventies received greater emphasis and became an important component of the anti-poverty strategy. This programme seeking to improve quality of life among the poor, envisaged to provide elementary education, health, nutrition, housing, drinking water, roads and electrification.

The Seventh Five Year Plan (1985-90) aimed at bringing down the proportion of poorer people to less than 10 per cent by 1994/95 by continuing the emphasis on target oriented programmes. By now, because of inter-regional disparities in growth patterns, poverty had assumed a regional dimension with large pockets of poverty concentrated in economically backward regions. In view of this dimension, the Seventh Five Year Plan adopted a discriminatory approach in allocating outlays and programmes for different regions. Further, for the first time, the Seventh Five Year Plan attempted to integrate poverty alleviation programmes with other developmental activities in rural areas. By this, it sought to ensure that the benefits accrued from all the schemes went selectively to the poorer groups.

The Eighth Five Year Plan (1990-95) of the Janata Dal government seeks to correct some of the distortions observed in recent years in the development pattern of India. It seeks to reorient the development policy by giving primacy to the "immediate and urgent needs of the poor". Its central thrust is employment. The plan seeks to provide (1) "employment opportunities to all at minimum wages" (2) "access to adequate means of livelihood and skills, as also supplies of food, education, health and child care services, and other basic necessities such as housing".

These objectives are sought to be achieved by

(1) Increasing the proportion of investment allocation to rural development.
(2) Directing such investments in areas having a relatively high concentration of poverty and employment.
(3) Efficient utilisation of such resources; and
(4) Promoting labour intensive and energy-capital saving techniques of production in all sectors of the economy.

1.4 Macro Economic Performance

The economic performance of a country is quite often judged in terms of the level of and changes in aggregate production, measured by variables like Gross National Product (GNP). As per the provisional estimates made by the Central Statistical Organization (C.S.O)of the Government of India, the GNP in 1989/90 is Rs.3,46,277 crores and per capita national income

is Rs.3835.30. To be meaningful, such estimates have to be juxtaposed with those for other Asian countries which have many similarities with India in terms of historical context etc. The estimates of 1988 for select Asian countries show that per capita income in India is one of the lowest in Asia (Table 1.1).

Table 1.1 : Per Capita GNP : India And Other South East Asian Countries

Country	Per Capita GNP 1988 (US $)	Average Annual Growth Rate (1965-1988) (Per cent)
Bangladesh	170	0.4
Nepal	180	-
China	330	5.4
India	340	1.8
Pakistan	350	2.5
Indonesia	440	4.3
Phillipines	630	1.6
Thailand	1000	4.0
Malaysia	1940	4.0
South Korea	3600	6.8
Hong Kong	9220*	6.3
Singapore	9070	7.2
Less Developed Countries (Average)	320	3.1
Developed Countries (Average)	17080	2.3

* refers to GDP
Source : World Bank (1990)

Viewed against the backdrop of years of stagnation during the pre-independence period, the Indian economic performance since 1951 looks quite impressive. There has been a much faster growth both in the total and in the major sectors during the planning era than in the earlier years.

1.4.1 Macro Indicators of Gross Domestic Product (GDP) Growth

An important aspect of the growth process in the post-independence period is the high degree of instability in the annual growth rates. This is clearly brought out in Fig. 1.1.. Such an instability is caused largely by the fact that India has a predominantly monsoon-dependent agricultural economy. Growth was adversely affected by the two successive severe droughts that ravaged the economy during 1965/66 and 1966/67. During these two years GDP and foodgrain production, in particular, fell much below the levels attained in 1964/65. Therefore, while examining the growth performance of the Indian economy, it has become customary to divide the post-independence period into two sub-periods: pre - and post-drought years of 1965-67. The Indian economy suffered from another serious drought in 1979/80, after which the growth profile shifted upward quite markedly. Accordingly, we divide the post-independence period into three different sub-periods and a profile of the macro-economic performance during these periods is given in Table 1.2.

Fig. 1.1: Annual Growth Rates in GNP.

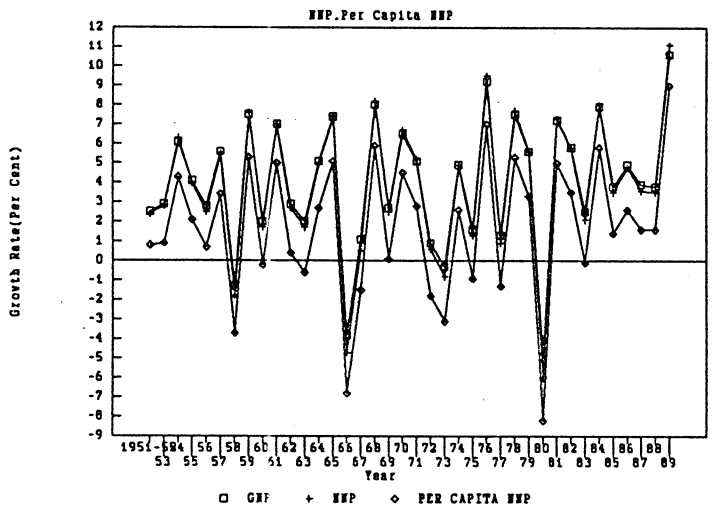


Table 1.2 : Growth in Output (At 1980/81 Prices)

Variable	1950/51 to 1964/65	1967/68 to 1979/80	1980/81 to 1988/89	1950/51 to 1988/89
	(Per cent per annum)			
Gross National Product (GNP)	3.90	3.57	5.02	3.73
Net National Product (NNP)	3.73	3.43	4.88	3.55
Per Capita Net National Product	1.69	1.12	2.75	1.34
Primary Sector GDP	2.61	2.10	2.86	2.35
Secondary Sector GDP	6.86	4.43	6.91	5.35
Tertiary Sector GDP	4.60	4.49	6.42	4.67
Total GDP	3.95	3.45	5.23	3.74

Note : The growth rates have been estimated from semi-log trend functions.
Source : Based on national accounts statistics given in Ministry of Finance (1990) Economic Survey 1989-90.

From the Table 1.2 the following features of the Indian growth process emerge.

(1) The growth rate of GNP was about four per cent per annum during the first period but fell in the eight years immediately after the drought years. The average growth rate of GNP was about 3.6 per cent during the second sub-period which was marked by greater instability in growth. The growth rate of GNP shifted to a new high of about five per cent in the 1980s. In the process, the economy has also become much more resilient and got nearly insulated against regular monsoon failures. This is reflected in the fact that the manufacturing growth rate has been quite high in the late 80s and has not declined significantly in spite of three successive years of severe drought. As a result, the decline in GDP growth rate was much milder than in the case of previous harvest failures.

(2) The primary sector - consisting of agriculture, forestry, logging, fishing, mining and quarrying - has been growing at the lowest rate throughout but in case of the tertiary sector, consisting of transport, communication, trade, banking, insurance, real estate, ownership of dwellings, business services, public administration, defence and other services, the growth rate has been high and has accelerated over time.

(3) That growth rates declined during the second sub-period is most noticeable in the secondary sector consisting of manufacturing, construction, electricity, gas and water supply. This deceleration in growth, particularly in the industrial sector, has been a subject of great debate calling into question the very policy framework of the Indian development strategy (Ahluwalia, 1985). There are several explanations for this deceleration - like organizational in-efficiencies, power shortages, shrinking demand for consumer goods, low growth in public sector investment and low growth performance of agriculture.

(4) While the trend growth rates have been positive in different sub-periods, they have been poor until the 1980s, when they improved quite dramatically.

1.4.2 Population Growth

According to provisional estimates of the 1991 census, the population of India "at the sunrise of March 1, 1991" stood at 844 million. Indian population growth has accelerated since 1951 (Cassen, 1978), nullifying much of the efforts at achieving growth and development. This growth is caused by a decline in death rate which has been faster than that in birth rate (Table 1.3). The decline in death rate has been primarily due to improvements in medical facilities. In fact, India is still considered to be passing through the second stage of the Demographic Transition Model. The population is predominantly rural accounting for 76.69 per cent of the total.

Table 1.3 : Demographic Indicators - India

Year	Population (in millions)	Rural Population (per cent)	Decennial Growth Rate (per cent)	Birth Rate (per 1000)	Death Rate (per 1000)	Life Expectancy at Birth (in years)		Litracy Rate (per cent)
						Male	Female	
1950-51	361.1	83.30	13.50	39.90	27.40	32.45	31.66	16.70
1960-61	442.4	82.03	21.40	41.70	22.80	41.89	40.55	24.00
1970-71	551.3	80.09	24.70	36.90	14.90	46.40	44.70	29.50
1980-81	690.1	76.69	24.80	33.90	12.50	54.10	54.70	36.20
1988-89	811.8	-	-	31.30	10.90	58.10	59.10	-
1991*	843.9	-	23.50	-	-	-	-	52.11

P : Provisional
* Provisional estimates for March 1,1991.
Source: Economic Survey 1989-90 and The Bulletin on Food Statistics (Various issues)

1.4.3 Sectoral Composition of GDP and Workforce

Judged by changes in the sectoral distribution of output some structural improvement seemed to have taken place in the Indian economy (Table 1.4). Although the primary sector constituting agriculture, logging, fishing, mining and quarrying - continues to be a major source of output, its share in GDP declined from 56 per cent during the First Five Year Plan (1951-56) to 34 per cent during the first four years of the Seventh Five Year Plan (1985-89). During the same period the share of the secondary sector increased from 16 to 27 per cent and that of the tertiary sector from 28 to 38 per cent. Within the tertiary sector, transport, communication and trade grew at a faster rate than the others.

Table 1.4 : Sectoral Composition of GDP

(Plan Averages-Rs. Crores at 1980/81 prices)						
Plan Period	Agri, Forest, Log, Fish, Min. & Qarry	Manuf, Const, Elec, Gas, Water Supply	Transport, Communication and Trade	Bank, Insur., Real Estate.Own Dwl & Bus. Ser	Pub. Admin, Defene & Ot. Ser	Gross Domestic Product
First Five Year Plan (1951-56)	26664.00 (56.04)	7448.00 (15.65)	5297.80 (11.13)	4223.20 (8.88)	3951.00 (8.30)	47584.00 (100.00)
Second Five Year Plan (1956-61)	30391.40 (53.01)	10265.40 (17.91)	7013.80 (12.23)	4900.20	4760.00 (8.30)	57330.80 (100.00)
Third Five Year Plan (1961-66)	33332.80 (47.94)	14716.00 (21.17)	9534.80 (13.71)	5756.40 (8.28)	6189.00 (8.90)	69529.00 (100.00)
Annual Plans (1966-69)	34957.00 (45.11)	17460.33 (22.53)	11162.67 (14.40)	6423.33 (8.29)	7490.67 (9.67)	77494.00 (100.00)
Fourth Five Year Plan (1969-74)	40304.20 (44.28)	20866.80 (22.98)	13160.40 (14.49)	7579.00 (8.34)	9002.40 (9.91)	90822.80 (100.00)
Fifth Five Year Plan (1974-79)	45545.20 (42.00)	25784.40 (23.77)	17101.60 (15.77)	9272.20 (8.55)	10750.20 (9.91)	108453.60 (100.00)
Annual Plan (1979-80)	43005.00 (37.65)	28963.00 (25.35)	19349.00 (16.94)	10588.00 (9.27)	12331.00 (10.79)	114236.00 (100.00)
Sixth Five Year Plan (1980-85)	52479.40 (38.61)	34100.20 (25.09)	22906.20 (16.85)	12196.60 (8.97)	14231.80 (10.47)	135914.20 (100.00)
Seventh Five Year Plan (First Four Years) (1985-89)	58471.00 (34.37)	46024.75 (27.05)	30209.00 (17.76)	16282.50 (9.57)	19130.00 (11.25)	170117.25 (100.00)

Note : Figures in brackets refer to percentage shares in GDP
Source : Based on the national accounts statistics given in Ministry of Finance (1990):Economic Survey 1989-90.

In occupational terms, however, not many significant changes have occurrred, with the census data showing a virtual constancy in the sectoral distribution of work force[1] (Table 1.5). This, together with the fact that primary sector's share in output has declined over the decades, implies that for the bulk of those engaged in the primary sector, relative per capita real incomes remained more or less static. Rural activities being largely primary in character, it follows that the rural sector did not benefit significantly from the limited growth that occurred during the post-independence period.

Table 1.5 : Sectoral Distribution of Male Work Force (All India)

Sector	1951	1961	1971	1981
Primary	69.10	68.00	70.40	66.22
Secondary	12.60	12.70	11.20	13.91
Tertiary	18.30	19.30	18.30	19.87
Total	100.00	100.00	100.00	100.00

Source: Census Reports (various issues)

The low degree of structural transformation is said to have been caused by low agricultural growth, high cost industrial structure and the economic policy environment.

1.4.4 Savings

As already noted, economic growth in India has been sluggish, because of the limited possibilities offered by the policy framework for achieving economic growth. With an inelastic and limited land supply and an expanding population, the two major sources of growth are capital accumulation and technical progress. Successive five year plans have laid special emphasis on capital formation as the main instrument of achieving economic growth. The capital formation, however, is a function of savings rate in the economy.

By the standard of a developing economy, India has a high savings rate. Households, the private corporate sector and the government are the main sources of domestic savings.

The household sector consists of individuals, non-government unincorporated household and non-household enterprises like farm and non-farm business. It also includes all

[1]However the National Sample Survey (NSS) data shows a tendency of diversification towards non-agricultural activities perticularly in rural areas (for further details see chapter IV)

unincorporated establishments like sale proprietorship and partnerships and non-profit institutions like charitable trusts, religious endowments, educational institutions etc.

Private corporate sector consists of non-government financial and non financial public and private limited companies registered under the Indian Companies Act, 1956.

Public Sector covers government administration, departmental and non-departmental enterprises.

The household sector accounts for more than 75 per cent of total domestic savings (Table 1.6). Gross domestic saving has increased steadily from 10 per cent during the First to about 20 per cent during the Fifth Plan period. Much of this increase in savings has come from the household sector, in spite of the low level of income and low per capita income growth rate.

Table 1.6 : Gross Domestic Saving*

Plan Period	Household Sector	Private Corporate Sector	Public Sector	Total Economy
First Five Year Plan (1951-56)	7.59	1.02	1.67	10.28
Second Five Year Plan (1956-61)	8.56	1.23	1.95	11.74
Third Five Year Plan (1961-1966)	8.45	1.69	3.15	13.29
Annual Plans (1966-69)	10.19	1.23	2.17	13.59
Fourth Five Year Plan (1969-74)	11.98	1.56	2.76	16.30
Fifth Five Year Plan (1974-79)	14.70	1.52	4.38	20.60
Annual Plan (1979-80)	15.20	2.06	4.34	21.60
Sixth Five Year Plan (1980-85)	14.54	1.63	3.63	19.80
Seventh Five Year Plan (First Four Years) (1985-89)	16.05	1.82	2.32	20.19

* (as % of GDP at current market prices)
Source : Based on national accounts statistics in Ministry of Finance: Economic Survey 1989-90.

This paradox of slow growth with high savings implies a process of income redistribution in favour of those who save, particularly the rich as against the poor. In particular, the Green Revolution and the shift in terms of trade in favour of agriculture is supposed to have accentuated the skewness in the income distribution in the rural sector further, contributing to a rise in savings rate. Another factor that has contributed to a rise in the savings rate since the mid-seventies is the increased workers' remittances from the Gulf after the Oil Crisis. One disquieting aspect of the savings in the household sector is that much of it is in the form of physical assets like land and gold which are socially unproductive. In recent years, the increased savings have been mainly in the form of financial assets. Saving in financial instruments like currency, deposits, shares and debentures, pensions and insurance and other small saving certificates has increased its share in total private savings from about 45 per cent in 1979/80 to 55 per cent in 1988/89. This increase is essentially in response to various incentives offered by the government.

The private corporate sector is not a major contributor to savings. Several factors like declining profits caused by increased prices for inputs and wage costs brought about by a shift in terms of trade in favour of agriculture and highly progressive rates of corporation tax are said to be the causes for a dismal savings performance by the private corporate sector.

In Indian planning the public sector has been assigned a major role in mobilizing resources for development. Yet, it has not been able to make a sustained contribution to the savings pool required for development. Public sector savings arise from the budgetary surpluses and surpluses of state owned enterprises. Budgetary surpluses depend mainly on government's tax effort and containing of current expenditure. However, the government has not been successful in preventing the widespread evasion of income tax partly due to steep direct tax rates. Agricultural incomes are not generally taxed, despite this sector being benefited immensely from the Green Revolution technology. At the same time, the Government has not been able to curtail its expenditure particularly in the areas of defence, administration and subsidies in food and farming. Defence expenditure has acquired the status of the "holy cow" particularly after the wars with China (1962), Pakistan (1965) and Bangladesh (1971). In recent years, public administration and subsidies have caused steep increases in public expenditures.

The poor performance of the public sector in resource mobilization during the period 1966-75 has been cited as one of the causes for low growth performance during the period since mid-sixties. Public sector saving has declined again since 1980 due primarily to the dis-saving by the Central government. In fact, a major failure of the planning process has been the inability of the public sector to generate investible surpluses on a sustained basis.

1.4.5 Investment

Accordingly, gross domestic capital formation in India has increased from about 10 per cent to about 21 per cent during the same period (see Table 1.7). The marginally higher capital formation than domestic saving is due to the fact that part of it is financed by foreign savings.

Foreign savings has never exceeded five per cent of GDP. The increasing importance given to the role of the public sector in India's economic development strategy is also reflected in the sectoral break-up of the investment rate. The share of the public sector in total investment has increased from about 30 per cent during the First Plan to about 50 per cent by the Seventh Five Year Plan period.

Table 1.7 : Gross Domestic Capital Formation*

Plan Period	Public Sector	Private Sector	Total Economy
First Five Year Plan (1951-56)	3.52	7.11	10.63
Second Five Year Plan (1956-61)	6.24	8.46	14.70
Third Five Year Plan (1961-1966)	7.83	8.64	16.47
Annual Plans (1966-69)	6.58	9.85	16.43
Fourth Five Year Plan (1969-74)	6.94	10.54	17.48
Fifth Five Year Plan (1974-79)	9.03	11.77	20.80
Annual Plan (1979-80)	10.33	12.53	22.86
Sixth Five Year Plan (1980-85)	11.06	12.17	23.23
Seventh Five Year Plan (First Four Years) (1985-89)	11.16	10.42	21.58

* as % of GDP at current market prices
Source : Based on Ministry of finance (1990) : Economic Survey 1989-90

In spite of such an increase in capital formation why is growth so slow in India? One important reason that could be cited is that the major part (more than 40 per cent) of gross capital formation is in the construction sector. Within construction, a significant proportion (more than 50 per cent) has been in residential and non-residential buildings. In recent years, stock

accumulation has caused large increases in gross capital formation. Even with the limited increase in fixed investment, the economy could not register high growth because of increasing incremental capital output ratio (ICOR) (Table 1.8).

Table 1.8 : Estimates of Incremental Capital Output Ratios

Period	Gross Ratio	Net Ratio
1951/52-1955/56	2.87	1.97
1956/57-1960/61	4.05	3.16
1961/62-1965/66	4.58	3.61
1966/67-1968/69	5.05	3.96
1969/70-1974/75	5.86	4.30
1974/75-1978/79	4.28	3.24
1980/81-1983/84	4.45	3.38
1951/52-1959/60	3.49	2.59
1960/61-1969/70	4.40	3.39
1970/71-1979/80	5.40	4.11
1980/81-1983/84	4.45	3.38

Source: Chakravarty (1987)

There are a number of explanations for the rising trend in the capital-output ratios. There are factors like:

(1) Changes in composition of investment in favour of industry and within industry, in favour of technologically intensive industries;
(2) Low investment absorptive capacity of the economy;
(3) Growth in idle capacity in the manufacturing sector caused by infrastructural bottlenecks and demand constraints.

1.4.6 Foreign Trade

The foreign trade sector accounts for a small part of the economy. Even after three decades of development, exports constituted about six per cent of GDP and imports, about nine per cent during the Sixth Five Year Plan period (1980-85).

Imports

The government controls much of the foreign trade. Indian development strategy is largely based on a philosophy of import substituting industrialization initiated in 1956. The ten years of the Second and Third Five Year Plan and years following the Oil Crisis of 1973 are the two periods of accelerated growth in imports (Table 1.9). During the first period, imports consisted mainly of capital goods and equipment required for the production of goods and services for the domestic market (Table 1.10). However, the industrial recession, that followed the drought years of 1965-67, accounted for a decline in the rate of growth of imports during the late sixties. Till India attained near self-sufficiency in foodgrain production in the late 1970s, food constituted another major import item particularly in years of drought. Since the Oil Crisis of 1973, raw materials and intermediate goods like petroleum, oil and lubricants (POL) have been a major component of imports. The steep increase in oil prices also caused an acceleration in import growth in the late 1970s. The share of imported manufactures in total domestic supplies has declined till late 1970s. This trend, however, has since then been reversed as a result of import liberalization and modernization of domestic capital goods industry.

Table 1.9 : Foreign Trade

Year	Exports	Imports	Exports as Proportion of Imports	Growth Rate (%)	
	(Rs. Crores at Current Prices)			Exports	Imports
1951-52	716	890	0.80	18.1	46.4
53	578	702	0.82	-19.3	-21.1
54	531	610	0.87	-8.2	-13.1
55	593	700	0.88	11.7	14.8
56	609	774	0.79	2.7	10.6
57	605	841	0.72	-0.7	8.7
58	561	1035	0.54	-7.3	23.1
59	581	906	0.64	3.6	-12.5
60	640	961	0.67	10.2	6.1
61	642	1122	0.57	0.3	16.8
62	660	1090	0.61	2.8	-2.9
63	685	1131	0.61	3.8	3.8
64	793	1223	0.65	15.8	8.1
65	816	1349	0.60	2.9	10.3
66	810	1409	0.57	-0.7	4.4
67	1157	2078	0.56	42.8	47.5
68	1199	2008	0.60	3.6	-3.4
69	1358	1909	0.71	13.3	-4.9
70	1413	1582	0.89	4.1	-17.1
71	1535	1634	0.94	8.6	3.3
72	1608	1825	0.88	4.8	11.7
73	1971	1867	1.05	22.6	2.3
74	2523	2955	0.85	28.0	58.3
75	3329	4519	0.74	31.9	52.9
76	4036	5265	0.77	21.2	16.5

Year	Exports	Imports	Exports as Proportion of Imports	Growth Rate (%)	
	(Rs. Crores at Current Prices)			Exports	Imports
77	5142	5074	1.01	27.4	-3.6
78	5408	6020	0.90	5.2	18.6
79	5726	6811	0.84	5.9	13.1
80	6418	9143	0.70	12.1	34.2
81	6711	12549	0.53	4.6	37.3
82	7806	13608	0.57	16.3	8.4
83	8803	14293	0.62	12.8	5.0
84	9771	15831	0.62	11.0	10.8
85	11744	17134	0.69	20.2	8.2
86	10895	19658	0.55	-7.2	14.7
87	12452	20096	0.62	14.3	2.2
88	15741	22399	0.70	26.4	11.5
89	20295	28194	0.71	28.9	25.9

Source: Ministry of Finance (1990) : Economic Survey, 1989-90

Table 1.10 : Composition of India's Imports

	1950/51	1955/56	1960/61	1965/66	1970/71	1975/76	1980/81	1985/86
	(Percentages)							
Food, Beverages & Tobacco	18.98	8.50	18.89	24.45	16.65	27.12	3.03	4.49
Crude Materials Inedible Except Fuel	18.35	15.07	12.45	6.69	12.25	3.51	5.45	7.64
Mineral Fuels, Lubricants & Related Materials	8.52	8.18	6.10	4.90	8.32	23.29	42.17	26.50
Animal & vegetable Oils, Fats & Waxes	4.29	5.25	4.96	5.11	2.35	1.52	5.65	3.91
Chemicals & Related Products	7.68	9.43	7.21	7.45	11.76	14.05	10.55	14.61
Manufactured Goods Classified by Minerals	13.23	20.48	19.29	14.45	21.09	11.05	17.86	19.23
Machinery & Transport Equipement	25.58	28.49	29.20	35.11	24.15	17.75	14.51	20.77
Miscellaneous Manufactured Articles	2.89	3.94	1.42	1.31	1.99	1.05	1.69	2.55
Others	0.43	0.62	0.45	0.53	1.41	0.22	0.02	0.26
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

	1950/51	1955/56	1960/61	1965/66	1970/71	1975/76	1980/81	1985/86
Total Value of Imports	6502.10	6788.40	11396.90	13940.50	16342.00	52647.80	125491.50	196577.00

Source : Central Statistical Organisation (CSO): Basic Statistics Relating to the Indian Economy (Various issues)

Exports

A corollary to the strategy of import substituting industrialization in India has been the neglect of the option for generating an export surplus through export promotion. At the time of independence, Indian exports consisted largely of traditional manufactures and primary articles (Table 1.9). Income and price elasticities of demand for such products being low, it was thought that external markets for Indian goods would be limited in size and could cause a constraint on export expansion. During the first decade of development, there was a virtual stagnation in export earnings (Table 1.9). India's share in world exports declined from two per cent in 1950 to one percent in 1960.

Several studies have shown that it is not external market but loss of competitiveness which accounted for India's poor export performance in the 1950s. The loss of competitiveness was due to overvalued exchange rates, increasing pressure of domestic demand, poor quality of products and discriminatory trade policies.

By the end of the Second Five Year Plan, there was a deterioration in the balance of payments position caused by stagnant exports and liberal import of capital goods. To ease the situation, the government undertook various export promotion measures like cash subsidies, tax rebates and entitlements to imports for exporters of selected commodities. As a consequence, exports of goods increased rapidly along with a change in composition. Its composition changed in favour of new types of manufactures and goods like chemicals, engineering goods, clothing, handicrafts and leather manufactures (Table 1.11). There has also been an increase in the capital intensity of India's exports of manufactured goods which could be attributed mainly to the growth of capital intensive industries. While the export promotion measures have sustained export growth, they have not really promoted efficient resource allocation and foreign trade. For, these measures have attempted to promote trade by tackling the symptomatic causes of lack of competitiveness rather than dealing with the root cause i.e. inefficient resource allocation generated by indiscriminate import substituting strategy.

Since the late seventies there has been a realization that the earlier import substituting policies were inconsistent with export growth. Accordingly, foreign trade has been subjected to considerable liberalization and rationalization so as to promote export growth and resource allocation based on the principle of comparative advantage.

Table 1.11 : Composition of Exports (Rs. Millions) Percentage Share

	1950/51	1955/56	1960/61	1965/66	1970/71	1975/76	1980/81	1985/86
Agriculture & Allied Products & Plantation	38.66	42.25	41.00	38.86	31.64	36.96	30.65	22.64
Ores, Minerals, Scrapes & Manufactured Minerals	3.76	5.97	9.45	11.12	16.58	17.07	12.12	5.09
Textile Fabrics & Manufacturs of Coir & Jute	44.88	32.12	31.13	31.72	22.72	11.85	19.07	16.39
Leather & Leather Manufactures	6.02	5.21	5.66	5.34	8.59	5.53	5.81	6.55
Minerals, Fuels, Lubricants, Including Coal & Coke	0.59	0.72	0.5	0.35	0.81	0.42	0.40	5.25
Chemicals & allied Products	0.56	0.81	1.48	2.00	4.11	3.23	3.35	4.61
Handicrafts & Others of Which (Engineering Goods)	5.51 (-)	8.95 (-)	10.75 (-)	10.57 (-)	15.50 (7.58)	24.90 (-)	28.55 (6.36)	39.42 (7.53)
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total (Rs. Millions)	6006.40	5963.20	6602.20	80952.20	15351.60	40362.90	67110.00	124519.50

Source: CSO, Basic Statistics Relating to the Indian Economy(Various issues)

To improve the balance of payments (BOP) position of the country, the government has taken a number of policy reforms and measures. These aim at accelerating export growth, efficient import substitution and allocation of foreign exchange, liberalization of trade and industry, and improvement in infrastructural facilities for exports. Foreign trade policy reforms involve providing more freedom to industries with respect to supply of raw materials and machinery, gradual switch-over from physical controls to financial controls and fiscal and monetary concessions for the export sector.

1.4.7 External Assistance

Self reliance forms the major goal of the development process in India. Yet, inadequate investible resources and the need for foreign exchange to finance the imports necessary for industrialization initially and modernization of industries in recent years have necessitated dependence on foreign aid to some extent.

External assistance can be divided into three broad categories. i) Loans at concessionary rates of interest from international institutions and foreign countries, ii) grants which bear no interest and iii) commodity aid- mainly wheat imported under U.S. P.L. 480 programmes. These three sources of external assistance have varied in relative importance over different plan periods (Table 1.12). In recent years, loans from international institutions have become a major source of foreign aid.

During the Second, Third Five Year Plans and Annual Plans, foreign aid financed more than 25 per cent of public sector outlay, its overwhelming proportion being earmarked for industrial development

Table 1.12 : External Assistance Utilization: (Rs Million)

	Upto First Plan (1951-56)	Second Plan (1956-61)	Third Plan (1961-66)	Fourth Plan (1969-74)	Fifth Plan (1974-79)	Sixth Plan (1980-85)	(1987-88)
I. Loans and Credit							
I.a Repayable in Foriegn Currency	1241 (61.52)	6080 (42.5)	17520 (61.09)	35069 (91.71)	38793 (82.05)	63298 (80.79)	23048 (91.05)
I.a.1. From International Institutions	338 (16.7)	2228 (15.58)	3240 (11.3)	7297 (19.08)	15562 (32.92)	44851 (57.25)	16899 (66.76)
I.a.2. From Foriegn Countries	903 (44.77)	3852 (26.93)	14280 (49.8)	27772 (72.63)	23231 (49.14)	18447 (23.54)	6149 (24.29)
I.b. Repayable in Rupees (From Different Countries)	23 (1.14)	1170 (8.18)	1563 (5.45)	23 (0.06)	- (0.00)	- (0.00)	- (0.00)
I. Total (I.a. + I.b.)	1264 (62.67)	7250 (50.69)	19083 (66.54)	35092 (91.77)	38793 (82.05)	63298 (80.79)	23048 (91.05)
II. Grants	702 (34.80)	1606 (11.23)	1062 (3.70)	1596 (4.17)	8484 (17.95)	15050 (19.21)	2266 (8.95)
III. Commodity Assistance	51 (2.40)	5448 (38.09)	8532 (29.75)	1540 (4.03)	- (0.00)	- (0.00)	- (0.00)
Grand Total (I. + II. + III.)	2017	14304	28677	38238	47277	78348	25314

Note: Figures in brackets show percentages of Grand Total
Source: CSO: Basic Statistics Relating to the Indian Economy, 1989.

Since the mid-seventies the share of agriculture in total aid utilization has gone up markedly. Commodity aid in the form of foodgrains helped in sustaining consumption levels and containing food prices during the late fifties and mid-sixties, particularly in drought years.

Since the late sixties, external assistance has declined in importance as a source of financing the plans. A step up in savings rate along with increased remittances from Indian immigrants in the Gulf have helped to reduce India's dependence on foreign assistance. But the oil price hike in 1979 was a setback which turned the BOP position into a massive deficit by 1981. This led india to borrow $ 5.8 billion from the IMF under the Extended Fund Facility which was not utilized fully.

During the Seventh Five Year Plan, India's BOP position deteriorated further on account of mounting trade deficits, declining role of invisibles in financing such deficits, repayment of loans from the IMF and other sources, limited availability of concessional assistance and a rise in debt service payments on external debt.

In recent years the government has been borrowing from commercial sources. Borrowings from these source have increased four times from Rs.4,146 crores in 1980/81 to Rs.17,482 crores in 1988/89, thereby augmenting its share in total external debt from 22.5 per cent to 25.4 per cent. At the same time, the grant element in external assistance has declined. These two factors together have contributed to a rise in the average cost of external debt over time.

The composition of India's external debt is relatively favourable. In 1988, short-term debt accounted for about sevem per cent and concesstional debt for about 43 per cent of total external debt.

At the end of 1988/89, total external debt stood at Rs.82,985 crores, of which Rs.14,154 crores were non-resident deposits. According to a World Bank estimate, India's debt-GNP ratio was 22 per cent in 1988 while it was 54 per cent in nineteen highly indebted middle income countries and over 111 per cent in twenty seven severely indebted low income countries. At present, India's debt service ratio is about 23 per cent.

1.4.8 Public Sector Performance

By the very logic of India's development strategy, the public sector has to play a dominant role in India's economy. Besides controlling the 'Commanding heights', it has also been playing a supportive role in the development process of the private sector by producing backward and forward linkage.

Table 1.13 : Public Sector Performance Indicators

	First Five Year Plan (1951-56)	Second Five Year Plan (1956-61)	Third Five Year Plan (1961-1966)	Annual Plans (1966-69)	Fourth Five Year Plan (1969-74)	Fifth Five Year Plan (1974-79)	Annual Plan (1979-80)	Sixth Five Year Plan (1980-85)	Seventh Five Year Plan (1985-89)
	(Plan Period Averages : Rs. Crores at Current Prices)								
1. Gross Domestic Product	9657.80	13182.60	20004.80	31173.00	44542.20	79201.40	102442.00	163418.20	NA
1.1. Public Sector Per cent Share	NA	NA	2302.20 11.51	3801.33 12.19	6263.60 14.06	14064.20 17.76	20212.00 19.73	36307.80 22.22	NA
1.2. Private Sector Per cent Share	NA	NA	17702.60 88.49	27371.67 87.81	38278.60 85.94	65137.20 82.24	82230.00 80.27	127110.40 77.78	NA
2. Gross Domestic Saving	1043.40	1641.20	2864.20	4569.33	7920.00	18010.40	24698.00	36051.40	64581.75
2.1. Public Sector Per cent Share	169.40 16.24	272.80 16.62	679.00 23.71	731.00 16.00	1340.60 16.93	3829.60 21.26	4967.00 20.11	6607.40 18.33	7411.25 11.48
2.2. Private Sector Per cent Share	874.00 83.76	1368.40 83.38	2185.20 76.29	3838.33 84.00	6579.40 83.07	14180.80 78.74	19731.00 79.89	29444.00 81.67	57170.50 88.52
3. Gross Domestic Capital Formation*	1077.80	2053.00	3551.20	5521.00	8490.60	18178.40	26145.00	42296.60	69052.70
3.1. Public Sector Per cent Share	357.20 33.14	871.20 42.44	1687.40 47.52	2211.00 40.05	3369.60 39.69	7890.60 43.41	11818.00 45.20	20140.60 47.62	35706.50 51.71
3.2. Private Sector Per cent Share	720.60 66.86	1181.80 57.56	1863.80 52.48	3310.00 59.95	5121.00 60.31	10287.80 56.59	14327.00 54.80	22156.00 52.38	33346.20 48.29
4. Final Consumption Expenditure	NA	NA	18768.20	29624.33	41074.00	71832.60	92869.00	147247.80	NA
4.1. Public Sector Per cent Share	606.60	920.40	1755.00 9.35	2786.33 9.41	4324.40 10.53	8066.40 11.23	11165.00 12.02	18440.80 12.52	NA
4.2. Private Sector Per cent Share	NA	NA	17013.20 90.65	26838.00 90.59	36749.60 89.47	63766.20 88.77	81704.00 87.98	128807.00 87.48	NA

* Unadjusted for errors and omissions

Source: CSO Basic Statistics Relating to the Indian Economy (Various issues)

Some of the important indicators of public sector performance during the different Plan periods are presented in Table 1.13. Its share in total GDP has been increasing and during the Sixth Five Year Plan it accounted for as much as 22 per cent of total GDP. In fact, this figure does not correctly reflect the public sector's contribution to GDP for two reasons: i) Public sector's material outputs are generally underpriced via subsidies, and ii) infrastructural services provided by the public sector are valued on the basis of actual costs.

During the Sixth Five Year Plan period, public administration and defence accounted for about 22 per cent of the public sector GDP, the infrastructural activities contributed about 30 per cent and the rest consisted of directly productive activities. Nearly 70 per cent of total infrastructural activities is carried out in the public sector. This shows the dominant role that public sector plays in providing the infrastructural support for the development process. Further, nearly 20 per cent of total manufacturing output is generated in the public sector, particularly the core sectors of the economy.

However, the public sector has failed in generating investible surpluses. In fact, during the 1980s its share in gross domestic savings has even been declining. Still, its share in total investment has been increasing largely because of its success in mopping up of some of surplus funds of the household sector. As can be expected, nearly 4/5 th of total public sector investment is currently taking place in the two major sectors of infrastructure and directly productive activities, particularly the latter.

In recent years, the share of directly productive activities in total public sector investment has been increasing.

In short, the public sector has been playing an important role in the development process of the Indian economy. Even though it provides bulk of the infrastructural facilities, its investment allocation (in percentage terms) for this area has been somewhat declining in recent years. This may be one reason for the serious infrastructural bottlenecks which impede the growth process of the economy. Public sector participation is being rationalized in the 80s. Many public enterprises have been playing a leading role in growing sectors like petrochemicals, fertilizers and automobiles.

1.4.9 Deficit Financing

One important consequence of the low level of budgetary surpluses is the deficit financing or money creation to finance plan expenditures (Table 1.14). Government's own resources have financed, barring Fifth Five Year Plan, less than 50 per cent of the public sector outlay. Public borrowing and deficit financing have financed significant proportions of public sector outlays in different five year plans, ranging from 40 to 50 per cent.

Table 1.14 : Pattern of Financing of the Public Sector Plan Outlay

Financial Resources for the Public Sector Plan	First Five Year Plan (1951-56)	Second Five Year Plan (1956-61)	Third Five Year Plan (1961-1966)	Annual Plans (1966-69)	Fourth Five Year Plan (1969-74)	Fifth Five Year Plan (1974-79)	Annual Plan (1979-80)	Sixth Five Year Plan (1980-85)	Seventh Five Year Plan (1985-89)
Total Public Sector Plan Outlay (Rs. Crores)	1960.00	4672.00	8377.00	6756.00	16160.00	39303.00	12601.00	110821.00	180000.00
Resources (as per cent of outlay) Balance from current Revenue and Pre-Plan rates of Taxation	19.50	0.20	4.90	4.50	1.50	12.50	22.40	1.71	2.92
Additional Taxation*	13.00	22.50	33.70	13.50	26.50	37.40	12.00	29.75	24.83
Surplus of Public Sector Undertakings	5.90	3.60	5.10	6.00	7.00	2.20	13.50	5.24	19.71
Sub Total: Own Resources	38.40	26.30	33.90	24.00	32.00	52.10	47.90	36.70	41.62
Market borrowings and term loans from financial Institutions	14.10	11.60	9.60	10.60	21.30	16.60	20.60	19.96	16.98
Small savings etc@	24.60	14.60	15.00	19.30	21.00	13.10	12.20	21.49	23.61
External Assistance	9.60	22.40	28.20	35.90	12.90	14.80	8.60	7.70	0.00
Deficit Financing**	13.30	25.00	13.20	10.10	12.80	3.40	10.80	14.15	10.00
Sub-Total: Other Resources	61.60	73.60	66.00	75.90	68.00	47.90	52.20	63.30	7.78
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

* Additional taxation including measures to increase the surplus of public sector undertakings.
Includes retained profits of the Reserve Bank.
@ Includes small savings. Annual deposits, compulsory deposits, State Provident Fund, miscellaneous capital receipts and others.
Excluding yield from measures adopted for raising additional resources for the Plan.
** Deficit financing refers to changes in government (Central and States) indebtedness, both long-term and short-term, to the Reserve Bank of India.
Note : Components may not add up to totals due to rounding.
Source : Computed from date published in Report on Currency and Finance (Reserve Bank of India) (various issues).

