CHAPTER IV
THE IMPACT OF MODERNISATION
CHAPTER IV

THE IMPACT OF MODERNIZATION

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CHAPTER IV

THE IMPACT OF MODERNISATION

4.1 CHANGING STRUCTURE OF SOCIETY

4.1.1 MODERN, MODERNIZE & MODERNIZATION

4.1.1.1 The little Oxford Dictionary defines “modern” as “of present and recent times; new fashioned; not concerned with a classics” and “modernize” has been defined as “to make modern; adapt to modern ideas, taste etc.” Modernization may therefore mean “the increased use of the machines, equipment, methods, procedures, products, processes etc. in industrial production, economic system, banking, education system, society etc. in daily life or living style based on the application of the first hand science and technology of most recent generation.” Several generic terms in common use are “modernize the economy”, “modernization of railways”, “modernization of textile industry” “modernization of industries”, “modernize the education system”, “modernize the banking system”, “modern technology”, “modernize the society” etc.

4.1.1.2 Black defines modernization as the process by which historically evolved institutions are adapted to the rapidly changing functions that reflect the unprecedented increase in man’s knowledge, permitting the control over his environment that accompanied the scientific revolution.¹ The noted sociologist, W.E. Moore defined modernization as a ‘total’ transformation of a traditional or pre-modern society into the types of technology and associated social organization that characterize the ‘advanced’, economically prosperous, and relatively politically stable nations of the Western world. Because so many aspects of the social order in the underdeveloped areas of the world do not conform with the models set by the advanced countries, there is room for improvement in practically any direction one looks.²

4.1.2 MODERNIZATION & CHANGE

4.1.2.1 Modernization is the phenomenon found in every era. Historically, modernization is the process of change towards those types of social, economic and political systems that have developed in Western Europe and North America from seventeenth to nineteenth centuries and have then spread to other European countries and in nineteenth and twentieth centuries to the South American, Asian and African continents. Nothing has remained static in human history, everything changes and must change. But all changes are painful. The revolutionary changes are far more painful. There are wild reactions, traumatic experiences and peaceful transitions - all taking place at times simultaneously indicating a confused state of affairs. Modernization refers not only to change but also to conceptions of efficiency, increased human and spatial interaction and extraordinary complexities of social relationships. Modernization operates rather through a transformation of institutions that can only be accomplished by the transformation of individuals - the painfully complex process which W.H. Auden epitomized as "a change of heart".

4.1.2.2 MODERNIZATION & POOR

For those who are more fortunate, modernisation has brought revolutions in technology, information, space, electronics and computers. But for most, the conditions that they must somehow learn to live with are not so much revolutionary as just downright revolting. Persistent and wilful neglect of democratic aspirations and failure to meet people's needs may take the people to the streets - the path of revolution. While the food is beyond the reach of many, lack of even basic amenities such as roads, water, electricity and elections may give birth to ripened 'objective conditions' for a mass upsurge driven by diverse interests converging to overthrow an established system. Beginning with the 'Spring Thunder' in Naxalbari, revolution has been a handy misnomer for spreading and deepening societal ideological schisms.

4.1.3 MODERNIZATION & PEASANTRY

The central elements of subculture of peasantry as enumerated by Everett M. Roggers are

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1. Mutual Distrust in Interpersonal Relations: This signifies the distrust syndrome that any peasant, who adopts new ways and becomes rich must have cheated, must have exploited his fellows.

2. Perceived Limited goods: The term 'perceived limited goods' refers to commonly hold notion that all desirable in life (including land, wealth, health, love, power and safety) exist in finite quantity, are always in short supply and cannot be increased in quantity by any means within the peasant's power.

3. Dependence on and hostility towards Government authority

4. Familism: Familism refers to the act of the subordination of individual goals to those of the family and greater dependence on the members of one's own family. Individualism is secondary to conformity and submission to the needs of the family.

5. Lack of innovativeness: Lack of innovativeness is due to tradition oriented attitude. It is a function of scarce economic resources or of technology inappropriate for village settings.

6. Fatalism: Fatalism means the degree to which an individual recognizes a lack of ability to control his future. "Everything is predestined in one's life." "Omnipresent fate is blamed for misfortune." Such beliefs, related to fatalism, have dysfunctional consequence for programmes of directed social change.

7. Limited aspiration: Aspirations denote desired future state of being, which includes level of living, social status, education and occupation. The People in poverty have low level of aspiration. The low level of achievement is also consequence of perpetual poverty, limited resources and long history of exploitation. Achievement motivation has been regarded as a social value that emphasizes a desire for excellence in order for an individual to develop a sense of personal
accomplishment. Limited aspirations, lack of achievement motivation and a sense of fatalism may create negative attitude towards life and retard one's social mobility.

8. **Lack of deferred gratification**: This means postponement of immediate satisfaction and is functionally related with low aspiration and fatalism.

9. **Limited view of the world**: This indicates lack of urban orientation and unawareness of modern possibilities due to lack of physical mobility, geographic mobility and mass media exposure.

10. **Low empathy**: Empathy means ability of an individual to project himself into the role of another person. Low empathy is another attribute of poverty group. It acts as a mental insulator and creates socio-psychological barrier.

### 4.1.4 MODERN ECONOMY

The characteristics of **modern economy** are summarized as follows:

1. It will have mechanisms for the permanent creation or absorption of innovations in technology and organization. These mechanisms will ensure the continuous emergence of new dynamic sectors to replace those that are declining or no longer expanding.

2. It will use increasingly higher forms of energy and more efficient technologies in every branch of economic activity.

3. The production of goods, and later, of services will usually predominate over agriculture, although the later will be carried on in an increasingly efficient way.

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4 Everett M. Rogers, Modernization among Peasants: The Impact of Communication, Holt, Rinehart and Winston Inc, 1969, p. 34
4. Capital intensive activities will increasingly predominate over
labour intensive activities i.e. the amount of capital expended
per worker will tend to increase over time.

5. The size of the productive unit will tend to increase as will also
the economic unit and there will be increasing technological
specialization.

6. Savings and Capital investment will increasingly be carried on
through Corporate Organizations.

7. Corporate management of production will become predominant
whether under state ownership, private ownership and actual
management of production, which will increasingly be carried on
by professional managers.

8. There will be more and more national economic planning,
although it will take different forms in different economic
systems.

9. Political units will become more technologically dependent upon
one another nationally or internationally.

10. Increasing output per capita will become the prevailing
tendency, along with perhaps more equitable distribution of it,
the later resulting from deliberate state intervention rather than
from the spontaneous forces of the market.

4.1.5 OPERATIONAL VALUES OF MODERNITY

The operational values of modernity are:

1. A degree of self-sustaining growth in the economy or at least
growth sufficient to increase both production and consumption
regularly.
2. a measure of public participation in the polity or at least
democratic representation in defining and choosing policy
alternatives.
3. a diffusion of secular-rational norms in the culture - understood
approximately in Weberian-Parsonian terms;
4. an increment of mobility in the society - understood as personal
freedom of physical, social and psychic movement;
5. a corresponding transformation in the modal personality that
equips individuals to function effectively in a social order that
operates according to the foregoing characteristics - the
personality transformation involving as a minimum an increment
of self-things seeking, termed "striving" by Cantril\(^5\) and "need-
achievement" by McClelland\(^6\) and an increment of self-others
seeking, termed "other-direction" by Riesman\(^7\) and "empathy"
by Lerner\(^8\).

### 4.1.6 ASPECTS OF MODERNIZATION

#### 4.1.6.1 The economic aspect is concerned with investment, capital-output ratio, transfer of
technology, production and productivity, industrialization, urbanization, national income and per
\textit{capita} income. The social aspect of modernization include health, housing, schooling, nutrition,
media exposure and other basic need components. The political aspects are concerned with
participation of population in the decision-making which affects the people and their fate, party
membership and voting. Psychologists are concerned with a cross-cutting variable of
personality measured in terms of authoritarianism, empathy, and need achievement.

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\(^{5}\) Cantril, Hadley, The Pattern of Human Concerns, New Brunswick, N.J.; Rutgers Univ. Press, 1966
\(^{7}\) Riesman, David, The Lonely Crowd: A Study of the Changing American Character, New Haven: Yale
Univ. Press, 1950
\(^{8}\) Lerner, Daniel, The Passing of Tradition Society: Modernizing the Middle East, Glencoe, Ill.: Free
Press
Anthropologists add the local-temporal variants - those diverse cultures which, in Kluckhohn's\(^9\) words, shape the behavioral variations underlying our common humanity.

4.1.6.2 MODERNIZATION AND ECONOMIC ASPECTS

The comparative measure of achievement levels along the aspirational continuum of economic development aligns, compares and rates the societies and nations.

4.1.6.3 MODERNIZATION AND SOCIAL ASPECTS

Modernization is the process of social change in which development is the economic component. Modernization produces the societal environment in which rising output per head is effectively incorporated. The perceiving and achieving wealth-oriented behaviour involves the ultimate reshaping and resharing of all social values such as power, respect, rectitude, affection, well-being, skill and enlightenment. Economic decisions on investment criteria and resource allocation must take close account of such non-economic factors as population growth, urbanization rates, family structure, the socialization of youth, education and the mass media.

4.1.6.4 MODERNIZATION AND POLITICAL ASPECTS

4.1.6.4.1 The political modernization is the third vertex of a process of societal modernization, the first two being the economic and the social aspects. The economic and social aspects expect the political decisions, strategies and will to bring continuum changes for upliftment of the poor so as to achieve goals of secularism, democracy, liberty, freedom, fraternity, justice and for gradual diminishing, reduction and dilution in dichotomy and inequality. The politics is concerned with numerous aspects of the society or country and it directly owes responsibility for structural changes and adjustment towards institutional efficacy and efficiency, fulfillment of constitutional guarantee and its implementation, creation of and monitoring the bureaucracy, public and general administration, distributive mechanism, role of public sector, nationalization, health services, societal and cultural stimulations, secularism, foreign trade, collaboration, peace, human rights, nationalism, reformations, federalism, democracy at the grass root level, decentralization of powers and decision-making etc. It plays an important role in deciding the

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\(^9\) Kluckhohn, Clyde, Common Humanity and Diverse Cultures, in Daniel Lerner's The Human Meaning of the Social Sciences (ed.), New York: Meridian, 1959, pp. 245-284

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future of the millions of the people by way of controlling, monitoring and promoting the means of production, proliferation of the means of production, creating the assets/wealth and their just distribution and deciding over the ownership aspects. A man wish perpetual betterment in his prevailing situation and betterment is often projected as if it were an ultimate aim to achieve. The betterment expected by a man is subjected to a condition that it should be without uncertainty in life. The politics is, therefore, responsible for ensuring continuous supply of, in adequate/sufficient quantity at reasonable prices, goods and services necessary for fulfillment of basic needs, decent living standard, justice, liberty and freedom, progress and prosperity of the nation and its citizens. For ensuring human progress and do the social justice to poor, the implementation of economic development and its ideals should be independent of political game. The pace and efficiency of modifying or altering the living conditions, and not the life cycle, of the people of the country is governed by the political set up. Efficient distributive mechanism, effective and efficient delivery system, modern concepts in legislation, justice to all those helpless, destitute and down-trodden within shortest possible time, impartial and non-corrupt administration needs not only the political will to do so but also alienation of political interference and interest from distributive justice, poverty eradication programme, economic and social needs, welfare of the poorest of the poor. Poverty eradication and socio-economic development should not only be independent of political games but also should not be exploited solely as a political tool.

