

**INDUSTRIALIZATION AND SOCIETY IN INDIA :**  
**A CASE STUDY OF BIHAR** २

Dissertation submitted to the Jawaharlal Nehru University  
in partial fulfilment of the requirements for the  
award of the Degree of  
**MASTER OF PHILOSOPHY**

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JAWAHARLAL NEHRU UNIVERSITY  
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1983**

To  
BABUJI AND MAI  
who have been a beacon of inspiration

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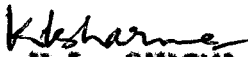
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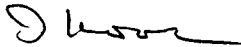
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## CERTIFICATE

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INDUSTRIALIZATION AND SOCIETY IN INDIA: A CASE  
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the award of MASTER OF PHILOSOPHY DEGREE, has not  
been previously submitted for any degree of this  
or any other University. This is his own work.

We recommend this dissertation be placed  
before examiners for evaluation.

  
Dr. K.L. SHARMA  
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### ACKNOWLEDGEMENT

In making of this dissertation I owe my thanks to Dr. K.L. Sharma, my supervisor, for his keen interest shown in the timely finalisation of research problem and for his guidance at different stages of accomplishment of this. He politely went through the drafts and made fruitful comments for improvement.

I am thankful to the Library staff of Indian Institute of Public Administration, Nehru Memorial Library, Central Reference Library and Ratan Tata Library (both in Delhi University) and the staff of Jawaharlal Nehru University Library.

I also take this opportunity to thank Prof. Yogendra Singh of the Centre for his fruitful discussions and exchange of ideas despite his busy schedule.

I am deeply indebted to my friends particularly Rati, Rakosh, Bharat, Choudhary and Kushwaha who provided all possible helps and encouragement during my research. My sincere thanks also go to Mr. Om Prakash for his speedy and efficient typing of my dissertation.

Finally I acknowledge my supreme debt of gratitude to my parents and other family members for inspiring me to undertake higher studies against the heavy odds of life.

Jawaharlal Nehru University,  
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January 1, 1984.

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## CHAPTER I

### INDUSTRIALIZATION: AN INTRODUCTORY FRAMEWORK

This is an age of dramatic technological progress. It may be hard to believe that before the second World War an average American or a European or a Japanese had never seen a television screen, never bought a pocket of frozen food, and never had his laundry washed with a non-soap detergent. These things are common-place now, and they have been overshadowed by science's penetration into the core of the atom and to the shell of outer-space-achievements without parallel in the chronicle of human adventure. Yet this age of technological discovery is not over and every indication points to the fact that it has just started.<sup>1</sup> However, when we look at the industrial development of India in the context of world industrial development, particularly in the light of industrialization in the advanced countries, the picture becomes very disappointing. As Davis says, India, with respect to our index of industrialization, stands at about the mid point of the array. Fifty one per cent of the rest of the world population lies in countries more industrialized than India and forty-nine

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1. R.K. Kapila, Story of Industrialization: Industries the World Over, Candour Publishing House, Delhi, 1963, p.1.

per cent in countries less industrialized".<sup>2</sup>

Davis' statement may cease to be relevant today for India during the period, particularly under the planned economic development, has made clearcut headways in industrial development which at least makes it appear different from what it was a few decades ago. But the case of Bihar which is the focal point of the present study nowhere shows any indication even today which will present it as a highly industrialized or even rapidly industrializing state of the Indian union. The case with some other states if not all where industrialization began more or less with the same time as in Bihar is not so despairing and have better growth than Bihar although they have been lacking certain pre-requisites necessary for rapid industrialization. ....to industrialize successfully there had to be capital formation, technical change, reallocation of resources as well as changes in social, political and cultural attitudes to economic activity".<sup>3</sup>

Supplies of labour and raw-materials, an adequate internal market, a good demand for production, a sound industrial

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2. K. Davis and Heritz Golden, "Urbanization and Development of Pre-industrial Areas", Economic Development and Cultural Change, vol.3, Chicago, Oct. 1954, p.6.

3. A.G. Kenwood and A.L. Loughheed, The Growth of the International Economy 1820-1960, George Allen & Unwin Ltd., London, 1971, p.143.

policy, a favourable social structure, a committed entrepreneur class and at least a basic infrastructure are some other necessities for rapid industrialization. Bihar does possess most of these requirements. It contains the richest and largest mineral tract in the country. It produces 100 per cent of copper and apatite, 95 per cent of kyanite, more than 50 per cent of coal, 60.34 per cent of mica, 48.28 per cent of iron-ore besides a large number of other important minerals. The supply of cheap power, another requisite for industrial development, is sufficiently assured by various electrical projects in the state. There is no dearth of industrial labour force in Bihar. The unskilled workers are sturdy and hard-working. Given the opportunity for training they always respond to become more efficient. Besides an efficient internal market, the state has also trade relation with outside state. Despite these all facilities the hard fact remains that Bihar is industrially a backward state. Even whatever meagre industrialization has taken place in the state, does not show a balanced growth rather gives an impression of lop-sided development. North Bihar, which has nearly half the population of Bihar, has no industry worth the name, except a few of sugar-cane and jute factories. South Bihar too has almost wholly an agricultural