Deficit financing refers to changes in governments' (Central and State) indebtedness to the Reserve Bank of India. These include both long term and short term debts. This way the government financed as much as 25 per cent of the total public sector outlay during the Second Plan. This is also a major factor contributing to excess liquidity and inflation in the economy. Along with a general price rise, relative prices of foodgrains have also changed with foodgrain prices increasing faster than other prices. The consumption basket of the poor like rural landless agricultural labourers being heavily weighted in favour of food grains, these sections of the society are the hardest hit by inflation. A number of studies have borne out the differential impact of inflation over different decile groups where the poorer deciles are the most adversely affected ones.

1.5 Conclusions

The pre-independence period for India was marked by stagnation particularly in the agricultural sector. Social indicators were equally poor. Independent India adopted planning to remove the structural constraints on its growth process. Almost all the five year plans have had a common set of goals: growth, social justice, self reliance, alleviation of poverty, industrialization, and improvement in productivity. But, the relative emphasis on these has varied. The Fifth Plan gave more emphasis to poverty reduction. This Plan also introduced target group oriented anti-poverty programmes. The Seventh plan attempted to integrate poverty alleviation programmes with other developmental activities in rural areas. The Eighth Plan forumulated by the Janata Dal government seeks to correct some of the distrotions observed in recent years in the development pattern of India.

The conculsions regarding macro performance in the post-independence period are as follows:

(1) The growth rate of GNP was about four per cent annum during the period 1950/51 to 1964/65 while it was 3.6 per cent during the period 1967/68 to 1979/80. The growth rate of GNP, however, shifted to a new high of about 5 per cent in the 1980s. In the process the economy became more resilient to fluctuations in agriculture.

(2) Population has accelerated since 1951, nullifying much of the efforts of development. India is still considered to be passing through the second stage of 'demographic transition'

(3) The primary sector's share in told GDP declined significantly whereas its share in total workers declined only marginally in the post-independence period.

(4) Gross domestic saving has increased steadily from 10 per cent during the First to about 20 per cent during the Fifth and subsequent Plan periods. Much of this increase in savings has come from the household sector. During the same period, gross domestic capital formation increased from 10 per cent to about 21 per cent. The share of public sector in total investment increased substanitally from about 30 during the First Plan to about 50 per cent by the Seventh Plan period.

(5) The foreign trade sector accounts for a small part of the economy. Exports constituted only about six per cent of GDP and imports about nine per cent during the Sixth plan period (1980-85). The Indian development strategy is largely based on a philosophy of import substituting industrialization, initiated in 1956. Since the late seventies, however, foreign trade has been subjected to considerable liberalization so as to promote export growth and resource allocation based on the principle of comparative advantage.

(6) The share of public sector in total GDP has been icreasing and during the Sixth Plan it accounted for as much as 22 per cent of GDP. Nearly 70 per cent of total infrastructural activities is carried out in the public sector. However, the public sector has failed in generating investible surpluses. Governments' own resources have financed, barring Fifth Plan, less than 50 per cent of the public sector outlay. Public borrowing and deficit financing have financed significant proportions of public sector outlays in different five year plans, ranging from 40 to 50 per cent.

II. POVERTY AND INCOME DISTRIBUTION

The objective of economic development is essentially the promotion of the economic welfare of the population. Economic welfare depends upon aggregate GNP growth, its distribution and a host of other variables like access to education, health and safe drinking water. Therefore, a comprehensive analysis of growth performance and welfare change requires scrutiny of (in addition to GNP), various other welfare indicators.

2.1 Trends in Income Distribution

Total income of an individual and hence, personal income distribution depends upon distribution of ownership of factors of production and factor prices.

India does not have comprehensive and comparable data on distribution of ownership of factors of production. The sample survey data collected by the National Sample Survey Organization (NSSO) in different years give some information on the distribution of ownership holdings and operational holdings in rural India.

2.1.1 Asset Distribution

The NSS surveys for the years 1953/54, 1960/67, 1970/71, and 1981/82 show a steady increase in the number of operational holdings but a steady decrease in the total as well as average area of operational holdings in rural India (Table 2.1). The Lorenz ratios, on the other hand, do not show any improvement in the distribution of operational land holdings over the years.

Table 2.1 : Estimates of Number, Area and Other Characteristics of Operational Holdings - Rural India

Item	1953/54	1960/61	1970/71	1981/82
Total number of operational holdings('000)	44354	50765	57070	71043
Total area operational ('000ha.)	135267	133482	125684	118567
Average area per operational holding ('000 ha.)	3.05	2.53	2.2	1.6
Lorenz ratios of distribution of operational holdings	0.62	0.58	0.59	0.63

Source : Sarvekshana (July, 1988)

As regards states, Rajasthan(3.75 hectares), Maharashtra (2.97 hectares) and Madhya Pradesh (2.70 hectares) have the highest average area of operational holding. The three states having lowest averages are Kerala (0.43 hectares), West Bengal (0.77 hectares) and Tamil Nadu(0.88 hectares). Except Kerala and West Bengal, other states do not show much improvements in the distribution of operational holdings (Sarvekshana, July, 1988).

Land per se is not adequate; assets are also equally important in the production process. The NSSO has collected data on the distribution of six major types of assets, viz. cattle, buffalo, other livestocks, agricultural machinery, non-farm business equipment and transport equipment across 15 size classes of operational holdings in 1971/72. The assets considered here do not include land and buildings. These data show that, in terms of Lorenz ratios, assets are much more equally distributed than operational holdings (Table 2.2). Cattle is the most important asset of the rural community; it accounts for 45 per cent of their assets. Agricultural machinery is the most unequally distributed asset; but it has only a modest share in total assets, even though it is important in enhancing productivity in agriculture. The negligible share of non-farm business equipment shows heavy dependence of the rural sector on agriculture.

Table 2.2 : Selected Indicators os Assets Distribution - Rural India (1971/72)

Type of Asset	Value (Rs. lakhs)	Percentage of Total Asset	Lorenz Ratio
Cattle	336420	45.00	0.43
Buffalo	156214	21.00	0.35
Other livestock	47082	6.00	0.27
Agricultural machinery	132748	18.00	0.63
Non-farm business equipment	16320	2.00	0.24
Transport equipment	63328	8.00	0.44
Total assets	752112	100.00	0.60

Source : Kulkarni et.al. (1984)

There is wide inter-state variation in the average value of asset per hectare of operated area and in its distribution across size class of holdings. The average value of asset per hectare of operated holding is the minimum for Orissa (Rs.354) and maximum for Goa (Rs.3210). Inequality in asset distribution is highest in Kerala (0.56) and lowest in Manipur(0.12).

The All India Debt and Investment Surveys conducted by the Reserve Bank of India (RBI) show a marginal decline in the concentration in rural asset distribution. The Lorenz ratio declined from 0.66 in 1971 to 0.64 in 1981 (RBI, 1987). At the same time, debt-asset ratios have also declined for all classes of households (Table 2.3).

Table 2.3 : Debt-Asset Ratio (Per cent)

	1971	1981
Rural cultivator households	4.1	1.8
Rural non-cultivator households	8.5	2.3
All households-Rural	4.4	1.8

Source : Reserve Bank of India(1987)

An unequal asset distribution generates an unequal income distribution which accentuates the skewness in the initial asset distribution further via the savings function.

2.1.2 Functional Distribution

Time series of data on functional distribution of income are available at the all India level by sectors. The National Accounts Statistics(NAS) provides data on division of net domestic product by four principal categories. They are (1) compensation of employees, i.e., wages and other payments to hired labour, (2) interest, (3) rent, and (4) profits and dividends. India has a large unorganized sector where many households are self-employed and work on their own account, simultaneously earning all the four categories of income in different proportions. These are called mixed income and are shown as such in the NAS.

Table 2.4 : Factor Income Shares (1984/85) (Per cent)

	1960/61	1965/66	1970/71	1975/76	1980/81	1984/85
Primary Sector NDP (Rs.million at current prices)	696650	101940	173070	277320	426680	651740
Compensation of Employees	25.4	26.0	22.6	22.1	24.2	23.1
Interest	3.3	4.7	3.2	4.4	5.7	6.2
Rent	2.9	2.9	2.4	2.0	1.2	1.5
Profits & Dividends	2.7	3.0	2.2	2.1	2.1	4.8
Mixed income of self employed	65.7	63.4	69.6	69.4	66.8	64.4
Unorganised Private Sector NDP (Rs.million at current prices)	99260	147310	250360	77100	135640	232350
Compensation of Employees	22.41	22.32	26.05	24.6	25.82	26.51
Interest	2.3	3.09	3.17	4.56	4.78	5.12
Rent	6.51	6.36	6.42	5.46	5.3	4.63
Mixed Income	68.79	68.23	64.36	65.37	64.1	63.74
Total Economy NDP (Rs.million at current prices)	133350	208010	345190	625570	1054450	174890
Compensation of Employees	33.7	35.4	38.7	39.2	40.8	42.2
Interest	3.2	4.6	5.2	6.7	7.8	8.6
Rent	5.2	4.9	5.1	4.2	4.1	3.
Profits and Dividends	6.7	6.8	4.3	4.6	4.5	6.0
Mixed Income of Self employed	51.2	48.3	46.7	45.3	42.8	39.7

Source: C.S.O.: National Accounts Statistics (Various issues)

About 80 per cent of the rural work force is employed in the primary sector. Even the non-primary sector is largely informal in character in the rural areas. Primary and private unorganized sectors are not mutually exclusive sets; a large subset of the primary sector is a subset of the private unorganized sector.

Mixed income and compensation of employees together constitute nearly 90 per cent of the Net Domestic Product in the Primary sector (Table 2.4). Their share has tended to decline over the years. Interest, and profits and dividends have increased their shares. But,

there has been a phenomenal increase in the absolute size of the work force depending upon wage and self-employment. This would imply that average income disparities in the rural sector have widened over the years.

2.1.3 Income Distribution

India does not have direct estimates of income distribution on a time series basis. The National Council of Applied Economic Research(NCAER) has conducted nation wide surveys at irregular intervals. The Lorenz ratios for the NCAER data on rural income distribution are 0.463 for 1967/68 and 0.388 for 1975/76 (NCAER,1980). But, it is difficult to make any judgement about the underlying income distributional changes. The NCAER concepts of income vary between surveys; sample size is inadequate; and the concept of income does not include imputed rental value of owner occupied houses.

2.2 Consumption Distribution

In the absence of time series data on income distribution, studies on income distribution in India have used the NSS data on consumption distribution as proxy and have drawn conclusions on that basis. The use of consumption as proxy for income is justified on the grounds that they are highly correlated in a poor country like India and that consumption is a better proxy for permanent income distribution than income (Bardhan, 1974a).

Whether consumption can be used as a proxy for income or not depends upon relative income increases of the different income groups and the shape of the consumption function. It is quite possible that a decrease in consumption inequality may accompany an increase in income inequality, in the short run.

The degree of inequality in rural consumption distribution as measured by the Lorenz ratio does not show any sustained trend either for India or for any state (Table 2.5). They show a pattern of fluctuations over time. These data are at current prices. They are not adjusted for the differential impact of inflation which has hit the poor more adversely than the rich. Price-adjusted distributions show increasing trend in inequality upto 1977/78 for states like Kerala, Tamil Nadu and West Bengal(Suryanarayana, 1986).

Table 2.5 : Lorenz Ratios of Rural Consumption Distribution

States	1961-62	63-64	64-65	65-66	66-67	67-68	68-69	69-70	70-71	72-73	73-74	77-78	1983	86-87
Andhra Pradesh	0.319	0.302	0.310	0.329	0.277	0.280	0.279	0.288	0.269	0.273	0.288	0.298	0.293	0.305
Assam	0.222	0.220	0.191	0.205	0.238	0.174	0.189	0.183	0.172	0.180	0.200	0.204	0.193	0.210
Bihar	0.279	0.289	0.288	0.302	0.310	0.299	0.278	0.281	0.265	0.288	0.273	0.258	0.256	0.245
Gujarat	0.263	0.295	0.292	0.284	0.296	0.279	0.280	0.272	0.266	0.302	0.232	0.285	0.254	0.300
Karanataka	0.365	0.287	0.278	0.306	0.303	0.298	0.316	0.264	0.277	0.274	0.281	0.321	0.304	0.285
Kerala	0.327	0.300	0.333	0.295	0.298	0.315	0.403	0.305	0.325	0.311	0.325	0.354	0.331	0.332
Madhya Pradesh	0.339	0.343	0.307	0.314	0.288	0.322	0.320	0.322	0.308	0.306	0.286	0.331	0.293	0.310
Maharastra	0.278	0.289	0.270	0.276	0.284	0.255	0.284	0.268	0.246	0.310	0.264	0.462	0.284	0.296
Orissa	0.292	0.276	0.265	0.273	0.246	0.291	0.284	0.287	0.282	0.312	0.262	0.301	0.266	0.269
Punjab Haryana	0.348	0.298	0.314	0.324	0.300	0.286	0.283	0.303	0.282	0.295	0.280	0.303	0.278	0.285
Rajasthan	0.362	0.302	0.318	0.314	0.300	0.286	0.283	0.303	0.261	0.272	0.269	0.319	0.340	0.296
Tamil Nadu	0.316	0.305	0.293	0.286	0.276	0.270	0.281	0.303	0.261	0.272	0.269	0.319	0.325	0.299
Uttar Pradesh	0.314	0.295	0.289	0.287	0.277	0.279	0.307	0.287	0.287	0.277	0.236	0.299	0.291	0.301
West Bengal	0.267	0.261	0.237	0.260	0.252	0.237	0.227	0.247	0.258	0.305	0.296	0.295	0.284	0.237
All India	0.313	0.297	0.294	0.297	0.293	0.291	0.305	0.293	0.283	0.299	0.276	0.336	0.297	0.296

Source : Suryanarayana (1986 and 1990)

Consumption does not capture other aspects of welfare like health, life expectancy and access to public goods. Also simple measures of consumption inequality like Lorenz ratios are mean independent; they do not tell anything about the trends in availability of basic goods and average living standards.

2.3 Trends in Per Capita Availability of Basic Goods

Per capita availability of foodgrains is low in India. Between 1951 and 1989, per capita availability of foodgrains has increased by about 25 per cent, though not in a sustained manner (Table 2.6). Cotton textiles declined while non-made fibres have increased in supply. NSS estimates of monthly per capita consumption show a rise in real living standards. Since 1973/74 NSS estimates are available from quinquennial surveys and hence, cannot be mistaken for real trends.

Table 2.6 : Per Capita Net Availability of Some Select Items of Basic Needs

	1951	1956	1961	1966	1971	1976	1981	1985
Cereals (gms. per day)	334.2	360.4	399.7	359.9	417.6	373.8	416.2	456.2
Pulses	60.7	70.3	69	48.2	51.2	50.5	37.5	40.4
Foodgrains	397.08	431.96	468.74	408.18	468.68	425.39	453.74	496.64
Textiles:(metres)								
1) Cotton	-	-	14.8	14.0	12.4	11.4	10.2	10.1
2) Man made fibres	-	-	1.2	1.7	2.2	2.4	4.2	4.5

Source : Ministry of Finance (1990): Economic Survey 1989/90

There has been some improvement in the health facilities available in the economy as a whole. The number of registered doctors per lakh of population has increased from 16.5 in 1950 to 48.2 in 1987 (CMIE, 1989). Number of hospital beds per lakh of population has increased from 31 to 77 during the same period. Primary health centres have increased from 725 in 1955 to 14,609 in 1987. The improvement in health services is also reflected in the decline in death rate from 27.4 in 1951 to 10.8 in 1987.

Even though housing facilities have improved, they have been inadequate in relation to population growth. Total size of houseless rural population has increased from 9.7 lakhs in 1961 to 15.2 lakhs in 1971 and to more than 17 lakhs in 1981 (CMIE, 1989).

Yet, there can be no gainsaying the fact that average level of living in India is low. Low per capita consumption with some degree of inequality in its distribution would mean sub-subsistence level of living for the poor. Indeed, majority of them are not capable of attaining even a minimal standard of living. It is argued that success of development and changes in welfare should be judged in terms of the Rawlsian criterion of justice (1971) and the 'maxmin' rule.

2.4 Poverty

2.4.1 Poverty Line

Poverty estimates are generally made on the basis of the NSS consumption data. For such estimates, the choice of a norm is very important. A working group set up by the Planning Commission in 1962 recommended a national minimum consumption level of Rs.20 per capita per month at 1960/61 prices. This estimate was based on the balanced diet recommended by the Nutrition Advisory Committee of the Indian Council of Medical Research. Based on the NSS data, Dandekar and Rath (1971) have estimated Rs.15 and Rs.22.5 per capita per month at 1960/61 prices as the poverty lines for rural and urban India respectively corresponding to a per capita daily intake of 2250 calories. A similar approach was adopted by the Planning Commission (1980) when it estimated poverty line as the mid point of the monthly per capita expenditure class having a daily per capita calorie intake of 2400 in rural areas and 2100 in urban areas.

These poverty norms are based on average calorie requirement of the population. Calorie requirements vary depending upon the age, sex and occupation of the individual. But, age-sex occupation specific poverty lines have so far not been estimated. Therefore, the same all India poverty norm is applied for states as well after suitable adjustments for inter-regional price variations (Bardhan, 1973b).

Updating of the poverty lines is generally done using relevant price deflators. For rural India/state, the corresponding Consumer Price Index Numbers of Agricultural Labourers(CPIAL) are used as deflators(Bardhan, 1973b). For urban India/state, Consumer Price Index Numbers of Industrial Workers(CPIIW) are used. The Planning Commission has been using CSO's national income deflator for both rural and urban sectors. CPIAL and CPIIW relate to certain subsets of the rural and urban populations. Hence, they are considered inappropriate for updating the poverty lines for the general population(Minhas et.al., 1987). The Planning Commission approach (Planning Commission,1985) is inappropriate because it assumes same price movements for both rural and urban sectors. To overcome some of these problems, Minhas et.al., (1987) have constructed Consumer Price Index for Middle Rural Population using NSS rural retail prices and NSS weighting diagram for the corresponding population. For the urban sector, they obtain a deflator as a linear combination of CPIIW and Consumer Price Index for Urban Non-manual Employees using total expenditure weights. Even though Minhas et.al. approach is quite satisfactory, because of non-availability of retail prices for pre-1970s, their approach cannot be used in our analysis which begins from 1960s.

2.4.2 Data Base for Estimation of Poverty

Two most important data sources for poverty estimates are the NSSO and the Central Statistical Organisation(CSO). The NSSO provides distribution of population across per capita expenditure (PCE) classes with monthly PCE corresponding to each class. The CSO provides national aggregate private consumption expenditure. In addition to direct estimates based on the NSS data, poverty ratios have also been estimated superimposing the NSS distributions on CSO aggregates. The estimates of poverty based on these two data sources differ with respect to both level and trend(Bardhan,1970a;Minhas,1970 and Vaidyanathan,1974). This in turn is due partly to conceptual and methodological differences between the NSS and CSO estimates of PCE and partly to differences in methods and deflators employed in poverty estimation.

The NSS is a socio-economic survey conducted in the form of successive rounds, wherein information on household consumption by commodities is collected. Thus, the NSS estimates are direct estimates unlike the CSO where consumption estimates are made using the 'Commodity Flow' method. Both the NSS and the CSO are estimates of some unknown parameters. The population parameters they seek to estimate are not the same conceptually. The NSS seeks to estimate all expenditure incurred by the household sector exclusively towards non-productive purposes. The CSO estimate, in addition, includes (i) consumption of private non-profit institutions, and (ii) imputed values of rentals in owner-occupied houses. Further, there are also other factors like differences in reference period, notion of consumption, methods of valuation and coverage which have caused differences in the NSS

and CSO estimates of total as well as commodity-wise consumption (Mukherjee, 1986; Vaidyanathan, 1986a; Suryanarayana and Iyengar, 1986).

In fact, studies on poverty in India differ with respect to many such aspects as the basis of definition of poverty line, methods of its calculation, methods of estimation of poverty, data base etc.. Such details regarding a few important studies are given in Table 2.7.

Table 2.7 : Norm, Poverty Lines and Estimates (India)

Author	Norms	Poverty Line in Rupees Per Capita Per Annum	Data Base	Period	Absolute Poverty %	
					Rural	Urban
Ahluwalia (1978)		180 for Rural India at 1960/61 prices	N . S . S . Consumption Data	1956/57 1960/61 1965/66 1967/68 1970/71 1973/74	53.5 38.4 54.7 56.5 47.5 46.1	- - - - - -
Bardhan (1970)	2250 calories per head per day	180 for Rural India at 1960/61 prices	N . S . S . Consumption Data	1960/61 1964/65 1967/68 1968/69	38.0 45.0 53.0 54.0	- - - -
Dandekar and Rath (1971)	2250 calories per head per day	180 for Rural and 270 for Urban India at 1960/61 prices	N . S . S . Consumption Data	1961/62	40.0	50.0
Minhas		200 for Rural India at 1960/61 prices	Tiwari's estimates of per capita consumption combined with N.S.S. Distributions	1960/61 1964/65 1967/68	46.0 39.3 37.1	- - -

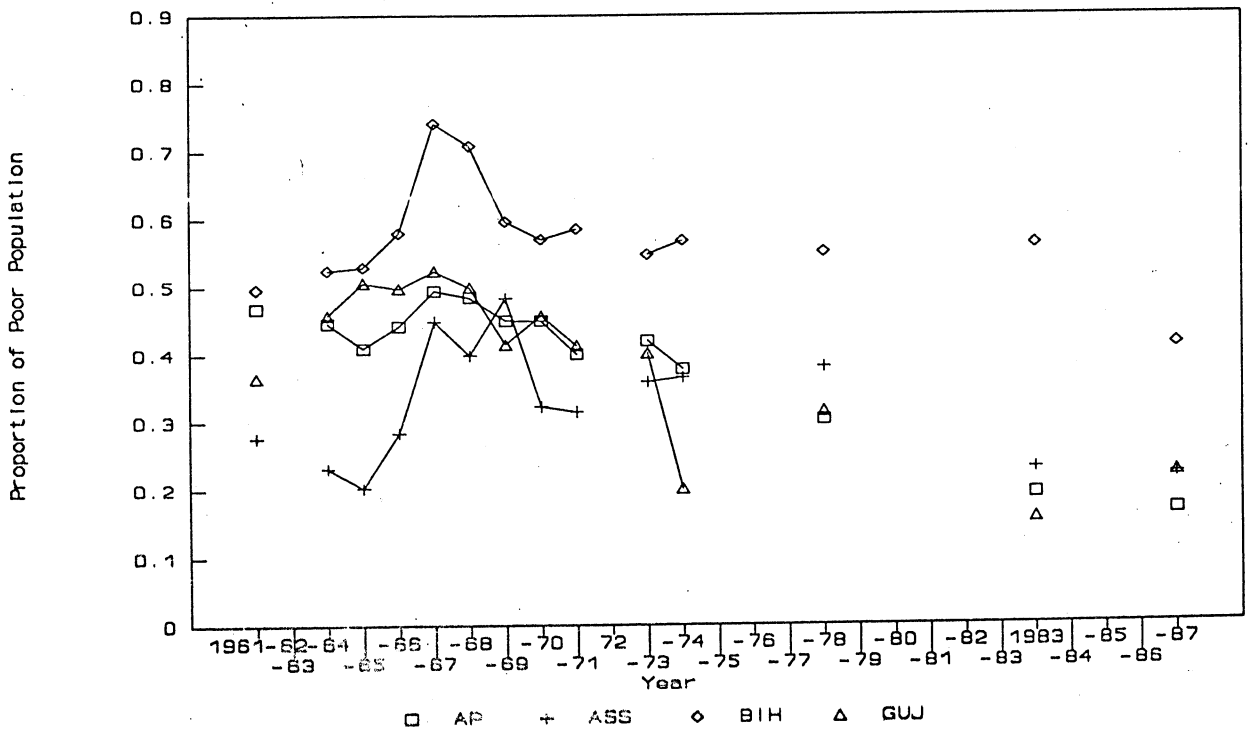
Ojha (1970)	518 gms of food grains per capita per day to get 80 per cent of the calorie requirement of 2250 units in the rural areas and 432 gms of foodgrains to get 66% of 2250 calories in urban areas	15 to 18 for rural India;and 8 to 11 for urban India at 1960/61 prices *	N.S.S. Data combined with official estimates of foodgrains availability	1960/61 1967/68	52.0 70.0	- -
Rajaraman (1975)	Linear Programming approach to minimize cost of living subject to nutritional constraints	16.36 for rural Punjab at 1960/61 price *	N . S . S . Consumption Data	1960/61 1970/71	18.4 23.28	- -
Study Group, Planning Commission, (1962)		240 for all-India at 1960/61 prices				
Planning Commission	2400 calories per head per day for rural and 2100 calories for urban India	49.09 for rural land and 56.64 for urban in 1973/74*	N . S . S . Consumption Data	1972/73 1977/78	50.5 51.5	40.1 38.2
Vaidyanathan (1974)		240 for rural India at 1960/61 prices	N . S . S . Consumption Data	1960/61 1964/66 1967/68 1960/61 1964/66 1967/68	59.5 60.4 67.8 58.8 56.9 57.8	- - - - - -
Vyas (1971)		180 for rural India at 1960/61 prices 240 for rural India at 1960/61 prices	- -	1954/55 1960/61 1954/55 1960/61	45.5 63.2 45.5 38.5	- - - -

* indicates poverty line per month.
Source : Suryanarayana (1986)

2.4.3 Trends in Poverty

Estimates of poverty, made using a poverty line of Rs.15 per capita per month at 1960/61 all India prices for rural India and corresponding poverty lines for rural areas of different states, do not show any consistent trend(Table 2.8). They show a pattern of fluctuations, which can be expected in a predominantly monsoon dependent agrarian economy. Broadly, they show a rise in incidence of poverty between 1960/61 and 1967/68 and a decline thereafter (Fig. 2.1 to 2.4 and Table 2.8). In 1986/87 the absolute size of the poor in rural India is approximately 153 million which means a decline of 25 per cent in absolute size from about 203 million in 1970/71 even though poverty ratio has come down by 45 per cent during the same period.

Fig.2.1: Head Count Ratio



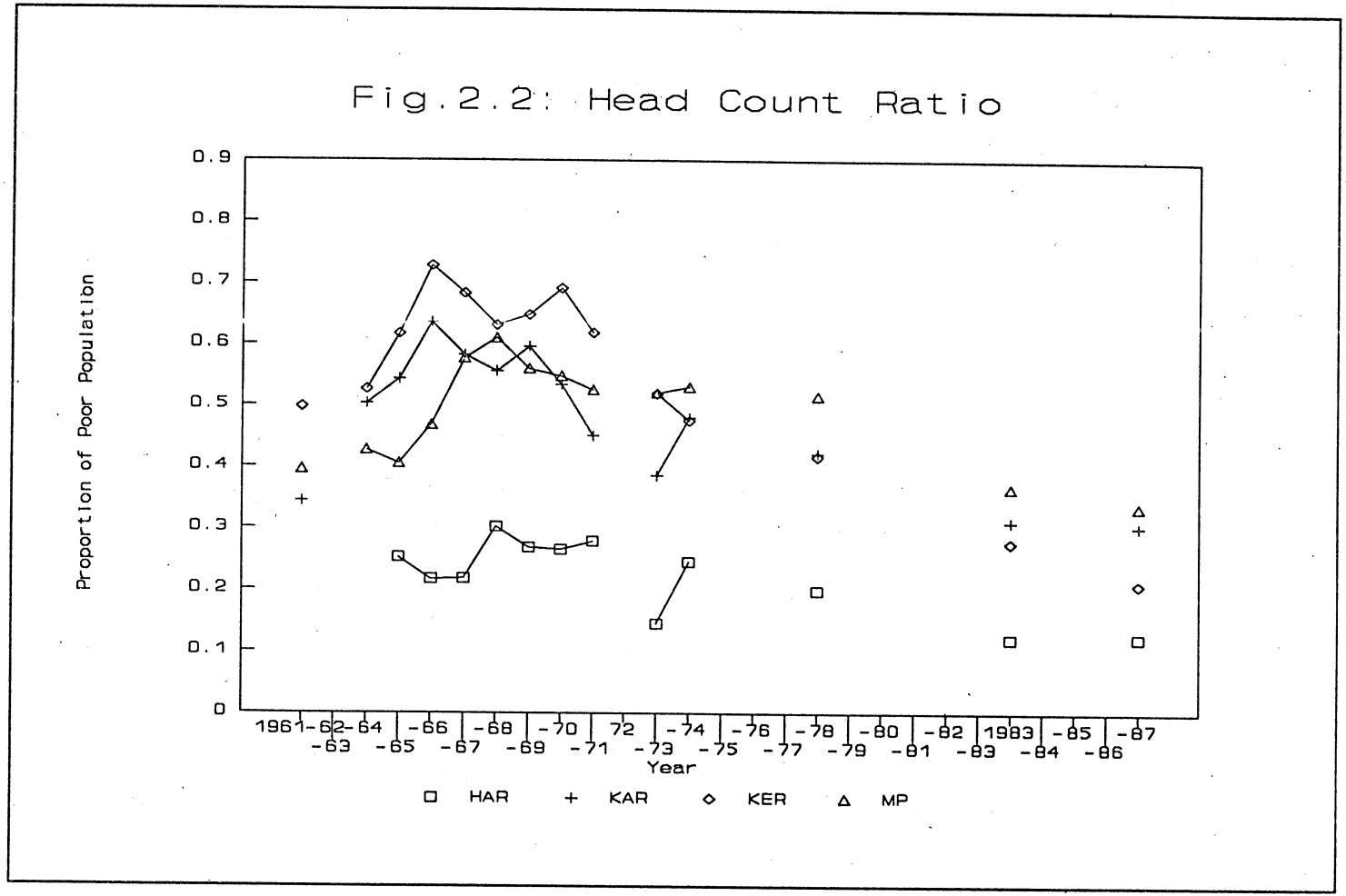


Fig.2.2: Head Count Ratio
Proportion of Poor Population
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1961-62-64
-63
-65
-66
-67
-68
-69
-70
-71
72
-73
-74
-75
-76
-77
-78
-79
-80
-81
-82
1983
-84
-85
-86
-87
Year
HAR
KAR
KER
MP

Fig.2.3: Head Count Ratio

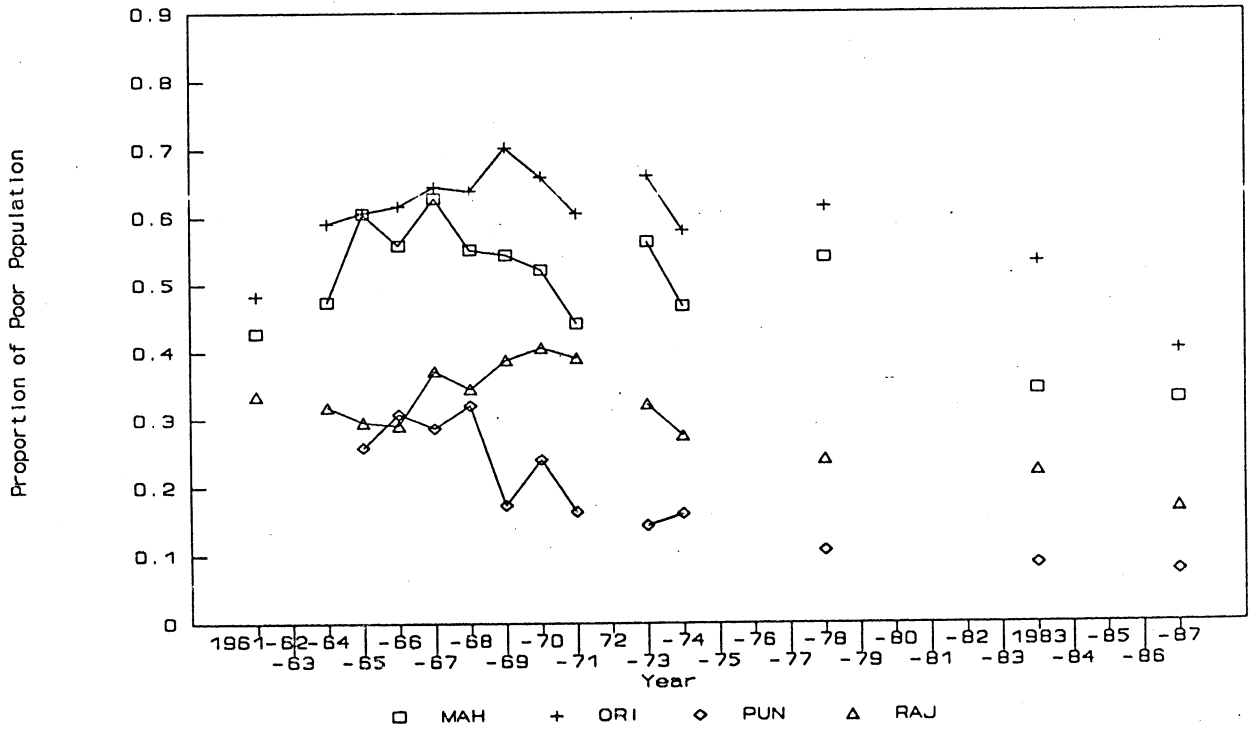
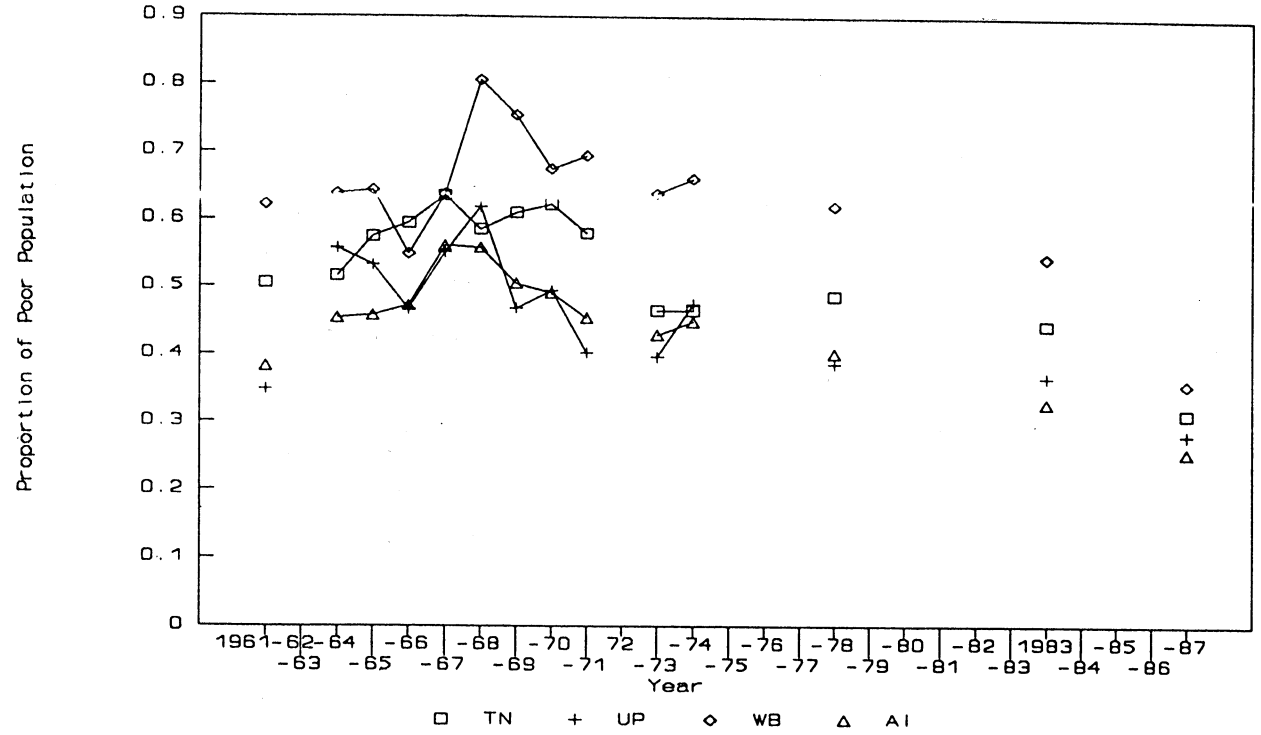


Fig.2.4: Head Count Ratio



The head count ratio tells only about proportion of population having a standard of living below the poverty line. It does not tell us anything about the average income shortfall of the poor. The poverty-gap index which tries to capture this aspect of poverty also shows a similar trend picture as that of the head count ratio (Table 2.9).

Neither of these two measures satisfy the monotonicity and transfer axioms postulated by Sen (1976). Accordingly the Sen's index of poverty are estimated at the national as well as state levels (Table 2.10). These estimates also show a pattern similar to earlier two indices.

Sen's index however has a limitation that it is not decomposable. The Foster-Greer-Thorbecke (1984)index which is decomposable has all the important desirable properties, but it is difficult to estimate when the available data is of the NSS type, ie. available in the form of size distribution of population across expenditure classes. Hence assuming that all individuals have the same consumption level as the mean consumption level in the respective expenditure groups, the Foster-Greer-Thorbecke index is estimated for all India and individual states (Table 2.11). This index also shows a picture similar to the earlier indices.

The incidence of poverty, as measured by the head count ratio, has declined for the weaker sections between 1977/78 and 1983/84. In rural India, absolute poverty among the Scheduled castes declined from 64.60 per cent to 53.10 per cent. For the Scheduled Tribes, the decline was from 72.40 per cent to 58.40 per cent (Gupta, 1989).

2.4.4 Chronic Versus Transient Poverty

Poverty is not a regular feature of all families all the time. The economic position of a household varies between years depending upon a good or bad harvest and within a year due to seasonality of employment and wage earnings. A study by the International Crops Research Institute for the Semi-Arid Tropics of agricultural households in Central India during 1975-83 showed only 12 per cent of the households to be above poverty all the time. Forty four per cent were poor for six or more years while 19 per cent were poor every year (World Bank, 1990). The NSS in the year 1983, on the other hand, has shown that only 81 per cent of the rural households got adequate food throughout the year; about 16 per cent got food during some months only and two per cent did not get adequate food throughout the year (Sarvekshana, July, 1990).