4.1.6.4.2 The economy to be modernized needs physical foundations such as roads, dams, irrigation canals, power systems, telephone and telegraph networks, school buildings and urban facilities such as paved streets, water supply and sewage disposal. As these needs involve large investment, the government must arrange for them through public authority such as electricity boards, water supply and sewerage corporations, local authorities such as municipal councils/corporations. The economy also needs social foundations such as education - both school as well as adult; agricultural extension services, community development work involving education for literacy, health and local self-government; industrial extension services and in-service training to modernize and upgrade the skills of managers and workers in industry,
commerce, government's own civil service, efficient public administrative organization, stable financial and credit apparatus, stable legal and political framework etc. This "development administration" demand on the government, in addition to usual "public administration" is the result of present day modernization.

4.1.6.5 MODERNIZATION AND PSYCHOLOGICAL ASPECTS

The impulse to modernization in ideal psychological terms consists of two factors - firstly a personal virtue of need achievement and secondly a social virtue of interest in the welfare of the generalized other fellow.

4.1.7 CULTURE AND MODERNIZATION

4.1.7.1 The culture connotes refinement or improvement of mind, taste etc. by education and training. The UNESCO has distinct but comprehensive definition of culture. According to World Conference on Cultural Politics held in 1982 in Mexico City, the culture may now be said to be the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes not only the art and letter but also modes of life, the fundamental rights of the human beings, value systems, traditions and beliefs.

Modernization with perfect equity, redistribution, full employment and eradication of poverty and society without discrimination based on caste, creed, color, race, sex cannot be achieved unless those of the traditional and primitive cultural values, which deprive the people from participating in nation's growth, are given up. Tradition and modernity are usually considered to be the antithesis of each other, as if the two were discrete entities. "The assumption that modernity and tradition are radically contradictory rests on a misdiagnosis of tradition as it is found in traditional societies; a misunderstanding of modernity as it is found in modern societies and a misapprehension of the relationship between them. The binding threads of tradition are intricately netted especially in cultures that have persisted without catastrophic changes for centuries. The net is not only intricate but also elastic, making the culture 'permissive' during times of stress and strain. Thus Indian culture can very well absorb all modern technology and

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management, yet remain traditional in its basic tenets and behaviour patterns. Tradition and modernity need not thus be considered as two opposite poles.\textsuperscript{11}

4.1.7.2 The prevailing knowledge in any given time is limited to thinking capacity of a man and as time passes, the knowledge is increased. The refinements and redefining the old concept is itself a continuum change which signifies the modernization. New thoughts and new social order ideals from the contemporary world are to be incorporated to eradicate the social evils and the poverty. Modernization needs isolation of those aspects of culture which retard economic outlook or economically which do no seem to be reasonable to be continued. The ideal of culture lies in the guarantee to all of the liberty, freedom and justice. But "equality of treatment" of human-beings is to be upheld as supreme, even if this involves curtailing liberty or freedom to some extent. A humanistic culture from within would not only promote knowledge, technology and economic growth but also a morality that would give meaning to life and living and ensure the equality of man as against the dominance of one group over others. Development from within implies a detailed analysis of the socio-economic system in light of the societal values and needs. New values and needs are emerging. New history of the human kind is being written not on the paper but on the minds and hearts of the people. The programmes imposed from top just do not work. If they work, they produce serious side effects. Such programmes do not aim at the development of man. All along, the stress is on the individual and how the individual can quickly become economically rich by defeating others around him. Under such circumstances, even if the growth and justice criteria are met, cultural-neutral development can disrupt the identities of peoples and societies, leaving the so-called developed man completely bewildered and lost. Virtually any society or culture is capable of economic development. The problem is to recognize within the culture those dynamic elements that contribute most to rising productivity and incomes. Efforts to force all societies into the same mold are likely to retard rather than accelerate economic growth in developing countries as a group. It is not even certain that drastic change is always necessary for the combination of

\textsuperscript{11} L.I.Rudolph and S.H.Rudolph, Modernity of Tradition : Political Development in India, Orient Longmans, Bombay, 1967, p. 3
capital accumulation, technological progress, structural change and acquisition of skills that are
the essence of economic development. In at least one important case - the grandest success
story of them all, Japan - industrialization seems to have taken place by utilizing the existing
institutions and value systems of feudalism. What is, therefore, needed is the new course of
development which is more appropriate to the needs of the people and less destructive of those
aspects of their cultures, beliefs and social systems that give meaning and purpose to their lives.

4.1.8 IMPACT OF MODERNIZATION ON EDUCATION

4.1.8.1 NEED OF EDUCATION FOR PROGRESS

4.1.8.1.1 Education is regarded as the prime instrument of social mobility. Technological and
economic progress cannot be obtained without education. Plato believed that education was
indispensable to the economic health of a good society because education made citizens
"reasonable men". In view of high economic value of education, he argued that a considerable
part of the community's wealth should be invested in education. Alfred Marshall emphasized
that "the most valuable of all capital is that invested in human beings." Education is necessary
to learn how to behave in effective modern state and society, how to become venturesome, how
to carry on public business promptly and in proper order and how to become more productive.
Education teaches the youth the way for remolding traditional intellectual systems into new forms
with which to advance the material or non-material aspects of modernization. Poverty cannot be
escaped unless poor become literate, learn to carry on technical and business operations.
National levels of education and of income are closely related. Increases in income are followed
by a rise in schooling.

4.1.8.1.2 But education is a long process and those who are able to treat the education as an
investment in children by way of 16 years of continuous education to a child aged 6 years, start
getting return at commensurate rate of total investment over 16 years. Expenditure on

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12 Higgins, Economic Development, p. 265
education is a social investment in human beings - men and women - and it ultimately increases the productivity of persons but the time lag is very long and hence the direct effect in raising output per unit of investment is very low.

4.1.8.1.3 *During the process of economic modernisation, the rate of increase in human capital is higher than that of reproducible physical capital.*[^13] India stands as an outstanding example of massive expansion of educational systems among the third world countries. The educational network in India is the second largest in the world.[^14] The progress is not only in quantitative terms but is also in qualitative and equitable terms. It is said that the third largest professional class in the world is produced by the Indian educational system.

### 4.1.8.2 EDUCATIONAL INSTITUTIONS

The number of educational institutions has increased by more than three times from 2.31 lakh in 1951-52 to more than 8 lakh in 1993-94.

#### NUMBER OF EDUCATIONAL INSTITUTIONS

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4.1.8.3 ENROLMENT IN EDUCATIONAL INSTITUTIONS

4.1.8.3.1 The enrolment in these institutions has gone up enormously from 24 million to more than 157 million i.e. a rise by more than six times. The national stock of educated man-power has increased by 12 times from 4 million in 1950-51 to about 48 million in 1984-85. The number of literate has also increased considerably, the literacy rate being 52.2 per cent of the population of 7 years age and above as per 1991 census as against 18.3 per cent of the population of 5 years and above in 1951. With 156 million children in age group 6-14 in 1981 with an estimated expenditure per student at Rs. 144 per year requires annual expenditure of Rs. 2,246 crores on education. The Eighth Plan emphasized the universalisation of elementary education, eradication of illiteracy in the age group of 15 to 35, strengthening of vocational education and integrated approach to higher education, aiming at expanding education in an equitable and cost-effective manner.

4.1.8.3.2 The schooling facilities are now widely spread all over the country. According to the Fifth All-India Educational Survey\(^{15}\), 95 per cent of the population were served by a primary school either within their own habitation of residence or within a walking distance of one km; and 84 per cent of the population have an upper primary school within a maximum distance of 3 km.

4.1.8.3.3 Today, every sixth student in the world enrolled at primary level, every seventh enrolled in the secondary level and every eighth enrolled in the tertiary level is an Indian.

\(^{15}\) National Council of Educational Research and Training, 1992, Fifth All-India Educational Survey, New Delhi
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<td>SECONDARY (IX-XII)</td>
<td>14-17</td>
<td>1.5</td>
<td>3.5</td>
<td>4.6</td>
<td>10.8</td>
<td>19.1</td>
</tr>
<tr>
<td>HIGHER (DEGREE)</td>
<td>17-23</td>
<td>0.2</td>
<td>0.6</td>
<td>2.0</td>
<td>2.8</td>
<td>4.4</td>
</tr>
</tbody>
</table>

As per the official statistics on the gross enrolment ratios, nearly every one in the age-group 6-11 years, two out of every three in the age group 11 to 14 years and one out of every four in the age group 14-17 are enrolled in schools. About 5 per cent of the population in the age-group 17-23 years are in universities and colleges.

### Chart No. 4.1

Gross enrolment ratios can exceed 100 per cent as they are based on actual enrolments irrespective of the age-group and population of the relevant age-group.

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17 Ministry of Human Resource Development, Various years, Selected Educational Statistics, Government of India, New Delhi

Planning Commission, 1985, Seventh Five Year Plan (1985-90), Government of India, New Delhi

As 14 above
4.1.8.4 TEACHER POPULATION

The teacher population in primary schools in India is a sizable 1.7 million and that in middle school is 1 million. Those in secondary and higher education are 1.4 and 0.3 millions respectively.

