CHAPTER – 1
INTRODUCTION

Development, in the contemporary context, is a process whereby minimum progress at the socio-economic, political and technological level is ensured to fulfill the basic needs of human beings. It is also a relative phenomenon based on the comparison between some advanced and the underdeveloped countries. Various models were adopted in different countries with varied process and success. Almost all models focused on economic development.¹

Economic development, as it is now generally understood, includes the development of agriculture, industry, trade, transport, means of irrigation, power resources, etc. It, thus, indicates a process of development. The sectoral improvement is the part of the process of development, which refers to the economic development. Broadly speaking, economic development has been defined in three ways:

Firstly, Economic development is “an increase in the economy’s real national income over a long period of time.” The term: ‘real national income’ has been used here simply for the country’s total production of goods and services in real sense and not in terms of money. Thus the calculation of real national income will not consider the effect of price changes. This definition does not consider the changes in the growth of population.

Secondly, Economic development implies an increase in the per capita real income of the economy over a long period. Economists generally recognize this concept unanimously and define economic development as an increase in per capita real income or output. According to G. M. Meier, Economic development is “the process whereby the real per capita income of a

¹ Kothari, Rajani, Rethinking Development (Delhi: Ajanta), 1988, pp. 4-5.
country increases over a long period of time". Buchanan and Ellis define it as, “developing the real income potentialities of the underdeveloped areas by using investment to effect those changes and to augment those productive resources which promise to raise real income per person”. Professor Baran defines economic development as “an increase over a time in per capita output of material goods.”

These definitions point out clearly that the rate of rise in the real national income should be more than the growth rate of population for economic development. Here the difficulty arises that a rise in per capita income does not secure a rise in the real standard of living of the masses. It is quite possible that an increased per capita income may adversely affect per capita consumption in the society, because people may increase the rate of their savings or the state may use the increased income for defence or other purposes. It is, further, possible that the gap between the poor and the rich may increase.

Thirdly, some economists define economic development in terms of economic welfare. According to Okun and Richardson, economic development is “a sustained secular improvement in material well-being, which we may consider to be reflected in an increasing flow of goods and services”.

Usually, the terms economic development; economic growth and economic progress are commonly used in day-to-day life. But in economics, these terms have been defined in quite a different way with separate meanings.

Economic growth refers to a steady and continuous increase in the aggregate real national product of an economy over a sufficient long period of

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4 Ibid.
5 Ibid.
Economic growth may also be explained as the process through which an under-developed economy is transformed into developed economy; welfare of the citizens of that country also increased. Economic growth can also be measured either in terms of increase in economic welfare or in terms of increase in per capita income. Economists who consider standard of living as the best index of economic growth prefer per capita income criterion to other criteria mentioned above.

However, both national income and per capita income criteria require necessary adjustment to price level changes for the purpose of arriving at real growth rate. These two terms are used as synonymous or interchangeable. Some economists have made slight distinction between the two. Schumpeter and Mrs. Ursula Hicks have distinguished economic development from economic growth. In brief, economic development deals with problems of under-developed countries and economic growth with those of the advanced and rich countries. In the words of Schumpeter, "Development is a continuous and spontaneous change in the stationary state which for ever alters and displaces the equilibrium state previously existing; while growth is a gradual and steady change in the long run which comes about by a general increase in the state of savings and population."6

There is no exaggeration in the fact that science and technology have revolutionised knowledge and entire gamut of economic activities. Hence importance of introducing technology in agricultural operations is paramount. In this context, the role of technology becomes most crucial, and its transfer to the rural areas as essential for scientific development. Technology, in the sense of knowledge organized to do a task, has always played a major role in economic and social activity. Indeed, the material levels of living, the character of social and cultural life, and the security of the societies have

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always been closely related to the technologies they used. But the occurrence of the industrial revolution, first in Britain, its subsequent spread to other parts of Europe, and then to the USA, Japan and the erstwhile USSR, led to technology coming to occupy centre-stage in the development of nations. In India, this recognition of the role of technology in development and the commitment to its acquisition, development and use, was first enunciated, and has since been enshrined, in the Scientific Policy Resolution of 1958, which was drafted by Pandit Jawahar Lal Nehru and approved by Parliament, and it states in its opening paragraphs:

The key to national prosperity, apart from the spirit of the people, lies in the modern age, in the effective combination of three factors – technology, raw material, and capital, of which the first is perhaps the most important, since the creation and adoption of new scientific techniques can, in fact, make up for deficiency in natural resources and reduce the demands on capital.7

Rural Development is comprehensive programme of all activities which include agricultural growth, development of economic and social infrastructure, village planning, public health, education, functional literacy and communication, etc. It has two important aspects viz. Economic Development with a close interaction between different sections and sectors, and economic growth, specially directed to the rural people. The rural development thus encompasses both spatial and functional integration of all relevant programmes bearing on increased agricultural production and provision of gainful employment to rural people.

The technological strategy for rural development in India, therefore, calls for a perspective appraisal of these special circumstances. Technology is as much necessary for physical and material well being of the rural people as it is for their economic emancipation. Thus, we not only need suitable technology in the field of agriculture, animal husbandry and industry for strengthening the economy of the villages but also we need appropriate

technology for housing, health and hygiene, transport and communication, recreation, education and energy needs for the rural people for their survival without agony. Technology transfer in rural areas took dominant position in our policy because our earlier plans emphasized on the modernization of industry, which resulted in lopsided development. So, it is necessary to modernize agriculture and its allied husbandry, fishery, horticulture, small scale and cottage industry and rural housing, etc.

The gap between evolution and easy to adopt technology developed has increased. Scientists should function as bridge so that eighty per cent people of India living in rural areas and ecological and economically backward regions may be developed properly.

The Indian Council of Agricultural Research (ICAR), Agricultural Universities and other selected agencies have been implementing the projects of extension education which aim at:

a) Organizing demonstrations by scientists to show the production potential of the latest technologies of farmers and extension functionaries without loss of time.

b) Getting the feedback from all concerned for modifying research and education programmes, and

c) Developing extension approaches to suit the socio-economic condition of the farmers.

For facilitating technology transfer to rural India, various programmes were formulated and implemented. Some of them are as under:

National Demonstration Project (NDP): The rationale behind the scheme is that unless the scientists were called to demonstrate what they had advocated, their advice might not be heeded by the farmers. This project serves as a window to the world of production, plenty and prosperity.

Krishi Vigyan Kendras (KVKs): These promote vocational education in agriculture. The ICAR mooted the idea of establishing these Kendras._Farm
service centers - as innovative institutions for imparting vocational training to the farmers and field level extension functionaries. They impart short and long farm training courses covering subjects such as crop production, livestock production, horticulture, home science, agriculture engineering, fishery and related disciplines, based on the needs of people and technology gap, assessed through village and family surveys. These courses are organized at the campuses of KVKs as well as in the villages for the benefit of weaker sections of society.

Lab to Land Programme (LLP): This programme was initially launched in 1979. It was included in the seventh plan from 1st Oct. 1986. The LLP is educational and motivational in nature. There is special emphasis on scheduled castes and backward communities. Landless labourers are mostly involved in dairying, sheep-rearing, goat-keeping, poultry-keeping, duck-rearing, pig-farming, bee-keeping, fishery, mushroom cultivation and other vocational enterprises like weaving, leather work, and basket-making. Farm women are being trained in the kitchen-gardening, tailoring, embroidering, vegetable and fruits preservation and bakery.

Regarding the impacts of technology transfer in India, Kumud Nath Jha says, “As a result of technology transfer into the rural areas of India, the process of economic growth speeded up at a bonafide level. Specially, in the field of agriculture, technology transfer has resulted in increased agricultural production as well as reduction of costs.” The basic characteristics of Indian Economy are: (i) Mass Poverty and Low per Capital Income: Per capita income in India is estimated at about Rs. 2,701 in 1996-97, which is one of the lowest in the world; (ii) Inequalities in Income Distribution: About 10 percent holding belongs to medium and large group (i.e. up to 4 hectare, and 10 hectare and above, respectively); they held 49.2 per cent of land whereas, 90 per cent farmers held only 50.8 per cent of land. Likewise, the assets of the top

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20 big business houses are over Rs. 80,000 crores, which is about 70 per cent of the total assets held by the private sector industries. According to the World Development Report 1997, in 1995, the lowest 20 per cent households had only 8.5 per cent in the household income, whereas the highest 20 per cent households had 42.6 per cent in the household income; (iii) Predominance of Agriculture: It is a paradox that agriculture occupies a predominant place in the Indian economy. Despite this, agriculture in the country is backward. Nearly 65 % of the national population gets living from agriculture. The agriculture and allied activities contribute about 28.8 per cent to the national income of India. Agricultural commodities account for about 80 per cent of the total consumer expenditure, out of which 63 per cent is exclusively spent on food articles. Agricultural products in the country worth about Rs. 21,000 crores represent 19.8 per cent in the total export earnings. Data given in Table No. 1.01 is revealing.

The productivity of agriculture is miserably low. Per hectare yield of agriculture in India is also very low as compared with the yield in the developed countries. The share of agriculture in the economy has been declining after 1960–61. Still, it is the single most important sector contributing the highest to the national income. A comparison with other countries will make it very clear. Contribution of agriculture in the United Kingdom is 3.1%; in the United States of America, it is 3.2%; in Canada, it is 5 % and so on.

<table>
<thead>
<tr>
<th>Table No.1.01 Contribution of Agriculture to National Economy</th>
<th>Share</th>
</tr>
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<tbody>
<tr>
<td>India</td>
<td>32.0</td>
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<tr>
<td>Canada</td>
<td>5.0</td>
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<tr>
<td>UK</td>
<td>3.1</td>
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<tr>
<td>USA</td>
<td>3.2</td>
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<td>Germany</td>
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<td>China</td>
<td>27.0</td>
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</table>
The size of labour force engaged in agriculture increased from 87.72 million in 1921 to 167.33 million in 1977, further to 322 million in 1996 and to 390 millions in 2001. In country like the UK, the USA, West Germany, Canada, New Zealand etc., less than 20% of the population is dependent on agriculture. In India, about 66.8 per cent people depend on agriculture for their livelihood. It is an important segment of export of the country. Agricultural raw material and processed goods constituted about 16.6 per cent of India’s exports. The contribution of agriculture and allied products to total export was Rs. 21,138 crores in 1996-97. The main agricultural commodities exported are tea, oil cakes, fruits and vegetables, spices, tobacco, cotton, coffee, rice, sugar, hides and skins, etc. Ready made garments and jute textile exports etc. are the commodities based on agriculture for raw materials.