Table 2.8 : Proportion of Rural Population Below the Poverty Line

State	1961-62	63-64	64-65	65-66	66-67	67-68	68-69	69-70	70-71	72-73	73-74	77-78	1983	86-87
A.P.	0.4682	0.4460	0.4092	0.4421	0.4944	0.4842	0.4502	0.4495	0.4000	0.4200	0.3775	0.3021	0.1919	0.1660
Assam	0.2766	0.2316	0.2018	0.2835	0.4488	0.3987	0.4835	0.3231	0.3147	0.3583	0.3648	0.3800	0.2287	0.2200
Bihar	0.4972	0.5244	0.5295	0.5798	0.7410	0.7081	0.5966	0.5700	0.5853	0.5471	0.5676	0.5502	0.5615	0.4120
Gujarat	0.3657	0.4584	0.5061	0.4978	0.5232	0.4996	0.4146	0.4572	0.4129	0.4010	0.2005	0.3149	0.1561	0.2222
Haryana	NA	NA	0.2518	0.2169	0.2176	0.3022	0.2681	0.2648	0.2780	0.1448	0.2453	0.1985	0.1203	0.1220
Karanataka	0.3434	0.5031	0.5428	0.6349	0.5817	0.5560	0.5960	0.5342	0.4501	0.3853	0.4803	0.4221	0.3102	0.3028
Kerala	0.4973	0.5258	0.6167	0.7280	0.6824	0.6305	0.6476	0.6910	0.6182	0.5193	0.4751	0.4167	0.2761	0.2091
M.P.	0.3956	0.4265	0.4050	0.4680	0.5767	0.6097	0.5598	0.5476	0.5256	0.5201	0.5305	0.5161	0.3653	0.3352
Maharastra	0.4279	0.4742	0.6057	0.5582	0.6285	0.5517	0.5441	0.5219	0.4419	0.5631	0.4677	0.5395	0.3435	0.3280
Orissa	0.4834	0.5902	0.6068	0.6166	0.6450	0.6389	0.7025	0.6594	0.6051	0.6607	0.5798	0.6149	0.5327	0.4013
Punjab	NA	NA	0.2587	0.3082	0.2873	0.3211	0.1739	0.2413	0.1643	0.1443	0.1617	0.1070	0.0868	0.0759
Rajasthan	0.3358	0.3189	0.2966	0.2914	0.3719	0.3458	0.3879	0.4062	0.3907	0.3224	0.2761	0.2407	0.2231	0.1692
T.N.	0.5050	0.5158	0.5746	0.5943	0.6357	0.5851	0.6102	0.6228	0.5798	0.4651	0.4649	0.4875	0.4442	0.3134
U.P.	0.3479	0.5566	0.5320	0.4667	0.5505	0.6186	0.4686	0.4945	0.4027	0.3966	0.4748	0.3864	0.3667	0.2818
W.B.	0.6218	0.6379	0.6429	0.5488	0.6375	0.8059	0.7542	0.6751	0.6945	0.6387	0.6608	0.6209	0.5442	0.3566
All India	0.3822	0.4533	0.4573	0.4721	0.5609	0.5579	0.5050	0.4912	0.4539	0.4290	0.4488	0.4021	0.3285	0.2558

Source : Suryanarayana (1986 and 1990)

Table 2.9 : Poverty Gap Index

State	1961-62	63-64	64-65	65-66	66-67	67-68	68-69	69-70	70-71	72-73	73-74	77-78	1983	86-87
A.P.	0.2956	0.2580	0.2550	0.2558	0.2650	0.2464	0.2814	0.2781	0.2404	0.2595	0.2467	0.2386	0.2024	0.2110
Assam	0.1665	0.1696	0.1776	0.1985	0.2060	0.1967	0.2047	0.1765	0.1806	0.1824	0.2177	0.1781	0.1595	0.1681
Bihar	0.2791	0.2874	0.2980	0.3147	0.4208	0.4037	0.3308	0.3139	0.3118	0.3160	0.3050	0.2883	0.2863	0.2211
Gujarat	0.2293	0.2438	0.2491	0.2899	0.3201	0.2874	0.2718	0.2602	0.2486	0.2430	0.3827	0.2390	0.1639	0.2363
Haryana			0.1978	0.1831	0.2316	0.2386	0.2164	0.2323	0.2238	0.1740	0.2046	0.2023	0.1681	0.1606
Karanataka	0.2605	0.2607	0.2952	0.3532	0.3452	0.3209	0.3127	0.2628	0.2664	0.2567	0.2594	0.2839	0.2489	0.2451
Kerala	0.3212	0.2991	0.3605	0.3584	0.3532	0.3351	0.3599	0.3461	0.3522	0.2976	0.3006	0.2906	0.2167	0.2080
M.P.	0.2555	0.2837	0.2732	0.2735	0.3340	0.3531	0.3168	0.3181	0.2986	0.2768	0.2815	0.2909	0.2395	0.2172
Maharastra	0.2571	0.2644	0.2926	0.2889	0.3073	0.2944	0.2801	0.2696	0.2567	0.3280	0.2665	0.2917	0.2240	0.2210
Orissa	0.3058	0.3203	0.3126	0.3094	0.3092	0.3186	0.3577	0.3569	0.3289	0.3566	0.2992	0.3278	0.2956	0.2405
Punjab			0.2583	0.2361	0.2022	0.2452	0.2339	0.2241	0.1771	0.1865	0.2309	0.2223	0.1642	0.1745
Rajasthan	0.2685	0.2504	0.2584	0.2530	0.2651	0.2848	0.2964	0.2754	0.3068	0.2476	0.2229	0.2522	0.2364	0.2013
T.N.	0.3040	0.2962	0.3007	0.3107	0.3166	0.2974	0.3064	0.3318	0.2843	0.2671	0.2644	0.2775	0.2815	0.2511
U.P.	0.2387	0.3076	0.2874	0.2703	0.3016	0.3085	0.2712	0.2871	0.2506	0.2489	0.2328	0.2399	0.2423	0.2029
W.B.	0.2461	0.3012	0.3032	0.2977	0.3091	0.3821	0.3354	0.3225	0.3401	0.3525	0.3534	0.3205	0.3023	0.2289
All India	0.2609	0.2707	0.2758	0.2848	0.3170	0.3131	0.2922	0.2835	0.2774	0.2701	0.2618	0.2637	0.2423	0.2120

Table 2.10 : Sen's Poverty Index

States	1961-62	63-64	64-65	65-66	66-67	67-68	68-69	70-71	73-74	77-78	1983	86-87
Andhra Pradesh	0.1800	0.1600	0.1400	0.1600	0.1800	0.1700	0.1800	0.1300	0.1400	0.1050	0.0550	0.0430
Assam	0.0600	0.0600	0.0500	0.0800	0.1300	0.1000	0.1400	0.0800	0.1100	0.1410	0.0720	0.0680
Bihar	0.1900	0.2100	0.2200	0.2500	0.4100	0.3700	0.2600	0.2500	0.2400	0.2190	0.2240	0.1560
Gujarat	0.1200	0.1600	0.1700	0.2000	0.2200	0.2000	0.1600	0.1500	0.1000	0.1110	0.0380	0.0690
Haryana										0.0580	0.0220	0.0230
Karanataka	0.1200	0.1800	0.2100	0.3000	0.2700	0.2400	0.2500	0.1700	0.1700	0.1600	0.1090	0.1060
Kerala	0.2100	0.2100	0.2900	0.3300	0.3100	0.2800	0.3100	0.2900	0.2000	0.1580	0.0930	0.0630
Madhya Pradesh	0.1400	0.1700	0.1500	0.1700	0.2600	0.2900	0.2400	0.2100	0.2000	0.2030	0.1340	0.1210
Maharastra	0.1500	0.1700	0.2400	0.2200	0.2700	0.2200	0.2000	0.1600	0.1800	0.2140	0.1240	0.1170
Orissa	0.2000	0.2600	0.2600	0.2600	0.2700	0.2800	0.3300	0.3000	0.2300	0.2490	0.2110	0.1510
Punjab										0.0160	0.0070	0.0020
Punjab & Haryana	0.0700	0.1000	0.0800	0.0800	0.0800	0.1100	0.0500	0.0700	0.0600			
Rajasthan	0.1200	0.1100	0.1100	0.1000	0.1400	0.1400	0.1700	0.1600	0.0900	0.0770	0.0690	0.0440
Tamil Nadu	0.2200	0.2100	0.2300	0.2500	0.2600	0.2400	0.2500	0.2200	0.1700	0.1900	0.1710	0.1110
Uttar Pradesh	0.1200	0.2300	0.2100	0.1700	0.2300	0.2500	0.1700	0.1300	0.1500	0.1440	0.1350	0.0960
West Bengal	0.2000	0.2600	0.2600	0.2200	0.2700	0.4000	0.3300	0.3100	0.3100	0.2520	0.2160	0.1300
All India	0.1400	0.1600	0.1700	0.2100	0.2400	0.2400	0.2000	0.1800	0.1700	0.1400	0.1000	0.0840

Note : The estimates upto year 1973-74 are from Ahluwalia (1978)

Table 2.11 : Foster-Greer-Thorbecke Index (α = 3.0)

State	1961-62	63-64	64-65	65-66	66-67	67-68	68-69	69-70	70-71	72-73	73-74	77-78	1983	86-87
Andhra Pradesh	0.0243	0.0176	0.0159	0.0176	0.0208	0.0212	0.0231	0.0234	0.0137	0.0188	0.0152	0.0122	0.0053	0.0086
Assam	0.0031	0.0033	0.0031	0.0054	0.0106	0.0093	0.0112	0.0049	0.0052	0.0059	0.0100	0.0061	0.0030	0.0029
Bihar	0.0240	0.0281	0.0308	0.0400	0.1000	0.0829	0.0456	0.0378	0.0374	0.0357	0.0357	0.0284	0.0274	0.0102
Gujarat	0.0108	0.0174	0.0204	0.0266	0.0333	0.0264	0.0221	0.0180	0.0157	0.0139	0.0272	0.0105	0.0023	0.0116
Haryana			0.0053	0.0040	0.0060	0.0118	0.0060	0.0095	0.0081	0.0026	0.0054	0.0058	0.0021	0.0022
Karanataka	0.0133	0.0193	0.0288	0.0541	0.0463	0.0373	0.0392	0.0223	0.0194	0.0177	0.0187	0.0239	0.0114	0.0112
Kerala	0.0325	0.0282	0.0552	0.0588	0.0521	0.0470	0.0562	0.0543	0.0495	0.0290	0.0275	0.0242	0.0077	0.0051
Madhya Pradesh	0.0135	0.0219	0.0192	0.0222	0.0432	0.0505	0.0394	0.0371	0.0294	0.0245	0.0243	0.0281	0.0125	0.0092
Maharastra	0.0154	0.0187	0.0321	0.0270	0.0400	0.0312	0.0239	0.0212	0.0172	0.0392	0.0195	0.0283	0.0095	0.0105
Orissa	0.0285	0.0377	0.0367	0.0409	0.0411	0.0442	0.0605	0.0587	0.0450	0.0559	0.0311	0.0428	0.0316	0.0161
Punjab			0.0100	0.0143	0.0063	0.0116	0.0062	0.0081	0.0032	0.0030	0.0029	0.0078	0.0013	0.0014
Rajasthan	0.0123	0.0114	0.0128	0.0108	0.0195	0.0202	0.0266	0.0212	0.0236	0.0119	0.0074	0.0108	0.0074	0.0045
Tamil Nadu	0.0344	0.0284	0.0343	0.0367	0.0394	0.0327	0.0360	0.0430	0.0294	0.0198	0.0185	0.0242	0.0236	0.0128
Uttar Pradesh	0.0115	0.0316	0.0288	0.0201	0.0335	0.0382	0.0215	0.0240	0.0143	0.0145	0.0131	0.0131	0.0125	0.0068
West Bengal	0.0214	0.0344	0.0369	0.0314	0.0387	0.0758	0.0512	0.0424	0.0503	0.0538	0.0563	0.0412	0.0357	0.0119
All India	0.0158	0.0202	0.0224	0.0244	0.0382	0.0363	0.0285	0.0254	0.0219	0.0203	0.0189	0.0181	0.0120	0.0074

2.4.5 Demographic, Social and Occupational Characteristics of the Poor

By and large poorer households have larger sizes. Average number of children per household is higher for the poorer households than for the non-poor (Figure 2.5 and Table 2.12). Child labour is rampant in rural areas. Children are looked upon as an additional source of income whereby to supplement family earnings.

Fig.2.5: Family Size by Expenditure

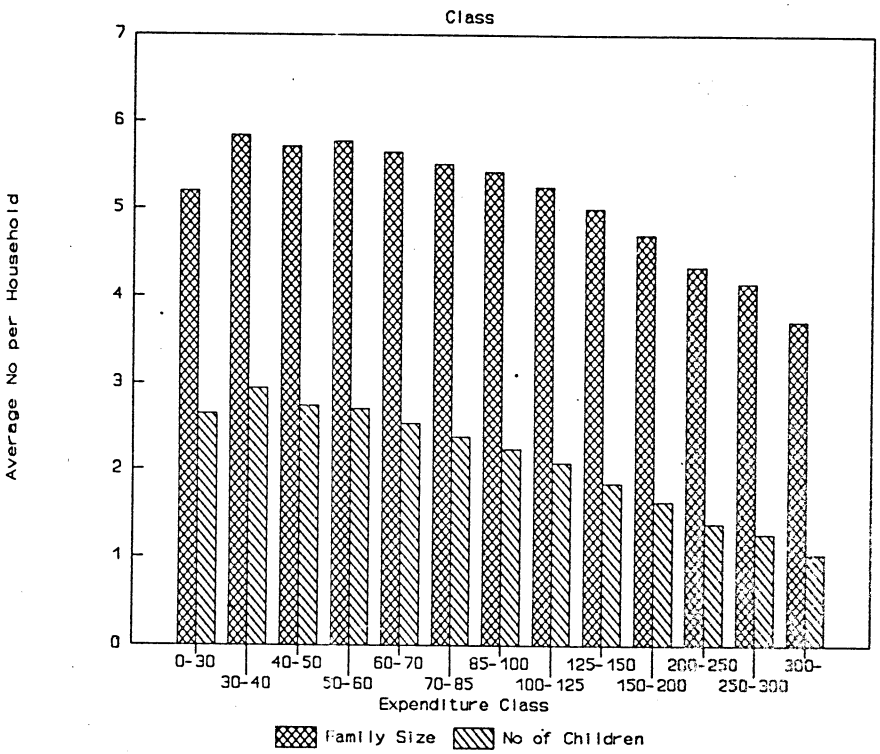


Table 2.12 : Demographic Characteristics of the Rural Population - All India (1983)

PCE Class	Percentage of		Average number per household			Total persons
	households	persons	adult male	adult female	children	
Poor						
0-30	0.92	0.92	1.15	1.4	2.65	5.20
30-40	2.21	2.47	1.36	1.54	2.94	5.84
40-50	4.66	5.11	1.42	1.55	2.74	5.71
50-60	7.13	7.90	1.48	1.58	2.71	5.77
60-70	8.94	9.69	1.53	1.58	2.54	5.65
70-85	14.41	15.24	1.54	1.59	2.38	5.51
Poverty line: Rs.76.65: Non-Poor						
85-100	13.12	13.64	1.59	1.59	2.24	5.42
100-125	16.88	16.99	1.59	1.59	2.07	5.25
125-150	10.41	10.00	1.60	1.56	1.84	5.00
150-200	10.83	9.78	1.57	1.50	1.63	4.70
200-250	4.74	3.96	1.53	1.43	1.38	4.34
250-300	2.27	1.81	1.56	1.33	1.26	4.15
300 & above	3.48	2.49	1.44	1.25	1.03	3.72
All Classes	100.00	100.00	1.54	1.55	2.12	5.12

Source : Sarvekshana (April, 1986).

About 35 per cent of the poor belong to the Scheduled Castes and Scheduled Tribes (Table 2.13). Even though poverty in these two categories of the rural population has declined between 1977/78 and 1983, their share in total rural poverty has gone up. This is partly because their population grew much faster than others (Sarvekshana, January, 1989) and partly because they did not benefit by the growth process as much as others (Gupta, 1989).

Table 2.13 : Percentage of Scheduled Castes/Scheduled Tribes Among Poor - All India

	1977/78	1983/84
Scheduled Castes		
Rural	21.2	22.4
Urban	14.3	15.8
Combined	20.0	21.2
Scheduled Tribes		
Rural	13.3	14.1
Urban	2.4	3.0
Combined	11.4	12.1
Scheduled Castes and Tribes		
Rural	34.5	36.5
Urban	16.7	18.8
Combined	31.4	33.3

Source : Gupta (1989)

The incidence of poverty is the highest among agricultural labor households (Fig. 2.6 to 2.8 and Table 2.14). Their share in total rural poverty is also the highest. One important reason for this is the high incidence of unemployment. These households account for 60 per cent of total person days of rural unemployment, even though their share in all rural households is only 30 per cent. Even at the disaggregated level, it is found that poverty is highest among the agricultural labour households (Mahendra Dev, 1988b). As regards other types of households, the pattern of incidence of poverty varied across states.

Fig.2.6: Composition of Rural Households (Per Cent : 1983)

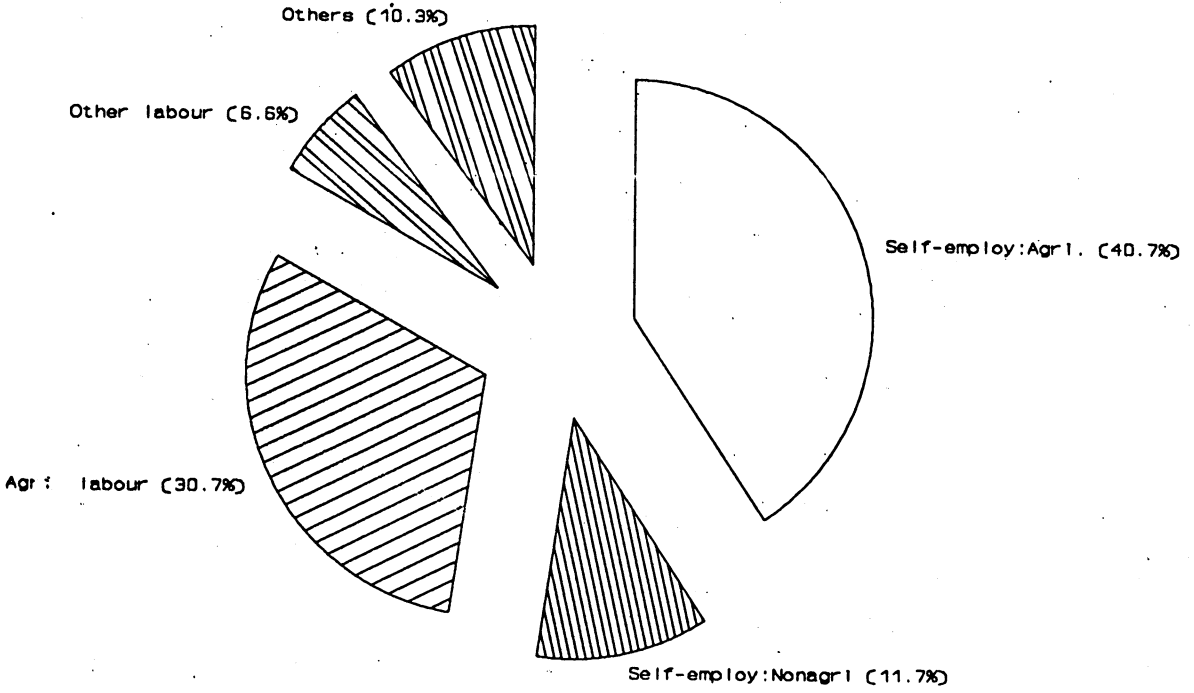


Fig.2.7: Per Cent Share in No of Unemployed Mandays by Household Type

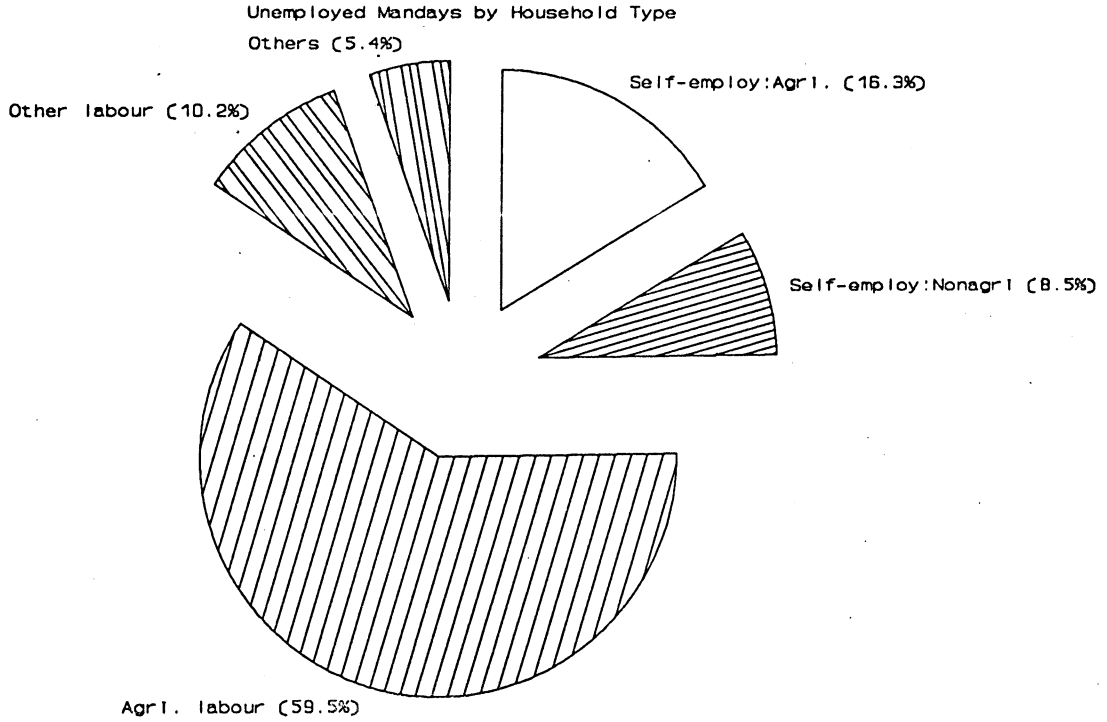


Fig.2.8: Composition of Rural Poor

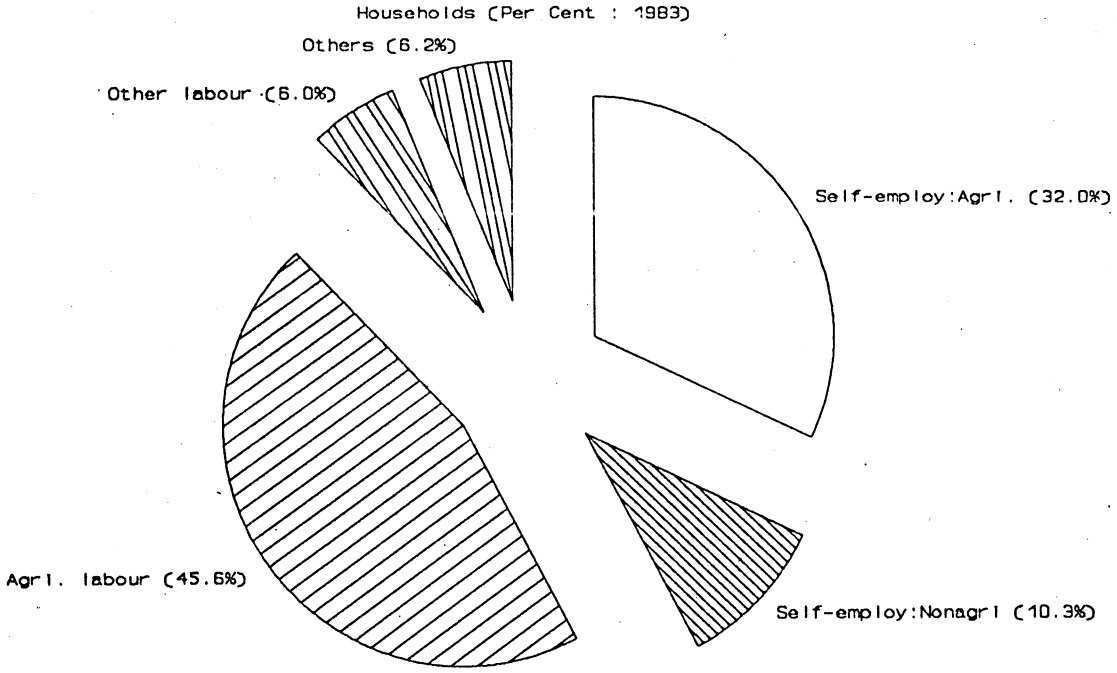


Table 2.14 : Share of Different Types of Households in (1) All Rural Households, (2) Households Below the Poverty Line, (3) Unemployed Person-Days and (4) Incidence of Poverty Within Each Household Type

All India (Rural) 1983						
Household type	Percentage share in all rural households	Incidence of poverty within each household type	Percentage share in all rural households below poverty line	Percentage share of each Household type in total number of unemployed person days		
				Males	Females	Persons
Self-employed in agricultural occupations	40.72	24.08	32.04	18.38	12.01	16.32
Self-employed in non-agricultural occupations	11.70	26.93	10.29	9.02	5.85	8.50
Agricultural labour households	30.70	45.45	45.59	55.81	68.54	59.54
Other labour households	6.57	27.93	5.99	10.99	9.73	10.21
Other rural households	10.31	18.32	6.17	6.24	3.86	5.43
All households	100.00	30.62	100.00	100.00	100.00	100.00

Source: Computed from Sarvekshana (April 1988)

Notes:

1) Household types are defined by reference to the major source of livelihood for the household in the year preceding the date of survey.

2) All households with per capita total consumer expenditure of less than Rs.76.65per month consitute the set of poor households. The poverty norm of Rs.15 per capita per month at 1960/61 prices, when adjusted by the consumer price index for rural agricultural labourers, works out to Rs.77.65p.

3) Incidence of poverty within each household type in column 4 is defined by the percentage of households below the poverty line (of Rs.76.65 per capita per month) within each household type.

2.4.6 Other Aspects of Poverty

Access to safe drinking water is an important aspect of level of living. In 1986/87 only 16 per cent of the all India rural population had access to tap as a major source of drinking water; about 37 per cent used tube well/hand pump and 39 per cent depended upon pucca well. (Sarvekshana, April, 1990). The poor constituted about 25 per cent of the rural population in this year. The percentage share in different sources of drinking water of the bottom 23.74 per cent of the population is given below (Table 2.15).

Table 2.15 : Percentage Share of the Rural Poor in Each Different Source of Drinking Water - All India Rural (1986/87)

Tap	Tubewell handpump	Pucca well	Tank pond reserved for drinking water	River canal	Tankers	Others	All
18.24	24.92	24.52	21.86	28.87	17.32	27.22	23.74

Source: Sarvekshana(April, 1990).

About 26 per cent of the rural population reside in electrified dwellings. As regards the rural poor only 16 per cent of them reside in such dwellings (Sarvekshana, April, 1990). As regards sanitation, about 34 per cent of the rural population and an equal percentage of the rural poor live in dwellings sprayed with disinfectants (Sarvekshana, April, 1990).

In order to stabilize the general living standards of the population and insulate them against rising prices, the government sells some basic items of daily use to the public at controlled prices through outlets like ration shops and fair price shops. This system is called the Public Distribution System(PDS). For commodities like rice and wheat, of those who depend exclusively on the PDS, about 25 per cent belong to poverty (Table 2.16). The bottom 20 per cent of the rural households account for about 98 per cent of the rural poor. These households get less than 15 per cent of their total purchases of foodgrains from the PDS. Thus, PDS's role in supplementing the consumption level of the poor seems to be limited.

Table 2.16 : Some Aspects of PDS and its Impact on the Rural Poor - All India (1986/87)

	Rice	Wheat	Bajra	Jowar	Other cereals	Pulse	edible oil & vanas pati	Sugar	Coal	Kero sene	Standard cloth
Rural poor's share(%) in the rural population depending only on the PDS	28.88	25.55	26.15	41.80	22.77	15.88	28.95	28.58	14.03	27.33	33.18
Rural poor's share(%) in rural population depending upon both PDS & other source for selected commodities	27.92	21.43	39.21	32.34	36.76	13.50	21.02	15.40	0.30	23.23	25.11

Source: Sarvekshana, (April, 1990

Till recently, the PDS has been important only in the urban areas. Studies have shown that the PDS has an urban bias in the sense that more than 80 per cent of the total food grains supplied under this scheme goes to the urban sector. But, the latest data published by the NSS show a quite different picture. PDS is no longer urban-oriented. In a few states, in terms of total quantity supplied as well as percentage of total food purchased from PDS, it has a rural bias (Fig.2.9, 2.10 and Table 2.17). PDS does provide income support but since both the rich and the poor get the same entitlements it does not really redistribute income significantly. For items like foodgrains and kerosene, the rich depend(in percentage terms) as much as the poor on the PDS to meet their consumption requirements(Table 2.18). Since per capita purchases of the rich are more than that of the poor it would follow that in absolute terms the rich might be getting benifited more than the poor at least in the urban sector.

Fig.2.9: PDS as Per Cent of Total

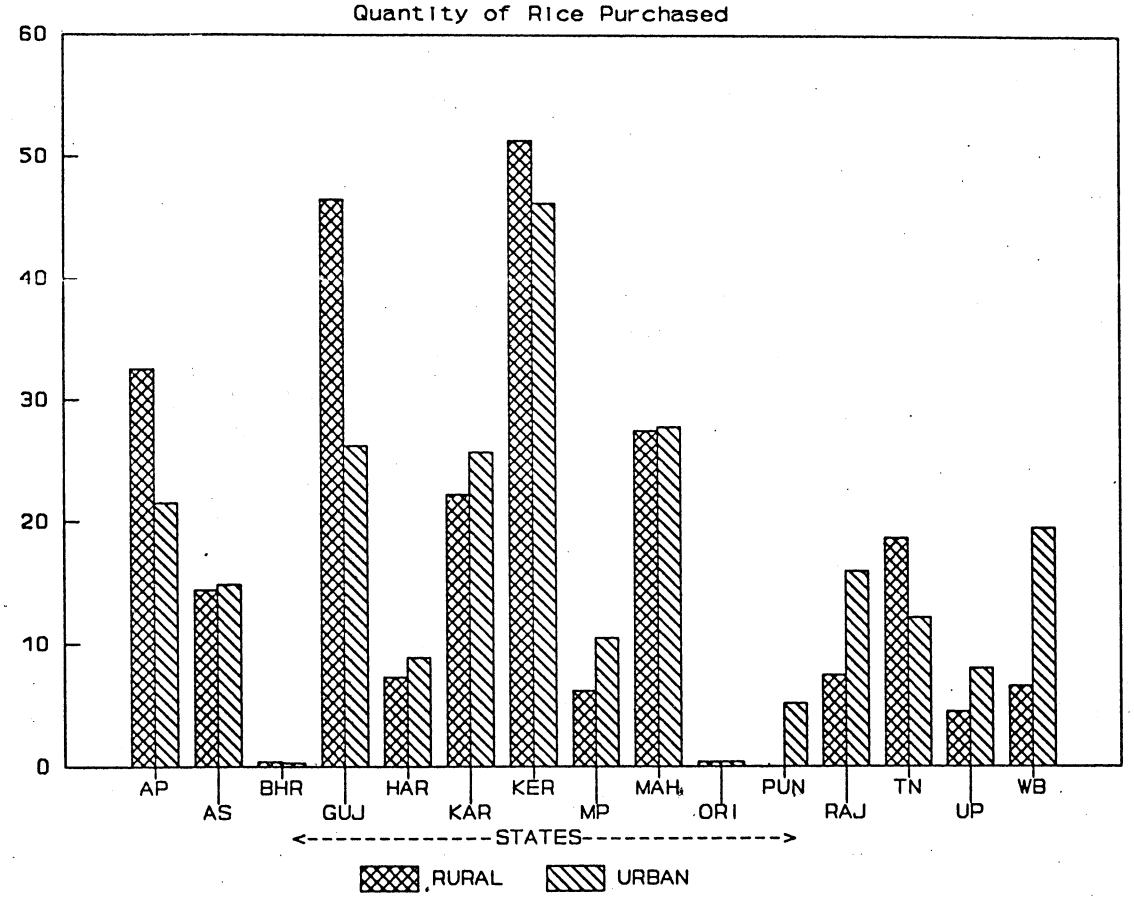


Fig.2.10: PDS as Per Cent of Total

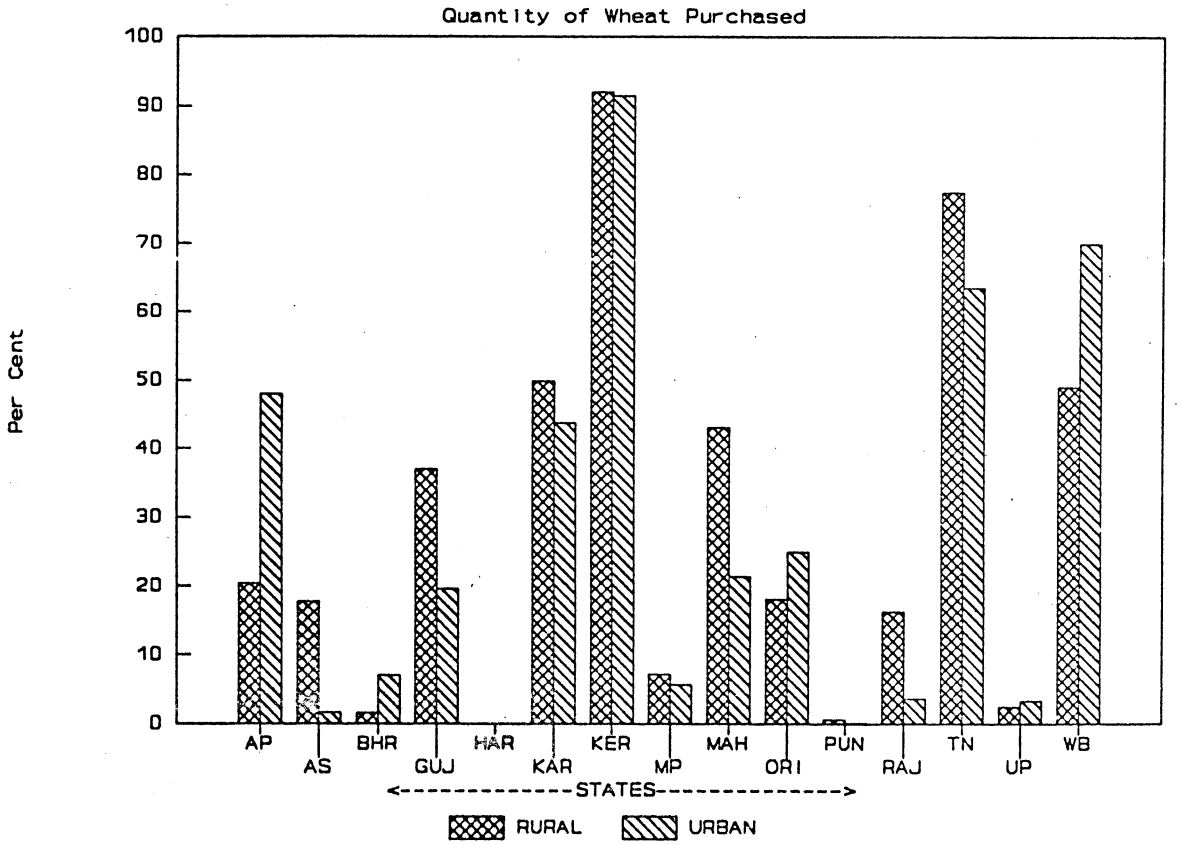


Table 2.17 : PDS in Rural Areas - Selected Commodities

State	PDS as Percentage of Total Quantity Purchased					
	Rice		Wheat		Kerosene	
	Rural	Urban	Rural	Urban	Rural	Urban
Andhra Pradesh	32.54	21.47	20.39	47.98	66.24	57.21
Assam	14.40	14.83	17.79	1.65	14.81	16.85
Bihar	0.42	0.29	1.51	7.05	38.16	40.19
Gujarat	46.53	26.21	37.02	19.63	29.02	42.11
Haryana	7.29	8.89	0.00	0.00	70.91	74.52
Karnataka	22.22	25.69	49.86	43.78	38.76	42.59
Kerala	51.36	46.19	92.04	91.48	92.12	82.95
Madhya Pradesh	6.14	10.47	7.17	5.65	29.15	29.82
Maharastra	27.45	27.77	43.13	21.45	34.79	67.82
Orissa	0.40	0.41	18.11	25.02	22.58	21.08
Punjab	NA	5.15	0.63	0.05	63.87	74.45
Rajasthan	7.47	15.94	16.21	3.61	44.79	59.93
Tamil Nadu	18.66	12.17	77.46	63.48	74.16	63.68
Uttar Pradesh	4.45	8.03	2.43	3.32	7.29	63.87
West Bengal	6.59	19.48	49.03	69.87	77.59	64.90
All India	16.76	19.08	12.64	19.33	25.86	59.27

Source: Sarvekshana, (April, 1990)

Table 2.18(a) : Percentage of Quantity of Purchase from PDS to Total Purchase by Item and Population Group - All India (1986/87)

Household Fractile Group	Rice	Wheat	Bajra	Jowar	Other cereals	Pulse	Edible oil & Vanaspati	Sugar	Coal	Kerosene	Standard cloth
0-10	16.92	9.45	5.32	2.13	1.34	0.20	10.95	54.59	9.29	51.69	5.69
10-20	15.26	9.73	2.77	2.44	2.09	0.29	11.21	56.20	0.21	4.92	3.60
20-40	17.58	14.03	0.30	2.06	2.32	0.27	12.71	51.66	0.28	47.69	4.61
40-60	15.49	12.82	0.62	2.80	3.83	0.48	10.88	47.94	1.45	47.57	2.54
60-80	17.88	14.10	0.19	2.26	3.67	0.52	12.10	77.15	2.92	46.97	3.31
80-90	17.78	13.40	NA	1.69	16.95	0.34	9.55	37.29	9.51	47.35	2.98
90-100	16.28	13.59	1.36	2.50	8.18	0.83	8.37	32.81	9.91	47.38	2.79
0-100	16.76	12.64	1.04	2.28	4.23	0.42	11.04	61.20	4.97	25.86	3.55

Table 2.18(b) : Percentage of Value of Purchase from PDS to Total Purchase by Item and Population Group

Household Fractile Group	Rice	Wheat	Bajra	Jowar	Other cereals	Pulse	Edible oil & Vanaspati	Sugar	Coal	Kerosene	Stand ard cloth
0-10	12.90	8.20	6.29	1.91	1.11	0.21	6.78	44.92	14.45	46.42	2.89
10-20	11.60	8.77	3.32	2.15	1.72	0.31	6.72	46.03	1.50	22.75	1.41
20-40	12.91	12.14	0.26	1.77	1.91	0.27	7.73	42.56	0.82	42.20	2.00
40-60	11.42	11.89	0.64	2.64	2.89	0.42	6.57	39.23	2.29	42.91	1.23
60-80	13.14	13.12	0.17	2.21	2.77	0.41	7.35	72.46	4.62	42.65	1.41
80-90	13.32	12.21	NA	1.50	15.77	0.30	0.09	28.98	3.31	41.78	1.25
90-100	11.41	12.14	1.01	1.64	4.48	0.78	5.01	25.37	10.84	42.81	1.12
0-100	12.40	11.49	1.12	2.05	3.46	0.38	6.73	45.15	4.61	39.42	1.57

Source: Sarvekshana, (April, 1990)

The poor spend about 80 per cent of their total expenditure on food (Fig. 2.11 and Table 2.19). Yet, they do not get enough nutrition in terms of calories and fat (Fig. 2.12). This picture holds good at the state level also, with varying intensity. The problem is serious with respect to the children whose development gets stunted because of malnutrition. Child malnutrition (modest and severe) has been found to be extensive in all states except Kerala (National Nutrition Monitoring Bureau, 1983).