**TEACHER POPULATION IN INDIA: 1950-51 TO 1993-94**

![Chart No. 4.2](chart.png)

India is regarded as having the third largest reservoir of scientific and technical manpower in the world of nations with an estimated stock of about four million. The turn out of scientific and technical personnel from the vast higher education system is of the order of about 2,50,000 per annum. "It is the only developing country which rates as fully institutionalized. It is a substantial exporter of locally designed industrial products, has excellent universities and has the third largest research community in the world; its contribution to the world stock of scientific information is impressive and its capacity for learning by doing, institutional innovation and other forms of local adaptation is proven."\(^{18}\)

4.1.8.5 FREE & COMPULSORY EDUCATION

The **Directive Principles of the Constitution** enjoined up on the Government to provide free and compulsory education to all children up to the age of 14 by 1960. Every Five Year Plan stressed universalisation of elementary education, adult literacy, development of vocational education, equality and quality in education, higher education for excellence etc. as specific educational objectives. However, the achievements - qualitative as well as quantitative - are far short of the targets.
4.1.8.6 LITERACY

4.1.8.6.1 The literacy rate in India has increased from 18.3 in 1951 (for population aged 5 years and above) to 52.2 percent in 1991 (for population aged 7 years and above) \( ^{10} \).

![LITERACY RATE IN INDIA](chart)

**Chart No. 4.3**

4.1.8.6.2 According to the National Sample Survey Organisation (1991 report), as many as 73 million children in the age-group of 6 to 14 years were not currently enrolled in schools. Similarly, about 60 million children were never enrolled in schools. Economic factors are important in explaining non-enrolment. Child labour has been one of the most important factors associated with the unaccomplishment of universal elementary education. About a quarter of children in the age-group of 6-11 years and as many as about 70 per cent of the children in the age-group of 12-14 years not currently enrolled in schools, were working as labourers.

4.1.8.6.3 The capacity of the system to retain the children is found to be extremely poor. According to Ministry of Human Resource Development, only two-thirds of the children who enroll in grade I reach grade V, about 50 per cent reach grade VIII and 30 per cent reach grade X. "The rest make do with a smattering of literacy or add to the mass of illiterates in the

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\(^{19}\) Census of India 1991, Series 1 India, paper 1 of 1991

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country. The Education Commission found that 65 per cent of the drop outs were due to poverty. According to the NSSO (1986-87) survey, nearly 50 per cent of the drop outs were due to economic factors. Drop out rates are generally higher for girls, for rural children, for children from economically backward class, scheduled castes and scheduled tribes. The literacy rate for rural females is only 21 per cent. The situation regarding literacy among rural poor female appears to be still very dismal and unless adequate measures to remove illiteracy from this section of population are taken, we may have dubious distinction of having majority of illiterates in the world illiterates.

4.1.8.6.4 The Fifth All-India Educational Survey (NCERT, 1991) has highlighted our highly impoverished educational structures. Running classes in open space, tents or in thatched huts, single-teacher schools, classes without furniture such as benches, chairs, mats etc., black boards, play ground, libraries can rarely impart good quality education to all and can rarely retain a significant proportion of the entrants. However, the OPERATION BLACK BOARD has since been launched for providing infrastructural facilities to primary schools.

4.1.8.6.5 Even if we define literacy as the most basic skill of writing and reading one's own name, India remains predominantly illiterate with the number of illiterates increasing over the years. "Adult Literacy has been criminally neglected by the planners in India." Adult education and literacy programmes closely linked with economic development activities may have a long term effectiveness.

4.1.8.6.6 The mis-match between manpower requirements of the economy and the output of higher education in unemployment of the educated is alarming.

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22 Naik, J.P., 1965, Educational Planning in India, Allied, New Delhi, p. 23
RATE OF UNEMPLOYMENT AMONG THE EDUCATED LABOUR FORCE

(Per Cent)

<table>
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<th></th>
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<tbody>
<tr>
<td>Males: Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Matric</td>
<td>1.34</td>
<td>1.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matric</td>
<td>12.04</td>
<td>13.02</td>
<td>10.45</td>
<td>10.51</td>
</tr>
<tr>
<td>Graduate &amp; above</td>
<td>19.52</td>
<td>19.72</td>
<td>12.78</td>
<td>14.98</td>
</tr>
<tr>
<td>Males: Urban</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Matric</td>
<td>4.55</td>
<td>4.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matric</td>
<td>7.95</td>
<td>10.08</td>
<td>9.08</td>
<td>8.80</td>
</tr>
<tr>
<td>Graduate &amp; above</td>
<td>7.81</td>
<td>9.31</td>
<td>7.31</td>
<td>7.40</td>
</tr>
<tr>
<td>Females: Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Matric</td>
<td>0.93</td>
<td>1.89</td>
<td></td>
<td></td>
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<tr>
<td>Matric</td>
<td>34.65</td>
<td>45.84</td>
<td>33.50</td>
<td>33.46</td>
</tr>
<tr>
<td>Graduate &amp; above</td>
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<td>41.48</td>
<td>37.30</td>
</tr>
<tr>
<td>Females: Urban</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Matric</td>
<td>3.54</td>
<td>3.05</td>
<td></td>
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<tr>
<td>Matric</td>
<td>29.32</td>
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<td>29.01</td>
<td>22.80</td>
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<tr>
<td>Graduate &amp; above</td>
<td>24.11</td>
<td>35.92</td>
<td>21.08</td>
<td>21.01</td>
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</tbody>
</table>

Note: Figures for "below matric" for 1972-73 and 1977-78 are not available.

Table No. 4.3

The manpower planning has been generally found to be ineffective in as much as it could not bridge the mismatches between the requirements of work and output of learning.

4.1.8.6.7 Notwithstanding the increase in huge stock of scientific and technical manpower by 20 times in 40 years from 0.19 million in 1950 to 3.8 million in 1990, the quality of this manpower and its utilisation is not impressive. The number of scientists/engineers in India is only 134 per million population whereas this is 10 to 30 times higher in other countries. Our stock is mostly made up of first level graduates, post-graduates are few and doctorates are fewer. In 1981, 12 per cent of the educated unemployed were engineers or other technical graduates.24 Most of the

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23 Institute of Applied Manpower Research, 1994, Manpower Profile India (Year Book 1993-94), New Delhi, p. 240
science and technology manpower is occupied in teaching, teaching-cum-research activities and administration, suggesting that science and technology manpower is not most efficiently utilised. The brain-drain adds fuel to this. This specialized human capital is, thus, not used efficiently for the production, industrial development and economic growth in the country.

4.1.8.6.8 The effective education results in more sweeping changes. Most of the economists now agree that education alone can bring notable changes in the attitudes of the people towards family, marriage and the birth of a child. Illiterate people will not shed irrational ideas and religious superstitions and will continue to have bigger families even if it is an obstacle in the path of raising the standard of living. However, not all the effects of literacy contribute directly to economic development. Some of the effects do and will displease the political authorities. While education is not a magic medicine that can by itself transform a society, it does contribute to the modernization of a society. In the long run, we cannot become prosperous unless we have a fairly large proportion of literate from the weaker section because education is the prime instrument of social mobility. Inequalities in education based on gender, region, religion, caste etc. need to be eliminated. Development of education should serve the goals of social equity as well as economic growth. For this, education needs to be transformed into a powerful instrument of social change and national development.

4.1.9 MODERNIZATION & HEALTH

The child from the era of modernization can look forward to a longer and healthier life. Diseases such as polio and diphtheria are being effectively eliminated; epidemic diseases are seen rarely, new drugs have been invented to control serious diseases like diabetes, high blood pressure, mental diseases and allergies. Healthier, more skilled and knowledgeable people, supported by and operating a sophisticated technology resulting in increased efficiency, enjoy circumstances of expanded personal convenience.

4.1.10 IMPACT OF MODERNIZATION ON AGRICULTURE

4.1.10.1 Agriculture plays an important role specially in developing countries like India, where the largest number of its people are employed in agriculture and the food for the industrial workers and the fibers for industrial products come from agriculture. Vast majority of people
depend on agriculture for their life and without significant improvement and development in agriculture, the standard of living of these people cannot be raised. The agriculture development depends on five essentials - transportation, markets for products, new farm technology, availability of purchasable inputs and incentives. Similarly, the factors which are not absolutely essential for agriculture growth/development but which speed up the rate of growth are education, production credit, farmer associations, improving or expanding the land base and planning. However, the relative importance of any one or any set varies through time and from location to location. This is so because not only the management ability of the farmers and quality of labourers differ from place to place/time to time but also because of the differences in soil, rainfall and irrigation, humidity, hours of sunshine etc. Agriculture is a biological process and is far more subject to environmental factors. Notwithstanding the development of technology to control the influence of climate and environment, agriculture continues to remain subjected to the factors associated with the particular location. Modernization requires the modern factors of production as also modern attitudes, values, motivations and skills. It involves conversion of traditional techniques to modern techniques and skillful manipulation of the resources to maximize the net farm-revenue. Technology from the advanced countries cannot be imported because of the variations in soil, environment etc. Technology most suited to local conditions will only yield the fruits. The attitudes, calculations and expectations of the farmers, who are large in number and wide spread over throughout the country, need to be changed from the traditional to the modern level. Then only, the impressive change in agriculture can be expected.

4.1.10.2 STRUCTURAL CHANGES IN AGRICULTURE

Modernization and structural changes in agriculture in India have resulted in perceptible development of agriculture. The agriculture is gradually moving from traditional to modern, subsistence to commercial, static to dynamic, backward to progressive and primitive to advanced stage. The abolition of Zamindari system, use of high-yielding varieties of seeds and other inputs, extension of irrigation facilities and water management programmes, support prices for agricultural produce, procurement and public distribution systems, promotion of
agricultural research, education and extension, availability of timely institutional finance has made this possible. The successful adoption of the new agricultural technology has led to continuous expansion in area under crops, increase in total production and rise in agricultural productivity. The proportion of gross cropped area to total geographical area rose from 40 per cent in 1950-51 to 55.5 per cent in 1990-91. As against 17 per cent in 1950-51, 32 per cent of gross cropped area had the irrigation facilities in 1990-91. The High Yielding Variety rice covered 69 per cent area in 1990-91 as against 15 per cent in 1970-71. In high yielding variety wheat, the area increased from 36 per cent to 91 per cent during the same period. The consumption of chemical fertilisers increased at 15 per cent per annum during the period. During the period 1950-90, the agricultural output increased at the rate of 2.9 per cent per annum while the food grains production registered an annual growth of 2.8 per cent. The per cent growth rate of agricultural production during 1990-1996 was as under:

GROWTH RATE OF AGRICULTURAL PRODUCTION: 1990-1996

![Chart 4.4](image)

The compound growth rate in agricultural production during the period 1949-50 to 1995-96 comes to 2.67.  

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4.1.10.3 PRODUCTION OF FOODGRAINS

As a matter of fact, the output of foodgrains has increased by four times from 51 m tonnes in 1950-51 to 198 m tonnes in 1996-97, 202.5 m tonnes in 1998-99 and it is estimated to be 205 m tonnes during 1999-2000. In stead of importing foodgrains, India became a net exporter. The per capita domestic availability of foodgrains increased from 431 grams in 1956 to 502 grams in 1995, showing a small increase of 14.5% in 29 years.