A few of special features of Indian agriculture are; (i) too much dependent on uncertain rains: Indian Agriculture is the gamble in the monsoons; (ii) Variety of crops: Due to multiplicity of crops, India is able to produce tropical products like rice, coffee etc., sub- tropical crops like cotton, tea, etc., and temperate zone products like wheat, pulses, potatoes, etc. The other peculiar feature is that about three fourths of the total cropped area is under food crops. Wheat, rice and millet, maize and barley occupy about 71%
of the sown area; (iii) Large variations are observed in other aspects too: It is not only crop pattern where we find an amazing variety, but this diversity is also a unique feature of the total Indian agricultural system. No uniform agricultural policy can be prescribed for the whole country; (iv) Semi-Commercial Type of Farming; (v) Predominance of Small Cultivators: According to the All India Report on Agricultural Census (1970-71), 70% of the land holdings come into the category of marginal (less than 1 hectare) and small (1 Hectare to 2 hectares) land holdings; (vi) Large Inequalities in Ownership of Land: The average size of agricultural holdings in India is very small. In India, it is about 1.8 hectare and in some states, the size of holding is even smaller than 1.8 hectare. Also 4 per cent holdings on the top have 30 per cent of land-area, the 50 per cent holdings at bottom of the ladder have only 9 per cent of land; and (vii) Low Productivity: Productivity in agriculture can be measured through output per hectare of land or per worker. Average output per hectare or per labourer is at the bottom. Several technical, special and economic factors are responsible for it.

In Indian context, the traditional / ancient worldview on life has been more fatalistic and spiritual than oriented towards material possession; hence poverty was accepted as “Karma” and thus tolerated. At this stage, it is necessary to understand the concept of poverty and it’s bearing on development, public welfare and dignity of life.

Professor Rein Martin, has given his views of poverty thus: “People must not be allowed to become so poor that they offend or are harmful to society. It is not so much the misery and plight of the poor but the discomfort and the cost of the community which is crucial to this view of poverty. We have a problem of poverty to the extent that low income creates problems for those who are not poor.”

There is little doubt that the penury of the poor does, in fact, affect the well-being of the rich.

There is difficulty in defining poverty in all its dimensions or aspects. Malnutrition captures only one aspect of our idea of poverty. The other aspects are inequality, relative deprivation and value judgement. Regarding inequality, we look at the nature and size of the differences between the bottom 20 or 10 percent and the rest of society. In that event, our concern becomes one of narrowing the differences between those at the bottom and the better off in each stratification dimension.10

With regard to the third aspect of relative deprivation, one distinction concerns the contrast between ‘feeling of deprivation’ and ‘condition of deprivation’. Peter Townsend has argued that ‘the latter would be a better usage’. The feeling and conditions of the deprivation cannot be separated and relative deprivation is also not easy to establish for various reasons.11 Indeed, there is an irreducible core of absolute deprivation in our idea of poverty, which translates reports of starvation, malnutrition and visible hardships into a diagnosis of poverty without having ascertained first the relative picture.12

Poverty as a ‘value judgment’ has been forcefully presented by many authors. It seems natural to think of poverty as something that is disapproved of, the elimination of which is regarded as morally good. Mollie Orshansky, an outstanding authority in the field, has argued that ‘poverty, like beauty, lies in the eye of the beholder’. However, for a person studying and measuring poverty, the conventions of society are matters of fact, and not issues of morality or of subjective search (What should be the contemporary standards?

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What should be my values? How do I feel about all this?). Adam Smith has very clearly brought out this point more than two hundred years ago.\textsuperscript{13}

"By necessaries, I understand not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even the lowest order, to be without. A linen shirt, for example, is strictly speaking, not a necessary of life".

"The Greeks and the Romans lived, I suppose, very comfortably though they had no linen. But in the present times, through the greater part of Europe, a creditable day-labourer would be ashamed to appear in public without a linen shirt, the want of which would be supposed to denote that disgraceful degree of poverty which, it is presumed, no body can fall into without extreme bad conduct. Custom, in the same manner, has rendered leather shoes a necessary of life in England. The poorest creditable person of either sex would be ashamed to appear in public without them."\textsuperscript{14}

The United States President's Commission on Income Maintenance (1969) argues thus for a policy definition of Poverty in its well-known Report, 'Poverty amid Plenty':

"If society believes that people should not be permitted to die of starvation or exposure, then it will define poverty as the lack of minimum food and shelter necessary to maintain life. If society feels of well being beyond mere existence, for example, good physical health, then it will add to its list of necessities the resources required to prevent or cure sickness. At any given time, a policy definition reflects a balancing of community capabilities and desires. In low-income societies, the community finds it impossible to worry much beyond physical survival. Other societies, more able to support their dependent


\textsuperscript{14} Ibid.
citizens, begin to consider the effects that pauperism will have on poor and non poor alike.\textsuperscript{15}

There are still difficulties with this policy definition. Policy is a political function, going beyond what should be done. There is clearly a difference between the notion of ‘deprivation’ and the idea of what should be eliminated by ‘policy’.

In the matter of standards and aggregation of deprivation, in comparing the poverty of two communities, there cannot be common standard of necessities found acceptable to all, since such standards would vary from society to society.\textsuperscript{16} Mahbub-ul-Haq, former Chief Economist of the Government of Pakistan, has stated, “the problem of development must be defined as a selective attack on the worse forms of poverty. Development goals must be defined in terms of progressive reduction and eventual elimination of mal-nutrition, disease, illiteracy, squalor, unemployment and inequalities. We were taught to take care of our GNP as this will take care of poverty. Let us reverse this and take care of poverty and this will take care of the GNP.\textsuperscript{17}” In view of the growing awareness among the masses and the changing environment in all the countries across the board, there is need and there have also been efforts at redefining poverty.\textsuperscript{18}

One of the early recommendations to widen the definition of poverty from the more common calorie-based income criterion came from the Expert Group on Poverty which was constituted by the Planning Commission to “look into the methodology for the estimation of poverty at national and state levels and also to go into the question of redefining poverty line, if necessary.

\textsuperscript{15} U.S. President’s Commission on Income Maintenance, 1969, p. 8.
\textsuperscript{16} Ibid, pp. 19-20.
\textsuperscript{17} Mahbub-ul-Haq, Employment and Income Distribution in the 1970s; A New Perspective (Lahore: Pakistan Economic and Social Review), June – December, 1971, p.6.
The report states, ‘While quantifying poverty, it is desirable that we not only consider the calorie needs of an individual but also give due weightage to the basic needs of shelter and health and other needs like education and transport, which would help him/her in living a “normal” and “effective” existence’.

The Expert Group specifically recommended the inclusion of the following aspects touching upon human life and dignity to arrive at a more relevant definition of poverty:

(i) The dominant characteristics of the poor population in terms of their distribution by region, social group and family characteristics.
(ii) Nutritional status including anthropometric measurements and activity patterns by age, sex and socio-economic categories
(iii) Health status including mortality, morbidity, access to and use of health services and costs
(iv) Educational status comprising school enrolment, reach, cost and quality of public education services, and
(v) Living environment including density of settlements, living space per head, type of houses, access to amenities, safe drinking water and sanitation.

These recommendations have not been translated into relevant empirical exercises that redefine poverty in keeping with the broader approach, either by the Planning Commission or by other scholars.

More recently, interest in redefining poverty has been triggered by the initiative undertaken by the United Nations Development Programme (UNDP) in devising two new measures of human deprivation, viz. the Capability Poverty Measure (CPM) in 1996, and a Human Poverty Index (HPI) in the 1997 report. Commenting on the inadequacy of the income measure of

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poverty, the 1995 report states, “income-poverty” is only part of the picture. Just as human development encompasses aspects of life much broader than income, so poverty should be seen as having many dimensions. “While the reports draw attention to human deprivation to complement income measures of poverty, their focus is on the percentage of the poor who lack the basic or minimal capabilities (1996) as well as access to minimal facilities (1997) rather than on the average attainment of minimum capabilities by individuals.

The Capability Poverty Measure (CPM) is a composite index, which considers the lack of three basic capabilities. The capability to be well nourished and healthy, represented the proportion of children under five who are underweight; the capability for healthy reproduction, represented by the proportion of births unattended by trained health personnel; and the capability to be educated and knowledgeable, represented by female illiteracy. These three deprivations have equal weights. It is evident that the index captures deprivations suffered by women and children.

The HPI extends the concept of CPM to other dimensions. Three indicators are included in it, that is (a) Survival deprivation represented by people not expected to survive to age 40; (b) Deprivation in education and knowledge represented by the adult illiteracy rate; and (c) Deprivation in economic provisioning which is a combined index of the indicators of population without access to safe water, health services and of undernourished children below age 5.

A common shortcoming of the CPM as well as the HPI is that they do not distinguish between outcome and process indicators, and deprivations based on the individual, household, community and region. An additional shortcoming arises from the differing dimensions of the indicators used for calculating the indices.

Despite its limitations, the HPI may be considered to be a useful first attempt at including education and health deprivations in the measurement of poverty.
The HPI visualized by UNDP comprises three types of deprivations:
deprivation in health, Knowledge and provisioning from both, public as well
as private sources. The three indicators have been given equal weight.
Following the UNDP’s methodology, an attempt has been made to calculate
the HPI for Indian states. The following is the procedure for computing HPI.

1) The indicators used to construct the HPI were agreed upon at the
workshop organized by UNDP (24-26 November 1997), at Kandy to discuss
the South Asia Poverty Monitor.

Deprivation in longevity has been represented by the percentage of
people not expected to survive up to age 40 ($P_1$), and deprivation in knowledge
by the percentage of people who are illiterate ($P_2$). The deprivation in a decent
living standard in terms of overall economic provisioning is represented by a
composite ($P_3$) of three variables, i.e., the percentage of people without access
to safe water ($P_{3/1}$), the percentage of people without access to health services
($P_{3/2}$) and the percentage of moderately and severely undernourished children
($P_{3/3}$).

The composite variable ($P_3$) is constructed by taking a simple average
of the three variable $P_{3/1}$, $P_{3/2}$ and $P_{3/3}$.

The formula for calculating the HPI is given by
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HPI = \left[ \left( P_{3/1} + P_{3/2} + P_{3/3} \right) - 3 \right]^{1/3}
\]

The official concept of poverty in India is based on a calorie norm:
families which cannot afford to spend enough on food to obtain minimum
calorie per capita per day are defined to be below the poverty line (BPL).