Fig.2.11: Per Cent Expenditure on Food

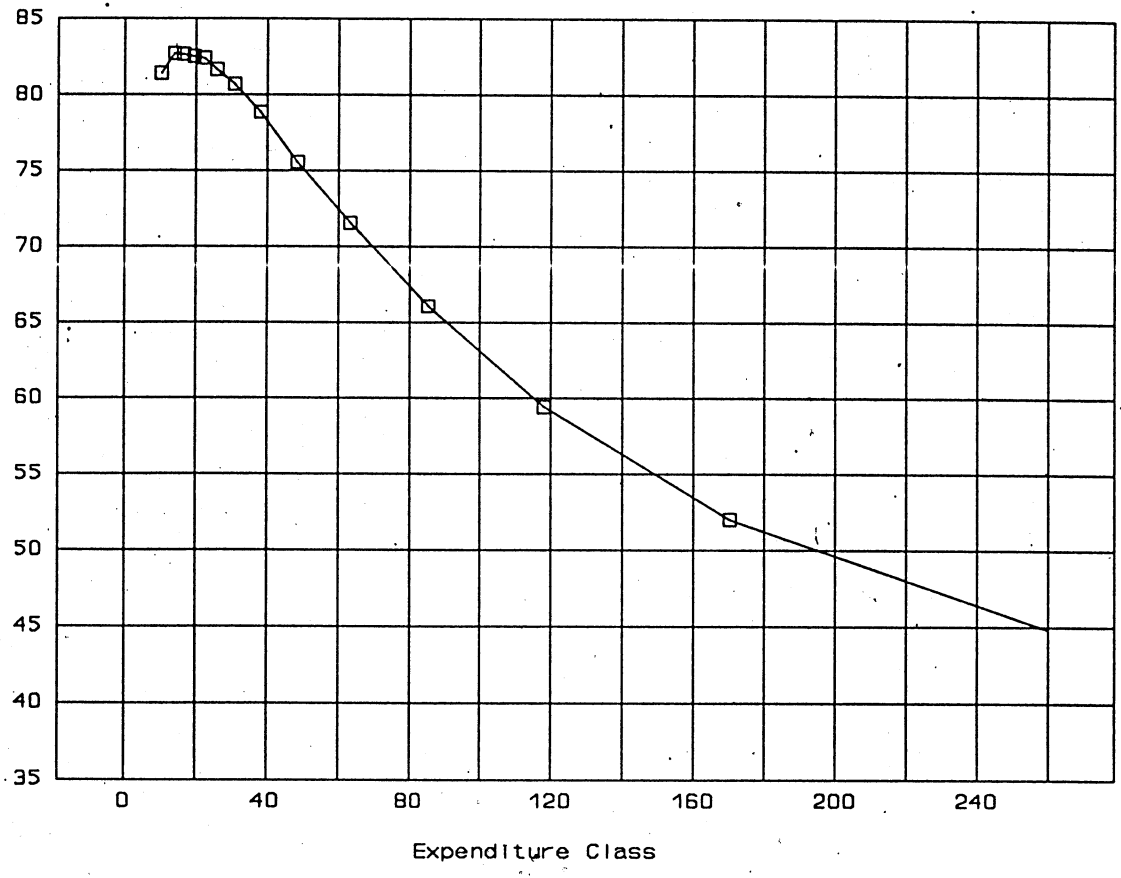


Fig.2.12: Per Capita Calorie Intake

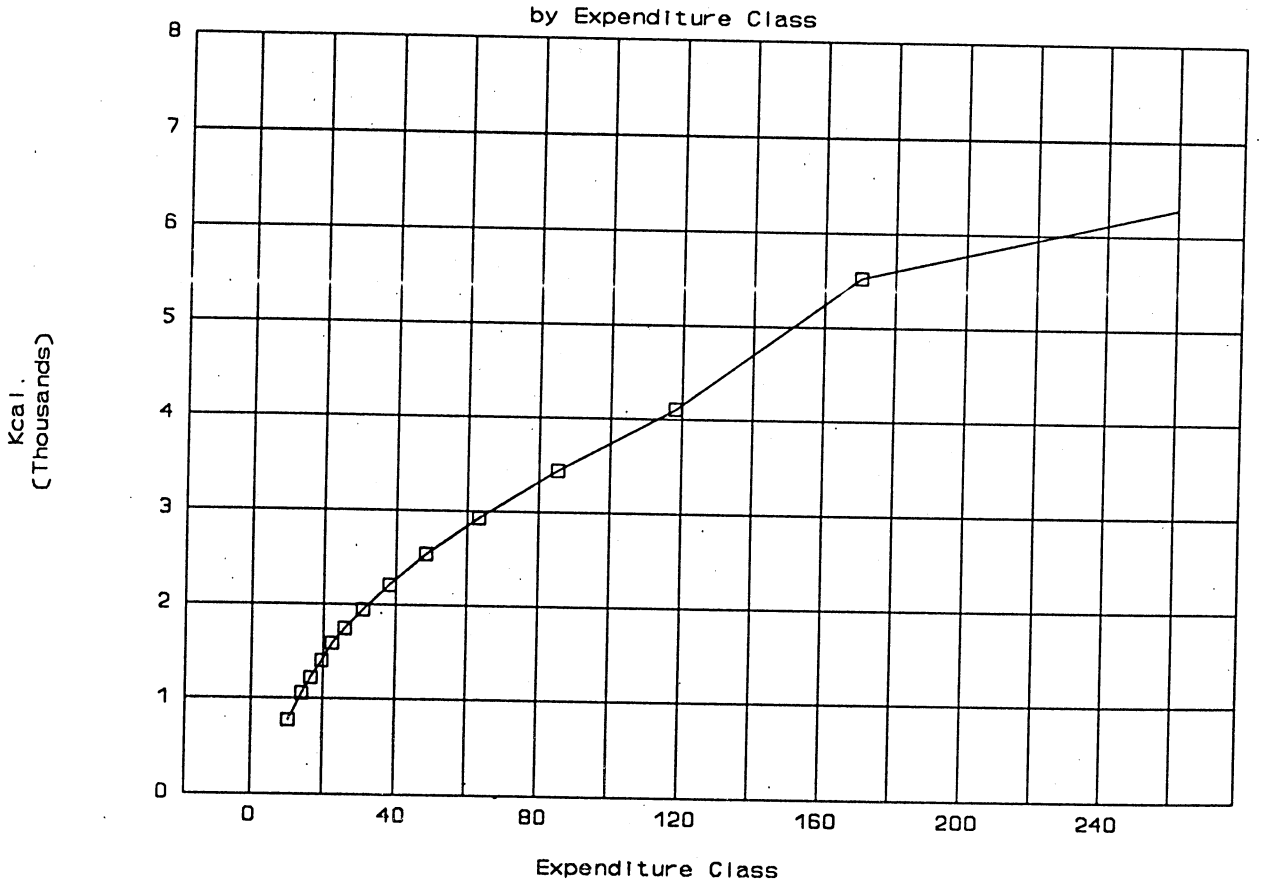


Table 2.19 : Nutritional Status of the Poor - Rural India (1972/73)

Monthly per capita expenditure calss (Rs.)	Per capita per diem intake of			Percentage of estimated number of persons	Monthly per capita expenditure (Rs. 0.00)	Percentage of food expenditure to total expenditure
	energy (Kcal)	protein (0.0 g)	fat (0.0g)			
Poor						
0-13	776	21.80	5.60	1.67	10.38	81.41
13-15	1055	30.40	7.10	1.34	14.01	82.73
15-18	1220	34.60	8.50	3.36	16.49	82.65
18-21	1398	39.70	10.00	5.13	19.46	82.52
21-14	1586	44.90	12.20	6.46	22.41	82.41
14-28	1743	49.70	13.60	10.09	25.91	81.68
28-34	1944	54.40	16.40	15.58	30.86	81.70
Poverty line : Rs. 33.75 : Non-poor						
34-43	2210	61.10	21.80	19.07	38.14	78.85
43-55	2538	69.90	28.20	16.25	48.24	75.56
55-75	2929	80.80	36.40	11.87	63.20	71.56
75-100	3439	93.60	50.10	5.31	85.26	66.05
100-150	4110	109.20	67.40	2.90	118.00	59.42
150-200	5521	135.20	84.90	0.56	170.32	52.00
200 & above	6991	177.80	138.90	0.47	342.81	38.22
All Classes	2266	62.70	24.50	100.00	43.91	72.81

Source: Sarvekshana (January, 1983)

By and large, the poor have little formal education (Fig. 2.13 Table 2.20). Low investment in human capital prevents them from taking up jobs in the formal sector. Instead they end up entering the informal sector as casual labourers or self-employed. Illiteracy was highest (75.83 per cent) among labourers, followed by self-employed (61.56 per cent) and the least among others(41.88 per cent) (Sarvekshana, April, 1988).

Fig.2.13: Illiteracy by Expenditure

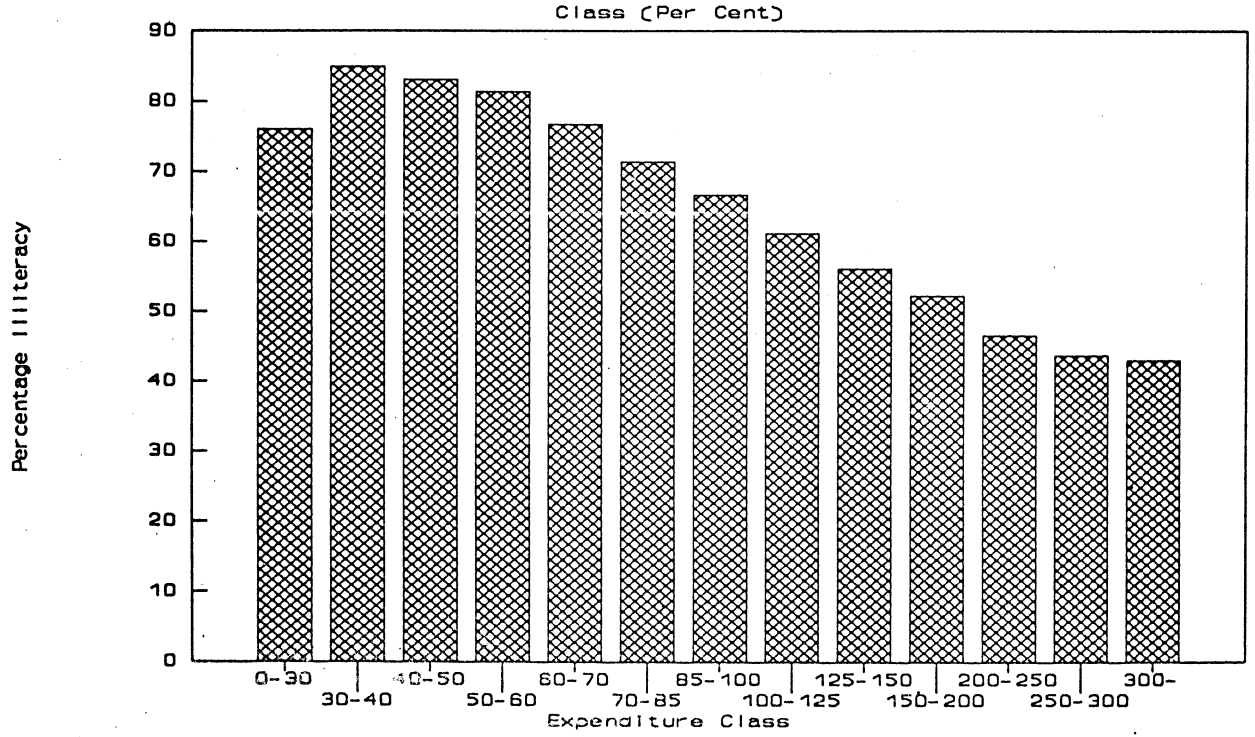


Table 2.20 : Educational Status of the Poor - Rural India

Household monthly per capita expenditure (Rs.)	General education category						
	not literate	literate & upto primary	middle	secondary	graduate & above	not recorded	all
Poor							
0-30	76.01	16.34	5.01	2.01	0.52	0.11	100.00
30-40	84.90	12.05	2.26	0.69	0.05	0.06	100.00
40-50	83.07	12.77	3.13	0.83	0.14	0.05	100.00
50-60	81.32	14.10	3.36	1.06	0.12	0.05	100.00
60-70	76.70	16.19	5.01	1.85	0.14	0.10	100.00
70-85	71.39	19.62	6.21	2.44	0.28	0.07	100.00
Poverty line Rs. 76.65 : Non-poor							
85-100	66.69	21.45	7.76	3.65	0.39	0.06	100.00
100-125	61.19	23.47	9.85	4.68	0.73	0.08	100.00
125-150	56.09	24.53	11.64	6.54	1.09	0.10	100.00
150-200	52.24	25.70	12.33	8.08	1.57	0.09	100.00
200-250	46.56	26.01	13.77	11.08	2.48	0.09	100.00
250-300	43.68	24.71	14.89	13.23	3.30	10.19	100.00
300 & above	42.97	24.12	14.43	14.13	4.23	10.12	100.00
All classes	64.76	21.04	8.51	4.75	0.86	0.08	100.00

Source: Sarvekshana (April, 1988)

2.5 Conclusions

The conclusions of our analysis on poverty and income distribution are as follows :

(1) The data on asset distribution for the years 1953/54, 1966/67, 1970/71 and 1980/81 do not show any improvement in the distribution of operational land holdings over the years. The same data show that assets other than land are much more equally distributed than operational holdings.

(2) Lorenz ratios for consumption in rural India do not show any sustained trend either for India or for any state. They show fluctuations over time.

(3) Similarly, the estimates of poverty based on head count ratio show a pattern of fluctuations. Broadly, they show a rise in incidence of poverty between 1960/61 and 1967/68 and a decline thereafter. The estimates of poverty based on poverty-gap index and the Sen's index also show similar patterns over time. In the 1980s, the incidence of poverty declined considerably in almost all the states.

(4) Information based on the probing questions of the NSS on food consumption in 1983 show that 81 per cent of the rural households got adequate food throughout the year while only two per cent did not get adequate food throughout the year.

(5) The incidence of poverty for different types of households indicate that it is the highest among agricultural labour households. These households also report highest incidence of person-day unemployment.

(6) The bottom 20 per cent of the rural households get less than 15 per cent of their total purchases of foodgrains from the PDS. Thus, PDS's role in supplementing the consumption level of the poor seems to be limited.

(7) The problem of malnutrition is serious with respect to children. The child malnutrition (modest and severe) has been found to be extensive in all states except Kerala.

(8) The poor, by and large, have little formal education. The illiteracy was highest (75.8 per cent) among labourers.

III. POVERTY AND LAND RESOURCES

It is well known that one of the most important assets in rural areas is agricultural land. In India, as in other developing countries, poverty is inversely related to the size of land holdings as shown in Figure 3.1. The Figure also shows that the majority of the poor cultivator households are concentrated in the size class of land upto 0.005 hectares (cultivators having upto one cent of land) in 1987/88.

3.1 Structure of Land Holdings, Tenancy and Common Property Resources

Figure 3.1 shows that access to land may reduce poverty for a household. With the tenancy system and the availability of common property resources, a poor household can operate or use land without having ownership rights. In order to evaluate the prospects of small and marginal farmers and the landless households, an examination of the structure of land holdings, tenancy system and common property resources is important[1].

3.1.1 Trends in the Structure of Land Holdings

Since Chapter II examines trends in the structure of operational holdings, we concentrate here on ownership holdings. The broad evidence on land ownership in rural India upto the early 1980s shows that the number of marginal and small owners as well as the total area they own have increased while the importance of large farms had decreased (see Table 3.1). Thus, there is an overall improvement in the land holding structure although the unequal distribution of land ownership since independence still persists. The concentration ratios presented in Table 3.2 also indicate that inspite of the progressive decline in the inequality in the distribution of ownership holdings, the change has not been appreciable.

[1]It may be noted that we have stressed here on land resources. As shown in chapter II, however, non-land assets are also gaining importance in rural areas.

Fig.3.1: Inverse Relation between Size of Land and Poverty

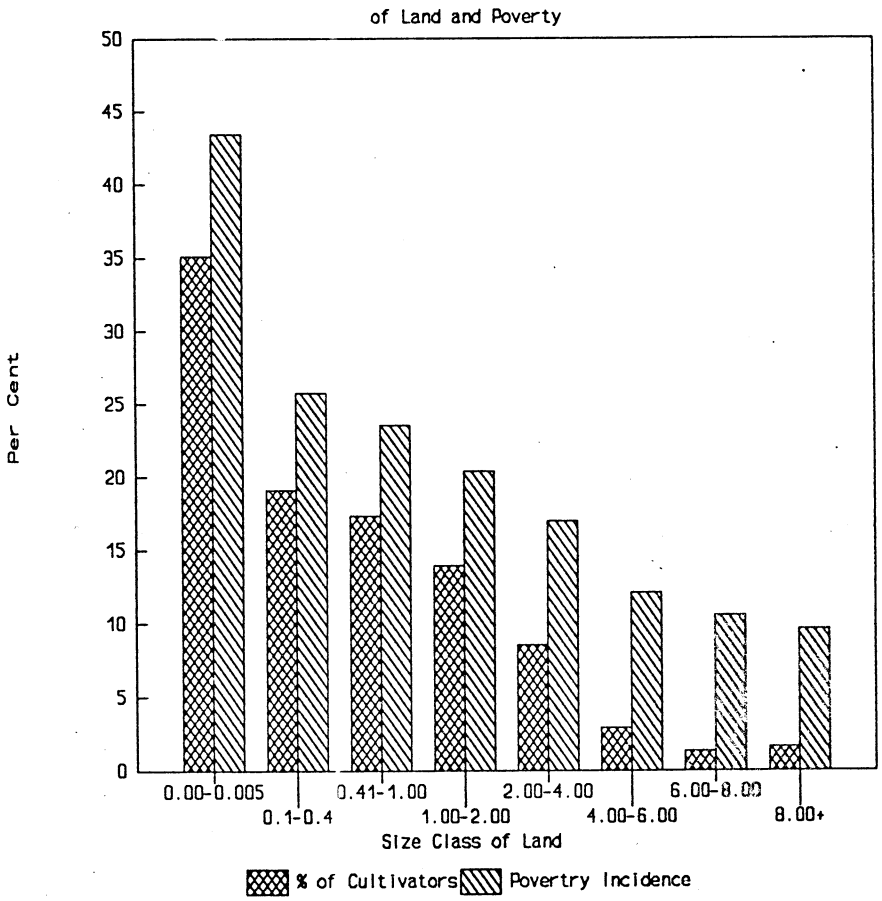


Table 3.1 : Changes in the Structure of Ownership Holdings: All India, 1961/62, 1971/72 and 1982

Categories of Households	Per cent of Households			Per cent of Area Owned		
	1961/62	1971/72	1982	1961/62	1971/72	1982
Marginal	60.06	62.62	66.64	7.59	9.76	12.22
Small	15.16	15.49	14.70	12.40	14.68	16.49
Semi-medium	12.86	11.94	10.78	20.54	21.92	23.38
Medium	9.07	7.83	6.45	31.23	30.73	29.83
Large	2.85	2.12	1.42	28.24	22.91	18.07
All	100.00	100.00	100.00	100.00	100.00	100.00

Source : Sarvekshana Vol.XI, No.2, October, 1987

Table 3.2 : Concentration Ratios of Household Ownership Holdings for 1953/54, 1961/62, 1971/72 and 1982

All India Rural	
Years	Concentration Ratios
1953/54	0.75
1961/62	0.73
1971/72	0.71
1982	0.71

Source : Same as Table 3.1

3.1.2 Demographic Pressures and Average Size of Holdings

The demographic pressures on the single most important asset in rural India namely land have been increasing over time. Acceleration in the rate of population growth since 1951, negligible increase in the agriculture land and a very slow shift in the work force from agriculture to non-agriculture have led to increasing pressures on land. It means that there would be a tendency towards small average size of farm holdings. The NSS data on land holdings indicate that the average size of household ownership holding has decreased progressively from 1.95 hectares in 1953-54 to 1.28 hectares in 1982. Regarding operational holdings, their number increased from 44,354 (000) in 1953-54 to 71,043 (000) in 1981-82. This is mainly due to the natural growth in population and number of households and

holdings, their number increased from 44,354 (000) in 1953-54 to 71,043 (000) in 1981-82. This is mainly due to the natural growth in population and number of households and consequent fragmentation of older holdings and also because of land distribution policies of the state governments. The area operated, however, declined over time. As a result, the average area of an operational holding underwent reduction from 3.05 hectares in 1953-54 to 1.67 hectares in 1981-82.

There are regional disparities in the average size of ownership as well as operational holdings. The average size of land holdings, however, declined over time in all the states. The size was higher in states like Rajasthan, Madhya Pradesh, Maharashtra, Gujarat and Karnataka as compared to those of the states with higher density of population.

3.1.3 Overstatement of Inequality in the Size Distribution of Land Holdings

The data on concentration of land holdings in India do not present a true picture of the extent of inequality in the ownership and use of land. First, size of the family is not taken into account. If we consider per capita holdings rather than holdings per households the inequalities may be lower (Singh, 1988b). Secondly, the available data do not take into account quality of the soil. The available estimates show that if soil quality is taken into account, the apparent inequalities in land holdings across groups and regions were lower, as compared to the estimates unadjusted for soil quality (see Bhalla, 1988). As can be seen from Table 3.3, the cultivated farm size was higher in Maharashtra, Rajasthan and Madhya Pradesh. However, quality of soil was the lowest in these states. As a result, inter-state inequalities in the average size of holdings would be lower if land holdings are adjusted for soil quality. Due to low soil quality in the above mentioned states, one can find poverty households even in the size group above 2.5 hectares in these states. Similarly Table 3.4 shows that average size and average quality is inversely related across size class of holdings at the all India level. The Table indicates that the first decile is very 'poor' since they cultivate only an average farm size of 0.3 acres compared to 24.6 acre average of the 'wealthiest' farmers. However, as shown in col(3) of Table 3.4, soil quality mitigates somewhat this inequality since average size and quality of soil are inversely related (For details, see Bhalla, (1988)).

3.1.4 Landlessness in India

We have already seen above that access to land and poverty are inversely related. In other words, landlessness and poverty are positively correlated.

The estimates given in Table 3.5 showed no change in the percentage of households who own no land in 1982 compared with 1961-62 which stabilised around 11 per cent although a slight fall in the said percentage was noticed in the 1971-72 survey.

Table 3.3 : Average Size and Quality of Soil - India, 1976/77

State	Cultivated farm size average (acres)	Quality of soil mean (Index)	Gross output per acre (Rs.)
Andhra Pradesh	6.20	0.73	814
Assam	3.30	0.73	627
Bihar	3.00	0.58	634
Gujarat	9.40	0.61	380
Haryana	10.90	0.99	1125
Himachal Pradesh	4.10	0.73	610
Jammu & Kashmir	4.10	NA	404
Karnatala	8.50	0.68	751
Kerala	1.30	1.22	2361
Madhya Pradesh	9.50	0.37	244
Maharashtra	10.50	0.37	373
Orissa	3.70	0.54	353
Punjab	9.50	1.09	1056
Rajasthan	13.10	0.40	313
Tamil Nadu	3.40	0.87	1234
Uttar Pradesh	3.50	0.75	932
West Bengal	2.70	0.79	942
India	5.90	0.65	600

Source : Bhalla (1988)

Table 3.4 : Distribution of Land and its Quality, India, 1976/77

Decile	Farms ordered by land size			Farms ordered by soil quantity	
	Average size	% share land	Average quality	Average size	Average quality
First	0.30	0.50	0.81	12.70	0.16
Second	0.70	1.20	0.70	7.60	0.30
Third	1.20	2.10	0.67	7.30	0.39
Fourth	1.90	3.30	0.65	5.80	0.48
Fifth	2.50	4.50	0.68	5.00	0.66
Sixth	3.50	6.20	0.69	3.90	0.66
Seventh	4.60	8.10	0.65	3.60	0.72
Eighth	6.70	11.80	0.62	3.40	0.81
Ninth	11.00	19.30	0.57	4.10	1.02
Tenth	24.60	43.10	0.42	3.70	1.33
All	5.70	100.00	0.65	5.70	0.65

Source : Bhalla (1988)

Table 3.5 : Landlessness in India

Year	Per cent of Households not Owing Land
1961/62	11.68
1971/72	9.64
1982	11.33

Source : Sarvekshana, October, 1987

It may, however, be noted that as shown in Appendix Table 3.1, about 35 per cent of the total cultivating households in 1987-88 had only upto one cent of land. These households also can be considered as near landless. The distribution of households by occupation (based on NSS 43rd Round data) reveal that rural labour households constitute 39 per cent of the total rural households. Obviously, majority of these households belong to the landless category.

3.1.5 Land Tenancy

With the tenancy system some of the poor people can have access to land without having ownership rights. The NSS data for all India indicates that agricultural tenancy for the entire country remained stable in the 1960s but it declined significantly during the 1970s (see Table 3.6). Land augmenting technical progress, increase in land productivity and tenancy legislations could be responsible for the decline in tenancy over the 1970s. There has also been some decline in the share of tenancy under share cropping. The percentage of area under share cropping to total leased out area declined from around 57 per cent to 46 per cent during the 1970s[2] (see Table 3.6).

The decline in share cropping could be the effect of technological progress. As shown in Table 3.7, the share of tenancy under share cropping have declined in the technologically advanced states such as Punjab, Haryana, Andhra Pradesh and Tamil Nadu. In contrast, it has increased in the agriculturally backward states of Bihar, Madhya Pradesh and Rajasthan.

[2]Based on the data for leased-in area Parthasarathy, G. (1991), however, indicates that the share of share cropped area has not declined in 1982 as compared to 1971-72.

Table 3.6 : Decline of Tenancy

Tenancy	1971/72	1982
Operated area leased in (%)	10.60	7.20
Net Leased-in area to operated area (%)	5.30	3.10
Net Leased out area as % of operated area by types of farmers		
a. Marginal	-19.40	-10.70
b. Middle	0.80	0.70
c. Large	2.20	3.10
% of Share Cropping area to total leased out area by types of farmers		
a Marginal	55.00	49.60
b. Middle	59.20	49.30
c. Large	48.70	30.80
d. All	56.50	45.90

Sources : NSS report No.215 and Sarvekshana, vol XI, No.2, October 1987.

Some people argue that tenurial system in India particularly share cropping is a barrier to adoption of new technology in agriculture and it is less efficient as compared to owner operated farms. A study by Chakravarty and Rudra (1973), however, indicates that tenant farms are not necessarily run very differently from owner-operated farms. A comprehensive empirical survey for India (Bardhan and Rudra, 1980) found that landlords took a keen interest in investment on their tenant's land and shared in the cost of new inputs so as to encourage tenants to use them.

Table 3.7 : Percentage of Area Leased-out for Share-cropping to Total Area Leased-out

States	1971-72	1982
Andhra Pradesh	69.20	36.90
Tamil Nadu	56.40	32.40
Punjab	49.20	31.00
Haryana	59.30	29.10
Bihar	32.30	57.20
Madhya Pradesh	41.20	44.40
Rajasthan	29.80	55.40

Sources: Same as Table 3.6

The critics of the tenancy system also argue that the tenants who are generally poor get even poorer as the benefits of new technology go to others. A survey by Singh (1988 a) reveals that the new technologies have benefited all farmers, including tenants but the landlord's share of his tenant's gains seems to be larger where very small share cropping tenancies predominate. "In absolute terms, the gains from new technologies are related more to the size of cultivator's holding than to his tenurial status, but where average holdings are small, net benefits of tenants are likely to be less" (Singh, 1988a, p.68)

3.1.6 Common Property Resources, Environmental Degradation and Poverty

Common property resources (CPRs) play a significant role in the life of the rural poor. CPRs are the resources accessible to the whole community of a village and to which no individual has exclusive property rights. Generally these include village pastures, community forests, waste lands, village ponds, tanks etc. Jodha's study (1986) which is based on data from over 80 villages in 21 districts in dry regions of seven states reveals significant contribution of CPRs towards the employment and income generation for the rural poor. The per household per year income derived from CPRs ranged between Rs.530 and Rs.830 in different areas. This is higher than the income generated by a number of anti-poverty programmes in some areas. "Despite such contributions of CPRs, their area and productivity are declining in all the regions. The area of CPRs has declined by 26 to 63 per cent during last three decades. Largescale privatization of CPRs has taken place mainly during the last three decades. The privatization of CPRs was done largely to help the poor. However, 49 to 86 per cent of the privatised CPRs ended up in the hands of the non-poor in different areas. Furthermore, most of the land received by the poor households was also given up by them as they did not have complementary resources to develop and use the newly received land. Thus, the rural poor collectively lost a significant part of the source of their sustenance through the decline of CPRs. This loss does not seem to be compensated by privatised CPR land given to (or

retained by) them. The situation calls for greater attention to CPRs as a part of the anti-poverty strategy." (Jodha, 1986, p.1169).

3.2 Simple Analysis of Land-Poverty Relations

Agriculture is still the main source of income for India's rural poor. The performance of agriculture is, therefore, important for raising incomes of the poverty population. Apart from agricultural production, agricultural prices particularly food grain prices also make an impact on the levels of living of the poor as they are net buyers of food.

Many studies have examined the relationship between agricultural production per capita and rural poverty in India. Ahluwalia (1978) was perhaps the first to examine the Indian evidence in a fairly comprehensive manner both at the all India level and at the level of major states. He has used agricultural value added per head of rural population apart from time variable for explaining the time series variations in incidence of rural poverty. This study shows that there was strong inverse relationship between agricultural per capita value added and incidence of poverty during the period 1956/57 to 1973/74. The results at the state level are some what mixed. On the basis of this analysis, Ahluwalia indicates that 'trickle down mechanisms' operated in rural India over the period analyzed[3]. Srinivasan (1985), however, says that these results should be interpreted with caution since there was very little to trickle-down at the all India level (p16).

Mellor and Desai (1985) show that Dharm Narain in addition to time and agriculture income per head, had used nominal prices in explaining time series variation in rural poverty. Gaiha (1989) also demonstrates that "while rural poverty and agricultural production were inversely related, the effect of the latter in some cases- especially at the state level - was either weak or absent. The effect of price fluctuations, on the other hand, was consistently strong and often decisive" (p351). This study suggests that consumer price stabilization (around a trend) in rural areas may have to be assigned a key role in anti-poverty strategy. Ghosh (1989) also shows that higher relative price of food grains/agricultural products vis-a-vis manufactures has poverty increasing impact. Commenting on Dharm Narain's work, Srinivasan (1985) says "Dharm's unfinished work is a pointer that with appropriate policies to protect the vulnerable sections of the society against food price inflation, perhaps trickle-down may come into its own. If this indeed is the case, the task of accelerating the tempo of development without inflation gains even great urgency" (p52).

3.2.1 Technology and Agricultural productivity

The above discussion indicates that lower food prices lead to reduction in poverty. It may be noted that higher agriculture growth helps at least indirectly by reducing the food prices.

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[3]Saith (1981), Griffin and Ghosh (1979) have also examined the time series variations in rural poverty. In recent years, decomposition exercises have been done to explain the roles of growth and distribution in the observed change in the incidence of poverty. For details see Jain and Tendulkar (1990), Kakwani and Subba Rao (1990) and Dutt and Ravallion (1990).

Table 3.8 : Percentage of Area Under HYV : States (Triennium Ending 1986/87)

States	Paddy	Wheat	Jowar	Bajra
Andhra Pradesh	87.50	NA	23.70	82.20
Assam	43.50	92.40	NA	NA
Bihar	49.30	90.00	NA	NA
Gujarat	65.10	71.90	14.30	91.50
Haryana	81.60	95.10	62.60	NA
Himachal Pradesh	96.00	82.90	NA	NA
Jammu & Kashmir	93.20	84.30	NA	NA
Karnataka	72.90	37.90	22.30	52.90
Kerala	49.10	NA	NA	NA
Madhya Pradesh	37.70	41.10	43.50	NA
Maharastra	66.60	93.80	49.30	56.40
Orissa	37.70	NA	NA	NA
Punjab	95.30	99.80	NA	NA
Rajasthan	33.50	76.00	2.90	28.40
Tamil Nadu	94.90	NA	53.80	NA
Uttar Pradesh	65.40	87.50	NA	NA
West Bengal	39.40	95.00	NA	NA

Sources : 1. Area and Production of Principal Crops in India 1987/88
2. Fertilizer Statistics 1987/88

The HYV technology introduced in the mid-1960s played an important role in increasing agricultural productivity in India. The new technology, however, has not covered all the crops and all the regions in India. As shown in Table 3.8, inter-state variations in adoption of modern varieties for within individual crops are large. Adoption rates for wheat were high in many states. In Karnataka and Madhya Pradesh they were low. The percentage of HYV under rice crop was very low in four states viz., Madhya Pradesh, Orissa, Rajasthan and West Bengal. Similar variations are found for coarse cereals.

Table 3.9 : Yield Levels for Major Cereals, States, 1986/87 (in kgs/ha)

States	Paddy	Wheat	Jowar	Bajra	Maize
Andhra Pradesh	2858	NA	600	583	1494
Assam	1564	1048	NA	NA	NA
Bihar	1689	1555	NA	NA	1428
Gujarat	1309	2100	278	806	1386
Haryana	3686	2837	272	453	1245
Karnataka	2974	525	799	475	2585
Kerala	2600	NA	NA	NA	NA
Madhya Pradesh	1243	1218	681	747	895
Maharastra	1720	729	488	268	928
Orissa	1667	1620	747	NA	793
Punjab	4993	2966	NA	NA	2023
Rajasthan	1322	1845	237	192	665
Tamil Nadu	4012	NA	902	942	NA
Uttar Pradesh	2033	1932	807	904	1228
West Bengal	2361	1716	NA	NA	NA
All India	2205	1916	576	401	1282

Source: Area and Production of Principal Crops in India, 1987/88

Table 3.9 provides yield levels for major cereals across states. It shows that yield levels are generally high in the states where adoption rates are high. For example, the percentage of HYV area under paddy crop in Tamil Nadu and Punjab was more than 90 per cent and the yield levels were highest in these states. For Orissa, Madhya Pradesh and Rajasthan, the adoption rates are low and these states showed very low yield levels.

Increase in the production of different crops in different regions are important from the poverty point of view at least for three reasons:

(1) As mentioned above, increase in agricultural production leads to low consumer prices of agricultural output. Farmers in regions where the new technology has not spread suffer loss in income.

(2) Development of crops like pulses and coarse cereals is necessary for improving the nutritional standards of the population particularly the poor.

(3) Development of agriculture also increases demand for labour which raises purchasing power of the poor.

A study on agricultural development at the level of districts showed that apart from technology (represented by fertilizer consumption) other factors such as extension, markets, roads, literacy of labour and agro-climatic endowments are also important in raising agricultural output in different states[4].

3.3 Land Use Policies and Poverty

As mentioned in chapter I, policies regarding institutional changes were given importance in the Indian planning particularly in the First three five year plans (1950-65), in order to help the poor. The major policy measures included abolition of Zamindari system, imposition of ceilings on land ownership and land redistribution, reform of tenurial arrangements, encouragement of co-operative farming among small and medium scale farmers, and community development projects. We present here the progress made on land ceiling and tenancy reforms.

3.3.1 Ceiling on Land Holdings

Land ceiling laws are prevalent all over the country except in the north eastern region and in some Union Territories. In other areas, the ceiling was first imposed on land holdings in the fifties and sixties. Later, guidelines on the subject were framed in 1972[5]. Under the two sets of ceiling laws, 7.23 million acers of land have been declared surplus, 5.7 million acres have been taken over by the state. By 1988-89, 4.49 million acres of land have been distributed among 4.15 million beneficiaries of which 1.46 million persons are scheduled castes and 0.57 million are scheduled tribes. However, 2.74 million acres out of total of 7.23 million acres of land declared surplus since the fifties still remained undistributed. A very large chunk of this surplus distributable land is blocked due to litigation. Also, in a majority of cases, land vested under land redistribution programme are of low quality and lack access to irrigation and, hence, need substantial investment to make it productive, as also close guidance with regard to cropping pattern and practices.

[4]See Parikh, K.S, S. Mahendra Dev and Shantanu Deshpande (1991)

[5]See Dantwala (1986)

3.3.2 Tenancy Reforms

Tenancy laws have been enacted in almost all the states with the objective of (1) Security of tenure (2) regulation of rent and (3) Conferment of ownership rights on cultivating tenants.

Implementation of the tenancy legislation is somewhat better than that of the ceiling legislation, at any rate in some states like Maharashtra and Gujarat[6]. About seven million tenant share croppers have acquired ownership rights. In this connection, the efforts of West Bengal government in the form of 'Operation Bargas' to register the share croppers in the record of rights is noteworthy. 'Operation Bargas has led to the recording of about 1.5 million share croppers who are eligible for loan from banks, while homesteads 0.25 million have been recorded. Both of these measures have reduced the dependence of the rural poor on the landlords, and have made evictions of tenants and share croppers virtually impossible - also because of the active role played by the Kisan Sabhas (Dasgupta, 1989).

3.4 Agricultural Subsidies and the Poor

The policy measures described above were part of the efforts made by the government to overcome the institutional barriers to growth and equitable distribution during the first three five year plan periods. Beginning with the Green Revolution, the government has also been providing incentives to farmers in the form of various agricultural subsidies, and assured market through procurement meant for PDS.

The major subsidies are those for fertilizer, public food distribution, irrigation, and electricity for farmers. Total budgetary subsidy on fertilizer is about Rs.3250 crores (1988/89). This amounts to more than Rs.2,000 per ton of fertilizer nutrient. Total subsidy on power, measured as losses due to lower prices to farmers, is about Rs.1700 crores (1986/87). There is also an implicit subsidy on irrigation water which is difficult to quantify. Subsidy is also incurred while providing food through the PDS at prices lower than the cost of procurement, storage and distribution.