Modernization and the new technology has resulted in strong linkages between agriculture and industry. The farmers have become market-oriented. They are now more dependent on the market for the supply of inputs and for the demand of their output.

4.1.10.4 EMPLOYMENT OPPORTUNITIES FOR AGRICULTURAL WORKERS

While the multiple cropping and shift towards hired workers has increased the opportunities for employment, the extensive use of agricultural machinery has resulted in displacement of labour. Green Revolution is a result of biological revolution and mechanical revolution. While biological innovations are labour-absorbing, mechanical innovations are labour-saving. "If the Green Revolution is regarded as a package consisting of HYV and fertilisers, its contribution to employment has been substantial. Also, tube wells seem to have contributed significantly to employment of labour. But the net employment of tractor-use may turn out to be negative when tractorisation of farm operations is complete. A harvest combine would displace farm labour on
a large scale while its land augmenting effect would be negligible.\textsuperscript{26} According to Martin H. Billings and Arjun Singh, assuming that no radical changes occur in public policies and the relationship between farm cost and prices remains sufficiently favourable, the displacement of labour was expected to rise from 5.5 per cent in 1968-69 to 17.4 per cent in 1983-84. About 55 per cent of the total labour displaced was expected to be caused by tractors and pump sets and 37 per cent by threshers and reapers.

4.1.10.5 IMBALANCED CROPPING PATTERN

"Marked cropping pattern imbalances have begun to emerge in the agricultural sector largely as a result of technological improvements in certain crops, the expansion of irrigated area, and the effective intervention by the government to support wheat and rice price."\textsuperscript{27}

4.1.10.6 UNEVEN DISTRIBUTION OF GAINS IN AGRICULTURAL SECTOR

4.1.10.6.1 Modernization of and technological changes in agriculture have adverse effect on the distribution of income in rural areas. Hanumantha Rao concludes in his study of technological changes and distribution of gains in Indian agriculture, "Technological changes have contributed to widening the disparities in income between different regions, between small and large farms and between landowners on the one hand and landless labourers and tenants on the other. In absolute terms, however, the gains from technological change have been shared by all sections. This is indicated by the rise in real wages and employment and in incomes of small farmers in regions experiencing technological change."\textsuperscript{28} Modernization and technological changes necessitate heavy investment in seeds, fertilizers, pesticides, water, farm machinery, farm houses and buildings, land improvement etc. This is beyond the capacity of the small and marginal farmers. Big farmers alone can make such heavy investments. Out of about 81 million farm households, 6 per cent of the big farmers account for 40 per cent of the land. As such, modernization has led to concentration of wealth in the hands of the top 10 percent of the rural

\textsuperscript{26} Rao, C.H. Hanumantha, 1975, Technological Change and Distribution of Gains in Indian Agriculture, p. 121
\textsuperscript{27} Government of India, Economic Survey, 1985-86
\textsuperscript{28} Rao, C.H. Hanumantha, 1975, Technological Change and Distribution of Gains in Indian Agriculture, p. 178
population. Modernization has thus benefited primarily the big farmers engaged in commercial production rather than subsistence farmers and among commercial farmers, big ones more than small producers. A low-cost technology with the use of local resources and suitable for small and marginal farmers has become all the more necessary for us. In the words of Dr. V.K.R.V. Rao, "It is now well-known that the so called green revolution which helped the country to raise its output of foodgrains has also been accompanied by a widening of the range of inequality in rural incomes, the loss of their status as tenants by a number of small farmers and the emergence of social and economic tensions in the countryside ... the challenge which Indian agriculture faces is not only of production but also that of distribution and in our anxiety to concentrate on production problems, we should not forget the human and social implications of agricultural development." It is therefore, imperative that land reforms are pushed through and equality is brought about in land ownership. "Land reforms with appropriate changes in the capital market and rural institutions would make possible maximization of output and productivity growth completely consistent with reduction of inequalities of income distribution."

4.1.10.6.2 Inter-regional and intra-regional differences in soil fertility, flood control and drainage system, irrigation facilities and rainfall continue to exist. Droughts and floods continue to result in substantial variations in year-to-year agricultural production. Despite modernization and technology, agriculture continues to depend up on the vagaries of the monsoons in 80 per cent of the parts of the country. As a result, low levels of agricultural production and productivity in certain parts of the country and the low levels of production of foodgrains and cash crops in certain years has taken place. Although the total agricultural production has increased, the production of several food grain crops like jowar, bajra and pulses and oilseed crops like groundnut and sesamum is either stagnant or show a nominal increase. On the whole, the growth rate of agricultural production was 2.38 per cent over the period 1950-51 to 1989-90. It does not have a high degree of prestige as a result of which energetic and dynamic people prefer secondary/tertiary sector to agriculture. The bright young people with great potential to be

the innovators in the society do not undertake the agriculture as the occupation. According to
the provisional figures from the 1990-91 agricultural census, small and marginal farmers account
for 78 per cent of holdings but operate only 32 per cent of area. Land ceilings and tenancy laws
promote creation of small and marginal farms. Economies of marketing, access to modern
inputs or efficient utilisation of capital inputs become difficult on fragmented holdings.

4.1.10.7 IRRIGATION IN AGRICULTURE

4.1.10.7.1 During 1951-90, 55 million hectare land was brought under irrigation, making the total
irrigated area from 23 to 78 million hectares. However, in view of an ultimate irrigation potential
of about 153.5 million hectares, cultivable area can be augmented through the proper use of the
water for irrigation.

4.1.10.7.2 In our country, out of the total cultivated area of 163 million hectares, 100 million
hectares of land is under dry farming. This 60 per cent of the total arable land under dry land
farming contributes less than 30 per cent to agricultural production. While the irrigation has
helped in attaining self-sufficiency in foodgrains, it has also widened the gap between the rich
and the poor farmers. About two-thirds of dry land farmers own less than two hectares and even
this is available in scattered and fragmented holdings. Development of dry-farming technology
with efficient and timely farm management has, therefore, become necessary for raising the
potential output of vast dry land areas.

4.1.10.7.3 Participation in the modernization process is usually greater in regions which have
shed the feudal and semi-feudal structures and attitudes and where the inequalities in wealth and
status are conspicuous.31

31 Rao, C.H. Hanumantha, 1975, Technological Change and Distribution of Gains in Indian Agriculture,
p. 121
4.1.10.8 AGRICULTURAL LABOUR

Agricultural labour generally comes from economically and socially backward classes of the society. It can be divided into four groups:

a. Landless labourers who are attached to the landlords
b. Landless labourers who are personally independent but who work exclusively for others.
c. Petty farmers with tiny bits of land who devote most of their time working for others.
d. Farmers who have economic holding but who have one or more of their sons and dependents working for other prosperous farmers.

The benefits of the economic development, specially the green revolution under "Agriculture" has been far less for this group of society.

4.1.10.9 DECLINE IN DISPARITY OF WAGES OF MALE AND FEMALE

According to the National Commission on Rural Labour (1991), during 1987-88, out of a total of 108.4 million rural households, 43 million households belonged to rural labour households and among them, agricultural labour households were of the order of 33.3 million. In relative terms, rural labour households accounted for 39.7 per cent of total labour households and agricultural labour households were of the order of 30.7 per cent. This means agricultural labour households constituted about 77 per cent of all rural labour households in 1987-88. Not only that the real wages have increased in all the states without exception during 1970-71 and 1988-89 but also the disparity between the wages paid to male and female agricultural labourers has also shown a distinct decline over the years. National Commission on Rural Labour explained the decline in the disparity of male-female wages of agricultural labour, "Factors like implementation of rural employment and afforestation programmes (which stipulated minimum wages and catered to the employment needs of poor rural women), periodical revision in minimum wages and notification of equal wages for equal work, productivity gains brought about by new technology and
growth of general awareness seem to have contributed significantly to the higher increases in real wages for rural females in agricultural sector.\footnote{Report of the National Commission on Rural Labour, 1991, Ministry of Labour, Vol. I, p. 59}

4.10.10 PLANNING COMMISSION & AGRICULTURAL DEVELOPMENT

The Planning Commission has kept the following four broad objectives while planning for agricultural development:

I. **Increase agricultural production**
   
The aim is to bring more land under cultivation, raise the per hectare yield through intensive application of such agricultural inputs as irrigation, improved seeds, fertilizers etc. And thus bring about increased agricultural production.

II. **Increase employment opportunities.**
   
   Apart from increase in production, the agricultural sector should generate additional employment opportunities and provide scope for increasing the incomes of the poorer sections in our villages.

III. **Reduce the pressure of population on land**
   
   Another basic objective of planning in the agricultural sector is to reduce the number of people working on land. The surplus labour on land should be shifted to secondary and tertiary sectors, preferably in rural and semi-urban areas.

IV. **Reduce inequality of incomes in the rural sector**
   
   The Government should remove the exploitation of tenants and should distribute surplus land among small and marginal farmers in such a way that there would be some degree of equality and justice in the rural areas.

All the objectives are being followed in all our plans but in practice, agricultural planning has come to mean the increase in production viz. the achievement of the first objective; all other objectives seem to have been ignored.
4.1.11 MODERNIZATION & INDUSTRIES

4.1.11.1 Modernization in industries is different from the concept of modernization of economy, society etc. In industries, modernization means use of today's knowledge of science and technology. As the science progresses, so progresses the technology. The science of today is the technology of tomorrow. Modernization means generating capability to convert science of contemporary state of the art in **basic research, applied research, invention, innovation and ultimately technology**. The regular, systematic and progressive use of science and technology is essence of modernization as it leads to manufacture of useful articles on commercial scale. Replacement or transformation of conventional, traditional, orthodox and outdated concepts, systems, equipment, machines etc. and use of most modern science and technology are involved in the process of modernization. Replacing the conventional machinery with sophisticated or modern machinery to enhance productivity, replacement of manual activities by mechanical activity, use of computers, automation and mechanization are the important characteristics of modernization. This is all the more necessary in view of law of modernity i.e. to make obsolete the items which were called modern till yesteryear or yesterday. The items that adorned our life for last few years have been disowned or abandoned and new items have taken their place. The changes in shape, size, outlook, delicacy, sophistication and flexibility of the present machines and equipment such as radio, tape recorders, televisions, video-cassette players, video record players, CD (compact disk) players, two-in-one/three-in-one, cameras, refrigerators, washing machines, cars, telephones etc. are the live examples of modernization. The family is surrounded by home appliances that are designed for almost every conceivable household use: washing machines, refrigerators, mixers, air conditioners, televisions and videos. And the future promises even more miracles through technology.