Following the recommendations of the Task Force on Projections of
Minimum Needs and Effective Consumption Demand (1979), the Planning
Commission has been estimating the number and proportion of the poor in
India, that is, those below the poverty line (BPL), for rural and urban areas, at
the national and state levels. This proportion is known as the poverty or the
Head Count Ratio (HCR). The Expert Group appointed by the Planning
Commission endorsed the adoption of the per capita intake of 2400 calories in
rural areas and 2100 calories in urban areas as the cut-off line for poverty estimation (1973-74 as the base year). Thus for 1993-94, the official HCRs (as percentage of total population) are 37.3 for rural areas, 33.7 for urban areas, and 36.3 for India as a whole. As against this, the World Bank Study Team has derived corresponding ratios as 36.7, Central Statistical Organisation (CSO) introduces an alternative poverty line (using price deflators developed at the Indian Statistical Institute (ISI) yielding estimates of 36.64 percent for the rural areas, 28.73 per cent for urban areas, and 35.12 per cent for India as a whole. These estimates, derived by using NSS consumption figures, indicate that more than 33 per cent of the Indian population could be counted as poor in the year 1993-1994.\(^{19}\)

There are other measures of poverty; one is “capability poverty measure (CPM)”. It was introduced by UNDP in 1996. It is a multi-dimensional measure of human deprivation. It indicates the percentage of people who lack basic, or minimally essential, human capabilities. This index is a simple average of three basic deprivation indicators, namely (i) percentage of children who are undernourished, (ii) percentage of women who have undergone non-institution deliveries, and (iii) female illiteracy rate. There is large gap between income poverty and capability poverty. It is worthwhile rather instructive to note that the programmes and policies aiming at reducing income poverty do not necessarily guarantee a reduction in capability poverty.\(^{20}\)

Human Poverty concept is more than income-poverty concept. It is the denial of choices and opportunities for living a tolerable life. Human deprivation has several forms which include poor survival chances, unjust employment of children, child prostitution, bonded labour, hunger, environmental pollution, domestic violence, and social exclusion, which arise

\(^{19}\) Raja J. Chelliah and Sudershan, R., Income Poverty and Beyond: Human Development in India, op. cit., 1999, p. 4

\(^{20}\) Ibid, pp. 10-11.
out of caste and gender discrimination and are not related to income in a predictable manner. To capture all the facts of poverty, a multi-dimensional, people centred concept is required which takes into account along with income and consumption, other aspects of human life.

The National Sample Survey (NSS) provides information on the distribution of households based on the availability of two square meals a day. In 1983, the percentage of such household was 81; it rose to 88 in 1991 and by the end of 1993, it was 93 percent. It is estimated to have reached 96 percent in the decade ended 2001.

Inequality of Income is apparent in Indian society. This anomaly generates many social maladies. Inequality of the distribution of wealth and income refers to that situation of an economy in which the income of a small section of the country is much larger than the average income of the nation and the income of a larger than the average national income. Problem of inequality of the distribution of the wealth and income is concerned mainly with the inequality of the distribution of individual income. It implies that income of some individuals is very high while that of large number of persons is very low.

Inequality of wealth and income has been increasing continuously in India. In order to enquire into the distribution of income in India, government of India had appointed for the first time, a committee under the chairmanship of Prof. P.C. Mahalanobis. In 1964, the report submitted by the Committee was published. In addition to this committee, National Council of Applied Economic Research, Reserve Bank of India and many economists like Lydall, Ojha and Bhatt, Ranadive, Ahmed, Bhattacharya, etc. have also made research studies regarding the distribution of income. The important aspects of distributional inequalities in India are – (a) Inequality of Assets; (b) Inequality of Income and Consumption; and (c) Regional Inequality.

All the three types of the inequalities are inter-related. For instance, inequality of assets stimulates inequality of income. Those who have large
wealth, they invest it in shares, debentures or deposit it in banks, post offices, etc. and earn handsome income. Similarly, on account of inequality of income, there arises inequality of wealth. Those who have large income have more power to save and so they can amass more wealth. Their wealth and income go on multiplying. Backward regions of the country have low income, low rate of capital formation and low rate of economic growth. On the contrary, income and rate of saving of the rich regions are high and so their rate of capital formation is also high. Their growth rate is also high. Consequently, inequality of rich and poor regions goes on increasing.

The reasons of inequality of income are (i) Inequality in the ownership of Land: The main reason of economic disparities in the distribution of income and wealth in Indian is inequality in the ownership of land. Small farmers fail to produce more because of fewer resources, mainly the capital. They remain poor and backward. Thus, it is economic disparities in the ownership of land in rural areas that causes increase in economic disparities of wealth and income; (ii) Individual Dominance of Property in Urban Sector: The ownership of property like land, houses, industries, trade, etc. is dominated by individuals. Some people possess large urban property; (iii) Unemployment and Underemployment: One of the important reasons for persistence of economic disparities in India has been the lack of employment opportunities for masses and severe under-employment for even talented segment of population; (iv) Laws of Inheritance: The existing laws of inheritance in India have also contributed to perpetuate economic disparities in the distribution of wealth and income; (v) Inequality of Professional Training: Inequality of professional training is yet another important factor responsible for inequality in income. Children of rich parents are in a position to enter the lucrative professions, like doctors, engineers, company executives, lawyers, etc.; (vi) Inflation: Since 1956, there has been a tendency for the prices to rise in the country. Rising prices affect adversely more the poor in comparison to the rich; (vii) Financial Support from the Financial Institutions: The financial
institutions have mostly offered financial accommodation to rich persons all along. This has led to the growth of monopolies and concentration of wealth in fewer hands; (viii) Capital-Intensive Production: The Second Five-Year Plan had accorded priorities to establishment of large-size industries in India on massive scale. Since then, a great number of capital-intensive industries have been set-up. Some of these industries use comparatively more capital than labour. This has widened the difference between the non-wage income (i.e. interest, rent, profit, etc.) and wage income; (ix) Heavy Burden of Indirect Taxes: Burden of indirect taxes falls heavily on the poor sections. Hence, their real income falls. This has compounded the problem of economic disparities; and (x) Malpractices: After independence, there has been a spurt in corruption and smuggling activities in the country. The policy to permit the establishment of industries only with permission or license has been made use of by big industrialists to their advantages. Those who had the capacity to grease the palm of the officials only succeeded in getting permits, quotas and industrial licenses with ease. They became multi millionaires. On the contrary, honest and law-abiding persons just got pittance. Black money is the outcome of corruption and smuggling. Government has failed to unearth the unaccounted wealth and income.

As cumulative result of overall economic growth, anti-poverty and employment generation programmes, incidence of poverty has reduced. The poverty ratio declined from 56.4 per cent in 1973-74 to 37.3 in 1993-94 in rural areas. For the country as a whole, the poverty ratio declined from 54.9% in 1973-74 to 36.0% in 1993-94 (Table No.1.02).21

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21 Report on Social Consequences of the East Crisis, Planning Commission (for India’s data) and World Bank (for other data), Sept. 1998.
### Table No. 1.02
Number and Percentage of Population Below Poverty Line
(Number in Million and Poverty Ratio in Percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Rural Sector</th>
<th>Urban Sector</th>
<th>All India Combined</th>
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<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Poverty %</td>
<td>Number</td>
</tr>
<tr>
<td>1973</td>
<td>261</td>
<td>56.4</td>
<td>60</td>
</tr>
<tr>
<td>1977</td>
<td>264</td>
<td>53.1</td>
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<td>1993</td>
<td>244</td>
<td>37.3</td>
<td>76</td>
</tr>
<tr>
<td>1999</td>
<td>193</td>
<td>27.1</td>
<td>67</td>
</tr>
<tr>
<td>2007*</td>
<td>170</td>
<td>21.1</td>
<td>50</td>
</tr>
</tbody>
</table>

* Projected for 2007

Source: Planning Commission

### Graph 1.02 (a)
Number of Population Below Poverty Line

* Projected for 2007
Today, almost 50 million households in India live below poverty line (defined as $ a day in terms of purchasing power parity). India's human development index 1999, for example, was 0.545, ranking the nation at No. 132 in a field of 174 countries studied. Poverty incidence and growth rates in India and selected Asian countries are given in Table No. 1.03.

Table No. 1.03
Poverty Incidence and Growth Rates in India and Selected Asian Countries (per cent)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>54.9</td>
<td>36.0</td>
<td>0.9</td>
<td>3.2</td>
<td>5.6</td>
</tr>
<tr>
<td>China</td>
<td>59.5</td>
<td>22.2</td>
<td>1.9</td>
<td>5.0</td>
<td>11.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>64.3</td>
<td>11.4</td>
<td>2.6</td>
<td>7.8</td>
<td>6.6</td>
</tr>
<tr>
<td>Korea</td>
<td>23.0</td>
<td>5.0</td>
<td>0.9</td>
<td>9.0</td>
<td>8.7</td>
</tr>
<tr>
<td>Malaysia</td>
<td>17.4</td>
<td>4.3</td>
<td>0.7</td>
<td>7.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Philippines</td>
<td>35.7</td>
<td>25.5</td>
<td>0.5</td>
<td>6.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>8.1</td>
<td>0.9</td>
<td>0.4</td>
<td>7.2</td>
<td>7.9</td>
</tr>
</tbody>
</table>


According to the findings of Minhas, Bardhan, Dandekar and Rath, a large bulk of the rural poor fall into the following categories:

(i) Agricultural labour households (owning no land) which form 60% of all agricultural labour households;

(ii) Agricultural labour households with very small holdings which constitute about 40% of all agricultural households;

(iii) Non-agricultural rural labour households without land holdings, include village artisans progressively losing their traditional employment; and

(iv) Small land operators, with holdings of less than 5 acres, and particularly less than 2.5 acres.

(v) In regard to the urban poor, Dandekar and Rath state “the urban poor are only an overflow of the rural poor into the urban areas. Fundamentally, they belong to the same class as the rural poor.”