Irrigation and fertilizer use per hectare do not vary much across size class of farmers. This would imply that these subsidies follow the same pattern of distribution as that of land. There is also considerable inter-state variation in the distribution of these subsidies. (Parikh and Suryanarayana, 1990)

Food subsidy, as measured by per capita public distribution of food grains, varies across states. It is the least in poorer states like Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (see Fig.3.2). Food subsidy, particularly in states like Kerala which has an efficient public distribution system, is progressive. The poor in these states get nearly 2/3 rds of their consumption from ration shops.

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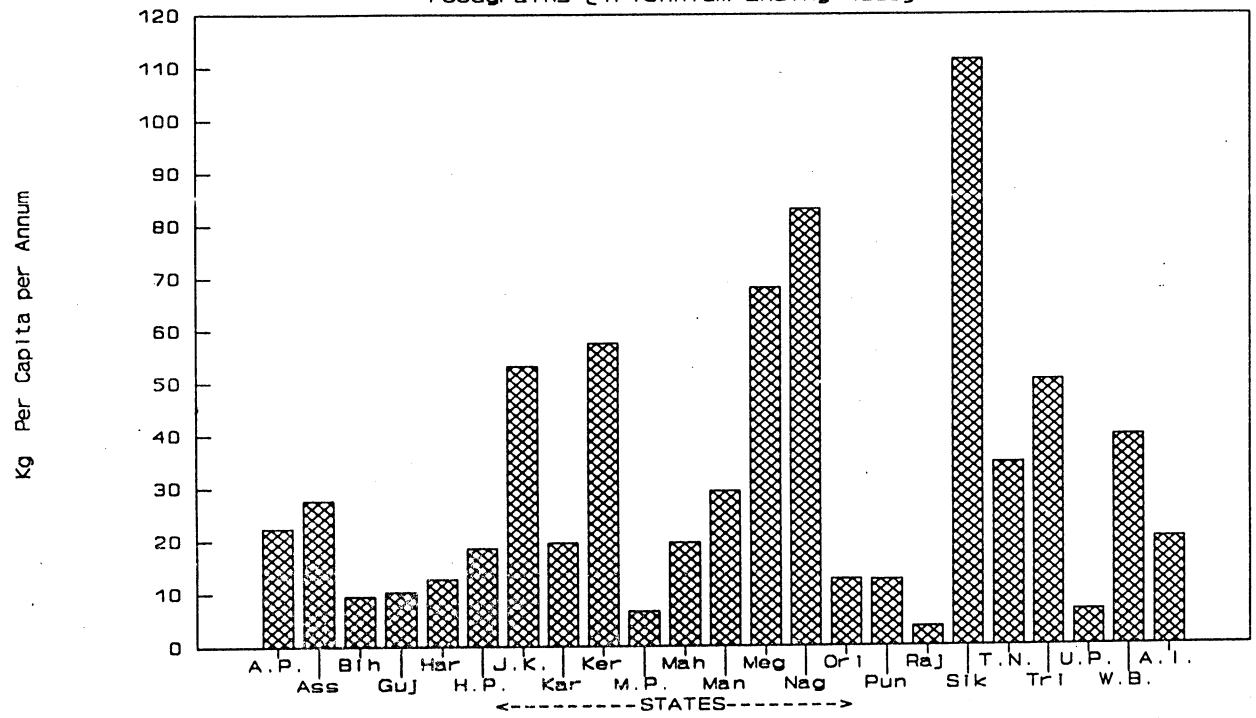
[6]See Dantwala (1986)

Much of the food required for the public distribution system is obtained through procurement at prices below market prices. This implies a tax which is progressive in its incidence on a per hectare basis. The distribution of procurement tax across states is uneven. It is heavier in states like Punjab, Haryana, Andhra Pradesh and Uttar Pradesh - the states which also benefit most from input subsidies.

Fig.3.2: Public Distribution of Foodgrains (Triennium Ending 1985)



3.5 Conclusions

This chapter analyzes the relationship between poverty and land resources. The conclusions are the following

(1) In India, as in other developing countries, poverty is inversely related to the size of land holdings.

(2) The broad evidence on the structure of land ownership in rural India upto the early 1980s shows that the number of marginal and small owners as well as the total area they own have increased while the importance of large farms decreased.

(3) The landlessness among the rural households was around 11 per cent in the 1980s. It may, however, be noted that about 35 per cent of the total cultivating households in 1987-88 had only upto one cent of land.

(4) The NSS data for all India shows that the percentage of tenancy which remained stable in the 1960s declined during the 1970s (from 10.6 per cent in 1971/72 to 7.2 per cent in 1982). There has been a decline in share cropping, from 57 per cent of leased out area to 46 per cent during the 1970s.

(5) The studies which explained the variation in the incidence of rural poverty reveal the importance of high agricultural per capita and low prices in reducing poverty.

(6) Raising agricultural productivity is important from the poverty point of view. There are considerable inter-regional disparities in agricultural productivity of different crops. Apart from technology, other factors such as extension, markets roads, literacy of labour etc. are also important in raising agricultural productivity in different regions.

(7) Since the mid-sixties, the government has been providing incentives to farmers in the form of various subsidies on fertilizer, water and power, and assured market through procurement meant for public distribution system. Irrigation and fertilizer use per hectare do not vary much across size class of farmers. There is, however, considerable inter-state variation in the distribution of these subsidies.

Appendix Table 3.1 : Inverse Relation Between Size of Land and Poverty : 1987/88

Size class of cultivated land (in hectares)	Percentage in total cultivated households	Incidence of rural poverty
0.00*	35.1	43.42
0.10 to 0.40	19.10	25.75
0.41 to 1.00	17.30	23.53
1.00 to 2.00	13.90	20.40
2.00 to 4.00	8.50	16.95
4.00 to 6.00	2.90	12.04
6.00 to 8.00	1.30	10.52
8.00 and above	1.60	9.57
All cultivators	100.00	22.87

* having upto one cent of land
Source : computed from NSSO (1990)

IV. POVERTY AND HUMAN RESOURCES

The previous chapter examined some issues relating to land resources and poverty. Majority of the rural poor are, however, marginal and landless farmers. Most of these people rely on employment opportunities in rural areas for their livelihood. Landless workers include agricultural labourers having no land of their own and other assetless non-agricultural workers. An examination of the changing conditions of these workers would provide a better understanding of the relationship between poverty and human resources. Before going to existing trends in employment and unemployment, we discuss here the importance of reduction in population growth for alleviating poverty.

4.1 Population and Poverty

India's population has touched 844 million in 1991. The growth rate of population is still above two per cent per annum. Obviously, population growth has an impact on poverty. We have already seen in chapter II that although the incidence of poverty has declined significantly over the last decade, the absolute size of the rural population under poverty has been quite significant even in recent years like 1986-87. In general, size of the family and poverty are positively related.

Viewed historically, the settlement of population in a region has been directly proportional to its natural endowments. Initially, high rainfall states/regions attracted increasing number of population. As a result, areas with high rainfall have tended to be densely populated. We have already seen that states like West Bengal, Orissa, Bihar etc. reported higher incidence of poverty as compared to the dryland dominated states.

It is noteworthy that higher population growth leads to acceleration in labour force due to the lagged effects of demographic changes on the age structure of population. The population in the working age-group (15-59 years) is the fundamental supply-side factor in the labour market. The trends in the proportion of working age (15-59 years) indicate that the percentage of these people increased since 1971 and it is likely to increase further in the years to come as shown by the estimates on population projections[1]. For this reason, the number of potential entrants to the labour force would increase further.

The above points highlight the importance of slowing down the population growth for alleviating rural poverty. Reduction in population growth should, therefore, be the central operational objective of development policy.

[1]See Report of the Committee on Population Projections, Census, 1985.

4.2 Trends in Employment and Unemployment

The NSS provides employment characteristics on the basis of sample data for which comparable information is available for the years 1972-73, 1977-78, 1983 and 1987-88. The census also collects data on employment. However, we rely on NSS data since it is more reliable due to a well trained field staff and considerable expertise in designing large scale sample surveys in employment and unemploymennt[2].

4.2.1 Trends in Work Participation Rates

The data on worker participation rates relating to usual status suggest that they were around 54 per cent for males and 32 to 34 per cent for females in rural areas (see cols.2 and 4 in Table 4.1). The participation rates were lower in urban areas as compared to those in rural areas. However, all the workers classified under usual status are not employed all the time. According to daily status, only around 50 per cent of males actually had work in 1987-88 while 54 per cent were categorised as workers according to usual status. The difference between daily and usual status is more marked for rural females (see Table 4.1).

Table 4.1 : Work Paritcipation Rates : All India, 1972/73 to 1987/88

NSS Round	Male		Female	
1	2	3	4	5
Rural				
27(1972-73)	56.5	52.1	33.0	24.0
32(1977-78)	55.2	48.8	33.1	19.4
38(1983)	54.7	48.2	34.0	19.8
43(1987-88)	53.9	50.1	32.3	20.7
Urban				
27(1972-73)	53.3	50.8	14.3	11.5
32(1977-78)	50.8	47.2	15.6	10.9
38(1983)	51.2	47.3	15.1	10.6
43(1987-88)	50.6	47.7	15.2	11.0

Source: NSSO (1990)

[2]See Krishnamurthy, J.(1988).

4.2.2 Unemployment

In India, the extent of unemployment measured in terms of daily status is considerably higher than with reference to usual status[3]. While barely two per cent of the male workers report themselves to be chronically unemployed, unemployment measured on the basis of current daily status works out to be over five per cent of the labour force in 1987-88. The corresponding figures for females are 2.4 per cent and 6.7 per cent respectively. In the absence of unemployment insurance, very few people in the rural areas can afford to remain idle over a long period, and most of them would accept any available work. Consequently, the usual status unemployment is unlikely to be closely related to the levels of living of the households[4]

4.2.3 Underemployment

The problem of underemployment is far more severe than chronic unemployment in India. Underemployment is of two types, visible and invisible. Agriculture being the main sector of work, many engaged in that sector for a relatively longer period in the year, may not find enough work during the lean seasons in agricultural activities and therefore, may remain unemployed during some part of the year. This is more so among the self employed and agricultural labourers. Thus, a section of the population categorised as usually employed does not have work throughout the year and in that sense is underemployed. Since one can measure the number of weeks or days an employed person remain unemployed, this type of underemployment is visible and measurable.

NSS 38th round (1983) provides some estimates of underemployment by using cross-classification of three measures of employment namely, usual status, weekly status and daily status, as given below.

Usual status versus daily status:

Around six per cent of the usually employed rural males and females are unemployed during a week of the year. Interestingly, about five per cent of the males and 21 per cent of the females usually employed had withdrawn from the labour force on an average day.

Weekly status versus daily status:

In rural areas, on an average about four per cent of the person-days of those who had some work during a week were unemployed both in the case of males as well as females. Rural females withdraw from labour force on almost nine per cent of the days in a week when there is no work for them. The corresponding proportion for rural males was two per

[3]NSS since 1972-73 measures employment and unemployment by following three approaches namely usual status, current weekly status and current daily status. For details see Sarvekshana, Vol.XI, No.4, April 1988.

[4]For the trends in unemployment rates over time, see chapter V.

cent. Thus, a part of the labour time (in terms of days) of those who had some work in a week is either underutilised or unutilised.

A second category of usually employed, particularly the self-employed may appear to work throughout the year. But either in terms of productivity or income, the work may not be sufficient for them. With the large quantum of time available with them, they may spread 'work' they are having with them and in that sense are underemployed. Such underemployment, in fact, is not visible and therefore, it is not directly measurable. However, indirectly it is measured based on the answers to the probing questions put to the usually employed. Thus, a count of those among the usually employed who answered in the affirmative to the particular probing question will give an indirect measure of the 'underemployed'. In 1983, about 20 per cent of the usually employed males and 18 per cent of usually employed females (i.e.available for additional work or underemployed) in rural areas. Underemployment is the highest among casual labourers, particularly among those usually engaged in agricultural activities (of the order 33-39 per cent)[5].

4.2.4 Unemployment and Poverty

Many studies have shown empirically that poverty and unemployment are positively related (see Visaria, 1980). Table 4.2 provides the estimates of unemployment rates (usual, weekly and daily status) for two groups of households, namely, those below and those above the poverty line. We find that the usual status (principal activity) rate unemployment is lower, especially for rural males in the poor households, than for those in the non-poor households. This implies that being unemployed as a 'principal activity' over long period is a ill-affordable luxury for rural males in the poor households(see Sundaram and Tendulkar, 1988). Table 4.2 also indicates that the rates of unemployment are distinctly higher for the non-poor under the weekly status but much more so, under the daily status. It would thus be concluded that there was no significant association between incidence of poverty and usual status unemployment rate but there was significant positive relationship between incidence of poverty and person-day unemployment rate.

[5]For further details on underemployment, see Sarvekshana, VolXI, No.4, April 1988.

Table 4.2 : Incidence of Unemployment by Usual, Weekly and Daily Status for Labour Force Located in Households Below and Above the Poverty Line, All India (Rural): 1977/78

	Rate of Unemployment for Labour Force Located in Different Households		
Category of Unemployment (1)	Below the Poverty Line (2)	Above the Poverty Line (3)	All (4)
Usual principal activity status			
Males	1.91	2.42	2.22
Females	5.50	5.54	5.52
Persons	3.20	3.30	3.26
Weekly status			
Males	4.01	3.28	3.57
Females	4.74	3.61	4.13
Persons	4.26	3.37	3.74
Daily status			
Males	9.02	5.87	7.12
Females	11.28	7.33	9.18
Persons	9.73	6.25	7.70

Source: Sundaram and Tendulkar (1988)

4.3 Forms of Rural Employment, Wages and Annual Earnings of Labour Households

4.3.1 Forms of Rural Employment

Broadly, the rural workers can be divided into three categories (i) self-employed (ii) regular wage/salary employed and (iii) casual labourers. In 1972-73, about 65 to 66 per cent of rural workers were found to be engaged in self-employment. By 1983, their share declined to 60 to 62 per cent (see Table 4.3). The decline was mainly in agriculture for males and non-agriculture for females. The proportion of regular employees also declined over time. The share of casual labourers, however, increased significantly in both agriculture and non-agriculture. The conclusion from the trends on the forms of rural employment is that rural workers are getting more casualized both in agriculture and non-agriculture. This is true in most of the states in India (see Vaidyanathan, 1986b).

The empirical evidence shows that casual workers are the poorest among the workers. The incidence of poverty for three types of workers presented in Table 4.3a indicates that around 58 per cent of the casual workers were below the poverty line whereas self employed reported only 32 per cent poverty incidence. From the policy point of view, the anti-poverty programmes should give more attention to the casual labourers than others.

Table 4.3 : Distribution of Workers by Status and Sector of Employment by Sex, Rural India, 1972-73 to 1987-88

Status/Sector of Employment	Males				Females			
	1972-73	1977-78	1983	1987-88	1972-73	1977-78	1983	1987-8
1	2	3	4	5	6	7	8	9
A. Self Employed	65.9	62.7	60.4	58.6	64.5	62.1	61.9	60.3
i) Agriculture	55.0	52.6	49.7	-	54.7	54.7	56.7	-
ii)Non-Agriculture	10.9	10.1	10.7	-	9.8	7.4	5.2	-
B.Employeees	34.1	36.9	39.6	-	35.5	37.9	38.1	-
1. Casual Employees	22.0	26.6	29.3	32.1	31.4	35.1	35.3	35.5
i) Agriculture	19.3	23.2	24.6	-	28.9	32.3	32.3	-
ii) Non-Agriculture	2.9	3.5	4.7	-	2.5	2.8	3.0	-
2. Regular Employees	12.1	10.8	10.6	10.4	4.1	2.8	2.8	3.7
i) Agriculture	6.6	4.5	3.8	-	2.1	1.1	1.0	-
ii) Non-Agriculture	5.5	5.8	6.5	-	2.0	1.7	1.8	-
All Workers	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0

Sources : 1. Sarvekshana, Vol.V, Nos.1-2, July-October, 1982 Vol.XI, No.4, April 1988.
2. NSSO (1990)

Table 4.3a : Incidence of Poverty for Types of Workers in Rural Areas: 1977-78

Type of Workers	Incidence of Poverty
Self employed	31.7
Regular wage/salary workers	49.3
Casual workers	58.2

Source : Mahendra Dev (1988a)

4.3.2 Wages and Annual Earnings of Agricultural Labourers

As shown in the earlier chapters, agricultural labourers are among the poorest segments of the rural society. An examination of the trends in wages and days of employment for these labourers would give an idea about changes in the living condition of this poor population.

Real wage rates for the period 1970-85 for 58 agricultural regions estimated by Acharya (1989) suggest that a rising trend in real wages has been operating in many regions. Male and female real wages have increased significantly in 1982-85 triennium as compared to 1970-73 triennium. The study by Jose(1988), however, showed a mixed picture at the state level. These studies show a strong association between the value of agricultural output per worker and average daily wage earnings at the state level and also at the NSS region level

(Jose, 1988 and Acharya, 1989). There was also close correspondence between wage rates and per capita expenditure during the period 1970-85 in many regions (World Bank, 1989).

The wages alone, however, do not indicate the total income of the labour households. The quantum of employment available per worker and the wage rates together determine the annual income of labour households. Unni (1988) reviews the changes in the economic conditions of agricultural labourers during 1956-78. Although there was some improvement in the standard of living of agricultural labourers, the study cautions on the conclusions since these are drawn using data on only two time points i.e. 1964-65 and 1974-75. The study, however, indicates two strategies adopted by the labour households to maintain their real income levels in a year of scarcity. "In a year of poor agricultural output, persons generally outside the labour force, such as women, entered the work force. Secondly, the proportion of non-wage and non-agricultural income of these households was higher in such a year, that is, these households undertook some form of self-employment and non-agricultural work to earn a living" (p A67). The entry and exit of women from the workforce appear to be dependent on the fluctuating income level of the household.

There are differences in wage rates between rural and urban areas and between males and females (see World Bank, 1989).

4.4 Rural Non-Agricultural Employment and Poverty

The problem of rural poverty can be reduced if non-agricultural employment grows sufficiently rapidly. The pattern of rural employment in India shows a significant and sustained tendency to diversification. As shown in Table 4.4, the share of workers in non-agricultural sector increased significantly from around 17 per cent in 1972-73 to around 26 per cent in 1987-88 for males. The corresponding figures for females were 10 per cent and 15 per cent respectively. The pressure of workers on agriculture has thus declined over time[6].

The figures in Table 4.4 also show that increase in the tertiary sector was higher than that of the secondary sector for males while the converse was true for females.

[6]It may be noted, that the rural labour households get substantial share of their income from rural non-agricultural activities. See Unni (1988) for details.

Table 4.4 : Percentage Distribution of Persons Usually Employed by Industry Division

	Male		Female	
Industry Groups	1972-73	1987-88	1972-73	1987-88
Agriculture, hunting,forestry & fishing	83.2	74.5	89.7	84.7
Non-Agriculture	16.8	25.5	10.3	15.3
Mining & quarrying	0.4	0.7	0.2	0.4
Manufacturing	5.7	7.4	4.7	6.9
Electricity,gas and water	0.1	0.3	Neg	Neg
Construction	1.6	3.7	1.1	2.7
Wholesale & retail trade and restaurents and hotels	3.1	5.1	1.5	2.1
Transport,Storage and communication	1.0	2.0	Neg	0.1
Services	4.8	6.2	2.8	3.0
Total	100.0	100.0	100.0	100.0

Source: 1. Sarvekshana, Vol.XI, No.4, April 1988
2. NSSO (1990)

There are considerable inter-state variations in the proportion of non-agricultural employment in rural areas. It varied from around 11 per cent in Madhya Pradesh to 35 per cent in Kerala in 1977-78. The growth of non-agricultural employment depends on several factors. In some areas, non-agricultural growth is due to agricultural growth linkages while in others it could be due to agricultural underdevelopment, unemployment and poverty. From the policy point of view, identification of the factors influencing regional variations in the share of non-agricultural employment in rural areas is important. In a recent study (Mahendra Dev, 1990b), variations in the share of non-agricultural employment across 56 agro-climatic regions are sought to be examined with person day unemployment rate, land productivity and Gini coefficient of the concentration in rural assets. The three explanatory variables explain

around 60 per cent of the inter-regional variations in the shares of rural non-agricultural employment[7].

An analysis of unemployment and poverty for major industry groups in the rural non-agricultural sector may give some idea about the nature of the levels of living in this sector. It may be noted that along with the non-agriculture sector, information is also provided for the agricultural sector in order to show the contrast between the two sectors.

The incidence of person day unemployment rates presented in Table 4.5 show that it was higher in non-agriculture than that of agriculture.

Table 4.5 : Incidence of Person Day Unemployment in Rural India 1977/78

	Principal Indusrty 'Agriculture'	Principal Industry 'Non-Agriculture'
Males	6.85	8.25
Females	9.01	10.03
Total	7.47	8.70

Note : Incidence of person day unemployment is defined as a ratio of unemployment days to labour force person days.
Source : Mahendra Dev S.(1990b)

Also, unemployment in rural manufacturing was higher than that of agriculture. In non-agricultural sector, incidence of unemployment was generally higher for construction, transport and mining and quarrying (see Table 4.6).

[7]For an analysis of non-agricultural employment at the state level, see Vaidyanathan (1986b). Also see Bardhan K, (1989).

Table 4.6 : Incidence of Person Day Unemployment of Households with Principal Industry 'Non-Agriculture' by Industry and Sex in Rural Areas : All India, 1977/78

Principal Household Industry	Incidence of Person Day Unemployment			Percentage Distribution	
	Male	Female	Person	Total Labour Days, Persons	Total Unemployment Days,Persons
Minig and quarrying	11.18	10.65	11.04	3.00	3.80
Manufacturing	7.65	9.59	9.22	35.40	33.40
Electricity, gas and water	8.16	14.12	8.85	0.90	0.90
Construction	15.23	12.57	14.23	8.40	14.00
Trade	4.68	6.07	4.99	19.10	10.90
Transport	11.69	19.8	13.14	5.70	8.70
Services	6.27	8.94	6.93	26.40	21.10
Others	71.21	39.15	58.17	1.10	7.20
Total non-agriculture	8.24	10.03	8.70	100.00	100.00

Source: Mahendra Dev (1990b).

The poverty estimates at the state level show that incidence of poverty in non-agriculture varied from around 12 per cent in Punjab and Rajasthan to 51 per cent in West Bengal. In general, incidence of poverty in non-agriculture was high in the states where poverty incidence in agriculture was high (see Table 4.7). In fact, the correlation coefficient between the incidence of poverty in agriculture and incidence of poverty in non-agriculture in 15 states was 0.91 in 1977-78.

Poverty estimates for different sectors in non-agriculture reveal that construction and manufacturing sectors reported relatively higher incidence of poverty in several states(see Table 4.8).

Table 4.7 : Incidence of Poverty and Percentage Shares of Poverty Households and All Households for the Households with Principal Industry 'Agriculture' and Principal Industry 'Non-Agriculture' in Rural Areas : 1977/78

	Incidence of Poverty		Agriculture		Non-Agriculture	
	Agricu lture	Non-Agri culture	Per cent share in Poverty	Per cent share in Total HHs	Per cent Share in Poverty	Per cent in Share in Total HHs
1	2	3	4	5	6	7
Andhra Pradesh	29.80	23.10	6.19	8.89	6.50	9.93
Assam	36.00	31.40	2.93	3.48	1.86	2.08
Bihar	53.20	49.60	15.11	12.13	13.83	9.84
Gujarat	31.30	17.70	3.32	4.53	1.66	3.31
Haryana	15.90	25.60	0.56	1.51	1.46	2.01
Karnataka	44.60	37.10	5.28	5.06	4.33	4.13
Kerala	38.50	33.10	2.75	3.05	7.18	7.64
Madhya Pradesh	49.40	38.00	10.93	9.45	4.94	4.58
Maharastra	50.20	37.90	10.00	8.52	8.71	8.11
Orissa	60.50	48.40	7.33	5.17	5.84	4.26
Punjab	9.20	11.90	0.43	2.03	1.03	3.05
Rajasthan	22.80	11.60	2.47	4.63	2.68	4.67
Tamil Nadu	47.30	33.50	7.87	7.10	9.54	10.03
Uttar Pradesh	34.90	34.90	14.13	17.27	16.90	17.08
West Bengal	63.60	51.40	10.70	7.18	13.54	9.28
All India	39.10	31.60	100.00*	100.00*	100.00*	100.00*

Note: * Total 15 States.
Source: Mahendra Dev(1990b).

Table 4.8 : Incidence of Poverty among Households in 'Non-Agriculture' by Principal Industry :1977-78

States	Mining and Quarrying	Manufacturing	Electricity, Gas and Water	Construction	Trade	Transport	Services	Others	Total Non-Agriculture
Andhra Pradesh	26.8	22.8	11.6	21.3	20.3	18.0	22.9	29.1	23.1
Assam	0.0	25.4	50.0	65.5	23.3	41.5	30.2	48.1	31.4
Bihar	39.8	54.6	31.7	66.0	47.8	42.2	46.7	50.4	49.6
Gujarat	59.6	19.8	15.8	21.4	15.2	14.3	15.1	11.8	17.7
Haryana	16.1	30.1	0.0	40.0	18.8	27.1	18.6	21.6	25.6
Karnataka	44.5	42.8	24.6	52.2	32.7	38.5	25.3	37.2	37.1
Kerala	35.4	43.6	22.9	30.1	28.3	32.2	22.0	43.1	33.1
Madhya Pradesh	32.1	51.5	0.0	43.7	33.8	41.5	27.5	35.9	38.0
Maharashtra	56.6	42.2	17.9	53.6	35.6	37.3	26.4	45.9	37.9
Orissa	59.5	52.0	30.8	72.1	53.6	38.2	43.0	42.8	48.4
Punjab	0.0	11.0	7.8	16.3	9.6	11.8	12.3	11.9	11.9
Rajasthan	26.0	22.0	13.5	31.2	20.0	12.2	12.4	19.1	11.6
Tamil Nadu	30.7	34.6	11.5	38.7	33.8	29.1	32.4	34.1	33.5
Uttar Pradesh	42.6	38.4	6.4	38.3	35.8	36.9	31.6	30.6	34.9
West Bengal	28.8	54.2	29.4	54.5	55.1	49.1	44.2	61.7	51.4
All India	31.2	35.3	13.5	37.4	30.5	28.5	26.7	33.3	31.6

Source : Mahendra Dev(1990b)

Can one draw any inference from this evidence about the nature of non-agricultural activities? or can we say from these estimates whether the shift of employment from agriculture to non-agriculture is productive? Our estimates show that incidence of poverty for non-agriculture was lower than that of agriculture in many states. Within the non-agriculture sector, the incidence of poverty was lower for services as compared to that of the manufacturing sector. It does not, however, mean that workers should not be shifted to the rural manufacturing sector. On the other hand, we should strengthen our rural industrial enterprises by providing investment and better technology so that employment in these activities can be more productive. However, the quality of employment in rural manufacturing may differ from state to state. For example, the quality of employment in industrial activities in Punjab may be much better (and more modernised) than, say, in that of Bihar. Micro studies in different states may give better insights on the quality of employment including incomes and wages in rural non-agricultural activities.

4.5. Employment Policies and Poverty

Generation of adequate employment in the economy and ensuring a basic standard of living to the poor have been among the principal objectives of economic planning in India.

4.5.1. Minimum Wage Laws and Unionization

In India, the Minimum Wage Act, 1948 came into force with effect from 15th March, 1948. The Act aims at preventing exploitation of workers in scheduled employments by fixing the minimum rates of wages. The Legislation, interalia provides for fixation/revision of minimum rates of wages, fixation of hours of work, spread over, payment of overtime wages, besides providing penalties for offences under the Act and rules made thereunder. All the State governments and Union Territories have framed their minimum wage rules. Over time, more categories of employment have been added to the schedule appended to the Minimum Wages Act, 1948[8].

Unionization particularly in the organized and some segments of the unorganized sector has helped in the enforcement of minimum wages.

4.5.2 Unorganised Labour in Agriculture

Agricultural workers constitute the largest segment of wage employed workers in the country. However, they are generally outside the scope of labour laws. In view of the crucial importance of the unorganized agriculture labour in the nation's commitment to remove poverty and establish an equitable, social and economic order, a sub-committee of the parliamentary consultative committee attached to the Ministry of Labour was set up in 1986 to enquire into and make recommendations about the problems of unorganized agricultural labour[9]. The sub-committee visited Andhra Pradesh, Bihar, Madhya Pradesh, Kerala, Orissa, Tamil Nadu, West Bengal and Goa. In the course of field visits, the sub-committee visited villages and enquired about the living conditions of the unorganized agriculture labour. Some of the findings are the following:

1. In a number of places, the agricultural workers complained that the contractors engaged by the Government to carry out different types of schemes were paying less than the minimum wage. Even government departments were alleged to be resorting to underpayment in the same way.

2. Wage discrimination on the basis of sex is palpable in many areas of the states they had covered. Generally, female agricultural workers are paid less than the male workers.

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[8]See Report on Minimum Wages, 1987.

[9]See Mainstream, January 2, 1988

3. The trade union movement has not made the desired impact on the condition of agricultural workers except in a few places.

4. The largest number of complaints concerning violation of minimum wages notification was in Bihar. In Bihar, an elaborate infra-structure for the enforcement of minimum wages has been built up. But the fact of life does not prove it to be effective.

The sub-committee recommends that there should be a central law for agricultural workers to provide a basic framework for their working conditions, wages and social security. The detailed rules and regulations to be framed under the central law may be left to the states in view of the diverse conditions prevailing in various parts of the country.

It may be noted that apart from agriculture even in the non-agriculture sector of rural areas, the effective implementation of Minimum Wages Act was hampered due to several reasons such as inadequacy of enforcement machinery, scattered nature and location of establishments, absence of strong trade unionism among labour, illiteracy among workers and employers etc.

4.5.3 Anti-poverty Programmes for Self Employed and Wage Employed

Even with rapid growth, a number of poor people, who because they lack assets, cannot benefit directly or immediately. Recognizing this, the government of India introduced target group oriented programmes that transfer income or employment benefits to the poor. The anti-poverty target-group oriented programmes initiated in different five year plans can be broadly divided into the following two categories.

(a) Self-Employment Programmes: Small Farmer's Development Agency (SFDA) and the Marginal Farmers and Agricultural Labourers Development Agency (MFALDA) were initiated during the Fourth Plan period. Integrated Rural Development Programme (IRDP), Training of Rural Youth for Self-Employment (TRYSEM), Development of Women and Children in Rural Areas(DWCRA) were introduced in the Sixth Plan.

(b) Wage Employment Programmes: Rural manpower programme was in operation between 1960-61 to 1968-69. The Crash Scheme for Rural Employment (CSRE) was launched for a period of three years from 1971-72. The Pilot Intensive Rural Employment Project (PIREP) operated for a period of three years ending in 1975. Food for Works Programme started on an ad hoc basis in 1977. National Rural Employment Programme(NREP) and Rural Landless Employment Guarantee Programme (RLEGP) were introduced in the Sixth Plan.

Employment Guarantee Scheme: Among the Rural Works Programmes, Employment Guarantee Scheme (EGS) in Maharashtra is perhaps the first programme in the developing countries which guaranties the right to work as a basic one. A comparison of the EGS with

other nationwide programmes like IRDP and NREP shows that the performance of the EGS was better. The EGS has certainly reduced the poverty and enhanced the levels of living of the workers in Maharashtra. (For further details on this scheme and other anti-poverty programmes see chapter V).

4.5.4 Employment Policies Towards Small Scale and Large Scale Industries

The industrial strategy has been almost dualistic in that capital intensive firms have been targetted towards import substitution, and traditional small labour intensive ones towards employment generation. As a result, the large scale industries have drawn scarce capital into inherently low employment generation activities. The data for the factory sector suggest that industrial employment has increased at a much slower pace in the 1980s than in the 1970s, despite the sharp rise in industrial growth. An analysis of past employment change shows that in the 1970s and early 1980s there has been a substantial decrease in the amount of labour used per unit of value added (World Bank, 1989). In small scale industries, the generated employment has often been unproductive. As a result labour productivity is quite low in small industries as compared to large scale industries.

As mentioned in other chapters, rural poverty can be reduced by shifting the surplus labour from agriculture to non-agriculture (either industries or services). Given India's need for generation of productive employment over the next several decades, new industrial strategies and labour policies seem desirable (For further details on industrial strategy for employment growth, see chapter V of this report).

4.6. Nutrition, Health, and Education

Adequate nutrition, good health, and educational attainment are obviously important for the rural poor to raise their standard of living.

4.6.1 Nutritional Interventions

The Government of India has introduced various programmes for filling the nutrition gaps at the household level. Subba Rao (forthcoming) has reviewed these programmes. He has analysed these interventions under three broad categories (1) Public Distribution System; (2) Various Public Employment Programmes; and (3) other Special Feeding Programs - Chief Minister's Nutrition Meal Programme in Tamil Nadu and Integrated Child Development Services at the national level.

According to this study "the basic objectives of these interventions are to combat off-seasonal or drought-induced malnutrition, and to protect specific vulnerable groups such as children from malnutrition. The broad conclusion is that food and nutrition interventions by and large benefitted social groups not at nutritional risk, while bypassing groups critically poor. The critically poor continue to sustain trend-level shortfalls as well as severe malnutrition in the drought years" (p 26).

4.6.2 Health

The poor generally remain susceptible to ill health and malnutrition and tend to underconsume educational services. In India, the priority issues regarding health seem to be in three areas: (a) Water and sanitation (b) family planning and (c) improvement in primary health centres and immunization schemes.

The 1982 National Health Policy redefined programme priorities (and the package of services offered) in line with the objective of providing "an integrated package of services to tackle the entire range of poor health conditions. The goal of the 1986 revised Family Welfare Strategy is to strengthen public provision of mother and child health and family planning information and services. Another important intervention is the Integrated Child Development Services (ICDS) scheme, begun in 1975, which delivers a package of basic health, nutrition and pre-school education services to children under six and to pregnant and lactating women". (World Bank, 1989 - pp.XXXVI and XXXVII). As shown in Chapter II, despite these admirable goals the health services are inadequate. The public spending on health related services amounted to only 1.6 per cent of GDP in 1986-87.

4.6.3 Education

The 1991 population census shows that the literacy rate in India has increased from 43.6 per cent in 1981 to 52.1 in 1991[10]. There are considerable inter-state variations in literacy rates. Kerala's literacy rate is a commendable 91 per cent while those of Bihar and Rajasthan are 38.5 and 38.8 respectively. The literacy rates for women are much lower than those of men in many states. One of the major criticisms against the government policies on education is that it has given more importance to higher education and neglected primary education. Another area of concern is the drop-out rates from schools which are quite high in India.

As shown in chapter II, the poor have a lower level of educational achievement than the population at large. Among poor rural women, there is virtually uniform illiteracy in Andhra Pradesh, Bihar, M.P., Orissa and Rajasthan (World Bank, 1989). The Government of India is aware of this problem of the educational status of the poor and has responded with some policies. The more recent of these initiatives is the National Policy on Education (NPE), a wide ranging programme aimed at revitalizing the education system and achieving universal primary school enrollment and other goals.

However, these intiatives have not reached majority of the poor. "The Challenge of Education document prepared by the Education Ministry in 1985 provides a cogent analysis of problems experienced in extending primary schooling and basic literary services to the poor" (World Bank, 1989, p.122).

[10]The statistics regarding literacy in 1991 Census were collected for literates of seven years and above. The 1981 Census figures are adjusted correspondingly.

The Seventh Five Year Plan recognized that "programmes for alleviation of poverty, reduction of social and economic inequalities and improving productivity should be integrated with educational development" (Vol.II, p.252).

The above discussion on health and education reveals the priority areas for improving the levels of living of the poor. In this connection, the priority states seem to be four namely, Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (BIMARU). These four states constitute about 40 per cent of the country's population. Some health and education indicators of these BIMARU states and all India are given in Table 4.9. It indicates that the performance of these four states in terms of health and education is much poorer than that of all India. These four states, therefore, should be given priority in order to improve health and education in India.

Table 4.9 : Indicators of Health and Education for BIMARU States and All India

	Bihar	Madhya Pradesh	Rajasthan	Uttar Pradesh	All India
Rural Female Literacy (1987-88)	14.3	15.6	9.8	17.2	25.9
Illiterate Adults (1981)	77.4	81.0	79.1	69.8	69.8
Birth Rate (1986-88)	36.8	36.4	34.8	37.4	32.0
Infant Mortality (1986-88)	100.0	120.0	104.0	128.0	95.0
Life Expectancy (1976-80)	40.4*	49.0	51.9	46.2	52.3
Couple Protection Rates (1986-87)	20.6	36.1	26.0	25.0	37.5
Hospitals & Dispensaries per lakh persons	40.0	43.0	64.0	48.0	91.0

* refers to 1970

Sources :
1. Population Census
2. Vital Statistics
3. CMIE (1990)
4. NSSO (1990)

4.7 Conclusions

The conclusions of our analysis on poverty and human resources are as follows:

(1) Worker participation rates relating to usual status are around 54 per cent for males and 32 per cent for females in rural areas in 1987-88. They are lower in urban areas.

(2) Males reported 2 per cent and 5 per cent unemployed rates based on usual status and daily status respectively in 1987-88. The corresponding figures for females were 2.4 per cent and 6.7 per cent respectively. Regarding underemployment, 20 per cent of the usually employed males and 18 per cent of usually employed females are underemployed in 1983. It is the highest among the casual labourers (of the order 33-39 per cent).

(3) The changes in the composition of rural workers show that the percentage of casual workers increased over time. In other words, rural workers are getting more casualized. This is true in most of the states in India. Casual workers are the poorest class. 58 per cent of them were below the poverty line whereas only 32 per cent of the self employed were poor.

(4) Rural employement in India shows a significant and sustained tendency to diversification. Between 1972/73 and 1987/88 the share of workers in non-agriculture increased from 17 yo 26 percent for males and from 10 to 15 per cent for females. The estimates of poverty for major sectors in rural areas reveal that the incidence of poverty for non-agriculture was lower than that of agriculture and lower for services than manufacturing in many states.

(5) Regarding health, the government has undertaken several programmes. Despite these programmes, the health services are inadequate. The public spending on health related services amounted to only 1.6 per cent of GDP in 1986-87. The priority issues in health are water and sanitation, family planning, improvement in primary health centres and immunization schemes.

(6) There are considerable inter-state variations in literacy rates. The literacy rates for women are much lower than those of men in many states. In the context of education of the poor, two problems are often mentioned, relative neglect of primary education, and high drop-out rates from schools.

(7) The performance of four states namely Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (BIMARU) in terms of health and education is much poorer than that of all India. The BIMARU states, therefore, should be given priority in order to improve health and education in India.