4.1.11.2 Today, we have a broad-based industrial sector. Food, textiles, metallurgical, mechanical engineering, electrical engineering, chemical, electronic and computer software industries find place in our industrial base. The industrial production expanded at an average rate of 5.9 per cent over the 1950-1990 period. The growth rate of industrial production during 1990-1995 was as under:
While applied research as well as basic research is inevitable and indispensable in modernization, capability to generate new technologies on indigenous efforts should be preferred to acquiring technologies from abroad in order to avoid perpetual dependency on advanced countries. Moreover, while imitation is easier than invention, it cannot be applied automatically. An intelligent adaptation becomes necessary. Modernization of industry and modernization of techniques in agriculture have been treated as indicators of economic development while degree of modernization of outlook and extent of social mobility have been taken as socio-cultural indicators.\textsuperscript{33} Despite the fact that economic modernization is distinct from modernization of the industries, in both the processes, the literacy, basic personal skills and mass communication/media participation determine the whole process of modernization. They play important role in social and political change as well as greater participation of people from different segments of population. The necessary change in attitude and institution needs information on both pro-change as well as anti-change aspects. The aptitude to change \textit{traditionally-hold-belief} is less in \textit{poorly informed society}. If there is no consistency in social changes with technological changes, the sure but undesired result will be \textit{growing inequality}.

\textsuperscript{33} Adelman and Morris, Economic Growth and Social Equity in Developing Countries, Stanford University Press, 1973, p. 16
As a matter of fact, the relative gaps between "haves" and the "have-nots" has grown and the poverty in midst of plenty continues to go on.

4.1.12 ELECTRICITY

Electricity output grew at an average rate of 10.6 per cent during 1950-90. The per cent of villages electrified increased from a mere 3.8 in 1960-61 to 83 in 1990-91. Rural Electrification assumes great significance in the promotion of rural living standards because our 75 per cent population lives in more than 580000 villages.

4.1.13 MODERNIZATION & COMMUNICATION

4.1.13.1 Communication process are integral, vital elements of modernization and development. Communication brings about the social change. The social change at individual level comprises diffusion, adoption, modernization, acculturation, learning, socialization and communication. Changes at social system comprises development, differentiation, integration and adaptation.

4.1.13.2 The co-ordination of life over a wide geographic area has become possible because of modernization of communication systems. The markets have become wide due to quick and up-to-minute price quotations. The growing international trade is the result of modernization of communication. Reading newspapers and magazines, viewing televisions and movies and listening radios has enabled the villagers and impoverished to discover a land of their heart's desire and they have been made aware of a different way of life from their inherited sorrow. The media has created knowledge of desirable things faster than these things themselves could be produced. Men's minds have been prepared for new desires more rapidly than those new desires could be satisfied. The media has disseminated awareness of aspects of life that are not part of the personal experience of the reader or listener or viewer himself. The modern media has extended the scope of a man's definite comprehension of ways of life that he has not experienced at first hand. Television teaching by expert teachers is now reaching to all the villages.

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34 Everett M. Roggers, Modernization among Peasants: The Impact of Communication, Holt, Rinehart and Winston Inc, 1969, p. 8
4.1.14 MODERNIZATION AND TRANSPORT

4.1.14.1 The effective and efficient transport system is required not only for the movement of raw materials, fuel, machinery, labour etc. from the place of availability to the place of production but also for their better utilisation. Large scale production through division of labour and creation of markets for the produce and production cannot be thought of without transport system. "An efficient and well developed system of transport and communications is vital to the success of a plan of economic development which lays stress on rapid industrialization." As a result of modernization, there has been a substantial growth both in the spread of network as well as in the output of the transport system.

4.1.14.2 RAILWAYS

Notwithstanding the low increase in the railways route length from 53600 Kms in 1950-51 to 62700 Kms in 1994-95, the growth in freight originating tonnage has increased from 93 million tonnes to 365 million tonnes during the same period, registering a growth of 4.3 per cent per annum. The growth rate in railway passenger traffic for the same period comes to 3.7 per cent per annum. However, bulk of freight and passenger traffic is concentrated around the four metropolitan cities. The percentage of the electrification of railway route length increased from 4.2 in 1970-71 to 14.6 in 1989-90.

4.1.14.3 ROADS

The road transport is not only suitable for short distances due to door-to-door service, flexibility, speed and reliability but is also a source of sizable employment opportunities in road construction and maintenance. The road length has increased from 3,98,000 kilo meters in 1950-51 to 20,40,000 kilo meters in 1994-95. About 70% of the villages have been connected by a net work of rural roads and over 40 per cent are served by all weather roads. The number of

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trucks increased from 82 thousands in 1950-51 to 1600 thousands in 1992-93. The number of buses increased from 34,000 in 1950-51 to 4,00,000 in 1992-93.\(^{37}\)

4.1.14.4 WATER TRANSPORT

India has over 14,500 Kms. of navigable inland waterways. Inland water transport, the cheapest mode of transport for long as well as short distances, remains underutilized. However, the Sixth Plan had floated a scheme to subsidize inland water transport entrepreneurs to acquire mechanical vessels and modernize their existing crafts including country boats. The Seventh Plan continued the scheme further.

4.1.14.5 SHIPPING AND PORTS

With vast coast line, 10 major ports and 139 minor ports, the Indian ships handled traffic of 197 million tonnes in 1994-95. Shipping tonnage has increased by 11 per cent whereas the coastal shipping could register a rise of 1.4 per cent. Although the number of Indian ships increased from 94 in 1950 to 471 in 1995, the shipping capacity is severely limited, Indian ships carrying only 34% of her cargo. Inadequate facilities for ship repairing, dry docking, cargo handling etc., high operating cost, aging fleet, negligible container fleet are responsible for this. Modernization of ports and fleet have become all the more necessary in this system of transport.

4.1.14.6 CIVIL AVIATION

The domestic air traffic recorded an average annual growth of 10 per cent during the last 25 years. Our international traffic registered an average annual growth of 12 per cent during the same period. The domestic air transport has now been thrown open to private operators. Foreign investors particularly NRIs have been invited to participate in the development of new international airports and the expansion of infrastructural support at domestic airports.

4.1.14.7 The speedy means of transport and easy availability have made the journeys and transportation cheap, time saving and comfortable. People begin to travel to work in nearby towns, resulting in comparatively better/higher wages. People travel to nearby market, resulting in availability of reasonably good quality goods at fair prices. Officials come to the villages more often. Doctors now visit the villages where previously they might have refused, thus making

medical facility available to the villagers also. Travelling has enabled people seeing new things and buying new things. Getting together of people from different regions/places has resulted in toning up of the social make-up of the community. People with different moods, languages, regions, learn to live together. Their emotional feeling, rational thinking and make up undergo a change for the better and become broad-based and humane. This is particularly of vast importance for us in view of heterogeneous people, long frontiers and large coast lines. Political integration has also become possible.

4.1.14.8 However, the entire transportation system including the road network continues to fall short of demand for transportation. Even today, 30 per cent of villages in our country still lack road connection. Instead of reducing the unbalanced regional development, transport system has increased it as massive volumes of traffic are concentrated in certain regions of the country. Urban population and economic activities tend to concentrate in major cities and towns and unless careful transport planning is made for greater dispersal of industries and balanced regional development, modernization of transport system would not mean to modernize the society obviously because net benefits derived out of such drive to modernization would be confined to selected group of people out of entire population. Majority of poor masses, who have no food to eat, money to buy clothing or to pay fare for air travel, would have no utility of modernized transport system under such circumstances. What is therefore necessary is upward mobility of the down-trodden, suppressed and repressed class along with modernization of the transport system.
4.1.15 MODERNIZATION & FINANCIAL SECTOR

4.1.15.1 The financial development in India is quite impressive according to the quantitative indicators :

**SELECTED FINANCIAL RATIOS**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. FINANCE RATIO (FR)</td>
<td>0.75</td>
<td>17.15</td>
<td>33.03</td>
<td>41.30</td>
</tr>
<tr>
<td>2. FINANCIAL INTER-</td>
<td>0.08</td>
<td>1.18</td>
<td>1.49</td>
<td>2.29</td>
</tr>
<tr>
<td>RELATION RATIO (FIR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. INTERMEDIATION RATIO</td>
<td>0.27</td>
<td>0.66</td>
<td>0.76</td>
<td>0.79</td>
</tr>
<tr>
<td>(IR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEW ISSUE RATIO (NIR)</td>
<td>0.17</td>
<td>0.71</td>
<td>0.85</td>
<td>1.28</td>
</tr>
</tbody>
</table>

Table No. 4.4

Financial Ratio = Total Financial Claim / National Income

Financial Inter-Relation Ratio = Financial Assets/Physical Assets

Intermediation Ratio = Total Secondary Issues/Total Primary Issues

New Issue Ratio = Primary Issues /Net Physical Investment

4.1.15.2 However, the financial technology in India is still underdeveloped as compared to many advanced countries of the world. Financial technology is a mechanism consisting of a spectrum of financial assets with wide-ranging variety of liquidity, risk, maturity, yield etc. Unfortunately, money and credit continued to be the main agents in the financial process for a long time. Moreover, there has been a strong preference of savers to accumulate tangible assets like real estate, precious metals, inventories, jewellery etc. instead of financial assets

4.2 WEALTH AS AN INDEX OF CLASSIFICATION OF SOCIETY

4.2.1 MODERNIZATION & ECONOMIC DEVELOPMENT

4.2.1.1 In economic development, modernization means increase in per capita output or growth. The per capita income over a period of time is presently taken as the basis for categorizing the country as backward, under-developed, developing or developed.
4.2.1.2 Modernization cannot be thought of without capital formation, scientific and technical progress, adequacy of education and sufficient produce and raw-material. Moreover, they should grow appreciably faster than the population to ensure continuation of modernisation. The pace of modernisation will largely depend on the rate of growth in population, degree of capital formation, level of stepping up the skilled personnel and the speed at which the agriculture is detraditionalized. As a matter of fact, modernisation is concerned with each and every aspect of human life. It is directly connected with the spirit of industry, entrepreneurship of people, nature and policies of government. It is indirectly connected with the ability to organize education, the capacity to generate and transmit knowledge, sophistication in scientific research and its conversion into practicable technology.