Estimates of incidence of poverty in India are given in Table No. 1.04

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Table No.1.04

Estimates of Incidence of Poverty in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Poverty Ratio (%)</th>
<th>No. of Poor (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>1973-74</td>
<td>56.4</td>
<td>49.0</td>
</tr>
<tr>
<td>1977-78</td>
<td>53.1</td>
<td>45.2</td>
</tr>
<tr>
<td>1983</td>
<td>45.7</td>
<td>40.8</td>
</tr>
<tr>
<td>1987-88</td>
<td>39.1</td>
<td>38.2</td>
</tr>
<tr>
<td>1993-94</td>
<td>37.3</td>
<td>32.4</td>
</tr>
<tr>
<td>1999-2000</td>
<td>27.1</td>
<td>23.6</td>
</tr>
<tr>
<td>2007*</td>
<td>21.1</td>
<td>15.1</td>
</tr>
</tbody>
</table>


Graph 1.04 (a)

Estimates of Incidence of Rural Poverty (%) in India

Projected for 2007
In 1870, Dadabhai Naoroji, prominent patriot, examined the causes of poverty in India. According to him, there was correlation between colonial rule and Indian Poverty. He stated that the ruthless exploitation of Indian resources, heavy taxation, unequal trade legislations, undeserved government and private remittances – the enormous capital drain out of India - led to the perpetuation of poverty in India. He unhesitatingly but emphatically termed the concept of poverty as an extension of British legacy. He stated forcefully that the greedy British businessmen-cum rulers destroyed the indigenous industry to boost up their markets. He continued his criticism to say that it was a pathetic story of loot, intrigues and exploitation. There was a time when Indian goods captured British markets for their beauty, variety and quality. However, heavy taxes were imposed by the British Parliament to stop the natural flow of Indian goods on account of which Indian cloth worth several shillings was sold in 20 shillings. Naoroji further narrates that cruelties were then perpetrated upon the weavers to the extent that their thumbs were often cut to render them incapable of weaving. This fact is corroborated by a number of authoritative works which include a letter of the Court of Directors dated May, 1766 to the then Governor of Bengal in which it was written,
“Every Englishman throughout the country...exercising his power to the oppression of the helpless native...we have the strongest sense of deplorable state...from the corruption and rapacity of our servants...by a sense of the most tyrannic and oppressive conduct that ever was known in any age or country.”  

The findings of Dadabhai Naoroji find evidence in the writings of Karl Marx, too. He wrote with vehemence in the New York Daily Tribune on June 25, 1853, “All the civil wars, invasions, revolutions, conquests, famines, strangely complex, rapid and destructive as the successive action in Hindustan may appear, did not go deeper than its surface. England has broken down the entire framework of Indian Society, without any symptoms of reconstitution yet appearing. This loss of his old world, with no gain of a new one, imparts a particular kind of melancholy to the present misery of the Hindu, and separates Hindustan, ruled by Britain, from all its ancient traditions, and from the whole of its past history. It was the British intruder who broke up the Indian handloom and destroyed the spinning wheel. England began with driving the Indian cottons from the European markets; it then introduced twist into Hindustan and, in the end, inundated the very mother country of cotton with cottons. From 1824 to 1837, the British export of Muslins rose from 1,000,000 yards to 64,000,000 yards. British steam and science uprooted, over the whole of Hindustan, the union between agriculture and manufacturing industry. Thus the British not only drained the wealth of India but also finished the hereditary means of subsistence of its well-organised, self-sustained village life. The most stunning aspect of this dissolution of

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24 Naoroji, Dada Bhai, Poverty and Un-British Rule in India (Delhi: Publications Division, Ministry of Information and Broadcasting, Government of India), 1962, p. iii.
community life by the Britishers was, of course, “called social revolution’ by Marx but he classified it as being “actuated only by the vilest interests.”25

In another letter of June 24, 1853, published in New York Tribune on July 11, 1853, Karl Marx wrote about the “East India Company: Its History and Results” and observed, “During the whole course of the eighteenth century, the treasures transported from India to England were gained much less by comparatively insignificant commerce than by the direct exploitation of that country, and by the colossal fortunes there extorted and transmitted to England” “The whole character of the trade changed. Till 1813, India had been chiefly an exporting country, while it now became an importing one; and in such a quick progression that already in 1823, the rate of exchange, which had generally been 2s 6d per rupee, sank down to 2s per rupee. India, the great workshop of cotton manufacture for the world since immemorial times, became now inundated with English twists and cotton stuffs. After its own produce had been excluded from England, or only admitted on the most crucial terms, British manufactures were poured into it at a small and merely nominal duty, to the ruin of the native cotton fabrics once so celebrated.”26 “It is notorious that the productive powers of India are paralyzed by the utter want of means for conveying and exchanging its various produce.”27

Besides the above causes of poverty, several other factors are responsible for the increase of poverty on a mass scale in India. These have been explained by economists and Indian patriots/social reformers as under28:

Low rate of growth: Economic growth has been low. Even during the period of planning, growth rate of the economy has remained below 4 percent per annum on average; population grows at the rate of 1.9 percent.

27 Ibid., p. 321.
Increase in Prices: Rapid rise in prices against low growth rate of per capita income has adversely affected the poor.

Low Net National Product: Net National Product of India is miserably low compared to its population size. Low per capita income is its obvious consequence. Net National Product of India in 1995 at current prices was Rs.7,44,663 crore while the size of population was 91 crore. Thus the per capita income was Rs. 8,237 only, which falls under the category of the poorest countries according to UNO norms.

Rural Economy: Indian economy is predominantly rural. Indian agriculture is backward. There is great pressure of population on agriculture. The income of the people in the agricultural sector is very low. Disguised unemployment is widely prevalent in rural economy.

Heavy Pressure of Population: The most important reason of poverty in India is the fast growth of number, especially among the poor families. The constant rise in population is due to fall in death rate and more or less stable birth rate for the last many decades. Growth rate of population was 1.0 per cent in 1941-51; it rose to 2.1 per cent in 1981-91. The rate of growth per year on average in 1991-2001 was also 2.1 per cent. The rising pressure of population is hindrance to economic development. Per capita wealth does not increase and standard of living does not improve. Per capita cultivated land has also come down to 0.13 hectares.

Chronic unemployment and under-employment: Due to population rise, educated unemployment, and disguised unemployment in agriculture is rising too. Poverty is just the reflection of unemployment.

Capital Deficiency: Capital is the instrumental factor in setting up of industry, transport, irrigation and other projects of development. Deficiency of capital is the chronic problem in India. Propensity to save is very low, hence no capital accumulation.

Lack of Skilled Labour and Technical Knowledge: Industrial education and training is almost non-existent. Workforce increased rapidly but work did
not increase commensurately. Labour is abundant but there is acute shortage of skilled and trained labour.

Lack of Entrepreneurship: There is paucity of able and efficient entrepreneurs. There is need for efficient and skilled entrepreneurs possessing initiative, imagination and risk taking capacity.

Lack of Proper Industrialization: India is backward from industrial point of view. Hardly 3% of total working population is engaged in large-scale industry. Capital and producers' goods industry is in infancy.

Outdated Social Institutions: There is caste system, joint family system, outdated laws of inheritance and succession, etc. Dynamic changes cannot be effected in the economy.

National Resources not Properly Used: India is rich in natural endowments. Variety of metals, minerals, soils, climates, and rivers is available. Manpower too is very large. All these resources are not properly used.

Lack of Well-Developed means of Transport and Communication: Due to lack of proper development of road and rail transport, agricultural marketing is defective, and, as a result of which, industries do not get raw-materials in time and the manufactured goods are not efficiently marketed across different regions of the country.

Inadequate Implementation of Land Reforms: Land Ceiling Act was not properly and fully implemented. Redistribution of land could not consequently take place, in order to reduce inequalities of wealth.

Unequal Distribution of Income: Unequal distribution of income is a reason, which cannot be overlooked. According to one report of the Economic Research Council, 20 per cent people of the country own 41% of the national income. According to Monopoly Enquiry Commission, 1536 Companies in
the country are under the control of 75 families. Unequal distribution of income contributed to the rise in poverty.29

Development is a complex phenomenon, which unavoidably covers a wide range of economic activities directed towards amelioration of the condition of people living in the rural areas. As life in the rural areas is a web of relationships encompassing social, cultural and class relationships, the socio-cultural ethos pervades any policy of rural development. No programme can be successful fully which is implemented apart from the social fabric connected with it. Mass communication will also have impact if it is consciously engineered/calibrated through opinion leaders. A few definitions of rural developments are reproduced below to make the subject more clear and understandable:

The World Bank defines rural development, thus “Rural development is a strategy to improve the economic and social life of a specific group of people, the rural poor, including small and marginal farmers, tenants and the landless.”30

According to Robert Chambers, “Rural Development is a strategy to enable a specific group of people, poor rural women and men, to gain for themselves and their children more of what they want and need. It involves helping the poorest among those who seek a livelihood in the rural areas to demand and control more of the benefits of rural development.”31

According to Ensminger, "Rural development seeks to involve a process of transformation from traditionally oriented rural culture towards an acceptance and reliance on science and technology."\(^{32}\)

Uma Lele defines it as: "Rural development is an improvement in the living standard of the masses of low income population residing in rural areas and making the process of self-sustaining."\(^{33}\)

Accelerated attention is needed to bring about rural development. The development orientation requires changes in the economic, social, political and psychological behaviour of the rural people who are illiterate and ignorant, more so in the Indian context where agriculture dominates all aspects of human life including philosophical context. Azmat Nayeem says, "Rural development is both problem and solution."\(^{34}\)

Rural development involves changes in attitudes, customs, beliefs and values, output - both qualitatively and quantitatively - utilization of natural and human resources, employment patterns and magnitudes, technology, institutional and organizational framework, incomes, both spatial and social relationships, rural lifestyles and policy initiatives related to land and water, forests, inputs, supporting services, prices, backward areas and deprived sections of society, organization and administration, resource generation, self-sufficiency and self-sustenance, gender issues, sustainability and management, conservation, government interventions, people’s involvement, and the nature and levels of planning (including decentralized planning in a multi-level framework).\(^{35}\)

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\(^{33}\) Lele, Uma, The Design of Rural Development; Lessons from America (Baltimore: John Hopkins), 1975.

\(^{34}\) Azmat Nayeem, Why Rural Development: Rural India (Mumbai), April 1981, p. 84.

\(^{35}\) Ibid.
To eradicate poverty and plan for rural development, it is necessary to grasp the rural development concept, the rural occupations and diverse agricultural activities. On Rural Development, Kumud Nath Jha Says that India lives in villages. This adage, which emphasizes the agrarian character of the Indian economy and to which such a pointed attention continues to be so to this day in spite of the industrial development that has taken place in the last four decades since independence. The industrialization has not made any substantial difference to the proportion of the population that lives in the villages, though the exodus from villages in recent years has created problems and added to the urban stump.

The importance of Rural Development, looked at broadly as such, is further intensified by the fact of poverty, the eradication of which is the supreme objective of all development efforts. It is the landless rural labour that forms the largest reservoir of poverty in the country, and is the source of urban poverty too. Industrialization can to an extent reduce the incidence of poverty, especially urban poverty, but to have this effect, industrialization not only has to be labour intensive, but perhaps more importantly, mass-based. The latter characteristics, namely, the mass-based, can be acquired by production of goods and services of mass consumption, sustained by steady increase of the purchasing power of masses, resulting from additional employment created by the labour intensity of the industrial activities. Indeed, it is only such mass base that can ensure continued expansion of industrial activities leading to a level of industrialization commensurate with the size and population of the country. Industrialisation, based on elite consumption, on the other hand, has limited potential. The narrowness of the base restricts its growth. It can create only islands of affluence in the surrounding sea of poverty.