V. ECONOMY WIDE POLICIES AND POVERTY

5.1 Importance of Macro-economic Policies

For a country like India, where the rural poor constitute a sizeable fraction of its population, where agriculture provides 35 per cent of its GDP and where 65 per cent of the population depend on agriculture, macro-economic policies play a particularly important role in poverty alleviation. To remove poverty is to increase the real incomes of the poor. This can be achieved by (a) providing them more assets such as land (e.g. through redistribution) or skills (through education and training) which increase their income earning capabilities; (b) increasing the value of their assets which is mainly comprised of unskilled labour, through increasing the demand for such labour; (c) reducing the cost of food on which the poor spend greater part of their incomes, or (d) increasing their incomes through transfers.

All these call for policies for rapid economic growth and/or redistribution.

The critical role of macro-policies in promoting growth and employment are well recognized. Given the size of the population under poverty, any redistributive programme, even a targeted one, will have significant macro-economic incidence which cannot be neglected and some of which can in the long run even defeat the purpose of the policy. In this chapter we examine how India's development strategy has affected the rural poor and how inspite of the failure of the strategy poverty is contained.

5.2 India's Development Strategy

The objective of India's development strategy has been to establish a socialistic pattern of society through economic growth with self-reliance, social justice and alleviation of poverty. The institutional framework of a mixed economy is used where both public and private sectors co-exist and where a national planning commission sets targets for sectoral development and various social welfare programmes. During most of the past four decades the desired sectoral allocations were sought to be realized through industrial licensing and restricting imports only under import permits, self reliance was equated with import substitution and whenever a product was domestically available imports were generally not permitted. India has followed a development strategy based largely on import substitution and only in the last few years export promotion has been considered a feasible and worthwhile option for accelerating development.

The strategy for industrialization was based on a heavy industry first strategy (machines to build machines to build machines ...). Self-reliance also required that technology imports were restricted to one time import and subsequent assimilation of the imported technology. Thus reduction in the import content, rather than domestic resource cost of production, became the guiding parameter of the drive towards self-reliance.

This strategy led to, what was obvious to some but what is now obvious with a 20/20 hindsight to most people, a number of problems. The heavy industries involved hefty investment with high capital/output ratios and had long gestation lags and required large imports of capital goods. The gestation period was unduly long owing to inadequate infrastructure, lack of experience and the necessity of learning by doing. Obviously these factors increased the cost which cascaded into all industries using these inputs. In order to protect the high cost domestic industry against foreign imports, trade was restricted and protection through high tariff and quotas was provided. To stimulate investment on domestically produced high cost capital goods, capital was subsidized and factor prices got distorted resulting in choice of more capital intensive techniques than would have been appropriate given the factor endowments of the country. Even if such a strategy was applied properly, a capital intensive slow growth economy would have occurred naturally. Such types of economics encourages inustrialists, traders, bureaucrats and politicians to go for rent seeking activities that provide immediate financial benefits rather than going for long term economic gains through efficient domestic production of goods. The domestic industry which was already protected from foreign competition through import restrictions against any domestically available product, and from domestic competition through industrial licensing, had thus no incentive to be efficient.

The slow growth of the economy (3.5 percent on the average from 1950-80) and employment (1.83 per cent growth in the organized manufacturing sector employment over 1971-1986) did not help much in reducing poverty as the population kept growing at a rate exceeding 2.2 per cent.

This inward looking development strategy implemented through bureaucratically controlled quantity restrictions (called the "permit-quota raj") started to move gradually towards liberalization in 1980. Perhaps liberalization is too charitable a word. The policy changes over the 1980s are better described as a process of debureaucratisation in which licensing requirements were relaxed for increasingly larger levels of investments and in which more and more items were permitted to be imported without an import permit though, still with a substantial tariff. Even this has resulted in a significant increase in the growth rate of the Indian economy exceeding five per cent over the 1980s compared to 3.6 per cent over the previous three decades.

This higher growth rate has also resulted in reduced unemployment over the period in rural areas (Table 5.1). In terms of number of person days of unemployment, the rates have come down for both rural males and females. For urban males and females the rates have not shown any uniform trend since 1972/73 though over the 80s it has come down for males and increased for females.

Table 5.1 : Unemployment Rates by Sex and Residence Status (All India)

Round & (Year/Years)	Approach	Unemployment rates (percentages)			
		Rural		Urban	
		Male	Female	Male	Female
43 (1987-88)	Current daily	4.6	6.7	8.8	12.0
38 (1983)	Current daily	7.5	9.0	9.2	11.0
32 (1977-78)	Current daily	7.1	9.2	9.4	14.5
27 (1972-73)	Current daily	6.8	11.2	8.0	13.7

Source : NSSO (1990)

However, in terms of persons employed by what is known as usual status, the situation has not improved in the 1980s(Table 5.2).

Why then the regular employment has not increased as fast as employment in terms of person days over this period? For an answer we need to look at some aspects of industrial and labour policy..

Table 5.2 : Number of Persons per 100 Persons Employed According to Usual Status by Sex and Rural-Urban Residence Status (All India)

Round (Year/Years)	Category of worker	Usually employed			
		Rural		Urban	
		Male	Female	Male	Female
43 (1987-88)	All	53.9 (160.5)	32.3 (92.0)	50.6 (55.0)	15.2 (14.7)
38 (1983)	All	54.7 (152.7)	34.0 (90.4)	51.2 (47.4)	15.1 (12.3)
32 (1977-78)	All	55.2 (140.7)	33.1 (80.9)	50.8 (33.4)	15.6 (9.3)
27 (1972-73)	All	56.5 (127.2)	33.0 (70.6)	53.3 (31.3)	14.3 (702)

Note :Figures in parentheses for usually employed category give aggregates in millions.
Source : NSSO (1990)

5.3 Industrial Policy

Despite a buoyant growth rate of industrial output in the 1980s, the growth of industrial employment has remained low. Employment in organized manufacturing sector grew at 2.42 per cent per annum (p.a) from 1971-1981 and at 0.66 per cent p.a. over 1981-1986. This may be compared with the growth of manufacturing employment in some other countries. In Indonesia it grew at 6 per cent p.a. in 1977-85, in Malaysia at 10 per cent p.a. in 1971-81, in the Philippines at 9.3 per cent p.a. in 1972-85, in Thailand at 7.7 per cent p.a. in 1972-80 and in Korea at 13.4 per cent p.a. in 1971-78.

Table 5.3 : India : Effective Protection of Manufactruing Industries

Effective Protection	No. of Sectors	Share Fixed Capital (%)	Share Persons Engaged (%)	Share Value Added (%)	KWH Value Added (Rs.1000)	Fixed Capital (Rs.1000)/ Persons	Average Labour Per Person Engaged (Rs.1000)
High	21.00	53.20	18.50	30.00	409.00	92.50	15.83
Medium	5.00	3.50	3.40	5.80	123.00	32.40	18.04
Low	30.00	43.10	77.70	54.90	199.00	17.80	9.36
Misc.	3.00	0.20	0.40	0.30	79.00	15.70	9.78
All Industries	59.00	100.00	100.00	100.00	266.00	32.10	10.86

Source : World Bank (1989)

The slow growth of employment in the manufacturing sector can be ascribed as discussed above, to the broad development strategy pursued. Table 5.3 gives data on effective protection in Indian industries and the associated capital/labour ratios. It could be seen that the highly protected industries show a capital/labour ratio that is five times higher than for low protected industries. The low protected industries employed 77.7 per cent of the total persons engaged while using only 43.1 per cent of the total fixed capital, and the high protected industries with 53.2 per cent of the fixed capital engaged only 18.5 per cent of the persons. The output of some of the high protected industries may not be easily tradable. However, if only 50 per cent of the capital from high protected industries were to use the same capital/labour ratio as the low protected industries, industrial employment would have been 40 per cent higher. This indicates the cost in terms of lost employment due to the adherence to faulty development strategy.

But why has employment growth slowed down over the 80s? As is seen in Table 5.3 the cost of labour is also high in the high protected industries. During 1979/80 to 1984/85 real cost of labour (nominal emoluments per worker deflated by the wholesale price index of manufacturing) increased by 7.2 per cent p.a. in organized manufacturing.

Table 5.4 presents estimated employment functions for the organized manufacturing sector.

Table 5.4 : Estimated Labour Demand Function 1974/75 - 1984/85

Subsectors Covered	Coefficients (Elasticities) of			Statistics	
	Real Value added	Real cost of Labour	Lagged Employ.	R^2 (adj.)	SSR
All Mfg.	0.300** (0.037)	-0.370** (0.051)	0.505** (0.046)	0.993	0.93095
Two digit subsectors 20-29 (NITC)	0.290** (0.061)	-0.350** (0.077)	0.560** (0.070)	0.992	0.68547
Two digit subsectors 30-38(NITC)	0.340** (0.044)	-0.410** (0.067)	0.520** (0.059)	0.995	0.17093

Notes : ** Statistically significant at 99 per cent or better. No Durbin Watson statistic is reported because the data are a cross sectional time series. However, the computed statistic is about 2, suggesting low auto correlation. NITC refers to National (Indian) Industrial Trade Classification, which is broadly similar to the U.N.'s Standard Industrial Trade Classification.

Source : World Bank(1989)

World Bank (1989) claims that the estimates are fairly robust. They point to a significant trade off between real cost of labour and employment. It could be surmised that during the 1980s the organized sector employment growth slowed down due to the negative effect of increases in real cost of labour which could not be adequately offset by the positive impact of faster growth in manufacturing value added.

The real cost of organized labour has been way above the costs of unorganized labour. A labour policy which protects employment operates in many ways. Labour laws make it extremely difficult to retrench any worker. Even economically unviable units are also not permitted to close down. In fact such units are often taken over by the government. Along with this job security a number of other benefits such as month's pay as annual bonus is given to workers as a deferred pay without linking it to productivity or even profitability of the enterprise.

As a consequence, entrepreneurs are forced to restrict regular employment. One can expect that recourse will be taken to subcontracting and ancillarization. The observations that in terms of person days unemployment has gone down but has increased in terms of usual status are consistent with such an explanation. Thus in some sense, inspite of government

policy some benefits of growth do percolate as additional person days of employment. This can be expected to have positive impact on poverty reduction as is observed for the 1980s.

5.4 The Public Sector

As we have seen in section 5.2 public sector has been assigned a pivotal role in the development process, particularly in reducing concentration of economic power, providing large investments in basic industries and infrastructure, generating investible surpluses and serving as a model employer.

Roughly 50 per cent of the capital formation in the Indian economy since 1965-66 has been in the public sector. It has reached the "commanding heights" in the sense that more than 2/3rds of the employment in the organised sector is in the public sector (see Table 5.5) and it generates around 55 per cent of the value added in the organised sector. Unfortunately, public sector has failed miserably in generating surpluses and its gross savings have been less than 40 per cent of the investment in public sector over 1950 to 1985. The poor profitability of public sector is seen in Table 5.6. We see that all commercial public sector enterprises together showed an after tax net profit of 4.7 per cent on their sales. If we look only at the non-financial enterprises it was only 1.3 per cent of sales. Given the generally high capital/output ratio of these enterprises, this indicates a very poor return on investment. The gravity of this failure of public sector enterprises to generate adequate surplus can be appreciated when we note that in 1983-84 the non-financial commercial public sector had a total net savings of Rs. 295 crores while its net capital formation that year was Rs. 12,766 crores.

Table 5.5 : Employment in Public and Private Sector Establishments

Sector	1980	1985	1986	1987
Public	153.8	175.9	179.2	182.4
Central Government	31.9	33.4	33.4	33.8
State Government	55.5	64.3	65.6	67.5
Quasi Government	45.3	56.5	56.5	59.1
Local Bodies	21.2	21.7	21.7	22.0
Private	67.9	74.3	47.0	73.6
Establishments employing 25% or more persons	60.6	66	65.6	65.4
10 to 24 persons	7.2	8.3	8.4	8.4
Total	204.0	250.2	253.2	256.2

Source : C.S.O: Statistical Pocket Book, India, 1989

The public sector has however fulfilled one objective, i.e. it is a "model employer". This is true at least from the view point of those employed by it but not from the view point of economic efficiency. The public sector has become a high wage island in the economy. In 1980/81 public sector employees accounted for 6.8 per cent of labour force who got as much as 39.8 per cent of the wages and salaries in the entire economy (CMIE, 1986). The situation must have become even more skewed now after the revision in government pay scales in late 80s.

Table 5.6 : Net Profit After Tax of the Entire Commercial Public Sector : 1960/61 to 1983/84 (Rs. Crores)

Year	Dept. enterprises	Non-dept non-financial enterprises	Total for non-financial enterprises (2+3)	Non-dept financial enterprises	Total for all commercial enterprises (4+5)
1960-61	96	-6	90	56	146
1961-62	127	-11	116	61	177
1962-63	139	-12	127	75	202
1963-64	176	7	183	133	316
1964-65	131	-14	117	149	266
1965-66	146	-17	129	135	264
1966-67	141	-38	103	111	214
1967-68	105	-56	49	134	183
1968-69	149	-53	96	121	217
1969-70	175	-23	153	150	303
1970-71	158	-1	157	226	383
1971-72	212	-51	161	250	411
1972-73	163	-47	116	317	433
1973-74	24	-49	-25	499	474
1974-75	77	140	217	685	902
1975-76	177	-36	141	725	866
1976-77	454	158	612	945	1,557
1977-78	572	-139	433	1,080	1513
1978-79	507	-155	352	1,304	1,656
1979-80	454	-105	349	1,458	1,807
1980-81	318	-417	-99	1,687	1,588
1981-82	269	-23	246	2,254	2,500
1982-83	396	464	860	2,681	3541
1983-84	369	703	1,702	3,139	4,211
Net Profit as % sales income					
1960-61 to 1973-74	8.8	-0.9	2.4	30.7	5.4
1974-75 to 1983-84	5.5	0.2	1.1	26.1	4.5

Year	Dept. enterprises	Non-dept non-financial enterprises	Total for non-financial enterprises (2+3)	Non-dept financial enterprises	Total for all commercial enterprises (4+5)
1960-61 to 1983-84	6.2	0.1	1.3	26.6	4.7

Source : CMIE (1986), based on CSO: National Accounts Statistics, (various issues)

The poor performance of the public sector has had serious consequences for the poor as it has significantly lowered the growth rate of the economy and has pushed wages higher in the organized sector as a whole. This has led to choice of relatively more capital intensive techniques and further constrained the growth of employment.

The location of public sector enterprises to promote regionally balanced industrialization has also not been very successful. Politically determined locations involve some economic costs. While these may be considered acceptable from the view point of regional equity, location of large public sector enterprises do not seem to have stimulated development of other industries in the area. Thus Bihar continues to remain industrially underdeveloped inspite of having many public sector heavy industry units and in spite of its large mineral resources. Perhaps a labour force spoiled by public sector indulgence does not attract other entrepreneurs.

5.5 Poverty Alleviation Focus in India's Policies

Inspite of the relatively poor performance of the Indian economy, poverty in India has been somewhat contained. This is because from the very beginning concern for the poor was at the centre of Indian political debate.

India's economic policy always had an egalitarian and redistributive bias following from the Constitution which valued a just social order (Basu, 1983), and reinforced by Nehru's deep concern for the distribution of economic gains.

After a decade of planning, Nehru's government was compelled to appoint a committee in 1960 under the Chairmanship of Professor P.C. Mahalanobis to study the distribution of income and levels of living in India. Even before this committee submitted its report in 1964, Mr. Pitambar Pant, then the head of the Perspective Planning Division of the Planning Commission, prepared a paper in 1962 (Perspective Planning Division, 1964) outlining a fifteen year perspective plan whose objective was to assure a minimum level of living for the entire Indian population by 1976. He argued that "the central concern of our planning has to be the removal of poverty as early as possible. The stage has now come when we should sharply focus our efforts on providing an assured minimum income to every citizen of the country within a reasonable period of time. Progressively the minimum itself should be raised as development goes a pace." This paper adopted a minimum standard of living i.e. a poverty line, recommended by a Planning Commission study group (see also chapter I) which has formed the basis of all discussion about poverty in India since then.

Pant rejected massive redistributions "operationally meaningless unless revolutionary changes in property rights and scale and structure of wages and compensation are contemplated." He argued that rapid growth is vital for poverty alleviation since "a comparison of distribution of incomes in different countries ... at very different levels of development and with varying socio-political environments...follows a remarkably similar pattern, especially in respect to the proportion of incomes earned by the lowest three or four deciles of the population." However he recognized that "on account of certain peculiarities of the Indian economy, it is, however, uncertain whether the distribution of income will remain stable with development or how it will change." Indeed, the paper elaborated on the Indian economy, with specific references to the poor living in remote rural areas and belonging to the vast reserve of under-employed labour force (comprising landless labour, cultivators with very small holdings, artisans with primitive techniques) with limited mobility (across space and occupations). It pointed out that this population was loosely integrated with the growing sectors of the economy and that economic development in itself was unlikely to lift it out of its poverty. For them income transfers were seen as needed. Taking all these into consideration the paper arrived at a growth target of 7 per cent per annum by balancing what is desirable with what is feasible by way of rate of growth and income redistribution within a given period of time.

In the event, the perspective plan presented in Pant's paper was not adopted. Until Mrs. Gandhi raised eradication of poverty as the main plank of her electoral platform in 1971, the planning commission did not formally propose a poverty oriented component of five year plans. They did so with the Fifth Five Year Plan for the period 1974-79.

The approach to the Fifth Plan postulated a specific objective of poverty eradication along with the elimination of net external aid on concessional terms, neither of which has been attained to this day! It included a "minimum needs" component which was an updated version of the notion of minimum levels of living of the Pant paper which itself anticipated the few worthwhile elements of the late, but not so lamented, Basic Needs approach proclaimed by some international agencies. The Sixth Plan (1980-85) included a number of poverty eradication measures such as programmes for rural works and self-employment and schemes for increasing the productivity of small and marginal farmers and rural artisans.

The Seventh Plan (1985-90) envisaged continuation of the various programmes of rural development (see section 5.7) but but proposed enhancement in co-ordination and rationalisation of the various programmes. Mid-day meal programmes were introduced in a number of states under which school children were provided free meals at lunch time.

The approach to the Eighth Plan (1990-95) formulated by the Janata Dal planning commission recognizes employment creation as the major remedy for poverty and proposes a much greater decentralization of programme planning and implementation.

Apart from the specific programmes for redistribution and employment creation, food and agricultural policies have also exerted a positive influence on the poor in the country. In the next two sections we briefly review these policies.

5.6 Food Prices and Inflation

5.6.1 The Indian Approach to Food Policy

Food policy plays a critical role in determining poverty in any country and particularly for a country like India where 65 per cent of the population is engaged in agriculture and where for almost all consumers, expenditure on food constitutes the bulk of 70 per cent of their total consumer expenditure. The dilemma posed by the need for high agricultural prices to provide incentives to domestic producers and the desirability of low food prices for the consumers has been sought to be resolved by the Indian Government by a set of policies - low prices for agricultural products coupled with low prices for agricultural inputs such as fertilizers, water and electricity to protect producer interests. A dual pricing system, operated through a public distribution system (PDS) under which a certain amount of food is given to ration card holders at subsidized prices, is used to protect consumer interests. Agricultural producers are also protected against fluctuations in their incomes through price support operations of the PDS. Of course, the PDS contains food price rise in a bad agricultural year.

5.6.2 Relative Prices and Inflation

These policies have by and large succeeded so far in containing food price rise to modest levels which has helped in containing inflation to single digit levels for most of the past 40 years. This is seen in Table 5.7 which also includes data on consumer prices.

Table 5.7 : Prices and Inflation in India

Calender Year	General Index of wholesale prices	Index for primary products	Index for manufactured products	Consumer Price Indices				
				Industrial workers		Urban non-manual employees	Agricultural labour	
				Food	General	General	Food	General
	(Base 1970/71 = 100)			(Base 1960/61=100)				
1980	206.5	197.1	203.9	362.0	350.0	321.0	359.0	333.0
1981	248.1	229.2	249.5	406.0	390.0	359.0	418.0	383.0
1982	278.4	260.8	269.9	465.0	441.0	403.0	479.0	436.0
1983	285.3	270.4	269.8	498.0	475.0	437.0	501.0	458.0
1984	308.5	296.0	288.7	564.0	532.0	480.0	561.0	511.0
1985	334.0	321.6	313.9	604.0	576.0	524.0	567.0	521.0
1986	353.3	329.3	338.2	626.0	608.0	558.0	582.0	538.0
1987	372.2	344.7	354.1	685.0	661.0	602.0	614.0	567.0
1988	395.7	371.0	376.2	750.0	719.0	647.0	657.0	608.0
1989	428.8	404.9	407.9	807.0	775.0	-	702.0	690.0
Growth rates based on semi-log trend function (per cent per year)								
1951-60	0.47	-0.33	0.10					
1961-70	7.05	8.61	5.85	8.3	7.38	6.31*		
1971-80	8.43	8.20	7.83	7.24	7.68	7.37		
1981-89	6.52	6.54	6.11	8.21	8.35	7.90**	5.77	6.38

* Growth rates refer to the period 1962-70
** Growth rates refer to the period 1981-87
Source : GOI, Economic Survey (Various issues)

Changes in prices have been modest. Food prices for urban industrial worker, who is a major beneficiary for the subsidized food distributed under the PDS till recently, have grown upward since thhe 70s, if anything, at a slightly lower rate than the general consumer price index.

In the absence of PDS one could have expected it to have increased at a higher rate. From the Wholesale Price Index (WPI) for agriculture and the general WPI it is seen that relative price of agriculture has not changed dramatically over the years.

To what extent prices have acted as an incentive to agricultural producers can be better seen from agricultural terms of trade shown in Table 5.8.

Table 5.8 : Intersectoral Terms of Trade (Agriculture - Non-Agriculture)

Year	Net Barter Terms of Trade	Year	Net Barter Terms of Trade
1951-52	86.9	1970-71	109.9
1952-53	85.6	1971-72	104.0
1953-54	89.5	1972-73	106.8
1954-55	83.7	1973-74	115.7
1956-57	88.4	1974-75	112.4
1955-56	81.8	1975-76	101.5
1957-58	85.0	1976-77	99.9
1958-59	87.8	1977-78	104.5
1959-60	87.8	1978-79	100.0
1960-61	86.3	1979-80	95.9
1961-62	86.9	1980-81	89.7
1962-63	85.5	1981-82	89.9
1963-64	84.1	1982-83	91.7
1964-65	93.8	1983-84	97.0
1965-66	98.8	1984-85	97.0
1966-67	106.2	1985-86	91.6
1967-68	107.9	1986-87	91.1
1968-69	100.4	1987-88	98.5
1969-70	108.5		

Source: Thamarajakshi (1990)

The barter terms of trade indicate that over the years there has been a modest decline in the barter terms of trade for agricultural producers. Thus the producers have not been fully compensated for changes in input prices by changes in output prices. However, in addition to subsidized inputs agricultural producers also get other subsidies in the form of generous credit (and more recently loan write-offs). In addition, agricultural income is exempt from central income tax. These should definitely compensate agricultural producers for loss in barter terms of trade.

Thus, the agricultural price policy in India seems to have managed to keep output prices to relatively low levels without affecting farmers' incomes adversely.

5.6.3 The Rural Poor Benefit from Low Food Prices

By and large, the poor in rural areas are net purchasers of food. This can be seen from Table 5.9. In the poorest three expenditure classes that contribute 20.9 per cent of the rural households, self-employed in agricultural occupation are only around 28 per cent of these households. The remaining 72 per cent of the households are therefore net purchasers of food. Even among the self-employed in agriculture some may not produce enough food for their own consumption and may be net purchasers of food. Thus low food prices increase the real incomes of these rural poor.

Table 5.9 : Distribution of Rural Households by Occupation of the Head of the Hoousehold and Per Capita Monthly Expenditure (percent of household)

Household Monthly Per-capita expenditure (Rs.)	Self-employed in		Agricultural Labour	Other Labour	Others	Total	Per 100 house holds
	Agricultural Occupations	Non-Agricultural Occupatuion					
< 65	24.7	8.0	48.8	10.3	8.2	100.0	5.6
65-80	26.5	8.2	50.9	9.9	4.6	100.0	6.3
80-95	30.4	9.8	45.7	9.0	5.1	100.0	9.0
95-110	34.6	11.1	39.6	8.9	5.9	100.0	11.1
ALL	37.7	12.3	30.7	9.0	10.3	100.0	100.0

Source : NSSO (1990)

5.6.4 The PDS and the Rural Poor

The PDS provides selected consumer goods to ration card holders at prices below the market prices. The consumers are free to purchase additional quantities in the open market. Till recently, the rationing system has worked mainly in urban areas excepting in a few states where the rural coverage is also significant. Generally in issuing ration-cards a means test is not applied. The PDS thus entitles all ration card holders to the same subsidy.

As shown in chapter II, in states like Kerala, Andhra Pradesh, Gujarat and Maharashtra, rural populations get benefit of some significance from the PDS. In fact, since the operation of the PDS has most likely raised the price of foodgrains in the open market from which the rural poor not covered by the PDS buy their food, they may have been adversely affected by the PDS.

5.6.5 Growing Subsidies - Can They be Sustained?

The food price policy of low input price, low output price and cheap ration involves subsidies from government's budget. These subsidies have been growing progressively and have now reached significant levels. See Table 5.10.

Table 5.10 : Govt. Budget Allocation for Agriculture and PDS

	Subsidy (Rs.Crores)			
Year	Fertilizer	Irrigation	Power	Food
1979-80	603	392	NA	600
1980-81	505	478	327.59	650
1981-82	375	491	404.81	700
1982-83	605	558	610.66	711
1983-84	1042	675	739.55	835
1984-85	1927	692	976.33	1101
1985-86	1924	827	1312.12	1650
1986-87	1933	NA	1736.66	2000
1987-88	1916	NA	NA	2200
1988-89	3250	NA	NA	2200
1989-90	3651*	NA	NA	2200

* Budgeted
Source : Parikh and Suryanarayana (1990)

These allocations cannot continue to grow for long. If the rising budget deficit is not contained, the rate of inflation will increase and its adverse impact on the poor will nullify the low food price policy and the accompanying benefits it brings to the poor.

Since these subsidies are not targeted only to the poor and also go to the relatively better off farmers, they can be trimmed without hurting the poor. In any case, for efficient management of scarce water and energy, better pricing of these inputs are needed.

By rationalizing input subsidies indirectly by subsidizing land improving investments and by better targeting the PDS, the strain on government budget can be contained without harming the welfare measures directed towards the poor.

5.7 Rural Development Programmes

A range of rural development programmes undertaken in India aim not only to stimulate the growth of agriculture and rural economy but also to provide employment. Thus, as mentioned in chapter IV, an element of anti-poverty programme has always been present. In fact, some of them are primarily conceived as such. These programmes include area and resources development, and programmes related to works, training and provision of rural-credit. Some of these initiated as early as in 1969-70 and summarized from Narayana, Parikh and Srinivasan (1991) are as follows:

1. **The small Farmer Development Agency (SFDA):** A credit programme initiated by the Government of India (GOI) in 1969-70.

2. **Agency for the Development of Marginal Farmers and Agricultural Labourers (MFAL)** : A land-productivity- improvement programme initiated by the GOI in 1969-70. Activities related to agriculture, like dairy farming, animal husbandry, etc. were also pursued. MFAL was later merged with SFDA.

3. **Drought Prone Area Programme (DPAP):** Taken up during the Fourth Five Year Plan (1969-74), this Integrated Area Development Programme (IADP) aims at "optimum utilization of land, water and livestock resources, restoration of ecological balance and stabilization of the income of the people, particularly the weaker sections".

4. **Crash Scheme for Rural Employment (CSRE):** Launched in the early 1970s, the programme aims at employment generation and creation of durable assets. Departments of Rural Development of the Central Government as well as of the state governments financed the programme; Block Development Offices and Panchayat Raj Organisations implemented it.

5. **Employment Guarantee Scheme (EGS):** Initiated by the Government of Maharashtra in 1972/73 aimed to provide work for unemployed, unskilled labourers in rural areas. This is one of the more successful rural works programmes.

6. **Food for Work Programme (FFW):** Initiated in 1977, this has several novel features to it. While it has the same objectives as other employment programmes, namely, provision of employment and creation of durable community assets in rural areas, it paid a part of the wages in foodgrains. This was motivated in part by the desire to use rapidly accumulating foodgrain stocks in the hands of the government and in part in the expectation that it will lead to an improvement in the nutritional status of the workers as compared to payment of wages in cash. This expectation will be realized if one can assume that (i) the workers have a higher marginal propensity to consume food from wages received in the form of foodgrains rather than in cash, (ii) foodgrains can be distributed at no higher cost than cash wages and (iii) the

impact on rural food prices would be insignificant if the wages are given in the form of food.

7. **Antyodaya**: Another rural development programme initiated by the Government of Rajasthan in 1977.

8. **Operation Barga (OB)** : Essentially a land-redistribution programme to identify and register all the names of share croppers. It was launched by the Government of West Bengal in 1978.

Detailed reviews of some of these programmes are available in the Mid-Term Appraisal of the Sixth Five Year Plan, Planning Commission (1983).

All these programmes, whether initiated by the Central Government or the states or both, share the fundamental objective of poverty elimination mainly through employment creation. Over time, some of these were merged with others or modified or renamed and by the time of the Sixth Five Year Plan (1980-85) these programmes stood as follows:

1. Resources and Incomes Development Programmes (Integrated Rural Development Programme - IRDP)

2. Special Area Development Programmes :

   (i) Drought Prone Area Programme (DPAP)
   (ii) Desert Development Programme (DDP)

3. Works Programmes for creation of supplementary employment opportunities : (i) National Rural Employment Programme (NREP) : this is a restructured form of the Food for Work programme.

4. Training Programme

   (i) National Scheme of Training of Rural Youth for Self Employment (TRYSEM)

The NREP launched in October 1980, is aimed at creating additional wage employment opportunities for unemployed and uner-employed persons in rural areas. Simultaneously it also attemped to create productive community assets for strenghening rural economic and social infrastructure and improved the overall quality of life in rural areas. It was envisaged to generate 300 to 400 million mandays (mmd) of employment per year and hence Rs.9800 millions of outlay was allocated for NREP in the Sixth Plan period. As against the target of around 1700 mmd, 1774 mmd of employment have been generated during the Sixth Plan period. In the Seventh Plan period an outlay of Rs.24,870 million was provided for NREP. Under this scheme, 1476 mmd of employment have been generated during the first four years of the Seventh plan as against the target of 1160 mmd (see Economic Survey, 1989-90). NREP plan targets thus were surpassed during the Sixth and Seventh plan periods. However, " a number of problems have been encountered in the implementation of this programme; these relate to (a) supply and distribution of foodgrains, (b) time taken in the

preparation of a shelf of projects in different states, (c) non-availability of technical manuals/guidebooks in local languages for facilitating the task of Block staff, (d) difficulties in local resource mobilization, and (e) durability of assets and their maintenance" (Planning Commission (1983)).

Besides running into these and probably many other problems involving leakages, these employment programmes have been criticised by many economists in terms of their alleged efficiency in alleviating rural poverty. Among these, particular mention may be made of Guhan (1980) and Dantwala (1978). We briefly note some of their criticisms.

Dantwala (1978) argued that "the public works approach to employment would make sense if it is so organized that there will be progressively less and less reliance on it, so that ultimately it becomes redundant. Its role should be accepted as transitional and deliberate efforts should be made to rehabilitate those engaged on public works within the mainstream of the economic systems".

Guhan (1980) pointed out that the budget allocation for NREP would create employment to the extent of only 6 to 8 percent of total demand of 5,000 to 7,500 mmd. And if leakages of the system are taken into account, "the actual impact of this programme on rural employment will be quite minimal." However, he was not in favour of larger budget allocations. Based on his study in Tamil Nadu, he dubbed the whole process as a "Tughlaqian enterprise" since to cover all these millions of households would involve the creation of an enormous administrative machinery. In his view land redistribution is a necessary condition to make any of these supplementary programmes effective. Ironically Guhan did not discuss the political and administrative effort needed to carry out effective land distribution.

However, there are studies which find positive aspects in employment schemes adopted in India. Indeed, some schemes have been successful in providing gainful supplementary employment to those who need it. MHJ (1980), Reynolds and Sundar (1977), Bagchee (1984) and Dandekar and Sathe (1980), etc., have reported positive results.

Among these programmes, the employment guarantee scheme (EGS) of Maharashtra stands out for its coverage of some 6 lakh jobs per day in Maharashtra and for general success. A number of evaluations has shown this to be so. The programme generates productive assets as 60 per cent of the total EGS expenditure on irrigation and soil conservation works which can be very productive in a semi-arid region. Unfortunately, no systematic evaluation of the effectiveness of these assets in increasing agricultural productivity is available.

Theoretical investigations of the nationwide EGS type rural works programme has been investigated by Narayana, Parikh and Srinivasan (1988) who use an applied general equilibrium model to account for the macro-economic incidence and general equilibrium consequences of a Rural Works Programme (RWP) that can eliminate rural poverty. Their sequential dynamic simulations also show the consequences over time. The analysis shows that RWP are an effective instrument for virtually eliminating hunger at modest cost in terms of growth if they can be well planned and executed.

5.8 Concluding Observations

1) The development strategy followed by India and the consequent macro-policies persued have led to a slow growing and relatively inefficient economy. Even the modest liberalisation introduced in the 80s has resulted in faster growth and has had beneficial effects on the rural poor. The historical experience indicates the need for liberalisation to accelerate the economy.

   The Indian planners were deeply concerned with poverty before poverty became internationally fashionable and also recognized the need for rapid growth to deal with it. Unfortunately their policies did not lead to rapid growth but their concern for the poor led to the introduction of many poverty alleviation programmes. These at least prevented, in spite of the slow growth of the economy, the situation of the poor from getting worse.

2) RWPs create a demand for unskilled labour, which in turn increase their earnings. In the absence of any radical redistribution of rural assets (particularly agricultural land) and without creating additional demand for unskilled labour, the possibilities of improving incomes of the rural poor in India's mixed economy are very limited. It may be suggested that by making rural unskilled labour less dependent on the rural land-owning rich, RWPs may loosen the social and economic power of the latter. An anticipation of this happening may lead the rural rich to oppose them. However, RWPs also improve rural infrastructure thereby increasing productivity of land, which may be sufficiently attractive to the rural rich to blunt their opposition.

   The effectiveness of planning and execution determine the success of RWPs. The fact that RWPs were not effectively executed in the past is not an argument against RWPs per se but only an argument for creating a design and implementation mechanism with less incentives for diversion of resources to other uses. For instance, the participation of the rural poor in formulating RWP may help. In any case, it is likely that the efforts and the resources needed to plan and execute RWPs effectively will be modest compared to designing and implementing alternative policies with similar impact on the rural poor.

VI. GLOBAL ECONOMIC ENVIRONMENT AND THE RURAL POOR

6.1. The Relevance of Global Economic Environment

Whether a country is large or small, the global economic setting within which it operates, affects its policy options. The policy it chooses to pursue can have a significant impact on the poor in the country. World markets provide an opportunity to export products it has a comparative advantage in and import those which have a comparatively high resource cost to exploit country's resource endowments better. A country that chooses to exploit this opportunity benefits in many ways. Its resources are allocated more efficiently and hence it attains faster growth. It also exposes its domestic manufacturers to competition from trade, making them more efficient in the use of resources. Competition or potential competition from imports keeps even domestic monopolists to behave as competitive firms.

However, the prospects for trade depend not only on the world market prices but also on the willingness to trade with other countries who may restrict the trade through quota, tariffs or other non-tariff barriers. Thus other countries' policies affect a country's policy options.

Even when a country is nearly self sufficient in a product and when trade is but a small part of its domestic disappearance, it is affected by world prices. If the country trades freely, then domestic price is the world market price. If it does not, then it will have to adjust its tariff or trade levels to maintain a particular domestic price when the world price has changed.

How significant can the impact be of world prices on domestic prices, policies and development is seen from an examination of cereal prices. Developed countries like the US and EC have protected their domestic agricultural producers. This has led to subsidized exports and the lower prices on the world market.

Many developing countries have used the low price of cereals on the world market to import more cereals and to keep domestic food prices to a low level. Parikh et.al. (1988) have shown that, by and large, the rich countries have protected their agriculture more. This has served as a disincentive to the farmers in these countries but of course has provided cheaper food to the consumers. This has certainly affected the poor in these countries. Have the rural poor gained or lost due to this policy? We will return to this question later.

Since the global environment affects a country and that this environment is the outcome of policies of different countries, it follows that a sudden change in a country's policy can give a shock to the global environment. This shock gets transmitted to other countries through the global markets for goods and services including financial services and migrant labour. The sudden change in Soviet grain trade policy in the early seventies and the various oil price shocks are some recent examples.

This interdependence of countries through trade aid and capital flows has been growing. The globalisation of production by "soulless" transnational firms without any obligation for the welfare of the host country is also increasing due to increasing competition in the global markets.

The environmental constraints imposed by the need to preserve the global commons for sustainable development have further increased the global interdependence.

How has the global environment affected the rural poor in India? How will the likely changes in the global scene affect the poor in India? These are the questions we address in this chapter.

6.2 Global Environment and the Rural Poor in India: The Past Experience

India has by and large followed inward looking, import substituting trade restricting development strategy and had tried to insulate itself from the global environment. In chapter V, we have already looked at the cost of this strategy in terms of lost opportunity for growth and employment and its adverse impact on the poor.

Nevertheless, India has not been immune to the global environment and major events have influenced its policy and development. In fact, this strategy of discouraging exports and restricting imports to the most essential goods has made India more vulnerable to changes in world prices of critical bulk imports such as oil. The availability of food grains under the US PL 480 scheme, and the oil shocks have affected the Indian economy.

6.2.1 PL-480 Imports and the Poor

The PL-480 imports in the 60s and particularly during the two drought years of 1965 and 1966 increased the availability of foodgrains in the country, and kept their prices below what they would have been otherwise. This measure helped the poor in urban areas as also the rural poor who are net purchasers of food. Yet the impact of PL-480 on Indian economy has been a most controversial issue in the Indian economic literature.

The arguments run as follows:

Faced with a food shortage, India may decide not to accept food aid but to ration food to deal with the deficit. In such a case the unsatisfied demand for food from those who could afford to buy more would be redirected toward consumption of other goods, which may reduce exports of these goods and lead to reductions in investment and food output in the future. However, were the country to accept food aid and distribute it only to the poor at subsidized prices, it would improve their well-being but have little or no impact on market prices and no impact on future output. It is difficult to identify the poor though, and the food might be distributed to all citizens living in given areas-mostly urban areas. This would lower market prices of food, reduce farmers' incentives to produce, and might lead to lower future output. But if the food aid constitutes an additional aid, it would permit the government to promote increased investment. If the government does in fact increase investment, this could,

if directed to agriculture, give a higher output in future. The outcome in a particular instance would thus depend on the totality of government policies.