4.2.2 MODERNIZATION & NATURAL RESOURCES
Modernization has enabled man to have technological mastery over natural resources - a capability for harnessing energy sources and using materials to provide physical well-being for the majority of human race. This continuous impressive outpouring of material products, the ever-increasing reliance on non-human energy resources and increased productivity, has resulted into great material abundance - more food, more clothing, better homes.

4.2.3 MODERNIZATION AND TECHNOLOGY
While it is easier to develop a country with plentiful and fertile land, economically useful minerals and abundant sources of power than a resource-poor country, the man-produced capital and the rate of capital formation play a more important role in development than the primary resources. A resource poor country can overcome its natural handicaps with the help of new technology. 'Tool -conception' is the most common conception of technology. According to this conception, any tool or technique, any product or process, any physical equipment or method which extends the human capability is technology. The technology has today become the prime mover of the development. But to develop, the country must modernize. To modernize means to find ways of making better use of the resources at hand, the application of the latest knowledge to the problem and the solution of the problem at the hand. However, the modern technology has become a handy tool of rural exploitation. What is therefore needed is the
appropriate technology that suits the common people’s needs - simple because poor people are simple, labour-intensive because poor are unemployed or under-employed, small because poor people do not have capacity to have it. An appropriate technology for development in India should be accessible to the poorest among the poor and should satisfy their Basic Minimum Needs; should act as a tool to attack the developmental problems such as poverty, unemployment, low productivity etc. and should be generated indigenously.

4.2.4 PROFIT MAXIMIZATION

Economic development through industrialization gives more emphasis only on capital investment, savings, profits, technology etc. This results in ample scope for the exploitation of weaker by strong for the sake of profit maximization. The rich wants to become richer at tremendous speed, even at the payment of low wages to workers.

4.2.5 NATIONAL INCOME

4.2.5.1 Whether the modernization has resulted in the increase in national income and if so, whether the gap between “haves” and “have-nots” has narrowed or widened is a pertinent question. According to the National Income Committee, “A national income estimate measures the volume of commodities and services turned out during a given period, counted without duplication.”38 Thus national income is a flow and not a stock. In order to judge the impact of modernization on the economy of the country, the changes in gross and net national product (national income), per capita net national product and sectoral distribution of income are to be examined. The Central Statistical Organization (CSO) has brought out New Series on national income with 1980-81 as base year.

4.2.5.2 NATIONAL INCOME GROWTH

Since the time we switched over to economic planning, the net national product has continued to grow.

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38 Government of India, First Report of the National Income Committee, April 1951, p. 6
NET NATIONAL PRODUCT AT 1980-81 PRICES

(Rupees in Crore)

Chart No. 4.7


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4.2.5.3 GROWTH RATES OF NATIONAL INCOME

The country achieved an average annual rate of economic growth of 4 per cent during the period 1950-90.

% AVERAGE ANNUAL GROWTH RATES OF GNP AND PER CAPITA GNP

The quick estimates of growth rates for 1990-91, 1991-92, 1992-93 and 1993-94 are 5.3, 0.6, 4.2 and 4.6 per cent respectively. The projected growth rate for 1994-95 is 5.4 per cent.

4.2.5.4 NATIONAL INCOME BY INDUSTRIAL ORIGIN

National income is the total of productions of Primary, Secondary and Tertiary sectors. The Primary Sector consists of agriculture, forestry and logging, fishing, mining and quarrying. The Secondary Sector consists of manufacturing, construction, electricity, gas and water supply. The Tertiary Sector consists of three sub-groups – (i) Transport, Communication and Trade (ii) Banking, Insurance, real estate and ownership dwelling and business services and (iii) Public Administration, Defence, Community and personal services. The sum of income originating from these three sectors is the Gross Domestic Product or Income. In a developed country, the contribution of the secondary and tertiary sectors in national income is large and that of the primary sector is low. In an underdeveloped country, the contribution of the primary sector to the national income is large and that of other sectors is comparatively low. With the development of

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the economy, the share of the primary sector in national income gradually declines and that of the secondary and tertiary sectors increases. The contribution of these sectors to the National Income of our country since 1950-51 is as under:

**GROSS DOMESTIC PRODUCT BY SECTORAL DISTRIBUTION**

*AT 1980-81 PRICES*

(Percentage Shares)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Primary</td>
<td>57.4</td>
<td>44.5</td>
<td>40.1</td>
<td>29.8</td>
</tr>
<tr>
<td>2. Secondary</td>
<td>14.1</td>
<td>23.6</td>
<td>25.9</td>
<td>28.9</td>
</tr>
<tr>
<td>3. Tertiary</td>
<td>28.5</td>
<td>31.9</td>
<td>34.0</td>
<td>41.3</td>
</tr>
<tr>
<td>4. Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table No. 4.5

The structural change in the composition of national income is the consequence of the process of modernization and the resultant economic growth.

**4.2.5.5 PER CAPITA NATIONAL INCOME**

The assessment of the performance of an economy can more accurately be made by studying the PER CAPITA INCOME. It is nothing but the per capita net national product at factor cost and eliminates the effect of growth of population. The growth of per capita income at constant prices is an indicator of the change in the standard of living of the people. The per capita net national product at 1980-81 prices has been as under:

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41 C.S.O., National Accounts Statistics, Various issues.
PER CAPITA NET NATIONAL PRODUCT*2

AT 1980-81 PRICES

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PER CAPITA NNP (Rs.)</th>
<th>RATE OF GROWTH (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>1127</td>
<td></td>
</tr>
<tr>
<td>1960-61</td>
<td>1350</td>
<td>1.8</td>
</tr>
<tr>
<td>1970-71</td>
<td>1520</td>
<td>1.2</td>
</tr>
<tr>
<td>1980-81</td>
<td>1630</td>
<td>0.7</td>
</tr>
<tr>
<td>1990-91</td>
<td>2222</td>
<td>3.1</td>
</tr>
<tr>
<td>1994-95@</td>
<td>2401</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Table No. 4.6

@ Provisional

4.2.5.6 A number of governmental, institutional and individual studies have arrived at the conclusion that the gap has actually widened and wealth and economic power has concentrated in a few hands. While classical economists believed that inequalities of incomes were incentives for the economic growth, Marx thought that the income inequality would bring the doom of capitalism with over-production and under-consumption. Lord Keynes pleaded for income equality leading to sustained economic growth. Kuznets and Lewis emphasized the maximization of the growth rate of the economy by building up capital, infrastructure and productive capacity of the economy and stated that the benefits of growth would automatically trickle down to the lower income groups over the period of time.

4.2.5.7 But the perpetuation of income inequalities is not feasible under the parliamentary democracy. Income inequality may lead to mal-distribution of resources with the economy. Rich section of the society may utilize their savings on conspicuous consumption, gold hoards, jewellery, estates and expensive houses, speculation, foreign travel, deposit in foreign banks,

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* Data obtained from National Accounts Statistics (New Series) 1950-51 to 1979-80 (1989) and Economic Survey (1995-96). Growth rates have been computed from the data.
hoarding of foreign currencies etc. instead of utilizing it for productive purposes within the country. One of the directive principles of the Constitution of India states, “the state shall, in particular, direct its policy towards securing that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.” So the achievement of economic development along with economic equality has been the main concern of the Government.

4.2.6 STANDARD OF LIVING

With more production, more income and more jobs come more choices in the way persons in modern era spend their time, work and play. Such persons spend more and more on prestigious items such as costly houses, cars, motorcycles, watches, ornaments, novelties, fancy goods and so on. Large amounts are spent on marriages, feasts and festivals. The poor become the factors of production, and not the benefactors of production and recipients of particular marginal investment through public expenditure in the form of social programmes such as health, education, housing and social security. The benefits of increased investment in economic and social activities do not necessarily go to them. These investments, thus, further widen the gap between the poor and the rich. Exploitation becomes a perpetual game in agriculture, industry and trade because the labourers, small farmers and poor have no bargaining power in the politics of the rich. A fairly good number of small and marginal farmers become landless labourers over a period of time. A new culture and a new life-style emerge. The society based on caste hierarchy is replaced by the class-based hierarchy.

4.2.7 MODERNIZATION AND SOCIAL RELATIONS

The modernization involving institutional changes and discontinuities have changed work relations, family relations and community relations. The traditional rights and obligations expected from and owed to kinsmen and neighbours have practically extinguished. The worker has now to follow and observe the notion of a workday and a workweek. He has to conform to the rhythm of the machine rather than the rhythm of his own mind and body. His economic security has greatly altered. Trade unionism, industrial unrest and industrial disputes, lock outs have become common. The individuation and isolation of the nuclear family has taken the place
of joint families. Family has ceased to be an economic unit of production and they are now more concentrated on emotional gratification and socialization. Newly married couples set up their own homes and leave the elders behind. Because of this social isolation of the aged, new institutional arrangements such as pensions and social security programmes, old age houses and homes have become imperative. The relations and connections with the collateral relatives are eroding. Formal organizations such as trade unions, clubs etc., based on economic or political interests, are replacing the community and associational life which were closely knit with the ascribed bases of social existence – kinship and clanship, tribal and caste affiliations. In the present day homogeneous society, one’s position depends more on individual achievement than on inherited status.

4.2.8 MODERNIZATION AND RELIGIOUS BELIEFS

Some of the socialists and economists consider religion as a major obstacle to modernization because it is a parapet of traditionalism and repository of beliefs and values incompatible with modern science, technology and the ideology of progress. However, this is not totally true. The workers in factories and at commercial places, irrespective of caste or creed, mix freely, eat in the same cafeterias, travel in the same buses and railways from home to place of work and back, go to trade-union and political rallies freely with one another. People now wear the Western dress, speak English and follow European customs. The basic Hindu doctrines such as the belief in rebirth, the belief in dharma or moral duty, the belief in personal fate or karma have been reinterpreted in the context of present. Sutee and human sacrifice before god has been acknowledged as evil and these activities have been put down. The doctrines of karma, dharma, moksha and ahimsa have been used by the father of the nation, Mahatma Gandhi, for political independence, the abolition of untouchability and the amelioration of poverty. Many Hindus are now engaging in modern occupations and professions. The beliefs regarding pollution and purity have become weak. Brahmans and upper caste are actually going into fields of work that were previously considered highly polluting. Hinduism has thus adapted to changing conditions and responded to the present day modernization. The net result of the processes of
reinterpretation, vicarious ritualization, and compartmentalization is the minimum direct conflict between tradition, religion and modernity.