Rural development is advocated today as a basic strategy for economic development, all over the world. The sheer largeness of numbers

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who continue to live and work in the rural areas in the developing countries compels our attention to this important and yet neglected sector of the economy.

Conceptually, rural development is taken as development of the rural areas - often, rural development has meant the extension of irrigation facilities, expansion of electricity improvements in the techniques of cultivation, construction of school-buildings, and the provision of educational facilities, health care centres, etc. This is a very narrow view of understanding rural development. Agriculture is at the heart but not the whole of rural development.

Today, rural development is described as a process aimed at improvement of the well-being of the people outside the urbanized areas. These non-urbanized areas, however, are not a separate entity but are part of a far-flung system of spatial and economic linkages. Rural development, therefore, takes into account the forward and backward linkage between the rural and the urban areas.

Rural development is comprehensive programme of all activities, which include agriculture growth, development of economic and social-infrastructure, village planning, public health, education, functional literacy and communication, etc. It has two important aspects, viz. economic development with a close interaction between different sections and sectors, and economic growth, specially directed to the rural people. The rural development thus encompasses both spatial and functional integration of all relevant programmes bearing on increased agricultural productions and provision of gainful employment to rural people.

Rural Development is a part of economic development. Even the economic development is a part of total development and so, it cannot be equated with 'total development of society'; the overall concept of development is an interaction of economic and non-economic forces. The concept of economic development is not the establishment of industrialization
alone but is much more than the acquisition of industries. It is the upward movement of the entire social system. The concept of economic development is something much more than economic growth. It is thus defined as 'development is taken to mean growth plus change'. Rural development is, therefore, not separate from the concept of economic development and they cannot be termed as two different concepts. The same parameters, which are essential for the overall development of a society, which are implicit in the concept of economic development, are a part and parcel of the process of rural development, which basically, is economic development of those specific areas and people who are living in rural environment; the qualitative value parameters, the social and political aspirations, which are essential to build up a national identity of a particular society.

When added to the concept of economic development, the rural development makes the concept of development in totality. Thus, the process of growth, extension of economy, removal of regional disparities and income inequalities, distribution of national resources and investment equitably between different regions, rural and urban, use of improved technology, availability of opportunity in the field of the education and health, to more and more people, development of various institutions, change of attitudes and values are part and parcel of the concept of development. The concept of development, in its totality, may be an abstract thought unless the same is subdivided and definite goals are set to achieve various forms of development for a particular society.

The fundamental purpose of development is the growth of a society, and to make available to the society the means of production and livelihood, to generate and sustain a process for creating more and more and sustained opportunities available to the people to participate in the process of total

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38 Ibid.
development of a country. As rural society is afflicted by poverty, rural development is a synonym of economic development and so, aims at the identical process of development, which is not merely for the realization of economic acquisition. Development has to be viewed as a holistic concept so that with the acquisition of economic assets, the social development spontaneously takes place as the core of the whole process. The ultimate purpose of all development activity is to provide increasing opportunities to all the people for a better life; it should bring about more equitable distribution of income and wealth, achieve a greater degree of income security, expand and improve facilities of education, health, nutrition, housing and social welfare, and above all, to safeguard the environment.

Increase in Agricultural Productivity and Out-Put: One of the spectacular advances with regard to increasing agricultural output and productivity has been the introduction of high yielding varieties of seeds and the provision of special technical and environmental inputs, such as fertilizers, irrigation etc., known generally as the "green revolution": it has to be sure of increased agricultural output and productivity.\(^{39}\)

But it has also tended to aggravate income inequalities in rural areas. It is but natural that we should keep in mind the unintended consequences of the green revolution that influence only a part of the agricultural production process.

Bringing Efficiency and Improving the Use of Scarce Land and Water Resources: It is well known that depletion and erosion of soil, the haphazard cutting of woods and forests and the advance of deserts have affected agricultural production badly in many parts of the country. Similarly, while in many places underground water remains untapped for agricultural purposes, in other places this is being depleted rapidly. It is, therefore, necessary to think of

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appropriate measures that will vary from one place to another place for improving efficiency in the use of scarce land and water resources.

Supply of Capital Resources\textsuperscript{40}: It is also well known that agriculture is the last sector to receive capital investments. Thus, there is the need to promote capital flow into agricultural production activities. However, there is enough evidence to emphasize that a massive flow of capital in the rural areas has sometimes produced massive social and economic mal-adjustments and led to unemployment through mechanization.

Maximization and Creation of Employment Opportunities\textsuperscript{41}: While it is quite clear that a programme of rural development must emphasize the creation of employment opportunities, it is not clear which of the employment generating devices is more fruitful. Such measures as labour intensive agricultural techniques, public works for infrastructure, using manpower intensively, rural industrialization etc., have been employed to generate employment. Nevertheless, the usefulness of these measures is dependent on the economic structure of a particular micro unit and cannot be determined side by side. The question also crops up as to which is the most appropriate sector where employment generating capacities can be built, so that the burden of increasing manpower on agriculture can systematically be reduced. After all, most of the employment generating measures, such as public works for constructing roads, have come to an end when enough roads have been constructed. Small-scale rural industries and large-scale industries have to be well thought out.

Redistribution of Income\textsuperscript{42}: Our past experience shows that even if aggregate per capita income increases, distribution of income between regions and social classes becomes more unequal. In order to prevent the income gap from widening and to reduce income inequality, rural development strategy

\begin{flushleft}
\textsuperscript{40} Government of India, Science Policy Resolution, 1958, p. 16.
\textsuperscript{41} Nehru, J.L., op. cit., p. 105.
\textsuperscript{42} Science Policy Resolution, 1958, p. 17.
\end{flushleft}
must specifically design measures to benefit the marginal farmers, the landless labourers, and the migrant seasonal workers.

Raising the Standard of Living of Rural Population\textsuperscript{43}: Lastly, if the goal of rural development is to raise the living standard of the rural population, it must aim at more than higher incomes; higher incomes do not necessarily and automatically mean a better standard of living for the rural population in terms of material well being, nutrition, education, security, leisure, mental health and social integration. Experience shows that a sudden injection of money in rural economy often leads to wasteful expenditure, conspicuous consumption and produces harmful results. If the increased output is to lead to real improvement in standards of living, in saving and productive investment, a number of soil development policies must be carried out simultaneously with the introduction of economic measures on the production side. Education for consumption and better living is as important as training and incentive for increasing production. This requires the definition of collective rather than individual goals, of community rather than personal improvement, of social rather than private interests.

Integrated rural development of which rural industrialization programmes form an essential part must fulfill multiple objectives. Provision for industrial inputs for agriculture, processing of primary products, employment and income generation are among these. Consequently, a successful programme for rural development requires a close link between agriculture and rural industry since the agricultural sector provides manpower, raw material and capital.

Equally important is the linkage between rural industry and modern industry. The latter supplies rural industry with much of the needed technology and also provides markets for rural ancillary industries. Since the capacity of modern industry expanding and generating employment opportunities is very limited because of its relatively high degree of

\textsuperscript{43} Government of India, Technology Policy, 1983, p. 7.
mechanization, in the initial stages of rural development it is out of question. On the other hand, because of the low degree of mechanization and productivity, the agricultural sector is incapable of providing the necessary capital for infusing dynamism in agriculture. It is in this particular extent that the linkages between agriculture, small rural industries, and modern industry must be articulated.

The major inspiration for planning for development with a major role in it for science and its applications came from Jawaharlal Nehru, independent India’s first Prime Minister. In his Discovery of India, Nehru expressed his conviction in these words: “it was science alone that could solve the problems of hunger and poverty, of insanitation and illiteracy, of superstition and deadening customs and traditions, of vast resources running to waste, of a rich country inhabited by starving people”. To him, science was the most effective and purposeful pursuit and its applications alone would usher in social transformation and ward off inequities of various dimensions, which afflict mankind. His pensive mind had a wider perspective of science, viz., its method and its national character, the scientific attitude or the scientific temper, as he used to refer it. To Jawaharlal Nehru, more than any other, India is indebted to the firm foundation laid by him, soon after Independence for the Multi-level growth of science and technology. He exhorted time and again that a dispassionate scientific temper would be of great value in solving problems in every walk of life, even in the parliament, although he was well aware of the destructive dimensions of science. Throughout his nearly seventeen years of stewardship of the nation, Nehru was intimately associated with the scientific community and the scientific organizations, lending his prestigious personality to the development of science in India as integral component of the

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44 Nehru, Jawahar Lal, Discovery of India (New Delhi: Oxford University Press), 1958, pp. 11-12.
successive five year plans. In the words of Nehru, “planning is science in action, and the scientific method means planning.”

Alleviation and Employment Generation Programmes: the discussion so far has been about development, economic development, poverty and rural development. In regard to rural development, the discussion surrounded the policy and programmes to attack the two seemingly perennial problems – poverty and unemployment – in the rural areas. Suffice it to state that after independence from the British Empire in 1947, India adopted planned economic development model under the experts, more notably Mahalanobis: the model of planning was almost akin to Soviet model, with socialistic bias. Five-Year Plans were prepared and implemented, one after the other; we are now in the Tenth Plan. The objectives of the 10th Plan about rural development with focus on poverty and unemployment are (i) reduction of poverty ratio to 20 per cent by 2007 and to 10 per cent by 2012; (ii) to provide gainful employment to additional labour force; (iii) to increase literacy rate to 72% by 2007 and to 80 per cent by 2012; (iv) to increase forest and tree cover to 25 per cent by 2007 and to 33 per cent by 2012; and (v) to ensure that all villages have access to potable drinking water by 2012.