As Bhagwati and Chakravarty (1969) observe "(i) that while PL-480 imports certainly reduced wheat prices in particular, and foodgrain prices in general, below what they would otherwise have been, ceteris paribus and (ii) that wheat production, being generally responsive to price change, must have been therefore below what it would otherwise have been, ceteris paribus, it would be a nonsequitur to argue that therefore imports of wheat under the PL-480 programme were "undersirable". This question cannot be assessed unless a framework has been devised to examine the optimal prices and quantities of agricultural and food grains outputs, in the light of the international and domestic possibilities (including aid availability). In any case, the indictment levelled at PL-480 imports by many Indian economists appear to have been, not that aid was tied to these commodities beyond what Indians wanted (a possibility that has not been fully investigated in the literature), but that the Indian government itself was keen to get the PL-480 aid and that the availability of such aid was detrimental to the economic interest of the country. Aside from the depressing effect on the resource allocation to agriculture.....economists critical of the PL-480 programme have alleged that the sheer availability of such an aid has prevented the government from pushing on the agricultural front organisationally. Insofar as it can be shown that mere drive and organizational energy could have increased agricultural productivity, and that this opportunity-costless gain to the economy was lost, thanks to the PL.480 availability, this would be a valid criticism indeed of that aid programme - or of any aid programme which permitted either directly or through switching, food grain to be imported readily. However, such a case is empirically difficult to establish and has not been pursuasively made so far despite its plausibility for many economists in the country " (pp. 61-62).

In this context it is worth recalling Dantwala (1957) who argued, that "The major component of PL-480 was wheat and it is reasonable to assume that these imports affected the prices of wheat or at best also of other substitutable cereals from the consumer point of view, but could not have had much impact on the prices of commercial crops. The expected consequence of this relative shift in prices in favour of commercial crops would be a shift in agricultural input for their production. Assuming that this is exactly what happened, would such a development be necessarily injurious to Indian agriculture or the Indian economy as a whole? It is, of course, true that higher foodgrains production is very vital to India's economy, but a stimulated growth of non-food grain crops is of no less importance for the overall national economy."

To reconcile these various contradictory conclusions, one needs an analysis based on an applied general equilibrium (AGE) model which accounts for all the relevant feedbacks. A counterfactual simulation with such a model can show what would have happened without the PL-480 imports. While no such simulation is available, we can draw some inference from simulations which examine the impact of changes in price of agriculture relative to non-agriculture.

With an AGE model with mostly empirically estimated parameters, Narayana, Parikh and Srinivasan (1991) have simulated the impact of increasing price of agriculture relative to non-agriculture by some 60 per cent over the price in the reference scenario (REF) every year for the period 1980 to 2000. Comparisons of the results of the scenarios for 1985 show the

impact over short term whereas comparisons for 2000 give an idea of what will happen over the long term.

Two alternative scenarios are run to trace the impact of the mode of financing the change in policy. The desired domestic prices in each of the policy scenarios are realized by imposing suitable ad valorem tariff on the world prices. Thus, when the domestic relative prices are changed, in different scenarios, the government's tariff revenue changes for two reasons: First, when the domestic price of a commodity is increased (decreased), it leads to changes in production and consumption in an opposite direction so that net exports increase (decrease). Second, the difference between the world price and the domestic price, the implicit tariff, changes. When the government is unable to raise tax rates to bring about budget balance, then something else will have to adjust, e.g., the level of public investment. Some macro-economic indicators for these simulations are given in Table 6.1

Table 6.1 : Macro Economic Impact of Changes in Agricultural Terms of Trade

Indicator	Absolute Values	Scenario Ratio to reference run value			
	REF	TT.5	TT.7	TT.2	TT.7X
1. P_{ag}/P_{na}					
1985	0.86	2.35	1.56	0.8	1.57
2000	0.74	2.7	1.65	0.77	1.66
2. GDP (10^9 Rs.1970)					
1985	654	1.1	1.05	0.98	0.99
2000	1391	1.37	1.14	0.97	0.92
3. GDP agriculture (10^9 Rs.1970)					
1985	247	1.11	1.05	0.98	1.03
2000	337	1.24	1.1	0.97	1.03
4. GDP non-agriculture (10^9 Rs.1970)					
1985	407	1.1	1.04	0.98	0.96
2000	1054	1.42	1.16	0.97	0.88
5. Price index of non-agriculture (1970-1)					
1985	2.19	0.5	0.7	1.2	0.70
2000	2.61	0.5	0.7	1.2	0.70
6. Investment (10^9 Rs.1970)					
1980	110	1.41	1.18	0.93	0.85
1985	152	1.53	1.22	0.92	0.82
2000	465	1.7	1.25	0.93	0.82

Notes:

1 REF: Reference scenario in which the price policy is to move domestic prices gradually towards the world market prices between 1980 and 2000.

2 TT.5: Non-agricultural price multiplied by 0.5 so that the agricultural to non-agricultural price ratio, P_{ag}/P_{na-q} is twice as much in each year as in REF (ε^s = 0.5).

3 TT.7: Non-agricultural price is multiplied by 0.7 so that P_{ag}/P_{na-q} is now 1.43 times its value in each year as in REF (ε^s = 0.7).

4 TT1.2: Non-agricultural price multiplied by 1.2 so that P_{ag}/P_{na-q} is lower and is 0.833 times in each year as in REF.

In all the above scenarios the associated changes in government revenues from tariffs because of changes in trade pattern are absorbed by appropriate changes in the average tax rate.

5 TT.7X: Price set the same way as in TT.7, but tax rates are fixed at the realized tax rates in REF. Public investment and hence total investment adjust to maintain budget balance.

Source: Narayana et al (1991)

The results show that higher prices for agriculture result in a very small increase in agricultural GDP. While supply response of farmers to price may be significant for individual commodities, sector level supply response is modest. In this model, and also we feel in real life agricultural development depends on investment in irrigation and other infrastructure as

well as in adaptive research (see Parikh, Dev and Deshpande (1991)). More of a crop may be produced by shifting critical resources such as land and water from a competing crop, but then the output of that crop will be lowered.

The results also show that when taxes adjust, the investment is higher and the GDPs are larger whereas when investments adjust the GDPs are lower than in the reference run. Investments are thus critical to development.

But what about the impact of these changes on the poor? In the model, it is assumed that agricultural wages adjust instantaneously to agricultural prices. This is an important assumption that should be borne in mind when looking at Table 6.2 where welfare comparisons are given.

Table 6.2 : Impact on Welfare Due to Changes in Agriculture Terms of Trade

Indicator	Absolute Values	Scenario			
		Ratio to reference run value			
	REF	TT.5	TT.7	TT1.2	TT.7X
1. Equivalent income (Rs./person)					
1985	575	0.72	0.90	1.02	0.97
2000	711	0.83	0.97	1.02	0.90
2. Energy intake/capita (Kcal/day)					
1985	2200	0.85	0.94	1.01	0.96
2000	2430	0.93	0.99	1.01	0.95
3. Rural/Urban (Ratio) income parity					
1985	0.51	1.75	1.32	0.88	1.38
2000	0.48	1.51	1.22	0.92	1.36
4. Rural poorest*					
a. persons (Millions)					
1985	172	0.80	0.89	1.05	0.91
2000	174	0.66	0.85	1.07	0.90
b. equivalent invome (Rs./person)					
1985	127	1.11	1.07	0.95	1.07
2000	125	1.22	1.12	0.92	1.11
5. Urban poorest*					
a. persons (Millions)					
1985	3	3.10	1.94	0.73	2.42
2000	2	1.35	1.09	0.55	2.55
b. Equivalent income (Rs./person)					
1985	167	0.92	0.97	1.01	0.98
2000	172	0.96	0.98	1.01	0.98

* Those with per capita consumption expenditure below what is equivalent to Rs.216 per person per year at 1970 prices.

Source : Narayana et al (1991)

It is clear that rural population gains and the income parity between rural and urban incomes improve. The rural poorest clearly gain when relative prices of agricultural

commodities increase. Thus in TT.7 there are 11 to 15 per cent fewer people in the poorest rural class (20 to 25 million persons) and also the equivalent income of this class is 7 to 12 per cent higher.

What can we say from these simulations about the impact of PL-480 imports during the 50s and 60s? They lowered the agricultural prices and provided budgetory support to the government. The price reduction would be much smaller than the price changes in the simulations described above. Thus any adverse impact on the rural poor should be of a smaller magnitude.

The positive impact of the PL-480 imports during the 60s is seen in the gross domestic capital formation even as a per cent of GDP was at a high level during this period. Some of these investments were directed to increasing irrigation. Irrigated area increased from 23.2 million hectares in 1951/52 to 38.4 million hectares in 1971/72. This surely helped the rural poor as it increased agricultural GDP and opportunity for agricultural employment.

The net impact of PL-480 on the rural poor, therefore, cannot be unambiguously stated. (The urban poor certainly gained). Yet whatever may be the direction of the impact, its total impact on the number of poor is likely to be small (within 5 per cent). The persistance of poverty in rural India cannot be easily be blamed on global environment.

6.2.2 The Oil Shocks and the Poor

Like any other oil importing developing country India too experienced severe external shocks in 1973 when oil prices increased fourfold and in 1979 when oil prices increased by more than 100 per cent. The first oil shock occurred at a time when the economy was already weak due to two successive years of poor agricultural performance (1971/72 and 1972/73) and low GDP growth, which had generated inflationary pressures on the economy. The wholesale price index had registered an increase of about 10 per cent in 1972/73 and about 23 per cent in 1973/74 along with similar increases in the cost of living index. Much of the rise in 1973/74 had taken place before the oil-shock.

With the oil price hike, India's petroleum import bill increased from Rs.203 crores in 1972/73 to Rs.1,157 crores in 1974/75, an increase of Rs.954 crores which turned the current account balance from a modest surplus of Rs.28 crores in 1972/73 to a deficit of Rs.961 crores in 1974/75. However, the economy could adjust to the shock relatively easily due to a mix of favourable factors like relatively easy availability of external financing (from the IMF and OPEC countries), reduction in trade deficit facilitated by a restrictive macro economic policy and private remittances from abroad. In the immediate short run there was price inflation all round, wholesale price index increasing by 25 per cent in 1974/75 while the cost of living for the agricultural labourer went up by 35 per cent. In addition to the rising prices, what was likely to have adversely affected the poor, particularly from income generation point of view, were factors like aggregate demand restraint brought about by a restrictive macro economic policy and also a decline in public real investment which led to an overall decline in gross fixed capital formation by about three per cent in 1974/75. However, this was only a temporary problem and the economy gained momentum after 1975/76. The GDP growth in the period 1974-79 averaged about 5.1 per cent compared to the

earlier trend rate of 3.5 per cent facilitated largely by improved agricultural production which rose at a rate of about 4.6 per cent compared to the earlier trend rate 2.5 per cent. Further, the oil boom in the Gulf opened up plenty of opportunities for the Indian labour whose remittances went a long way in improving the living conditions of the poor in India.

The second oil shock which involved more than doubling of oil prices in 1979 turned India's current account position from a surplus of Rs.575 crores in 1978/79 to a deficit of Rs.2020 crores in 1980/81. The deficit as a percentage of GDP remained around one per cent till 1984 (Ahluwalia, 1986). In this case also, the oil shock was preceded by agricultural drought year resulting in a general price increase of 18 per cent and a rise of about 15 per cent in the cost of living of the rural agricultural labourers.

The current account deficit was met by resorting to short to medium term financing which led to building up of debt service payment. Exports growth slowed down due to deceleration in world trade. Imports increased mainly on account of a policy of medium term structural adjustment involving liberalized import regime to meet ambitious targets for public investment in the critical sectors. Still, total fixed investment at constant prices did not rise as fast as it did in the latter half of the 1970s. This was so dispite the government not pursuing a restrictive macro economic policy. Instead, it attempted to deal with inflation in terms of removing short term and medium term bottle necks.

6.3 The Prospective Global Environment and the Rural Poor in India

Dramatic changes are expected in the coming year in the global environment, which have the potential of altering the structure of international trade. How would these affect the Indian economy and the rural poor? By its nature this has to be a speculative assessment with many ifs and buts. Nonetheless we present a broad overview of some likely changes and their impact.

6.3.1 Some Changes of Major Significance

The success or failure of the GATT negotiations of the Uruguay round will significantly affect world trade. In particular, agricultural trade liberalisation, which is a major item of discussion in this round if it comes about, can have significant impact on the food prices on the world market and hence on the poor in India.

Apart from the outcome of the GATT negotiation, the move towards establishment of trading blocks can also be of serious consequence for the poor in India. The move towards the establishment of a North American free trade zone, the unification of EC in 1992, the German unification, the possibilites of an ASEAN trading block etc. cover bulk of the world markets. None of these unfortunately include India. How would these affect prospects for India's exports? Can India change over successfully to an outward oriented strategy in such a world?

India continues to remain vulnerable to world oil prices. The middle east situation following the Kuwait war is full of uncertainty. The prospects for the Indian economy thus have become even more uncertain.

Apart from the likely changes in the openness and the size of the global markets, the environmental concerns for the preservation of the global commons and the perceived need to have a green house gas treaty will impose additional burdens on India. What would be the consequence for the rural poor?

We will deal with these issues in the followig sections.

6.3.2. Agricultural Trade Liberalisation

How would the rural poor be affected in India if the OECD countries decide in the Uruguay round GATT negotiations to liberalize agricultural trade? Fortunately we are able to answer these questions based on a system of AGE national policy models linked together. This modeling system called the Basic Linked System (BLS) was developed by the Food and Agricultural Program (FAP) of International Institute for Applied System Analysis (IIASA).

The BLS distinguishes nine agricultural commodities and has 18 national models, a model each for EC and COMECON countries who have followed a common agricultural policy and 14 somewhat simplified models to account for remaining countries of the world which are grouped together on the basis of the likely similarity of their agricultural trade behaviour. The models are linked through trade and capital flows in a general equilibrium framework so that a BLS simulation determines both national and world market prices.

Parikh, Fischer et. al. (1988) have reported the results of simulations of the BLS to explore the consequences of agricultural trade liberalisation by different groups of countries.

Simulations were carried out for the period 1980 to 2000. The selected countries liberalize their agricultural trade gradually over a five year period beginning 1980 so that 1985 is the first year of full liberalisation. Results for the year 1990 or 2000 are compared.

The results of two scenarios called F-OECD and F ALLME, where OECD and all market economies respectively liberalize their agricultural trade are compared with a reference scenario. The impact on poverty, measured by changes in the number of persons who are hungry, is shown in Table 6.3.

Table 6.3 : Impact on Hunger of Various Agricultural Trade Liberalization Scenarios

Scenario	1990	2000
F-ALLME	+0.8	+1.4
F-DECD	+3.3	+3.6
F-LDC	+4.7	+4.6

Note : Figure in the Table refer to percentage change in persons hungry relative to the reference scenario.

Source : Parikh et. al. (1988)

It is seen that in both F-OECD and F-ALLME hunger in the world increases. The OECD countries spend some 250 billion dollars per year to their agriculture. When this subsidy is withdrawn, global market prices go up and the developing countries who are by and large net importers of food grains, face higher prices for their imports which results in reduced imports, higher domestic prices and more hunger. Table 6.4 shows the changes in world market prices and net exports under these scenarios.

Table 6.4 : Percentage Changes in World Market Prices and Global Net Exports Under Various Trade Liberalization Scenarios Relative to the Reference Scenario

Commodity	Relative Prices			Net Exports		
	1990	2000		1990	2000	
	ALLME	ALLME	OECD	ALLME	ALLME	OECD
Wheat	16	23	18	1	3	-2
Rice	22	16	21	35	36	37
Coarse grains	17	13	11	-4	-3	-5
Bovine and ovine meat	26	11	17	52	69	35
Dairy products	38	34	31	30	24	13
Other animal products	3	-1	0	3	14	17
Protein feed	11	13	13	5	4	5
Other food	-1	-3	5	4	10	10
Non-food agriculture	-11	-17	-2	5	6	5
Total agriculture	9	5	9			
Nonagriculture	0	0	0	13	13	17

Source: Parikh et. al. (1988)

The impact on Indian economy is summarized in Table 6.5. It is seen that agricultural liberalisation by the OECD countries leads to a small increase in agricultural prices relative to non-agricultural price, but reduces equivalent income and calorie intakes. The rural poor are worse off.

Table 6.5 : India: Percentage Changes (Relative to the Reference in Main 1990 and 2000 for each of the Agricultural Trade Liberalization Scenarios)

Indicator	Reference scenario			Agricultural trade liberalization									
				All MEs		All OECD		All LDCs					
	1980	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
GDP70	68271	1.56	2.72	0.2	0	0.2	0.1	0	-0.2	0.1	0	0	0
GDPA70	28856	1.25	1.6	0.4	-0.1	0.1	0.1	0	-0.5	0.1	0.1	0.1	0
GDPNA70	39415	1.78	3.54	0.1	0	0.2	0.1	0	-0.1	0.1	0	0	0
AG vol. index WP70	1.262	1.33	1.8	0.1	0	0.1	0.1	0.1	0.3	0	0.1	0.1	0.1
Trade deficit 70	1917	1.55	2.66	-0.9	0	-1.1	0.4	-0.2	0.2	-0.3	0.7	0	0.4
AG trade deficit 70	-105.8	1.07	0.17	74.6	553.8	18.7	211.9	10	-4.7	8.4	83.5	1.6	50.8
Investment	107392	2.00	4.45	-0.4	0.1	-0.5	0.3	-0.2	0	-0.1	0.4	0	0.3
P_d/P_n	0.957	1.02	1.1	6.4	3.3	4.6	3	-1.9	-2.1	2.4	1.5	0.3	0.8
Terms of trade	1.108	0.99	0.92	4	12.2	11.1	14.6	-2.6	3.4	4.8	2.8	0.6	1
Parity	0.54	1.00	1.04	3.7	1.4	2.5	1.3	-0.8	-0.9	1.4	0.7	0.2	0.4
Equivalent income	71.84	1.07	1.22	-0.3	0.6	-0.5	-0.2	0.7	0.9	-0.3	-0.2	0	0
Calories/capita	2141	1.08	1.18	-0.1	-0.4	-0.7	-0.9	1.9	1.5	-0.2	-0.2	0.1	0

Source : Parikh et.al. (1988)

If as a response to OECD were India along with other developing market economies also to liberalize, it will moderate some of the adverse impact on India. Yet calorie intake is lower. Equivalent income is also lower in 1990, five years after liberalization, though it does improve by 2000.

In summary, we can conclude that the likely changes in the global agricultural trade environment will have an adverse impact on the rural poor in India, though the impact is rather small.

6.3.3. Impact of Trade Liberalisation and Trading Blocks

The impact on India of the formation of various trading blocks and European integration will be through the changes in India's trading opportunities. These may change in either direction. European integration for example would have two kinds of impact on EC's trade with the rest of the world. While some trade will be diverted to trade among the EC countries, additional trade will also be created as the EC economy will grow faster.

Trade liberalisation should stimulate global trade as better allocation of resources should increase global GNP. Moreover as countries adjust from a relatively distorted production structure to free trade, they need to trade more. The question, however, for India is, given its highly distorted production structure, can it adjust to free trade without a major disruption in production and consequent recession, unemployment and poverty?

Some of this pain may be unavoidable. However, with a carefully phased programme of liberalisation, introducing domestic competition first followed by a pre-announced fixed time table of removal of protection can minimize the pain. One should however, recognize that avoiding the pain of adjustment continues the pain of poverty for the poor much longer.

6.3.4. Environmental Concerns and Constraints on Development

The growing concern for the greenhouse effect and the hole in the ozone layer call for global action. India along with other developing countries is being pressurized to reduce emissions of chlorofluorocarbons (CFC), and greenhouse gases, Carbon dioxide (CO_2) and Methane (CH_4). How do these restraints affect India's prospects for development and how would that affect the rural poor?

The costs of curtailing emissions are many. For example, consider the CFC emissions. CFCs are used mainly in India as refrigerants whereas in developed countries they are used in aerosols and fire extinguishers in large scale. To replace refrigerant CFCs, substitutes are under development. India would have to import these subsitutes. Even if India is compensated for the additional cost of these subsitutes, it is only a small part of the cost. India's know how and investment in CFC manufacture becomes technologically obsolete as a consequence of environmental constraints necessitated by a problem mainly created by others. It also affects India's competitiveness in third markets to export air conditioners and refrigerators.

Control on CO_2 emissions implies restraint on the use of carbon, the only fossil fuel India has in abundance. Thus the value of this resource is reduced.

As we have seen earlier growth helps the poor. Any reduction in the growth of India's economy will affect the poor adversely.

Thus the global green house treaty should account for these consequences. If the treaty allocates the global carrying capacity fairly, then there need be no adverse impact on India's prospect for development as India's share should exceed what it emits.

6.4. Conclusion

We have seen that the global economic environment can in an important way affect a country's domestic policy options in its preoccupation to guard itself against the adverse influence from the global economy. India had selected to insulate itself to a considerable extent from the global economy and in the process denied itself the possible gains from trade. In the process the Indian economy has been less capable to withstand global shocks.

Thus the general environment of the global economy cannot be held too responsible for the state of the poor in India. Nevertheless specific influences from the global economy has affected the poor.

1) The availability of cheap foodgrains imports against Rupee payment from the USA, under its PL-480 in the 60s, helped India manage the two severe

droughts, without too adverse an impact on the poor. The PL-480 imports lowered agricultural and food prices and they provided budgetary support to the government- part of which led to higher gross domestic capital formation including in irrigation. The net impact on the rural poor of the loss of income due to loss of terms of trade for agriculture and the gain in income due to additional employment opportunity created by a faster growth of irrigation is difficult to assess but is most likely to have been small. The persistance of poverty in rural India cannot be easily blamed on the temptation offered by the availability of cheap foodgrains imports under the PL-480.

2) Given the small freedom India had to adjust critical imports, the two Oil Shocks of 1973 and 1979 would have been disastrous. The growth process got disrupted and it is reasonable to assume that the poor became worse off. Fortunately these adverse impacts were somewhat moderated by the suddenly expanded opportunities for employment for Indian workers in the middle East and the remittance that they sent to their families in India. Thus the second oil shock was less disruptive thanks to the resiliance provided by export of labour.

3) The prospective changes in the global economy and the likely formation of trading blocks will make it harder for India to expand its exports. To the extent this will restrict the growth rate of the Indian economy, the process of poverty alleviation would be slowed down. The Indian economy and the poor in India need free trading global economy.

4) While these changes can restrict India's export opportunities, an outward orientation is still the best policy for India as it will increase efficiency and promote a faster growth of employment. Also since India's share of the global merchandise trade is a miniscule 0.6 per cent, it should be able to expand it even if a restrictive trade environment emerges. Ofcourse a free trading would be better.

5) Finally, the emerging global concern for the green house gases should not be allowed to impose unfair burden on developing countries to tackle a problem created by the industrial nations and to support the unsustainable life styles of these countries. If India is given its fair share of carrying capacity of the earth's atmosphere, then India will be free to pursue its own priority on the environmental front. In resource allocation, improvement of the local environment in urban slums and restoration of rural commons, supply of clean water and provision of sanitary facilities should get a higher priority than green house gas emission control. The quality of life of the rural poor in India can then improve.

VII. POLITICAL ECONOMY OF POVERTY IN INDIA

7.1 Introduction

In India, political economy plays an important role in affecting the levels of living of the poor people. This is because major policies of the government are dominated by political powers of different groups. The state cannot bypass the poor because of the democratic form of government in the country. On the other hand, the pressure or interest groups try to influence both the government and the poor to shift the policies in their favour. In this chapter, we analyse the political economy of poverty in India by addressing the following questions:

(a) What is the framework under which the political economy works in India?

(b) What are the pressure or interest groups? what is the importance of these groups? and why policies are what they are?

(c) How have these pressure groups affected the economic policies and the poor? and What is the role of the poor in the political process?

7.2 The Framework

The usual Marxian framework of 'class structure' does not seem to be operating in the Indian economy because of the marginality of the two major classes in the Marxian analysis, namely labour and capital.

We begin with the marginality of organized labourers in the economy. Table 7.1 presents the percentage of organized[1] employees in different sectors. Out of the total 262.3 million employees, only 25.8 million workers in Indian economy are organized in 1987-88. In other words, only around 10 per cent of the workers in the country are in the organized economy. Among different sectors, only in electricity, gas and water, mining and quarrying, transport and services, the percentage of organized workers is sizeable. It may also be noted that of the 10 per cent (25 million) of the work force in the organized economy, only an estimated 30 to 40 per cent (8 to 10 million) are members of trade unions, a proportion that further diminishes the objective conditions supporting organized labour, one of the two classes in class politics[2]. The 90 per cent of the work force in the unorganized economy has remained beyond the ambition or capability of organized labour. Most of these workers are in the agricultural sector. As will be shown later the politics relating to agriculture is mainly sectoral rather than class based.

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[1]Organized sector comprises all establishments in the public sector and those non-agricultural establishments in the private sector employing 10 or more persons.

[2]Rudolph and Rudolph (1987)

Table 7.1 : Percentage of Organized Employees by Sectors : 1987/88

Sectors	Total Employees (In Millions)	Employees in the Organized Sector (In millions)	% of Organized Employees in Total
(1)	(2)	(3)	(4)
Agricultural & allied activities	171.1	1.4	0.8
Mining and quarrying	1.9	1.1	57.9
Manufacturing	28.5	6.3	22.1
Electricity, gas & water	1.0	0.9	90.0
Construction	9.9	1.3	13.1
Trade, restaurant & hotels	18.7	1.7	9.1
Transport	7.1	3.1	43.7
Services	24.1	10.0	41.6
Total of all groups	262.3	25.8	9.8

Source : Calculated from
1. NSS 38th Round Survey on employment and unemployment and
2. Economic Survey, 1989-90.

Again, among the organized workers 2/3rds are from the public sector as shown in Table 7.2. Only in agriculture, manufacturing and trade, the share of private sector employees was higher than that in the public sector.

Table 7.2 : Importance of Public Sector Among the Organized Employees

Sectors	Employees in the Public Sector (in millions)	Total organized Employees (In millions)	% Share of Public Sector (Col2/col3)*100
(1)	(2)	(3)	(4)
Agriculture, hunting etc	0.6	1.5	40.0
Mining & quarring	1.0	1.1	90.9
Manufacturing	1.9	6.3	30.2
Electricity, gas and water	0.9	1.0	90.0
Construction	1.2	1.3	92.3
Wholesale and retail trade	0.1	0.4	25.0
Transport, storage etc	3.0	3.1	96.8
Financing, insurance, real estate	1.1	1.3	84.6
Community, Social & personal services	8.6	10.0	86.0
Total of all groups	18.3	25.7	71.2

Source : Calculated from
1. NSS 38th Round Survey on employment and unemployment and
2. Economic Survey, 1989-90.

The presence of state as the third actor apart from labour and private capital indicates the marginality of class politics. In contrast to private capitalist, the Indian state as owner of the public sector enterprises presents itself as the labour's representative, friend and protector although in practice the state may not adequately represent labour's interests. Also, organized labour is fragmented at the top into eleven national federations whose ideological and partisan

divisions inhibit organized labour's capacity to act as a body for political , policy making or bargaining purposes[3].

The second actor in the Marxian analysis of class politics is the private capitalist. This class can influence the government in the application and implementation of controls and regulations in the decisions regarding investment, expansion, new products, foreign exchange, pricing etc. The important channel of influence by the private capitalists is generally made through business contributions to political parties. This class, however, faces formidable constraints that inhibit its capacity and will to engage in class politics. Private capitalism in India relies on the patronage and protection of the state for its profits and security. It is protected by the state from competition through licencing policies and by trade policies that continue from the import substitution development strategy. Since the private capital markets and the insurance markets are poorely developed, private industrialists generally rely on the policies and discretion of government-owned banks and long term lending institutions. Private capital sufferes from the absence of a public political voice since the demise of Swantantra party which operated between 1959 and 1974. After the Swantantra party, most of the political parties have some sort of concensus on secularism, socialism and democracy.

The third actor namely the state came to dominate the country's industrial and financial capital as well as employment in the organized economy. As a consequence, the control of state on the economy has become much more powerful than these two classes (organized private capital and organized labour). The public sector runs 8 of the top 10 industrial units in the country (see Table 7.3) and owns more than 60 per cent of all productive capital in the industrial sector.. The net sales of the largest public sector firms were more than six times those of the ten largest private sector firms.

[3]Ibid

Table 7.3 : The Top 15 Industrial Units in Terms of Sales Around 1982

Industrial Unit	Ownership group	Accounting year ending	Sales in billions
1. Indian Oil Corpn.	Govt	March 1982	80.97
2. Steel Authority of India	Govt	March 1982	29.61
3. Hindustan Petroleum Corp.	Govt	March 1982	18.84
4. Coal India (combined)	Govt	March 1982	15.49
5. Bharat Petroleum Corp.	Govt	March 1982	15.47
6. Oil and Natural Gas Commission	Govt	March 1982	13.3
7. Bharat Heavy Electricals	Govt	March 1982	11.7
8. Tata Engineering & Locomotive	Tata	March 1983	8.77
9. Tata Iron and Steel	Tata	March 1983	7.85
10. Madras Refineries	Govt	March 1982	7.74
11. Cochin Refineries	Govt	March 1982	7.69
12. National Textile Corp. (combined)	Govt	March 1982	5.89
13. Indian Tobacco Co.	ITC(F)	March 1982	5.79
14. Hindustan Lever	HL(F)	December 1982	5.13
15. Southern Petrochemicals Inds. Corpn.	Joint sector	(over 18 mts)	4.75

Source : Bardhan (1984) based on CMIE data

In the 1980's, however, the efficiency of public sector came for heavy criticism and the confidence over public sector declined. Particularly, during the rule of Rajiv Gandhi (1984-89) the public sector was perceived by many as the problem rather than the solution. Despite this change in the ideological climate in the 1980's,the state has continued to dominate the other two classes, the private capital as well as the labour. The marginality of private capital and labour indicates that factors other than the Marxian framework of political economy are applicable to India. One factor is that adult franchise preceded industrial development in the country. As a result, the class politics have not developed. Also, the class character in the major sector of the Indian economy namely agriculture has changed over time. As will be shown later, the importance of middle peasants has increased over time. This led to marginality of class politics in agriculture.

Rudolph and Rudolph (1987) show that centrist politics rather than class politics have been dominating in India. They explain the political economy of India in terms of command and demand politics. In their model of demand politics, voter citizens are sovereign. Citizens' preferences are expressed through party competition in election and through representation by interest, classes, communities and movements. The command policy is represented through state sovereignty and state hegemony over policy and politics. The links between command and demand politics and economic policy and performance have to be understood in the context of changing conceptions and the goals for development and the ways to achieve them.

Some other studies have also examined political economy of development in India. Bardhan (1984) is of the opinion that the role of the state in India has been to mediate between proprietary classes and has consisted in evolving a system of subsidies to adjust and accommodate the conflicting pressures of big industrialists, rich farmers and the professionals in the public sector who together constitute the dominant classes. In this context, Bardhan says that the role of the state has been more regulatory than developmental. In a review of Bardhan's work, Dhar (1987) indicates that apart from Bardhan's three classes, unionized labour, small scale industrialists and middle peasants also play a role in the political economy of Indian growth.

To sum up the discussion so far, it may be noted that the political economy in India seems to be working in the framework of demand and command politics (represented by demand groups and the state respectively) rather than in the form of Marxian framework of 'class' character. We therefore, look at the various demand groups and how they have tried to affect government policy.

7.3 Pressure or Demand Groups

The basic motive of demand group is interest rather than class. The interests can be expressed through a variety of social formations- class, caste, tribe or status group, religious, linguistic, or territorial community; and profession or occupation defined in terms of skill, knowledge and ethos as well as in terms of property relations[4].

The major demand groups which also include some form of organized interests can be divided into four: (a) Industrial workers (b) Private industrial sector including small scale manufacturers (c) students and (d) agricultural producers.

Before going to the major demand groups, we briefly mention about the bureaucracy. India has a long tradition of powerful bureaucratic functionaries. During the British rule, the powers of bureaucrats have increased under civil services. They influence the decisions of the government and there is always conflict between owners of private capital and bureaucracy. Bardhan (1984) includes them in the major proprietary class in India since they have human capital in the form of education, skills and technical expertise.

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[4]Ibid

7.3.1 Industrial Workers as a Demand Group

Since Independence, the organized workers have become a major demand group. Within the organized industrial sector, public sector employment grew much faster than that of the private sector. Between 1966 and 1981, the employment in public sector increased by 69 per cent while that of private sector increased only by 9 per cent. Of course the rapid expansion in public sector employment was partly due to nationalisation of insurance and banking. As the number of organized workers increased, trade union militancy gained momentum. The frequency of strikes, lockouts and labour unrest also increased progressively over the years.

Workers in organized sector are more protected against inflation (due to dearness allowance linked to cost of living index) as compared to many workers in the unorganized sector. Within the organized sector, the public sector workers get much higher salaries than those of the private sector. In the 1980's the supporters of agrarianism have increasingly drawn attention to the increasing disparity between the incomes of industrial and agricultural workers.

In spite of increasing trade unionism in the organized industrial sector, the government could control the militancy largely due to the ideological, partisan and territorial fragmentation of unions. Also, the unions proliferated rapidly weakening the capacity of the organized workers to affect economic bargaining, political competition and policy formulation in the process.

7.3.2 Private Industrial Capital

The private industrialists, mainly under the leadership of the top business families like Tatas from Western India, were reasonably strong at the time of Independence. They have influenced government decisions by encouraging the policies on import-substituting industrialization, quantitative trade restrictions providing automatically protected domestic markets, and of running a large public sector providing capital goods, intermediate products and infrastructural facilities for private industry, often at artificially low prices (Bardhan, 1984). The big industrialists because of their better access to bureaucrats have violated the licensing regulations and created unlicensed capacities. The large business houses also run many small scale units which are fictitious in order to take advantage of the exemptions and benefits these units enjoy.

Apart from large scale industrialists, small scale entrepreneurs constituting 50 per cent in total industrial output and employing 2/3rd of the total labour force engaged in production are also powerful. Dhar (1987) indicates that "small industrialists are now a national constituency in their own right and their lobbies are politically very powerful and influential essentially in electoral politics... The political power of the small industrialists is less visible, but it is more widespread" (p.7).

7.3.3 Students as a Demand group

Students, particularly educated unemployed youth, have become important demand group in Indian politics. Student politics is generally limited to the issues internal to universities. They also participate in the agitations for regional demands. They exhibited their potential in 1974-75 in Gujarat, in North India in the mid -70s in the form of JP (Jaya Prakash Narain) movement, and in Assam in the 1980s. More recently, the upper caste students have participated in the agitation against the Mandal Commission Report which provided reservations in Central Government employment for backward classes.

The unprecedented growth of higher education was a response to powerful political demands for a pace of expansion. The higher education received a disproportionate share of the available funds in part because of the political influence of the urban middle classes and rural elite in public policy and the absence of countervailing pressure for allocations to elementary education. Although the overall unemployment rates are low, the unemployment rates among the educated (graduates and above) are very high as shown in Table 7.4 for rural areas.

Table 7.4 : Unemployment Rates by level of Education (Usual Status) : All India Rural, 1977-78

Educational Status	Incidence of unemployment (%)
Illiteracy	2.06
Primary	7.29
Middle	4.92
Secondary	16.92
Graduate & above	21.68
Diploma Holders	14.71
All	3.17

Note : Incidence of unemployment is defined as a ratio of unemployed persons to labour force

Source : NSS 32nd Round Survey on Employment and unemployment

Unemployment among the educated is a significant element in student discontent and influences students to mobilise. The present disturbances in Punjab and Assam could be partly due to this discontent among the unemployed youth. The politicians have used students as a demand group in a big way. As a result, students are able to become an effective political class in partisan and agitation politics.

7.3.4 Agricultural Producers

The important and influential demand group in rural areas is that of agricultural producers which succeeds in moulding the policies of the government in a big way. In the agricultural sector also, the usual 'class politics' do not seem to be working. Rudra (1988) contends that "a large proportion of the agricultural population of our country does not belong to any class whatsoever" (p.485). He says that "the interest of the big landowners are so homogeneous on a countrywide scale that the local-level pressures cumulatively add up to regional-level pressures and even national-level pressures that get reflected in regional level and national level politics (p.499). The big landowners not only constitute a class-in-itself but also a class-for-itself. By contrast, the agricultural workers do not as yet constitute a class for-itself because of their organizational weaknesses.

In his analysis of political economy of development, Bardhan (1984) calls the rich farmers as 'numerically the most important proprietary class'. The government has assured price support for these rich farmers and provides subsidies to the inputs. Due to this lobby of the farmers, there has been hardly any significant taxation of agricultural income and wealth.

It may be noted, however, that middle peasants are becoming more important in the demand politics. As shown in Table 7.5, semi-medium (2 to 4 hectares) and medium (4 to 10 hectares) farmers together constitute 21 per cent and 50 percent of the total holdings and total operated area respectively, in 1985-86.

Table 7.5 : Percentage Distribution of Number of Holdings and Operated Area by Size Classes: All India, 1985-86.

	% of number of Holdings	% of area operated
Marginal (below 1 ha)	58.1	13.2
Small (1 to 2 ha)	18.3	15.6
Semi-medium (2 to 4 ha)	13.5	22.3
Medium (4 to 10 ha)	8.1	28.7
Large (10 ha. & above)	2.0	20.2
Total	100.0	100.0

ha = hectare
Source : Agriculture Census, 1985-86, Ministry of Agriculture, Krishi Bhavan, New Delhi.

The demands regarding farm prices, subsidies etc are similar for both rich and middle peasants. There are no serious conflicts of interests between rich farmers and middle peasants on state politics affecting agriculture.

The form of agrarian demand politics and the issues involved have changed over time. In the fifties and sixties, the issues were mainly confined to land reforms, compulsory levy of foodgrains, taxation of agriculture etc. With the introduction of new technology, the issues relating to commodity and input prices became important.

In the mid and late sixties, Charan Singh,who formed an explicitly agrarian party the Bharatiya Kisan Dal (later Bharatiya Lok Dal),was the leader for north Indian cultivators. Unremunerative prices for farm products has, since the late seventies, been the main issue in demand politics for farmers' organizations. With Janata's victory in 1977, the farmers' movements such as organized by Sharad Joshi in the late 70s and Mahendra Singh Tikait in the 1980s and the victory of Janata Dal in 1989, the agrarian politics came of age.

Under the leadership of Sharad Joshi, the farmers' resistance in Maharashtra became an organized force in the name of Shetkari Sanghatana (Farmers' Association). Joshi proclaimed that urban areas have been exploiting the rural areas and named rural and urban areas as 'BHARAT' AND 'INDIA' respectively. The Shetkari Sanghatana has taken the issues of onion, sugarcane prices etc. since Maharashtra has a big share in the production of these commodities in the country.

The importance of middle peasants started increasing after the mid - 1960s. Conclusions of a study by Brass 1980 on the politicization of the peasantry in Uttar Pradesh (U.P.) are: The principal factor for the decline of congress party in U.P. over time has been its inability to establish a stable basis of support among the middle peasantry. Disaffected from the congress since the 1950's, this middle peasantry turned in large number to the Bharatiya Kisan Dal, the agrarians party of Charan Singh, in its first appearance in U.P. elections in 1969. They also provided the central core of support for the Janata party in its landslide victory in the 1977 state assembly elections. In 1989, Devi Lal won the elections with the support of the middle peasantry and also became Deputy Prime Minister of the country.