4.2.9 MODERNIZATION AND URBANIZATION

4.2.9.1 The steady flow of people from villages to the cities and towns is the most striking physical manifestation of modernization. Urbanization is, thus, the outcome of modernization. The cities and towns have become the central place for the storage of wealth and the distribution of wealth. In this capacity, the cities have assumed the commercial function of distributing goods drawn from certain parts of its hinterland to other parts of the hinterland that did not produce them. Cities and towns have become the centres of changes leading to new permutations, combinations and innovations in economic and related activity. The cities are largely inhabited by persons in middle or upper income groups. The lowest income groups are found on the outskirts of the more traditional cities, near the railway lines and on the banks of rivers and big drains, on foot path and open public lands. Collectively, they are known as the occupants of zuggi-zophadi. The separation of place of work from place of residence is another hallmark of the modern cities and towns. They continue to be the central place for learning and knowledge as well as for other types of productive services. They have become the centres not only for administrative machinery but also for a large-scale manufacturing, commercial and service functions. The decline in birth rate and the shift toward the small family are the result of urbanization. People from different areas have now come together in the cities and a new grouping of population according to social and economic status has facilitated the development of impersonal relations of modern life. Cities and towns have created favourable conditions for the increase in knowledge and skills. The immigrants have learnt from those living in the cities as also from each other. The worker's relations with economic life are greatly altered. The remuneration is now paid to the worker in cash and he has to purchase the goods and services from the market in cash. The satisfaction of increasing number of wants have become more costly particularly because of overcrowding and congestion. The imitation of consumption patterns of the city life by the immigrants also resulted in increased consumer expenditure. Housing, sanitation, water and fuel, transportation and similar other day-to-day needs became
costlier in the cities. People in urban area become preoccupied with job and immediate family circles and find it difficult to engage in meaningful encounters with other classes and groups. As a result, the ties of neighbourhood, friendship and family which are so strong in villages, tend to shorten. The awesome stresses, strains and pressures become the part and parcel of the urban life. Violence, sex crimes, assaults, thefts, robberies, suicides, homicides are on the ascendancy. Vices such as shoplifting, burglary, pick pocketing, smuggling and worst of all, prostitution have become more common. In the past, these crimes used to be committed generally by the 'ill-bred' poors. Today, they are the traits of the 'well-bred'. The cities have become dens of urban guerrillas and other anti-social elements. There is a vast difference in the earning capacity and quality of life between the richer and poorer sections of the urban population. Overcrowding and environmental deterioration is felt more severely.

4.2.9.2 Notwithstanding the tragic poverty in urban areas, the average incomes in cities turn out to be much more than those of rural communities. This requires the relative priority to be given to agriculture as against the industry in the development programmes.

4.2.9.3 Increasing urbanization has tended to raise literacy; rising literacy has tended to increase mass media exposure; increasing media exposure has gone with wider economic participation (per capita income) and political participation (voting). This basic model is stated to reappear in virtually all modernizing societies on all continents of the world. This is

Urbanization ⇒ Literacy ⇒ Mass Media Exposure ⇒ Income and Voting.

4.2.10 MODERNIZATION & POOR

Modernization, whether it be political, social or economic, necessarily brings the changes and transformation per se of a country. It also includes eroding the existing primitive and traditional cultural life to accommodate new values of modernity. "The modernization is the process by which societies have been and are being transformed under the impact of scientific and technological revolution." 43 Modernization process is to bring revolutionary change in brain, mind, heart and action of the people of traditional society. This struggle to achieve "brain-heart-

43 Cyril Black’s definition in Hoffman and Laird, 1982, p. 54
action revolution" is difficult by conception but inevitable by international demonstration effect of wealth. The individuals and families of socially backward communities have been the perpetual subject of exploitation, suppression, humiliation and neglect. They had been cut off from the mainstream of economic, commercial, agricultural and industrial growth for years together. To bring substantial irreversible improvement in their condition is really a Herculean task. In order to qualify as a modern society, the modern technology should be accessible to the poorest of poor also.

4.2.11 MODERNIZATION & EXPLOITATION OF POOR

The development and the modernization have adverse effect on the poor such as increasing impoverishment during early period of development or increasing inequality due to modernization. Modernization should in fact spring from the society to transform the lower strata into modernity. Importing solution to the indigenous problems is no solution unless the attitude of people paid from government treasury are changed towards the people who do not receive any means of production and subsistence or welfare benefits apportioned to them. Most of the funds meant for the poorest of poor are swallowed by those group of people branded with the label of officials, guardians, trustees or, change agents. The exploitation without the implicit or explicit consent and will of institutional set up and machinery concerned with legislation, judiciary, administration, policy maker, elite, social reformers and others cannot be thought of. The failure of entire system connected with the poverty eradication is due to contribution to viciousness from all corners and apathy in political will, unarticulated basic intention, vested interest, non-commitment to the national cause and duties.

4.2.12 HUNGER

Hands, legs, brain etc. together entitle a man to earn to feed belly through mouth. But if earning through hands, legs, brains etc. is less than that is required to feed belly then it is the situation leading to poverty. On the contrary, if earnings are more than a mouth could eat, drink, then it is situation leading to prosperity. Hunger is an intrinsic character of the poverty group. The hunger denotes a strong desire for food. It is an uneasy sensation caused by the lack of food. The food items are essential for survival. Continuous non-availability of food items converts the
hunger into starvation. The hunger is directly related to the availability and accessibility of food items to individuals and to the members of the family. The accessibility of the food items is a function of availability of money which in turn is a function of remuneration. The remuneration is a function of nature of job, employment, duration of employment etc. The nature of employment is dependent of education one had, training that one received and the experience one attained and the capability to compete with others. The great success of industrialization, science and technology, green revolution, or great pride of civilization and culture are meaningless if the people of the society or the country die out of hunger or starvation. "A man can be neither a saint, nor a lover, nor a poet, unless he has comparatively recently had something to eat." Those who are not sure of the next meal, it matters little whether the nation lives or perishes.

4.2.13 MODERNIZATION & RISING FRUSTRATION

Aspirations are more easily aroused than satisfied. Mass audiences are encouraged to more wants without being informed how to get more. Everett M. Rogger says, "A surge of expectancy was created by political leaders such as Nasser, Nehru and Nkrumah." It created mass expectation and mass motivation for development and modernization. This situation of "tide of aspiration" was termed as "The quiescent poor have become morvy seekers in the have-less-but-want-more process we call Development" and it was justified that "a man's reach should exceed his grasp." During 1960s, a picture of golden age of India, assuring no more misery to its weaker section, was made very popular. However, these rising expectations turned out to be era of "rising frustration" and political leaders came to realize that their speeches were promissory notes on which they could not deliver. The presumption under the logic of "trickle down" that "Pursue the policy of industrial development, and sooner or later, the societal spin-off from urban industrial growth would reach all segments of the population, including peasant" proved wrong. When actualities fell far short of aspirations, the net result was frustration. The

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46 Ibid, p. 11, Leder's paraphrase
components of aspirations increase without any restriction due to exposure to modernization whereas the achievements are constrained by the availability of money in hand. The outcome is the implicit frustration. This can be shown mathematically as

$$\text{Frustration} = \frac{\text{Wants}}{\text{Gets}}$$

The numerator of wants exceeding the denominator of gets gives the frustration. The revolution of rising frustration and revolution of rising expectation indicate the notion that the causes of revolutions and civil disorder lie in perceptions of the situation rather than in the objective situation. The diversified products manufactured in the country are inaccessible to majority of poor and they have become aware of their deprivation. The exploitation of poor still continues in one form or the other.

4.2.14 HORSE-AND-BUGGY SPEED, RAILWAY SPEED AND AEROPLANE SPEED OF ECONOMIC DEVELOPMENT.

Where the jet plane and the bullock cart exist side by side, the strains of modernization are immeasurably greater than where the development of the various aspects of a society have been more gradual and balanced.

4.3 GOVERNMENT POLICY: SOCIALISTIC PATTERN OF SOCIETY

4.3.1 Three objectives of development have been recognised the world over - Democracy, Growth and Equity.

4.3.2 ROLE OF GOVERNMENT

Stern\(^7\) points out that from the point of view of income distribution and protection, governments ought to be active in social security; from the point of view of rights, they ought to be active in education and health; and from the point of view of market failure, they ought to be active in infrastructure. Where governments should not be active - because none of these arguments apply - is in the production of hair pins, motor cycles, motor cars and the like. Increase in

national wealth as reflected in accumulated foreign assets and foreign currency reserves, prosperity for one and all and well-being to the people as reflected in the eradication of poverty and satisfaction of basic needs should be the ultimate aim of any democratic welfare government.

4.3.3 MINIMUM NEEDS PROGRAMME

Rostow\(^{48}\) has sketched the attractions of a "mass-consumption society" for peoples who now demand more comfort and fun than peoples dared to dream of in all previous history. The ambivalent behaviour of all transitional societies and the vigorous behaviour of most modern societies are the natural result of this process of modernization. The minimum needs programme sought to provide education, health, nutrition, water supply, rural housing and rural electrification that contribute to human resource development as well as enhanced living standards.

4.3.4 DEMOCRATIC SOCIALISM

The principal features of Democratic Socialism can be summarized as under:

I. The foremost aim of a socialist society is the removal of poverty and the provision of a national minimum comprising the essential minimum requirements in respect of food, clothing, shelter, medical aid and education.

II. A socialist economy aims at the reduction of inequalities, income and wealth.

III. A socialist economy aims at the provision of equal opportunities to all.

IV. A socialist economy believes in mixed economy.

V. A socialist economy endeavors to check concentration of economic power and the growth of monopolistic tendencies.

VI. In a socialist economy, the basic criterion of economic decisions is social gain and not the private.

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\(^{48}\) Rostow, Walt W., The Stages of Economic Growth: A Non-Communist Manifesto, Cambridge Univ. Press, 1960
VII. A socialist economy believes in **democratic values** for the enrichment of the individual and communal life.

**4.3.5 ECONOMIC DEVELOPMENT, EQUALITY AND POLITICAL PARTICIPATION**

Classical modernization theory originally argued that economic development and social modernization would lead to equality, stability and democracy. However, the experience has shown that a high degree of correlation between economic development, equality and political participation is possible only in the most advanced stages of development. The poverty is itself a culture having more vices than virtues for collective survival of the humanity. **It is a social necessity that none should be made so poor that he dies of hunger and starvation or none should be allowed to become so rich that he is able to resort to suppression of other's mobility for the sake of self progress while affluent class feels a prerogative in enjoying all the benefits.** In other words, accessibility of the benefits of struggle be dispersed uniformly and widely. Welfare economics and development economics are concomitant in their overall modernization approach. Modernization is the process of social change whereby the developed societies acquire characteristics common to more developed societies. Modernization of the society should cover guarantees of civil rights, equitable income distribution, political rights, participation of women, parliamentary institutions etc. Distributive justice means not only the upgradation of the income and quality of life of the poor but also downgradation of the income and conspicuous consumption of the rich.