The planned development, specifically aimed at rural areas, is the Community Development Programme, although various programmes were conceived, formulated and implemented from time to time. A brief account of all imported programmes is presented below:

Some provincial governments had taken some initiatives towards rural development. Worthy of mention are (i) Firka Development Scheme, Madras (1943); (ii) Etawah Pilot Project, Uttar Pardesh (1949); (iii) Nilokheri Project (1948). Firka Development Scheme: The Firka Development Scheme was launched in 1946. It aimed at “a happier, more prosperous and fuller life in

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which the individual villager will have the opportunity to develop both as an individual and as a unit of well integrated society.46

It did make strides as regards projects relating to construction of roads, repairs of old roads, construction and repair of village dams, development of water sources, construction of primary night schools, adult schools, libraries, first aid centers, leprosy clinics, waste land cultivation, starting new cooperatives, primary maternity centers, dispensaries and introduction of Wardha type latrines. The most outstanding feature of the Firka Development Programme was the people’s voluntary contribution in execution of the project works like the digging of wells, constructing roads etc. Their contribution exceeded 50% of the total cost of the scheme. However, for want of resources, the scheme suffered. The administrative perspectives of the official and non-official members were different which harmed the scheme.47

Etawah Pilot Project (1946): Albert Mayer was the beacon of the light to start this project. As the contents, processes, beneficiaries, were akin to those found under Community Development Programme, this project was called by the social workers and popular leaders as ‘Mini Community Development Project of India’. The aim of the project was “Intensive Rural Development for revitalization of life in the villages.” Mayer concentrated on major activity i.e. Agriculture.48

The Project served to transfer institutional administrative machinery from the provincial head to those at the grassroots. The success of the Etawah Pilot Project can be justifiably attributed to the dynamic leadership provided by Mayer; he cut at the administrative red-tapism to smoothen the process of implementation. Prosperity knocked at the doors of the farmers and the

46 Government of Madras (now called Tamil Nadu), Rural Welfare in Madras, Directorate of information and Publicity, 1951, p.7.
income of the farmers concerned moved up by about 40 percent in a period of three years.

The Nilokheri Project (1948): It was a government-financed project. The displaced persons as a consequence of partition of India in 1947 were rehabilitated at Nilokheri by allotting about 1100 acres of land. Mr. S. K. Dey was entrusted with the responsibility to develop agro-industrial complex to provide for organized multiple activities such as dairy, poultry, tannery, printing, engineering workshop etc; all these activities were run on cooperative lines. Dey ensured speedy implementation of the Project and achieved the onerous objective in trying situation. The project succeeded in making full employment available to the resettled persons. The project was so successful that Pt. Jawaharlal Nehru, the then Prime Minister, remarked, “I have seen one Nilokheri from its birth to its present development. I want Nilokheri to implement the message of Nilokheri which says work is the supreme sacrament and the right community organization is the means for enduring value and survival”.

It would be worthwhile to describe briefly various programmes undertaken by the government for eradication of poverty and generation of employment. A brief description is, therefore, presented, excepting IRDP etc., detailed separately.\(^{49}\)

The Training of Rural Youth for Self-Employment (TRYSEM) – is to train rural youth from the target group of families in skills so as to enable them to take up self/wage employment. Youth from SC and ST communities should be at least 50 per cent of the rural youth trained; at least 40 per cent should be women.

The Programme for Development of Women and Children in Rural Areas (DWCRA) aims to improve the socio-economic status of the poor women in the rural areas through creation of groups of women for income generating activities on a self-sustaining basis.

The Employment Assurance Scheme (EAS) has been universalized so as to make it applicable to all the rural blocks of the country. It aims at providing 100 days of unskilled manual work up to two members of a family in the age group of 18 to 60 years normally residing in villages in the lean agriculture season.

The Million Wells Scheme (MWS) is funded by the Centre and States in the ratio of 80:20 to provide open irrigation wells free of cost to poor small and marginal farmers belonging to SCs/STs and freed bonded labour.

The National Social Assistance Programme (NSAP) recognizes the responsibility of the Central and State governments for providing social assistance to poor households in case of maternity, old age and death of bread earner.

Community Development Programme (CDP): Indian village is responsible for the growth of life and culture since ancient times. Village tradition has exhibited marvelous continuity without any break. Villages did receive rude shocks during the Raj days; the British destroyed its basic fabric. With the aim of initiating and directing a process of change in order to undertake a planned transformation of village, that is, socio-economic life of the rural community, the Community Development Programme was started on the 2nd October 1952 (Mahatma Gandhi's birthday). The overall objective was village welfare (Gram Kalyan). Originally, it was defined as the 'government's programme with people's participation” but later, the programme was defined as the “people's programme with government participation.”

In a nutshell, the objectives of the programme are “to advance all spheres of village life. The vehicles recognized for it are cooperatives, rural industries and panchayats. The nucleus of the programme is to bring a change
from tradition to modernity and make the rural society worthy of its existence.50

The activities undertaken under the C.D. Programme are (i) Agriculture and related matters, (ii) communications, (iii) Education, (iv) Health, (v) Training, (vi) Social Welfare, (vii) Supplementary Employment, (viii) Housing. The programme includes economic and non-economic activities to impact both the social and cultural aspects.

Apart from Union Ministry of Agriculture and Rural Development, State Development Commissioner, Zila Parishad and various committees at different levels, there is Block Panchayat Samiti, which is in charge of the programme. Block Development Officer is the kingpin who is assisted by a number of need-based extension officers (experts in their respective fields). Each block consists of about 100 villages with a population of about one lakh persons spread over an area of about 400-500 sq. km. Finances are shared by central and state governments for execution of development projects. The villagers contribute in cash or kind, mostly labour. At the village level, gram panchayat controls the programme. A multipurpose man called Village Level Worker (VLW) or Gram Sewak is posted in each village or cluster of villages. He establishes linkage of various government officials with the village population.

The various programmes of rural development are mentioned below. Brief description of some of them is given elsewhere.

- Community Development Programme (1952);
- National Extension Service (1953);
- Khadi and Village Industries Programme (1957);
- Village Housing Projects Scheme (1957);
- Multi-Purpose Tribal Development Blocks Programme (1959);
- Package Programme (1960);
- Intensive Agricultural District Programme (1960);
- Applied Nutrition Programme (1962);
- Rural Industries Projects (1962);

50 Ibid., p. 175.
• Intensive Agricultural Area Programme (1964);
• High Yielding Variety Programme (1966);
• Farmers Training and Education Programme (1966);
• Wells Construction Programme (1967);
• Rural Works Programme (1967);
• Tribal Development Block (1968);
• Drought Prone Area Programme (DPAP) 1970-71;
• Tribal Area Development Programme (TADP) 1971-72;
• Hill Area Development Programme (HADP) 1973-74;
• Command Area Development Programme (CAD) 1974-75;
• Whole Village Development Programme (WVDP) 1975-76;

There are some new poverty alleviation programmes being currently implemented vigorously, some were introduced many years ago. These are briefly described below:

The Swaranajayanti Gram Swarozgar Yojana (SGSY): It was launched in April 1999 and is the only self-employment programme currently being implemented. It aims at promoting micro enterprises and to bring the assisted poor families (Swarozgaris) above the poverty line by organizing them into Self-Help Groups (SHGs) through the process of social mobilization, training and capacity building and provision of income generating assets through a mix of Bank credit and Government subsidy. The scheme is being implemented on a cost sharing ratio of 75: 25 between the Centre and the States.

Sampoorna Grameen Rozgar Yojana (SGRY): It was launched in September 2001. The schemes of Jawahar Gram Samridhi Yojana (JGSY) and Employment Assurance Scheme (EAS) have been fully integrated with SGRY. The objective of the scheme is to provide additional wage employment along with food security, creation of durable community social and economic assets, and infrastructure development in the rural areas. The scheme envisages generation of 100 crore mandays of employment in a year. The cost of the programme is to be shared between the Centre and the State on a cost-sharing ratio of 87.5: 12.5 (including foodgrains component).
Pradhan Mantri Gramodaya Yojana (PMGY): It was launched in 2000-01 in all the States and the UTs in order to achieve the objective of sustainable human development at the village level.

Pradhan Mantri Gramodaya Yojana (Gramin Awas): The scheme seeks to achieve the objective of sustainable habitat development at the village level.

Pradhan Mantri Gramodaya Yojana Drinking Water Project: Under this programme, a minimum 25 per cent of the total allocation is to be utilized by the respective States/UTs on projects/schemes for water conservation, water harvesting, water recharge and sustainability of the drinking water sources in respect of areas under Desert Development Programme/Drought Prone Area Programme.

Pradhan Mantri Gram Sadak Yojana (PMGSY): It was launched on 25th December 2000. The programme was to provide road connectivity through good all-weather roads to 1.60 lakh unconnected habitations with a population of 500 persons or more in the rural areas by the end of the Tenth Plan period (2007) at an estimated cost of the Rs. 60,000 crore. The programme is being executed in all the States and six Union Territories. The focus of the programme is on providing road connectivity to unconnected habitations of stipulated population size. Connectivity is being provided to all Panchayat headquarters and places of tourist interest under the PMGSY irrespective of the population size. The present source of funding for PMGSY is the diesel cess, 50 per cent of which is earmarked for PMGSY. Efforts are underway to raise additional resources for the programme with financial assistance from the World Bank and the Asian Development Bank.

Antyodaya Anna Yojana: The scheme was launched by the Prime Minister on 25th December 2001. Under the scheme, 1 crore poorest families out of the BPL families covered under the Targeted Public Distribution System are identified. 25kgs of foodgrains were made available to each eligible family at a highly subsidized rate of Rs. 2 per kg for wheat and Rs. 3
per kg for rice. This quantity has been enhanced from 25 to 55 kgs with effect from April, 2002.

Annapurna: This scheme was launched on April 1, 2000 as a 100 per cent Centrally Sponsored Scheme. It aims at providing food security to meet the requirement of those senior citizens who, though eligible for pension under the National Old Age Pension Scheme, are not getting the same. 10 kgs of foodgrains per person per month are supplied free of cost.

Indira Awaas Yojana (IAY): The Indira Awaas Yojana (IAY) aims at providing dwelling units, free of cost, to the poor families of the Scheduled Castes, Scheduled Tribes, freed bonded labourers and also the non SC/ST persons below the poverty line: in rural areas. The scheme is funded on a cost-sharing basis of 75:25 between the Centre and the States. The ceiling on construction assistance under the IAY is Rs. 20,000 per unit for the plain areas and Rs. 22,000 for the hilly/difficult areas.

Jai Prakash Rozgar Guarantee Yojana (JPRGY): The scheme seeks to provide guaranteed employment to the unemployed in the most distressed districts of the country. Operational modalities for launching of the scheme are being worked out.

Swarna Jayanti Shahari Rozgar Yojana (SJSRY): The Urban Self-Employment Programme and the Urban Wage Employment Programme are two special schemes of the SJSRY initiated in December 1997, which replaced various programmes operated earlier for urban poverty alleviation. This is funded on a 75:25 basis between the Centre and the States.