The above conclusions indicate that the political parties and all the governments cannot take the demands of the middle peasantry lightly if they want to win the elections particularly in rural India.

7.3.5 Overlapping Interests/Loyalties

We have discussed above the roles of four major demand groups in the political economy of India. There are many other demand groups in the country and their interests/loyalties are overlapping. The overlapping interest groups including the four major demand groups mentioned above can be listed as follows:

Bureaucrats, organised labour, private capitalists, small scale industrialists, handlooms and handicrafts, household informal sector, politicians, academicians and intellectuals, scientists and technologists, scheduled castes, scheduled tribes, other backward classes, students and agricultural groups - surplus farmers, small and marginal farmers and landless labourers.

These groups compete to have more share in the overall cake and all except the household informal sector, and landless labourers are happy with the present policies of the government since they are getting larger shares.

As mentioned earlier, demand polity has several interests -sectoral, class, casteist, linguistic etc. The command polity initiates several programmes and the vested interest pressure groups get developed. These pressure groups try to hijack the programmes which defeats the whole purpose of the developmental programmes.

7.4 The Impact of Demand Groups on Economic Growth and Poverty

The industrial workers have managed to delink wages from productivity and contributed their own share to the losses from public sector undertaking and to the industrial sickness in the

private sector[5]. The militant leadership of the trade unions, often provided by political parties, has given rise to a system of industrial relations which has directly hit the growth of productivity in the economy. Indirectly, the pressure tactics of these workers have induced producers in industry and in some parts of agriculture to substitute capital for labour whenever they can and thereby retarded the growth of employment which is the most effective instrument of poverty alleviation[6]. The industrial workers have been skillful in organizing themselves and use coercion for achieving their sectional interests at the cost of the industry in accumulating benefits for themselves. Expansion of organised employment has not been a goal of the labour unions. The labour unions have resisted automation to protect existing jobs, but their actions have not led to expansion of employment. This is true even in rural areas. It suggests that the demands of industrial workers have affected economic growth and levels of living of the poor adversely.

The private industrial capital supported the import- substitution strategy followed in India since Independence. The Bureaucracy and the intellectuals with leftist ideologies have also encouraged this strategy. As shown in previous chapters, this strategy could be responsible for slow growth in the economy till the early 1980s.

Small industrialists have increased employment in the country but at the cost of efficiency in the utilization of resources. This is especially true of the sub-sector of small enterprises which produce modern goods with the same techniques as are employed by their larger counterparts. Being small, the small enterprises in this sector have proportionately larger overhead costs. However, because of the demands of the small scale industrialists and for popularity, the successive governments particularly the government formed by Janata party have resorted to protective policies and exclusive reservations for small scale enterprises. These policies have affected the efficiency of the small scale sector.

The textile industry provides an example of the working of the political economy of India. It is one of the oldest industries in the country and has also a highly unionized labour force. Many of the mills, robbed by the managing agents, or neglected by the incompetent second generation owners who followed the original owners of the mills, were allowed to run down. In a competitive environment they should have closed down. Under the pressures from the labour unions they were not permitted to close down and many of these loss making units were nationalised and taken over by the government which continues to bear these losses till today.

In order to promote employment in the small scale sector, small power loom units were given excise concessions. Also freed from the pressures to pay union wages, the power loom sector boomed. Smallness was faked by many entreprenuers to benefit from the concessions. Though the powerlooms provide a much needed correction to highly constraining government policies, the mills became sicker as they faced this unfair competition from the

[5]See Rudolph and Rudolph (1987) for the data on strikes by the industrial workers.

[6]See Dhar (1987)

power looms. The powerlooms have become one more pressure group and the government is not able to withdraw the concessions.

The handloom and the Khadi (hand spun and hand woven cloth) industries, initially got protection as a Gandhian legacy of the independence movement. In the command polity of the post independance period, special emphasis was laid on them as they were considered to have large potential to provide additional incomes to the poor. Certain products were reserved for them, subsidies were provided and they were protected against synthetics through tariffs and excise taxes. They have over the years developed into pressure groups for continuation of these policies.

Nationalization of loss making mills to protect organised labour, excise concession to so called small industries to protect the power loom lobby and the product reservation, subsidies and protection to guard the interests of the handloom and Khadi workers-all of these put a sizeable claim on government budget.

We turn now to the most influential demand group in rural areas, namely agricultural producers. The major demand of these producers relates to the issue of remunerative prices for crop production. Given the character of the dominant political leadership and organizations in the country, the question of unremunerative prices for agricultural produce always gets more primacy. All the political parties irrespective of their ideologies support this major demand of the farmers. Due to the demands of the rich and middle peasants in many years, the administered purchase price (procurement price) has been higher than the weighted average cost of production which also includes imputed value of family labour. The recent changes (during the tenure of the Janata Dal government) in the method of arriving at procurement prices/minimum support prices for agriculture produce were due to the demands of these farmers and shows their growing political clout and sophistication. An expert committee which reviewed the methodology of production of crops has suggested some changes. Most important changes suggested by the committee are: (a) the evaluation of wage costs of family labour at actual wage rates for casual labour (b) computation of hired labour wage costs on the basis of actual wages paid and (c) payment for management input of farmers at the rate of 10 per cent of the paid-out costs. But, the government under pressure from the surplus farmers has made changes in these recommendations. Major disagreement between the expert committee and the government was regarding the consideration of wage costs between prevailing market wage rate and the statutory minimum wage rate in any region. The agriculture ministry suggested that the higher of the two would be considered for calculation of wage costs. Regarding management cost, the ministry indicated that the percentage should be taken from the total costs rather than from the paid-out costs. As a result of these changes, the procurement prices of foodgrains increased significantly in recent years. Obviously the poor, majority of whom are net buyers of food, are directly affected by the increase in the prices of foodgrains. The present bufferstock of 21 million tonnes is expected to be 27 million tonnes by June, 1991. Still food prices were allowed to increase directly affecting the poor.

In order to please the farmers, the politicians resort to popular policies without thinking about its impact on the economy. As part of their election promises, the Janata Dal government waived off farmer's loans upto Rs. 10,000 at huge cost. One should not get

worried if poor people benefit from these measures. Some reports, however, show that middle and rich farmers benefited more from this scheme.

The Impact of press on poor people: Inspite of its biases towards different political parties, the press in India has been doing well in helping the poor socially and economically. As shown by Dreze and Sen (1989), the Indian press played an important role in preventing famines by giving wide coverage to the impending drought and famine which forced the government to undertake immediate relief measures. It also acted as a countervailing power to the politicians regarding violence in the elections, atrocities on tribals, Harijans etc.

7.5 The Poor in the Political Process

The only major power of the poor in a democracy is participation in the election process. The poor in India can exercise their voting rights directly at three levels: elections for forming national government, state governments and panchayats. Some constituencies are reserved for scheduled castes, scheduled tribes and women at all these three levels. Due to this, some parts of the vulnerable sections of the society also participate in the policy making.

The elections in India are by and large free and fair and the electoral verdicts have generally reflected voter preferences. It may, however, be noted that the poor in some cases may not be allowed to exercise their voting power according to their wishes. We still have patron-client relationship in some villages and the poor have to vote according to the preferences of the landlords. Even the selection of scheduled caste and tribe candidates for panchayats is often done by the rich people. The poor are also affected by increasing violence in the elections. There were many instances of booth capturing to deny some voters thier right to vote, through violence. In recent years, the ability of the election commission to maintain free and fair elections has been increasingly stretched in certain parts of India.

Apart from the elections, the poor can participate in demand politics through mobilization. In a few areas of the country, the poor were mobilized to press for their demands. Rudolph and Rudolph (1987) reviewed two sets of studies: one in Thanjavur district of Tamil Nadu where mobilizations of the rural poor have occurred; the other in diverse locations in the West and the North. Mobilizations of the rural poor in the favourable objective conditions of Thanjavur district's old delta depended on the presence of leadership and the agrarian radicalism provided by the communist party cadres in the 1940s and late 1960s. In contrast, the North Indian micro studies showed that the conditions that prevailed in Thanjavur are more the exception than the rule. This study also indicates that the mobilization of the rural poor not only occurs rarely but also the prospects are dim for it to be a vehicle of revolutionary transformation.

7.5.1 Political Parties, Government and the Poor

The idea of social justice and removal of poverty has been in the forefront of the national political agenda since independence. While the poor are not organised politically, they are the most numerous. Thus every political challenger sees them as a vote bank to be seized. At election time, therefore, all political parties need them. Thus the Garibi Hatao ("abolish

poverty") slogan of Mrs. Gandhi or the implementation of the Mandal Commission report and reservation of 49.5% of the Central government jobs for the backward castes promised by V.P. Singh's Janata Dal, are the two most obvious examples. However, once the election is won, the reality of pressure groups takes over. The committment to socialistic pattern, Garibi Hatao etc., given prominance in the election rhetoric do not get completely forgotton. Many programmes do get started ostenisbly to benefit the poor. But they get highjacked by the established groups and the benefits do not fully reach the poor.

It may also be noted that there has been no political party which has organized the poor as a group. When it comes to the choice between rich farmer and the poor, the government and all the political parties support the farmers' cause. In fact, the decision making of the government is generally the outcome of the relative clout of powerful lobbies who want to improve their private interests. The politicians and the government sometimes avoid entering such areas of conflict to carry out reforms which would benefit the poor.

Finally, on the positive side, it is worth mentioning that the political awareness among the rural poor has been increasing. The Harijans, the largest single section of the poor, the tribals and other weaker sections of the society are developing their own leadership to counter the dominance of the rich people. This process of the mobilization of the poor, however, may take years to come.

7.6 Conclusions

We may recapitulate the major conclusions of this chapter.

(1) Political economy in India seems to be working in the framework of demand and command politics (represented by demand groups and the state respectively) rather than in the form of Marxian framework of 'class' character.

(2) The economic policies of the government are generally determined by the relative clout of different demand groups which are interested in their private interests in getting a larger share of the cake rather than in increasing the size of the cake through economic growth. These policies have affected the poor adversely.

(3) The poor participate in the political process in the form of elections at various levels. Some of the poor and vulnerable sections of the society also participate in decision making. But, the policies are generally determined by the rich. Different governments have introduced anti-poverty programmes in order to show that they are pro-poor. Every government that comes to power continues these programmes for their own survival. Since there is no committed bureaucracy, most of the schemes are only partially successful.

(4) The press is playing an important role by acting as a countervailing power to the government and the various demand groups.

(5) Because of the multiplicity of pressure groups of a pluralist society operating as a demand polity, it is not surprizing that the policies have many internal contradictions. The distorted protected, import substituting slow growth economy hurts the poor in terms of many lost opportunities for employment that faster growth would have generated. At the same time public food distribution and a variety of poverty alleviation programmes are pursued to protect the poor. Regarding effective implementation of the anti-poverty programme, the solution lies in the with mobilization of the poor. Increase in literacy among the poor will go a long way in promoting awareness among the poor regarding anti-poverty programme and their subsidy entitlements and in putting pressure on the government and the bureaucracy for effective implementation of these programmes.

VIII. POLICY CONCLUSIONS

8.1. The Possibilities

The poor do not get adequate incomes to buy all the basic necessities because they own too little assets of skills, capital or land, and the one asset that they own namely unskilled labour, fetches a low wage.

Policies can be directed either to give additional income to the poor by direct transfer, or to increase the real value of their incomes by lowering the relative price of the main consumption good of the poor like food, or to give them additional income earning assets such as skills, capital or land, or to increase the market value of the assets that they own. The most important long term policy is to increase the demand for labour for productive employment resulting from economic growth and augment the skills of the poor through education.

We have already seen that Indian policy approaches have included all these with varying degree of success. The PDS can be viewed as a programme to provide direct income support. The PDS has also served as a shock absorbing buffer against transient poverty due to high food prices in bad agricultural years. The PDS along with the food price policy of low output price with subsidized low priced inputs have aimed to increase the real value of the incomes of the poor. The various legislations on land ceilings, acts on land to the tiller and tenant's rights have tried to provide productive assets to the poor in the 1950s and the 1960s. In the 1980s, IRDP and other similar programmes have sought to give other productive assets to the rural poor. Expansions of primary education and various agricultural extension efforts have been directed to augment skills and knowledge. The various rural works programmes have created additional employment for unskilled labour and hence increased the demand for that one asset of the poor.

How have these policies performed and what does the experience suggest for future policies?

8.2. Income Transfer Through the PDS

Though the PDS has mainly served the urban population in the past, in recent years its coverage of rural population has matched urban coverage. The modest income support it provides in normal agricultural years must have marginally reduced poverty. However PDS benefits are not targeted to the poor as no means test is applied to determine the recipients. As a consequence, for a rupee spent, what the poor get is much less than what they could have obtained with a better targeting scheme.

Not all the poor are able or willing to buy all of their ration entitlements at the going prices. As a consequence on a per capita basis the rich get a larger income subsidy than the poor. Many poor buy provisions for a day or two because of the lack of liquidity to buy two

weeks' ration at one time and in the process are forced to forgo bulk of their ration entitlements. This is also regressive.

The direction in which the PDS should be improved are obvious.

a) Coverage should be expanded in rural areas to cover as many poor as possible.

b) Better targeting to the poor is desirable. It should exclude the top 50 per cent of the population, to begin with. Problems of identification and implementation do exist but a social climate may be created in which the well to do may be shamed into compliance.

c) The possibilities of targeting through providing coarse grains used by the poor may be limited as the markets for coarse grains are thin, their output has remained stagnant over the years for want of suitable and stable improved varieties and increasing the demand for coarse grains may push up their prices. This may negate any benefits the poor may have from distribution of coarse grains through the PDS.

d) One possibility of targeting would be to sell ration provisions only for a day or two at a time. This would make it possible for the poor with cash shortage to avail of their ration entitlements to a greater extent. It will also discourage the well to do from buying rations because of the higher transaction cost.

e) Even if targeting is not done, it is better to provide a given amount of income subsidy by increasing the subsidy on price and reducing the quantity of ration entitlement. This way the poor will be able to buy a larger proportion of their entitlement and hence get more income support. The quantity may be increased in bad agricultural years .

While these improvements can make PDS a better tool for poverty removal, because of the costs involved it cannot be the main measure to fight rural poverty in India.

8.3 Food Price Policy

The low output price and subsidized input price policy does help the poor. However, the burden of increasing subsidies for fertilizer, water and electricity now strains government budget to the point that their continuation has become untenable. Low input prices lead to other distortions. When marginal cost of water is nearly zero, a better water intensive cropping pattern gets selected and water is overused which may lead to water logging and salination problems. Low price of electricity for pumping water encourages overexploitation of ground water and discourages maintenance of pumps and conservation of energy. Similarly low fertilizer price also affects cropping pattern and leads to overuse of fertilizer.

The present policy of low food prices through input subsidy has now become untenable. It would be better to subsidize investment and support agricultural research rather than subsidizing current inputs - if cheap food is desired. Stepped up investment in irrigation

can also be targeted to backward areas or to poorer farmers and therefore also has the potential to further help alleviate poverty. Expansion of irrigation also generates additional employment. To make investment in irrigation in new areas more effective, research is also needed to adapt high yielding varieties to local agro-climatic conditions. Thus, low food prices realized through stepped up targeted irrigation and agricultural research would alleviate poverty more than input price subsidies.

8.4 Land Distribution

Not much scope exists for redistributing land in India. In 1971-72, of the 80 million agricultural households,less than five million landholders were considered large and operated more than 15 acres each. The average size of farm operated by such "large" farmers is around 30 acres.

The land reform carried out during the Nehru era has been estimated to have reduced tenancy from 60 to 25 percent and increased the proportion of owner cultivators from 40 to 75 percent (see Khusro(1964) and Joshi (1969)). The attempt to collectivize farming through co-operative joint farming in 1959 failed (fortunately?).

Further land reforms were carried out in the seventies in Kerala and in the eighties in West Bengal - by the CPI-M led governments.

Whatever may have been the impact of these reforms on rural poverty, the scope for further redistribution or the likelihood of realizing it remain small. This, thus, cannot be considered a significant policy option for alleviating rural poverty.

It is interesting to note that rural poverty in Kerala and West Bengal still exist and that land reforms have not abolished poverty.

8.5. Restoration of Common Property Resources

A major factor in worsening the quality of life of the landless and marginal farmers is the widespread degradation and reduction due to encroachment of common property resources.

Loss of trees have deprived them of fuel wood, for which they now have to walk longer and spend more time gathering twigs etc., Overgrazing has destroyed village pastures and the ability of the landless poor to keep animals gainfully is reduced. Similarly, reductions in the capacities of village ponds and tanks have meant that the poor have less fish and water. Even efforts at reforestation based on inappropriate trees has resulted in loss of artisan raw materials for the poor.

Thus policies for the restoration of village commons can play an important role in poverty alleviation and in designing an approach to such policies. We should first understand why common property resources have come to the sorry state they are in and have turned into wasteland. A major factor is overharvesting of common property resources. But this has happened also because such resources are often government owned and the users have a right

of use only through convention. They did not perceive it as their own resource nor did they feel responsible for preserving its quality and sustained productivity. Also a particular property was accessible to people from many surrounding villages. Enforcement of a social contract and discipline needed to preserve such a property were difficult.

What is needed is to provide each village exclusive right of use to a given piece of common property and to institute open democratic management of it. The strategy suggested for this by Agarwal and Narain(1989) is the most promising of the various suggested schemes. They recommend a gramsabha (village assembly) equipped with appropriate laws and funds and supported by information, education, training, technical assistance and incentive schemes to manage such common properties. Decisions on the management have to be taken in the open gramsabha meetings to ensure relevance and equity.

Only then can a social contract will be enforceable. Experiences in a number of instances have shown the workability of such a model.

8.6 Capital Distribution for Self Employed Poor

The income of the self employed poor can be increased by (a) improving the productivity of the existing assets and/or (b) creation of new assets. Since the early 1970s many target group oriented programmes for self employed poor were introduced in different five year plans. The Small Farmer's Development Agency (SFDA) and the Marginal Farmers and Agricultural Labourers Development Agency (MFALDA) were initiated during the Fourth Plan period. The Integrated Rural Development Programme (IRDP), the Training of Rural Youth for Self-Employment (TRYSEM), and the Development of Women and Children in rural Areas (DWCRA) were introduced in the Sixth Plan. Out of these programmes, the IRDP is the most important one.

8.6.1 Evaluation of the IRDP

The IRDP aims at making the beneficiary poor household economically viable through self-employment which would enable the selected households to cross the poverty line. The IRDP instructions classified the 'poor' into three categories: very very poor, very poor and poor.

There are four major studies on the IRDP which covered the whole country. viz., the Reserve Bank of India study (RBI, 1984), the National Bank for Agriculture and Rural Development study (NABARD, 1984) the study by the Programme Evaluation Organisation (PEO, 1985) of the planning commission and the study by the Institute for Financial Management and Research (IFMR, 1984). Subba Rao (1985) and Bandopadhyay (1989) have thoroughly reviewed these studies. We just highlight the important findings of these studies regarding the impact of the IRDP on beneficiaries (see Mahendra Dev, 1990a for further details).

Table 8.1 provides figures on the impact of the IRDP on the beneficiaries. It can be seen from the table that according to the PEO and the NABARD studies, more than 40 per

cent of the beneficiaries have crossed the poverty line and around 80 per cent of the beneficiaries have benefited from the IRDP.

Table 8.1 : Impact of the IRDP on the Beneficiaries

	Percentage of sample households which crossed the poverty line	Percentage of sample households which received incremental income
IFMR	NR	84.2*
RBI	17.0	51.0
NABARD	47.0	82.0
PEO	49.0	88.0

* were 'very poor' and 'happy' with IRDP.
NR not reported
Source: Bandopadhyay (1989)

Subba Rao (1985) says that these studies 'mechanically adopted the criterion of crossing the poverty line as a primary index of the impact of the programme, and showed how poorly the programme fared in relation to this goal. He says that initial income position of the selected beneficiary household is the most dominant factor in enabling the selected beneficiary households to cross the poverty line. Table 8.2 clearly shows that states with a higher proportion of success were precisely the states with a lower proportion of the 'very very poor' category in the selected households.

Hanumantha Rao et.al. (1988) evaluate the IRD programme in Uttar Pradesh for the period October 1985-September 1986. Their conclusions are as follows:

(1) A relatively large proportion of IRDP assets under the primary sector is found to be intact among the poorer households.

(2) In terms of income generation, the performance of secondary and tertiary activities - particularly the latter - has been much better than the primary sector activities especially among the low income households and in the infrastructurally developed regions.

(3) There has been significant increase in incomes on account of IRDP. Infrastructurally backward regions like the Himalayas and the Eastern regions show a smaller net increase in incomes attributable to IRDP. For the infrastructurally developed regions, nearly two thirds of the income from IRDP assets represents a net addition to household incomes.

Table 8.2 : Beneficiaries Crossing the Poverty Line

State	No of eligible eneficiaries in the sample	Per cent of beneficiaries with an initial income level of	Per cent of beneficiaries crossing the poverty line
Andhra Pradesh	93	33.3	25.8
Assam	58	13.0	31.0
Bihar	100	69.0	31.0
Gujarat	53	7.4	50.9
Haryana	88	26.0	76.1
Kerala	102	47.0	39.2
Karnataka	99	36.3	32.3
Madhya Pradesh	89	21.3	49.4
Maharashtra	86	15.1	65.1
Orissa	63	12.7	52.4
Punjab	22	0.0	86.4
Rajasthan	76	48.7	22.4
Tamil Nadu	89	52.7	27.0
Uttar Pradesh	119	21.7	72.3
West Bengal	58	18.9	77.6
Total	1195	-	47.1

Source: Subba Rao (1985) computed from NABARD Report

There are many other review studies on the IRDP. Rath (1985) after reviewing many evaluation studies on the IRDP concludes that poverty alleviation programmes should concentrate on wage employment programmes rather than asset creating self employment programmes. Dantwala (1985) on the other hand argues in favour of self employment programmes. Hirway (1985) indicates that around 63 per cent of rural workforce in India are self employed. Therefore, she argues that these programmes should not be neglected.

It may be mentioned here that there is a contrast between the findings of intensive micro-studies and large-scale household surveys. The findings of the latter type of studies are

much more encouraging. A recent study by Dreze (1990) also shows this contrast. After evaluating the IRDP experience, Dreze concludes that "(1) even if IRDP were flawlessly implemented, we could not expect this programme to bring about the kind of radical reduction of rural poverty in India that is often claimed or expected to produce, (2) in large parts of India (with some important exceptions such as West Bengal) the selection of IRDP beneficiaries is at best indiscriminate and at worst biased against the poor, and 3) we have no solid evidence on the actual effects that IRDP has on the living standards of the participating households" (pp. A101-A102).

Instead of IRDP, Dreze advocates a serious programme of employment generation, preferably in the form of an Employment Guarantee Scheme with legal status.

The above review shows that the experience of the IRDP where the poorest were provided with capital assets have been generally not very good. Apart from targetting difficulties, and other leakages which raise the success rate of transfers through such asset transfers, the continued support for working capital, lack of skills to use efficiently the asset and inability to effectively market the products show up all too frequently. Capital by itself does not make an entrepreneur and certainly the poorest have too little skills to become successfully self employed.

Perhaps the mistake in such programmes has been to target it to the poorest. They may have a better chance to success were they directed to the not so poor and perhaps the benefits may have trickled down to the poorest.

Nevertheless from the experience so far, it seems that unless skills are also given, assets alone are not too effective.

8.7 Education and Skill Formation

Education takes time to be an effective anti-poverty policy. There is a bit of a chicken and egg problem here. The poor can't afford to send their children to schools even when schools are free. The children are needed for productive work such as gathering fuel, do household chores, look after younger siblings so that the mother can work etc.

The sad fact is that even today not all primary school going age children in India go to schools. Indian policy makers have not appreciated enough the role of literacy to spend the resources and effort needed to ensure 100 percent attendance. Nor has schooling been made compulsory. The reasons for this, and a critique of this failure are described in Wiener(1991).

The allocation of resources by the government also suggest a relative neglect of primary education.

What is needed is to allocate much more resources for primary education, including provision of incentives to ensure that the children of the poor attend schools. Otherwise the problem of poverty will persist for years to come.

8.8 Health Improvement

The poor are generally susceptible to ill health. Provision of safe drinking water and sanitation improvement in primary health centres (PHCs) and immunization schemes seem to be the priority areas for improving the health of the poor. The primary health care system has achieved an impressive physical prsence in a relatively short period. However, the quality of the services is poor in many areas (World Bank, 1989). As a result, these facilities are underused by many poor people. It indicates that attention needs to be paid to strengthen the performance and the quality of PHC services.

In terms of health and education there seems to be four states namely, Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (BIMARU) which need attention. The performance of these four states in terms of health and education is much poorer as compared to other states. These four states constitute about 40 percent of the country's population and , therefore, should be given priority in order to improve health and education in India.

8.9 Macro-Policies for Employment Generation

A number of specific policies have also been suggested and some of them are pursued in India to stimulate industrial employement. Among these are, emphasis on wage good production, product reservations for handicrafts, cottage industries and small scale sectors, tax incentives for location of industries in backward districts to create industrial employment there and skill formation through Industrial Training Institutes (ITIs). We discuss below the problems with these policies and suggest the needed changes.

Incomes of the poor may not be increased through production of wage goods

Can one generate the needed additional employment mainly through the production of wage goods? This need not be necessarily the case. It depends on the alternative techniques of production available for these goods. The most important wage goods for the poor can be identified by having a close look at what the poor spend their incomes on. Since, one would like to bring everyone above the poverty line, the consumption pattern at the poverty line is the relevant pattern to look at. For people below the poverty line, the most important wage goods are agricultural products. Apart from products of food industry, the only other significant manufactured items consumed are textiles, cosmetics and drugs.

It may be possible to generate much additional employment in the handloom sector. However, if handlooms produce cloth purchased by the poor and if no subsidy on price is given, then the income of the handloom workers will be small. On the other hand, were they to produce cloth for the upper income groups, the total demand would be small, unless exports of such cloth increase significantly.

Mass produced goods for the poor, handicrafts for the rich may be more viable

In fact, the cheapest way to produce cloth for the poor may be mass production of synthetic and cotton blended cloth. This is what is seen from the prices on the

international market. In our concern for handloom workers we should not forget that availability of cloth at low prices benefits all consumers which include the poor. Therefore, it may not be desirable to generate much additional employment in the production of wage goods themselves. Moreover, employment need not be so generated.

Similar problems arise for other goods. Employment intensive production in the handicrafts sector should be encouraged to produce upgraded high quality articles, which are more for luxury consumption and goods for consumption demanded by the poor may be better produced at lower costs using mass production techniques.

Increase incomes of the poor - wage goods production will follow

Matching of effective demand to industrial production is particularly important when one tries to modify the structure of industries. Mere increase in the production of wage goods need not by itself ensure that effective demand will be created for these goods. On the contrary, if effective demand is created for them, production of wage goods will most likely take place to meet this demand. Moreover, the reorientation of the composition of domestic demand for industrial goods away from "luxury" consumer durables towards wage goods will make demand critical for the production of some of the "luxury" good. If industrial production is not to slow down then export of such goods becomes necessary. To encourage this, conditions should be created which makes exports more profitable than domestic sales.

Creation of effective demand for wage goods should therefore, be at the centre of industrial policy. Indeed, it should be the focus of the development strategy itself. This can be accomplished only through productive employment opportunities for the poor which will provide them adequate income.

Emphasize productive employment in all sectors - set factor prices right

Productive employment has to be generated, wherever it can be, in all industrial activities and not just in the production of wage goods. For this purpose, the relative factor price should reflect the true scarcity of labour and capital in the economy. This is not so at present and for a variety of reasons entrepreneurs and managers of enterprises in the organized sector try to restrict employment even at the cost of additional investment in capital. Capital is subsidized through interest rates that are too low. Labour laws protect workers in the organized sector and provide them job security without providing incentives to be productive enough to justify the high wages they receive. The difficulties of closing down sick units lead to further waste of resources which could be used elsewhere to generate more and productive employment. These measures work against the interest of the unemployed and those who are employed in the unorganized sector.

Incentives for location should be linked to employment not to investment

Reduction in inter-regional disparities has been the objective of Indian policy. Industries are given incentives for location in backward areas and at present,

two-thirds of the districts in the country are classified as backward areas. Such incentives are linked to the level of investment and not to the amount of employment created. It is additional industrial employment in the backward areas that will help reduce poverty, not just additional investments. Thus, locational incentives should be linked to employment created. Such incentives may also be given for location in industrially "sick" areas where sick and sunset industries are concentrated, provided, of course, that the new employment created helps absorb the workers from the sick industries.

Promote employment intensive enterprises, not just smallness

Another policy used to generate or protect employment has provided special protection to small sector through product reservation and excise and other tax exemptions. Here, again, smallness by itself is not necessarily more labour intensive. Also "smallness" is often easily faked. Similarly, reserved products are purchased from efficient producers and resold to collect the incentives (some unofficial industry estimates quote as much as 25 per cent of handloom production to be in fact powerloom production). Thus, subsidies for employment generation should be linked directly to employment.

Skill formation - a key to industrial employment and growth

Skills are very critical for industrial employment. Appropriate factor prices may motivate industry to go for labour intensive products and processes. Skill formation at the level of trades has not kept pace with the requirement of industries. The scope of courses offered by Industrial Training Institutes (ITIs) should be constantly updated to respond to the needs of industry. The scope and flexibility of ITIs should be enlarged. Incentives should be provided to industries to provide more on the job training.

8.10 Industry and Trade Policy to Accelerate Growth

Even the modest increase of growth rate in the 80s has beneficial impact on rural poverty. Policies that promote growth and encourage use of labour intensive techniques are perhaps the best way to provide a lasting solution to the problem of poverty.

To accelerate industrial growth India will have to improve the effectiveness with which existing capacity is used, raise investments and direct them to industries which reflect the country's short run and long run comparative advantage. As seen earlier, distortions have cost the country dearly in terms of lost opportunity for growth and job creation through use of more labour intensive techniques. Setting right the industrial policy can give a big stimulus to employment generation and poverty reduction. Which is the direction in which policy reform is needed?

Industrial licensing - simplify procedures and reduce scope

Industrial licensing policy has been used to contain concentration of economic power, for location in backward areas, for selection of products and processes as well as to

promote import substitution. Whatever may be the success of these policies in achieving these targets, there have been much cost in terms of delays, efficiency loss, opportunities for corruption and wasted resources in directly unproductive rent-seeking activities. Many procedural simplifications have been made in recent years yet more scope exists for further simplification. The Janata Dal government has announced a very good new industrial policy in 1990 but unfortunately an act was not presented to the parliament and the new policy remained as intention.

Exit policy for sick industries, provide social security to workers not job security

If industrial health is to be preserved, India must permit sick industries to die if need be. Without an option to exit, entrepreneurs would be wary of increasing employment beyond a certain size. It also discourages investment in risky industries. What is needed is to provide worker security against exploitation and hardships and not job security. A social security scheme or unemployment insurance scheme would be better than continuing morale sapping employment in sick units, either private or nationalized.

Job security with productivity - follow example of the Japanese industry

India can fruitfully follow the Japanese industry where life-time job security is provided to workers, but still incentive for work is maintained. A large part of the wage is paid as productivity linked bonus and productivity is measured at the level of teams of workers. Thus fellow workers in a team ensure that team members work effectively.

High growth of exports desirable

A high growth of exports provides the flexibility needed to restructure industrial production, permits larger imports to withstand delays and disruption in domestic production, and provides an opportunity to exploit the comparative advantage of the country in labour intensive production i.e., creates more jobs in the country.

The export performance of India during the late 80s was better than ever. This was accomplished through a process of real devaluation, export incentives and liberalized imports of intermediate inputs and capital. The variety of export incentives reflected in different types of import permits (actual users, small scale industry, advance license, special license, pass book license, REP license, CCP, Replacement etc.) can obviously be simplified.

Best incentive for exports is appropriate exchange rate

The best incentive, however, is provided by an appropriate exchange rate. An appropriate exchange rate also helps in rationalizing imports, provided domestic prices are not distorted by differential import tariffs and import quotas.

Rationalize import tariffs - expand Open General Licence

Liberalized imports at an appropriate exchange rate provide competition to domestic industry, even to domestic monopolists. For efficiency of resource use and improving the quality of products as well as promoting production of goods appropriate for labour abundance, liberalized imports are essential. Thus, the open general license (OGL) scheme under which items listed under the OGL list can be imported without a licence should be expanded. At present, only 12 per cent of India's total imports are under OGL (or 30 per cent of total non-governmental imports). Also, all quantitative restrictions should be replaced by transparent tariffs.

Liberalization of imports does not mean free trade as domestic industry may still be protected. It is also possible to prevent resources from going into selected luxury items by raising excise as well as tariffs on imports of such items in a consistent way.

Encourage foreign investment inflow to promote exports and augment domestic savings

India can fruitfully encourage foreign investment to augment its investible resources as long as it is on its own terms. If repatriation is restricted to net foreign exchange earnings from exports generated by such investments, they do not lead to any balance of payments problems. India also needs foreign investment in some of the hi-tech areas. Also, if Indian industries are to participate and benefit and they should, from the globalisation of production, India will have to permit not only foreign investment in India but also Indian investment abroad. India has a diversified and strong industrial base, a dynamic entrepreneurial class, a large pool of technically trained people and it is no banana republic. It need not fear foreign investment as long as it gets it on its terms. India should get rid of its East India company complex.

Public sector industries - needed a thorough going reform

Public sector industries play a major role in our economy. In terms of both surplus generated as well as in terms of efficient use of created capacities public sector performance leaves much to be desired. If their performance can be improved, not only more resources will become available for investment but also less investment would be needed for expanding output.

Lack of clarity of objectives, insufficient autonomy and freedom to manage, frequent changes in top management, political interference in essentially technical and economic decisions, and accountability for procedures rather than performance are some of the reasons for poor performance of public sector. A thorough going reform is needed to remove these problems.

Yet in the multiparty democracy of India, can public sector be ever free of politicl interference? And can it ever be efficient given such interference? There is a growing concensus in India that privatisation of many public sector units would be desirable.

8.11 Employment Generation Through Rural Works Programmes

Macro-Policy reforms outlined above will generate productive employment at a faster rate. Yet to absorb the backlog of employment only through such measures can be expected to take time. This is because existing investments embodied the choice of capital/labour ratios and only new investments and growth are likely to provide the full scope of employment generation through appropriate choice of techniques reflecting the true factor prices in India. Therefore, at least some special measures are needed to provide employment immediately to the poor. Such measures may have to be continued till growth generates enough better paying jobs.

Rural work programmes (RWP) such as the Employment Guarantee Scheme (EGS) in operation in the state of Maharashtra contribute the best choice among the many alternatives that have been tried in India. The advantages of RWPs when the wage rate is a bit below the market rate as in the EGS is that it is self targeting.

Only the poor would come forward for employment. The disadvantage is that they provide scope for leakages and require appropriate design and execution of the programmes if they are to generate productive assets.

Can we generate enough productive employment in rural areas through RWPs?

Experience of a number of highly motivated and skilled engineers and scienctists who have worked in rural areas have shown the tremendous potential and economic profitability of labour intensive land development schemes in different parts of the country. Such schemes can also be a vehicle for generating offpeak season employment for the rural poor and be an anti-poverty measure. However, to be effective such schemes must be well engineered, relevant to the needs of the people and efficiently executed.

The preparation of well-engineered projects for thousands of talukas of the country is a massive task but not beyond the human resources of the country. If the nearly 100 engineering colleges in the universities, the IITs and private engineering consulting firms are mobilized, such projects can be prepared. It would require effective training at various levels. A technology mission should be organised to co-ordinate and oversee this task.

The local panchayats should be involved in the selection of schemes so that they are relevant to the needs of the area. To ensure that panchayats select schemes which are in the larger interest of the community, panchayats should be elected.

A scheme of engineering audits should be introduced to evaluate the cost effectiveness and efficiency of execution of the schemes. This can be decentralized on the line of chartered accountants. "Chartered engineers" can be recognized for this purpose by a professional institution.

RWPs are also needed for yet another reason. A high growth of agricultural GDP is desirable for alleviating rural poverty. Yet, a growth rate of four per cent in agricultural GDP over the 1990s in India would lead to such an expansion of output that it would not be absorbed domestically unless RWPs generate sufficient demand for food. It is estimated

(Parikh, 1990) that a four per cent growth would generate an annual surplus of 35 million tonnes of cereals by the year 2000. Table 8.3 shows the cereal consumption in this scenario in the year 2000.

Table 8.3 : Cereal Consumption and Elasticity for the Rural Poor in the Year 2000 With 4 Per Cent Growth Rate in Agricultural GDP Over the 1990s

Per capita expenditure per year (1970/71 prices) in Rs.	Millions of persons in the class in the scenario in the year 2000	Cereal consumption of class per person		Expenditure elasticity of expenditure on cereals
		10^6 tons	kg.	
0 < e < 216	190.6	18.02	95	0.95
216 < e < 336	107.9	20.92	194	0.83
336 < e < 516	121.1	28.95	239	0.58

Source: Parikh, Kirit S. (1990)

It is clear from the Table that substantial scope exists to step up cereal consumption of the poorest rural class. If the poorest 190 million persons are provided with adequate income to lift their level to that of the second poorest class it would raise per capita consumption by 100 kg. per person per year. This would absorb 19 million tonnes of cereals compared to nearly 35 million tonnes exported in our scenario. And if the consumption of both the poorest two classes are raised to the level of the third class, we can absorb domestically all of the 35 million tonnes of cereal that is exported.

Given the expenditure elasticity, this means that the total consumption expenditure of the poorest rural class will have to increase by more than 100 percent over their reference run value. In other words each family of five would have to be provided additional income which in real terms corresponds to some 800 kg of cereals per year.

RWP for land improvement such as levelling, contouring, bunding, drainage, afforestation and micro-watershed development thus not only provide ways to provide additional income to the poor needed to absorb the output of a fast growing agriculture but also are needed to prevent adverse ecological impact on the environment and reduction in soil productivity. If agricultural growth is to be sustained both ecologically and economically, such programmes are strongly indicated.

8.12 In the End

We have seen that effective policy options to alleviate poverty are available. Rural poverty can be eliminated in reasonable time - say in few years.

In the short run we need a nationwide employment guarantee scheme. Productive rural works programme of land imporvement (levelling, contouring, bunding, drainage and irrigation development) and infrastructure development can provide the needed employment.

From the medium or long term perspective, however, economic growth must generate productive employment in the non-agricultural sector. An outward oriented development strategy coupled with sound macro-policy are critical for rapidly expanding employment opportunities.

But if the poor are to benefit from these opportunities, they must have the awareness, self-assurance and the skills to claim these jobs. Education plays a vital role in this.

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