**4.3.6 MODERNIZATION AND UNEMPLOYMENT**

In developed countries, with ample capital, raw material and technology, the aggregate level of economic activity is increased to such a degree that the unemployment remains at tolerable minimum. But in developing countries, the level of economic activity is set out not by the labour class but by the availability of capital, foreign exchange, managerial talents and the stage of development. **Modernization, thus creates a mass unemployment.** The displacement of huge human labour because of the use of computers is the live example. The market forces, left to themselves, may not stimulate types of economic activity that will provide full employment for
the rapidly growing labour force due to population growth as well as modernization. The Government has, therefore, to come with high levels of organizational and administrative attention for ways of utilizing the surplus labour resources in activities that require very little capital but can make a valuable contribution to the output and the productivity of the economy. Rural public works programmes, the building of roads and schools, the construction of irrigation and drainage facilities, the clearing and preparing of land for more effective agriculture etc. can be undertaken only by the Government.

4.3.7 MODERNIZATION AND DISTRIBUTION

The revolution of rising expectation is the mother of the desire for material improvement. The need for profound transformation in agriculture and industrial production, the need for high skills to improve the productivity of the labour, the need for use of latest science and technology clearly refer to the need for material improvement. The ideologies of equity and equality expect the government to arrange for every thing that concerns the common man - from military defence to health insurance, from economic development to universal education, from agricultural modernization to urban renewal, from care for the aged to protection of natural resources, from control of disease to conquest of outer space. People want greater political participation, more goods and services, more equitably distributed. This, eventually and inevitably, generates strong distributive demands. Such demands tend to challenge prevailing ideologies about who in society should get what and how much. Such demands test the technical, organizational, administrative and innovative capabilities of the government. It has to discover new and satisfying ways to meet the growing and varied appetites of those whom it serves. It has not only to organize itself and the society in such a way as to maximize the amount of goods and services available to the nation as a whole but also solve the question of how widely existing goods and services are to be shared within the nation. The smooth achievement and attainment of the desire for more greater equitable distribution of goods, services and welfare values calls upon the government to organize and co-ordinate all the segments of the society as also to give new kind of administrative organizations and administrators. The rural-urban terms of trade policy has resulted in the low prices of the
foodstuffs, especially to the urban consumers, by a variety of means, including price controls by the Government on the one hand and the little incentive for the industrial sector to concentrate on the production of really cheap manufactured necessities for the low-income rural market. The relation, therefore, between the prices farmers and villagers could get for their products and the prices they have to pay both for agricultural inputs like fertilizers, tools, pumps, and the like and for the manufactured consumer goods has been very unfavourable to the farmer and has prevented economic incentives for the modernization of agriculture from operating effectively. The improvement of storage, marketing and distribution are necessary to ensure that the margin between what the farmer receives for his produce and what the consumer pays for it is sharply reduced. Similarly, the improvement in marketing and distribution of agricultural inputs and the manufactured consumer goods available to farmers and villagers could reduce the cost of these things to the rural buyer without limiting the incentives of a satisfactory price to the manufacturer for his products. Some programmes of subsidy are necessary to ensure equity to low-income consumers and at the same time, the necessary production incentives are to be retained.

4.3.8 MODERNISATION & DISTRIBUTION OF INCOME

Modernization has increased, in stead of reducing, the distribution of income. The mass of the population exists at income levels barely sufficient for subsistence and tiny elite, enjoying a level of affluence. "Gaps" have become perceptible. This is because some are big, some are small; some have access to apolitical power, some do not; some have capital or land while others do not. Poor have developed the frustration and hostile feelings against non-poor. The basic hope of improvement in the lot of the less fortunate lies in increasing the size of the rupee rather than changing the way it is cut. No perceptible improvement in the lot of the underprivileged is possible without increase in the economic productivity. Equity may call for a heavy expenditure on housing, social services, health, education etc. The contribution made by per rupee of expenditure on these items may be very much less than an equivalent investment in economic or commercial activity. But this is required to ensure the social justice in the development context. However, this can be achieved not by the redistribution of rupee from more fortunate to the underprivileged but by substantial economic development.
4.4 POLICY FORMULATION BY THE GOVERNMENT OF INDIA TO MINIMISE THE ECONOMIC GAP BETWEEN THE DIFFERENT CLASSES OF SOCIETY

4.4.1 When India became independent, the Indian people were steeped in mass poverty, unemployment and underemployment, an illiterate and untrained labour force, static agriculture, a comparatively less developed industries, inadequate facilities of transportation and communication, scarcity of power and energy, poor facilities of banking and finance.

4.4.2 DIRECTIVE PRINCIPLES

The Directive Principles of our Constitution laid down: "The State shall, in particular, direct its policy towards securing

1. that citizens, men and women equally, have the right to an adequate means of livelihood
2. that the ownership and control of the resources of the community are so distributed as best to subserve the common good
3. that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.

The Directive Principles are an expression of the will of the people for economic growth. Planning was adopted as lever of social and economic change. In his endeavor to take the advantages of the capitalist as well as the socialist/communist societies, Pandit Jawaharlal Nehru, the architect of Indian Planning, conceived a new society for our country based on democratic socialism. This philosophy envisages material prosperity along with equal opportunities to all the citizens. High standard material comfort and well-being is meaningful only if accompanied by ethical and spiritual values necessary for the enrichment of the individual and the communal life.

4.4.3 LONG TERM OBJECTIVES

Four long-term objectives were set out by the planners in India:

1. to increase production to the maximum possible extent so as to achieve higher level of national per capita income
2. to achieve **full employment**

3. to reduce **inequalities** of income and wealth

4. to set up a **socialist society** based on equality and justice and absence of exploitation.

While the first two objectives are economic objectives and relate to increase in income and employment, the remaining two are social objectives and relate to the distribution of wealth and income and establishment of an egalitarian society in the country. The Fourth Plan memorandum stressed the need for establishing a progressive and rapidly growing economy based on high levels of productivity, the application of science and technology and the use of manpower reserves and a truly democratic and socialist society in which the burdens and the benefits are widely and justly shared.\(^{49}\) In reality, India's Five Year Plans gave the highest priority to growth and whenever other objectives conflicted with the growth objective, they were given up.

4.4.4 The mere production of goods does not improve the lot of the poor unless goods that the poor need are given priority and wealth and income are so distributed that the poor have the capacity to buy the goods available in the market. Also, along with attempts for improvement in the economic conditions of the poor, a simultaneous attack is made on the cause of poverty. The aim may not be a **perfect society** - the society that is completely reconciled and in which, everything is good and great. But the aim should be **least bad society possible**, the reason being that the very meaning of **good** and **bad** changes through time.

4.4.5 All development processes aim at human welfare. Man is the measure of all the things. It is the happiness of man that ultimately counts. But modernization and development will achieve this only if they encompass not only productivity and income but also social changes, relations and structure. Domestic economic inequalities challenge the government and no land is without problems of poverty and growth. Inter-personal and inter-group differences in income, earning capacities and quality of life pose a great problem before the government aiming at

\(^{49}\) Planning Commission, Memorandum on the Fourth Five Year Plan, p. 94

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development with mass welfare. In order to avoid the serious frustration and social unrest, it is necessary that the fruits of development and the activities that bring it are widely distributed throughout the society. Unless the governmental policy to the promotion of social justice and an equitable distribution of the fruits of progress are shared by the various sectors of the society, the minimum degree of political stability essential for effective development programmes is imperiled. The development will come to an halt if the major share of the fruits of growth go to a limited range, sector or social class. The democratic and welfare State has to demonstrate that the social justice is one of its central concerns. The progressive income-tax and the social security legislation are to be employed in the pursuit of economic equity. The tax system should be designed with two purposes in mind. Firstly, the consumption expenditures of the community should be restricted to the extent required to release productive resources for purposes of public and private investment and for expenditures on at least minimal quantities of social services like education and public health. Secondly, the tax structure should maintain the incentives for saving and productive investment in the private sector. If taxation simply diverts resources from private, productive investment into public investment or services, leaving consumption essentially unchanged, the goal of higher national economic productivity may not be attained.

4.4.6 Even after five decades of planned development, a sizable portion of our population lives below poverty line. With the progress of planning, unemployment is also on the increase. The Planning Commission admitted this fact: "By and large, therefore, it would appear that no serious dent had been made on the problem of unemployment in the country." Prof. V.M. Dandekar and Neelkantha Rath have also drawn the conclusion from their study in 1971 that the small gains of development over the years have not been equitably distributed among all sections of population. The condition of the bottom 20 per cent had definitely deteriorated and for another 20 per cent of the population, it remained more or less stagnant. The Fourth Plan admitting this fact mentions: "Another area where our effort so far has been feeble and halting is in narrowing the disparities in incomes and property ownership. Fiscal measures to unearth

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50 Planning Commission, The Third Plan Mid-term Appraisal, p. 10
51 Planning Commission, Fourth Five Year Plan - Draft Outline, p. 22
unaccounted money have failed. The fruits of economic progress instead of being shared by the masses, have flown into the pockets of the traders, businessmen and industrialists. The highly placed civil servants and the active politicians are all busy spinning money. While the Planning process has been successful in creation of social and economic infrastructure, in providing an industrial base by fostering the development of heavy and basic industries and enlarging educational facilities and opportunities, it has failed to provide employment to every able-bodied person willing to work, eliminate poverty and bring about institutional reforms leading to reduction in concentration of income and wealth. The benefits from the economic infrastructure have accrued largely to the relatively affluent and those in urban areas. According to the Janata Sixth Plan, these fundamental failures of planning emphasize the need for a re-appraisal of the development strategy. It mentions, "We must face the fact that the most important objectives of planning have not been achieved, the most cherished goals seem to be almost as distant today as when we set out on the road to planned development. These aims - implicit in all our plans more explicitly stated in the formulation of our development strategy - are universally accepted by the Indian people; they are the achievement of full employment, the eradication of poverty and the creation of more equal society." The rosy picture of development and progress of Indian economy loses its luster for the common man who cannot pride on modernized and self-reliant economy while he has to remain hungry due to poverty, inflation, unemployment. The "Garibi Hatao" slogan of our late Prime Minister, Mrs. Indira Gandhi could be provided a meaningful content only if measures were taken to achieve this objective.

52 Planning Commission, Fourth Five Year Plan - Draft Outline, p. 2