Valmiki Ambedkar Awas Yojana (VAMBAY): This scheme was formally launched by the Prime Minister on the 2nd December 2001. The scheme seeks to ameliorate the conditions of the urban slum dwellers living below the poverty line, which do not possess adequate shelter. Table no. 1.05 shows physical performance of Special Employment and Poverty Alleviation Programmes.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A Programme in rural areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 JGSY— mandays of employment generated ₹</td>
<td>-</td>
<td>260.29</td>
<td>-</td>
</tr>
<tr>
<td>2 EAS— mandays of employment generated ₹</td>
<td>259.45</td>
<td>218.39</td>
<td>339.19</td>
</tr>
<tr>
<td>3 SGSY— Total Swarozgaris assisted</td>
<td>-</td>
<td>1.01</td>
<td>-</td>
</tr>
<tr>
<td>4 IAY— Dwelling Units</td>
<td>1.24</td>
<td>1.17</td>
<td>1.29</td>
</tr>
<tr>
<td>5 ARWSP— Habitation / villages</td>
<td>0.08</td>
<td>0.07</td>
<td>0.05</td>
</tr>
<tr>
<td>6 CRSP— (No. of Sanitary latrines)</td>
<td>1.26</td>
<td>0.62</td>
<td>-</td>
</tr>
<tr>
<td>7 NSAP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) NOAPS— Beneficiaries</td>
<td>5.58</td>
<td>5.15</td>
<td>5.06</td>
</tr>
<tr>
<td>b) NFBS— Beneficiaries</td>
<td>0.21</td>
<td>0.2</td>
<td>0.16</td>
</tr>
<tr>
<td>c) NMBS— Beneficiaries*</td>
<td>1.82</td>
<td>1.45</td>
<td>-</td>
</tr>
<tr>
<td>B Programmes in urban areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 PMRY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Micro-enterprises @</td>
<td>0.22</td>
<td>0.19</td>
<td>0.22</td>
</tr>
<tr>
<td>ii) Employment generated $</td>
<td>0.30</td>
<td>0.28</td>
<td>0.30</td>
</tr>
<tr>
<td>2 SJRY $$ of which USEP-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Beneficiaries</td>
<td>-</td>
<td>0.10</td>
<td>-</td>
</tr>
<tr>
<td>(ii) Persons trained</td>
<td>-</td>
<td>0.09</td>
<td>-</td>
</tr>
<tr>
<td>II UWEP— mandays of employment generated</td>
<td>-</td>
<td>15.87</td>
<td>-</td>
</tr>
<tr>
<td>3 Beneficiaries covered under community structure component</td>
<td>-</td>
<td>28.73&lt;</td>
<td>-</td>
</tr>
<tr>
<td>4 Beneficiaries assisted under DWACRA</td>
<td>-</td>
<td>0.007</td>
<td>-</td>
</tr>
</tbody>
</table>

- Targets are not fixed.
P Provisional Figures.
@ Cases disbursed. For 2002-03, achievement is up to November 2002.
$ Estimated @ 1.5 per case disbursed loan. For 2002-03, achievement is up to November, 2002
$$ Swarna Jayanti Shahari Rozgar Yojana came into operation from December 1997.
< Cumulative information since it is a continuous process.
+ Up to December 2002
> Up to December 31, 2002
** Up to January, 2003
£: JGSY & EAS merged into Sampoorna Grameen Rozgar Yojana (SGRY) w.e.f. 25-9-2001.
££ Transferred to Ministry of Health and Family Welfare w.e.f. 2001-02.

Source: Planning Commission and Other Concerned Departments
As a result of thrust given to rural development, especially agriculture and allied activities, India has made impressive progress. Data about foodgrains production, Egg production, Milk production, Fish production and horticulture production are given in Table Nos. 1.06, 1.07, 1.08, 1.09 and 1.10.

Production of Foodgrains: The country has made tremendous progress in foodgrains production and is now self-reliant. The production from 1996 – 97 to 2002-03 is given in Table No. 1.06:

Table No. 1.06
Foodgrains Production (Million tonnes)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>81.7</td>
<td>82.5</td>
<td>86.1</td>
<td>89.7</td>
<td>84.9</td>
<td>93.1</td>
<td>77.7</td>
</tr>
<tr>
<td>Wheat</td>
<td>69.4</td>
<td>66.4</td>
<td>71.3</td>
<td>76.4</td>
<td>68.8</td>
<td>71.8</td>
<td>68.9</td>
</tr>
<tr>
<td>Coarse Cereals</td>
<td>34.1</td>
<td>30.4</td>
<td>31.3</td>
<td>30.3</td>
<td>31.6</td>
<td>33.9</td>
<td>25.1</td>
</tr>
<tr>
<td>Pulses</td>
<td>14.2</td>
<td>13.0</td>
<td>14.9</td>
<td>13.4</td>
<td>10.7</td>
<td>13.2</td>
<td>11.5</td>
</tr>
<tr>
<td>Foodgrains</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kharif</td>
<td>103.9</td>
<td>101.6</td>
<td>102.9</td>
<td>105.5</td>
<td>103.4</td>
<td>111.5</td>
<td>90.3</td>
</tr>
<tr>
<td>Rabi</td>
<td>95.5</td>
<td>90.7</td>
<td>100.7</td>
<td>104.3</td>
<td>92.5</td>
<td>100.5</td>
<td>92.9</td>
</tr>
<tr>
<td>Total</td>
<td>199.4</td>
<td>192.3</td>
<td>203.6</td>
<td>209.8</td>
<td>195.9</td>
<td>212.0</td>
<td>183.2</td>
</tr>
</tbody>
</table>

* Second Advance Estimates.


India has the distinction of having improved the production of Eggs and other poultry products. The Egg production in the country from 1950-51 to 2000-01 is given in Table No. 1.07:

Table No. 1.07
Egg Production in the Country

<table>
<thead>
<tr>
<th>Year</th>
<th>Eggs (Mill. No.s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>1,832</td>
</tr>
<tr>
<td>1985-86</td>
<td>16,128</td>
</tr>
<tr>
<td>1990-91</td>
<td>21,101</td>
</tr>
<tr>
<td>1995-96</td>
<td>27,198</td>
</tr>
<tr>
<td>2000-01</td>
<td>31,770</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India, Economic Survey 2002-03.
Year-wise data from 1950-51 to 2001-02 on production and availability of Milk in the country is given in Table No.1.08:

Table No. 1.08
Production and Per Capita Availability of Milk in the Country

<table>
<thead>
<tr>
<th>Years</th>
<th>Milk Production (Million Tonnes)</th>
<th>Per Capita availability (grms / day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>17.0</td>
<td>124</td>
</tr>
<tr>
<td>1960-61</td>
<td>20.0</td>
<td>124</td>
</tr>
<tr>
<td>1970-71</td>
<td>22.0</td>
<td>112</td>
</tr>
<tr>
<td>1980-81</td>
<td>31.6</td>
<td>128</td>
</tr>
<tr>
<td>1990-91</td>
<td>53.9</td>
<td>176</td>
</tr>
<tr>
<td>2000-01*</td>
<td>81.4</td>
<td>223</td>
</tr>
<tr>
<td>2001-02**</td>
<td>84.6</td>
<td>226</td>
</tr>
</tbody>
</table>

* Provisional
** Anticipated

Source: Department of Animal Husbandry and Dairying, Ministry of Agriculture, Government of India, New Delhi.

Data on the production and export of Fish and Marine Products are given in Table No. 1.09:

Table No. 1.09
Production and Export of Fish and Marine Products

<table>
<thead>
<tr>
<th>Years</th>
<th>Fish Production (Million Tons)</th>
<th>Export of Marine Products</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marine</td>
<td>Inland</td>
</tr>
<tr>
<td>1950-51</td>
<td>0.5</td>
<td>0.2</td>
</tr>
<tr>
<td>1960-61</td>
<td>0.9</td>
<td>0.3</td>
</tr>
<tr>
<td>1970-71</td>
<td>1.1</td>
<td>0.7</td>
</tr>
<tr>
<td>1980-81</td>
<td>1.5</td>
<td>0.9</td>
</tr>
<tr>
<td>1990-91</td>
<td>2.3</td>
<td>1.5</td>
</tr>
<tr>
<td>2000-01</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>2001-02*</td>
<td>2.9</td>
<td>3.1</td>
</tr>
</tbody>
</table>

* Provisional

Source: Department of Animal Husbandry and Dairying, Ministry of Agriculture, Government of India, New Delhi.
Horticulture Production: India is the largest producer of fruits at 4.64 million metric tones, out of the world’s total production of fruits at 45.37 million metric tones (8%). According to an estimate, the country loses about Rs. 70,000 crore annually on account of post-harvest wastage, while another estimate by the National Horticulture Board (2001-02) pegs the wastage at Rs. 5,000 crore. Some facts about fruits are given below in regard to production, consumption, employment, earnings, etc. of fruits:

a) Fruits and vegetables are grown only on 6-7 per cent of gross cropped area but contribute more than 18.8 per cent of the gross values of agricultural output and 52 per cent export earnings from total agricultural produce.

b) Areas under fruits increased by 172 per cent from 1961 to 1993, productivity per hectare was nearly doubled, leading to an increase in production to the tune of 320 per cent.

c) India can grow almost every fruit and vegetable.

d) The average labour requirement for fruit production is 860 man days per hectare per annum as against 143 man days for cereals corps. Crops like grapes, bananas and pineapple generate much larger employment, roughly from 1,000 – 2500 man days per hectare per annum. Commercial scale of horticultural production can generate large-scale employment and income generation in rural India.

e) Horticultural crops earn more foreign exchange than cereals and generate more employment.

f) According to the WHO norms, the per capita per day fruit consumption should be 85 gm; in India, it is only 62 gm. The per capita consumption of citrus fruits is 107 kg per annum in Lebanon, while in India it is a mere 3 kg per annum.

Data on estimated area and production of major horticultural crops is given in Table No. 1.10:
Table No. 1.10
Estimated area and Production of major Horticultural Crops
(Area in million hectares: Production in million tones)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>0.23 1.04</td>
<td>0.24 1.23</td>
<td>0.25 1.42</td>
</tr>
<tr>
<td>Banana</td>
<td>0.49 16.81</td>
<td>0.48 16.17</td>
<td>0.62 16.45</td>
</tr>
<tr>
<td>Citrus</td>
<td>0.52 4.65</td>
<td>0.50 4.40</td>
<td>0.56 4.58</td>
</tr>
<tr>
<td>Grapes</td>
<td>0.04 1.13</td>
<td>0.05 1.06</td>
<td>0.06 1.10</td>
</tr>
<tr>
<td>Guava</td>
<td>0.15 1.71</td>
<td>0.15 1.63</td>
<td>0.19 1.68</td>
</tr>
<tr>
<td>Litchi</td>
<td>0.05 0.43</td>
<td>0.05 0.40</td>
<td>0.05 0.42</td>
</tr>
<tr>
<td>Mango</td>
<td>1.48 10.50</td>
<td>1.52 10.24</td>
<td>1.56 10.64</td>
</tr>
<tr>
<td>Pappya</td>
<td>0.06 1.66</td>
<td>0.07 1.77</td>
<td>0.07 1.82</td>
</tr>
<tr>
<td>Pineapple</td>
<td>0.07 1.02</td>
<td>0.08 1.22</td>
<td>0.08 1.26</td>
</tr>
<tr>
<td>Sapota</td>
<td>0.06 0.80</td>
<td>0.07 0.67</td>
<td>0.07 0.70</td>
</tr>
<tr>
<td>Others</td>
<td>0.65 5.75</td>
<td>0.23 6.58</td>
<td>0.49 6.53</td>
</tr>
<tr>
<td>Total</td>
<td>3.80 45.50</td>
<td>3.89 45.37</td>
<td>3.95 46.60</td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture, Government of India, New Delhi.

Mango covers 39% of area accounting for 23% of the total fruit production in the country. India’s share in world production of mango is 54%. Citrus group of fruits ranks next in area coverage and accounts for about 10% of the country’s fruit production. Limes, lemons, sweet orange and mandarin cover bulk of the area under this group of fruits.

Banana ranks third in area coverage, covering about 13% of the total area. It ranks first in total fruit production. Apple is the fourth major fruit crop of the country with production of 1.24 million tones. Share of other fruits like guava and papaya is about 4% while that of grapes and pineapple is about 2%; Litchi’s share is about 1%.

The arid zones of the country are potential areas for fruit like aonla, ber, pomegranate, anona, etc. Date palm and fig cultivation is also finding favour in some areas.
The following are some on important area development programmes implemented with enthusiasm. The worrisome observations were: “the rich became richer and the poor no better than they were before, they rather became progressively landless. This happened despite beneficiary orientation, focus on weaker sections and scientific and systematic planning. It was, therefore, considered appropriate to formulate and implement all-inclusive programme, instead of multiplicity of programmes for the some objective. Therefore, the essence of all programmes was considered to involve all the agencies under a single programme for better planning, action planning, resource utilization, participation and even periodical evaluation.

As regards the Concept and Strategy of Integrated Rural Development Programme (IRDP), the National Workshop on Integrated Rural Development organized in May 1975 arrived at a consensus regarding its concept. According to this, the IRDP is “a wide ranging and comprehensive set of activities pertaining to all aspects of rural economy and covering rural people in their entirety including cultivators, landless labourers, rural artisans and so forth”.

Linkage between District Rural Development Agency and other Agencies / Offices / Officials is as under.

Figure No. 1
Linkage Between Farmers and Others

![Diagram showing linkage between agencies](51)
Figure No. 2

**BF** : Beneficiaries  
**BDPO** : Block Development & Panchayat Officer  
**DRDA** : District Rural Development Agency  
**DL** : Direct Linkage  
**LIL** : Limited Indirect Linkage  
**Patwari** : Patwari  
**VLW** : Village Level Worker (Gram Sewak)  
**VP** : Village Panchayat

Figure No. 3

MINISTRY OF RURAL DEVELOPMENT

CENTRE

STATE

DISTRICT

BLOCK

VILLAGE LEVEL

Ministry of Rural Development

Ministry of Agriculture & Rural Development

Technical Departments

BDO & EXTENSION OFFICERS

Beneficiaries
The government policy in regard to development of rural India and to ameliorate the hapless conditions of the rural poor is as follows: A number of measures were adopted to reduce economic disparities since independence. The more important of the measures taken by the Government are:

(i) Land Reforms: Zamindari System was abolished, ceilings on the holdings were imposed, and surplus land over and above the ceiling limit was distributed amongst the actual cultivators. Tenants were also given protection by providing due security of tenure.

(ii) Extension of Public Sector: Basic industries were started by the Government. Major Banks were nationalized in 1969 and 1980 to check concentration of wealth and income in the hands of fewer individuals.

(iii) Encouragement to Small-Scale and Cottage Industries: Emphasis was laid during the five-year plans to develop small-scale and cottage industries to reduce intensity of economic disparities. These industries also offered ample scope of large-scale employment, being predominantly labour.

(iv) Control over Monopolies and Restrictive Trade Practices: The aim was to check concentration of urban property. Monopolies and Restrictive Trade Practices Act, 1969 was passed. This attempt was supplemented by introducing policy of industrial licenses.

(v) Employment and Wage Policies: Various development programmes were started, almost all in the rural areas, to reduce unemployment. Special schemes were started, namely Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Labourers Agency (MFALA), Drought Prove Area Programme (DPAP), Food for Work Programme etc. For creating employment opportunities, Integrated Rural Development Programme (IRDP) was introduced at the end of Fifth Plan. National Rural Employment Programme (NREP) was initiated in

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the Sixth Plan. Similarly, Jawahar Rozgar Yojana and Nehru Rojgar Yojana were launched in the Seventh Plan. The number of Employment Exchanges was increased in the country.

(vi) Improving Economic Conditions of Workers: Minimum Wages Act, Payment of Bonus Act, Payment of Gratuity Act, etc were passed. These measures and many more benefited only organized labour, which was just 10%. Social security measures were also enforced like Employees’ State Insurance Act, Employees’ Provident Fund Act, Maternity Benefits Act, etc.

(vii) Pricing and Distribution Policies: These policies aimed at improving the distribution of income in favour of the poor. Subsidies were introduced in respect of many essential commodities like sugar, cloth, paper etc., which made them available to the poor at cheaper rates. Essential commodities were distributed through Public Distribution System (PDS) to the poor sections at subsidized rates.

(viii) Subsidies: For removing disparity of income, policy of granting subsidies has been put into practice. The poor and weaker sections of society are supplied several types of goods and services such as electricity, irrigation, drinking water, health services, milk, civil supplies, housing, education etc. at subsidized rates. Public enterprises have been engaged in selling of goods and services at cost price.

(ix) Taxation Policies: Policies of direct and indirect taxes aim at reducing disparities/inequalities of income. These act in two ways: these withdraw maximum possible purchasing power from the richer sections by progressive rates of taxation so that concentration of wealth is reduced. Secondly, tax proceeds are used to improve real income of the poor.

(x) Measures to reduce Regional Inequality: A number of measures were taken in this direction, such as:

(a) Greater allocation of Central funds to the backward states.
(b) Central assistance is given to the poor States for efficient administration.

(c) Special Area Programmes have been launched in backward states, such as Dry Farming Programme, Desert Development Programme, Drought Prone Area Programme, 20-Point Economic Programme etc.

Although many programmes were launched to reduce inequality of income and wealth and to increase employment yet the results have not been very satisfactory. There is no gain saying that the growing disparity between the urban elite and the rural poor can lead to political instability. Such a state does not augur well for economic development with social justice.

Globalisation is the latest development, which is taking on the world as an epidemic. There are authorities extolling its advent as boon to the poor or developing countries, and there are others condemning the process as a curse to the humanity. It is important to find out its impact on agriculture and related areas.

Globalisation and its Impact on Rural Economy – Agriculture: Globalisation is a reality that, for better or worse, touches our lives in ways most of us never stop to think about. The term “Globalisation” was first coined in the 1980s, but the concept stretches back decades, even centuries, if you count the trading empires built by Spain, Portugal, Britain, and Holland. The resolve of Western States to build and strengthen international ties in the aftermath of World War II laid the groundwork for today’s globalisation. It has brought diminishing national borders and the fusing of individual national markets. The fall of protectionist barriers has stimulated free movement of capital and paved the way for companies to set up several bases around the world.\(^{52}\)

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Many see globalisation as a primarily economic phenomenon, involving the increasing interaction, or integration, of national economic systems through the growth in international trade, investment and capital flows. However, one can also point to a rapid increase in cross-border social, cultural and technological exchange as part of the phenomenon of globalisation.

Impact on Workers: One of the benefits which globalisation has provided poor countries can be found in the new employment opportunities it offers. While multinationals themselves provide only around twenty million jobs in the developing world, indirect employment serving multinational industries can sometimes bring many more jobs than the companies themselves will offer. Many governments have created special export processing zones in order to attract multinationals to their countries and to encourage domestic industries to produce more for the international market.

Impact on Farmers: The vast majority of people in the developing world lives in rural communities and is dependent on farming for their livelihood. Globalisation will have the greatest impact in terms of the number of people it affects. Some farmers have benefited from the export opportunities which globalisation offers. Kenyan farmers have found a niche market in the European demand for year-round vegetables. African and Latin American producers who supply fair trade outfits such as Cafédirect, Oxfam or Tradecraft have managed to secure a stable source of income in return for their crops. Yet many more farmers have seen their livelihood threatened through exposure to global market. Coffee grown without fair trade protection is a good example of this threat. The price farmers around the world receive for their coffee crop is largely dependent on conditions in Brazil, which produces around a quarter of the world’s supply. When frost hit the Brazilian crop in 1994, the world coffee price rose, and when it floated its currency in 1999, the world coffee price fell.
Farmers also suffer when their own markets are opened up to competition from the powerful agricultural industries of the developed world. In 1994, Mexico opened its markets to competition from US agriculture under the requirements of North American Free Trade Agreement (NAFTA), and within just three years, 800,000 Mexican farmers faced bankruptcy as a result of direct competition from the industrial agriculture of the US Mid-West. Similarly, cattle farmers from Burkina Faso to South Africa have been forced out of business as a result of cheaply produced meat from the European Union being dumped on African markets.

Other pro-globalisation agents have also favoured multinational agricultural companies over the small farmers of the developing world. Within a day of the US Democratic Party receiving a $ 500,000 donation from banana multinational Chiquita, the Clinton Administration filed a complaint at the WTO against European Trade Agreements which favour banana imported from small farmers in the Caribbean. The WTO’s Disputes Settlement Body ruled in favour of the multinational, demanding that it should have greater access to the lucrative European market. Up to 21 ac Caribbean farmers, many of them women, may lose their livelihood as a result of the ruling.

Impact on Indigenous People: Liberalisations have made it easier for multinational companies to start operations even in highly sensitive regions. Some of the most damaging impacts have occurred in areas where large dams, mining, logging and other extractive industries have taken the lands of indigenous peoples. The relentless exploitation of natural resources has usually created few local benefits, but has contributed to the marginalisation of some of the most vulnerable communities.