economy except the Chotanagpur division. Even in Chotanagpur, industries are mostly confined to Singhbhum district, Dhanbad district and some parts of Hazaribagh district. During the different national and state plans a large number of industries of all sectors were set up in southern Bihar mainly in the tribal belts, which led to a big transformation in the political, social and economic life of the people of these regions. All these changes are considered as a positive impact of industrialization but how far they have been is still a major issue today. Moreover, who are the people actually benefitted is yet another issue to examine. These are some of the issues which this paper attempts to examine. In other words, what has been the level of industrialization in India in general and Bihar in particular, why Bihar has remained backward and what has been the impact of industrialization are the central issues the paper is devoted to.

The role of industrialization as a factor of social change hardly needs emphasizing. In fact all the major socio-economic transformations in early as well as contemporary peasant societies have come in the wake of industrialization. Tom Kemp observes, "Industrialization has made possible a great increase in the per capita output of material goods and the provision of an enormous range

of services arising under a complex system of division of labour. In fact, it has become common to equate industrialization with economic growth, and centuries embarking on the path of development have generally assured that they will have to industrialise".<sup>4</sup> "Large scale factory production has profoundly altered the course of human society. So great has been its impact that we now recognize a type of society that bears its imprint - the industrial society. The big divide in the world is between industrializing and industrialized societies, with the former desperately wanting to catch up with the latter".<sup>5</sup> Appropriately, therefore, sociological theory right from beginning has devoted a considerable deal of attention to industrialization as an instrument of social change. We may refer here Tonnies' discussion of the transition from Gemeinschaft to Gesellschaft and Durkheim's description of the progress of division of labour in society with the concomitant growth of organic solidarity.

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4. Tom Kemp, Historical Patterns of Industrialization, New York, A Longman Paperback, 1978, p.20.

5. E.A. Ramaswamy & Uma Ramaswamy, Industry and Labour - An Introduction, Oxford University Press, Delhi, 1981, p.33.

6. See John C. McKinney and C.P. Loomis, "The Typological Traditions" in J.S. Roucek (ed.), Contemporary Sociology, Greenwood Press, New York, 1958, pp.557-58.

Was it not modern industrialism which played the crucial role in the development of Gesellschaft relations based on consciousness? Contemporary sociologists have been no less concerned with the subject than the earlier pioneers. For instance, Sorokin's study of the transition from familistic to contractual relations<sup>7</sup> and Reisman's analysis of tradition-directed inner directed and other-directed personality types are a culmination of the same line of thinking on the social consequences of industrialization.<sup>8</sup>

*X* More recently the contribution of Zilon Mayo, Smelson, Wilbert E. Moore, Hoselitz, Clark Kerr, Fredrick Harbison, Stinchcombe and Charles Mayors reflect the same perspective and have gone a long way towards enlarging the understanding of the relationship between industrialization and society. Thus, the process of industrialization has both aspects - social and economic - which has attracted a great deal of intellectual exercise from both economists and sociologists. There are so many approaches to show the inter-relationships between industrialization and

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7. P.A. Sorokin, Sociological Theories of Today, Harper and Rao, New York, 1966, pp.504-06.

8. David Reisman, The Lonely Crowd, New Haven, Yale University Press, 1961, p.3.

society. However, central to all these approaches is the continuum between industrialization and social structure. Some approaches consider social structure as being the independent variable and assume that it is the particular kind of social structure which determines the process of industrialization. There are others who take an opposite stand and believe that whatever changes occur in social structure, are the direct culmination of industrialization, hence it is the industrialization which will ultimately determine the nature of social structure in a particular society. While the former approach shares its viewpoints with those believing in institutional approach such as Myrdal Gunnar, Wilbert E. Moore, Thorstein Veblen, the latter takes up a marxist perspective. Our assumption about the interrelationship between industrialization and social structure in Bihar is that of the latter's approach, that is, industrialization has brought changes in the state of Bihar and this hypothesis has adequately been supported in the light of the findings of some empirical studies particularly those of Martin Orans (A Tribal People in an Industrial Setting, Jamshedpur), Pranab Kumar Das Gupta, (Transformation of Tribal Economy in An Industrial Context: A Case Study of the Ho of Singhbhum district), Michael Ames (Modernization and Social

Structure: Family, Caste and Class in Jamshedpur) and L.P. Vidhyarthi (The study of H.E.C. in the city of Ranchi). The paper thus attempts to first understand the subject matter of industrialization in details and thereafter seeks to analyse all these various issues mentioned above in the subsequent paper, particularly more detail in the fourth chapter which is exclusively devoted to the study of industrialization and society in Bihar.

Finally the research work has been geared to analyse various models of industrialization such as those of Andrew Gunder Frank, Gunnar Myrdal, Wilbert Moore, Prof. Rostow (Evolutionary) and the Planning model and thereby an application of these various models have been examined in the light of the trends of industrialization both at the level of India in general and the state level of Bihar in particular.

#### Industrialization - A conceptual understanding

Industrialization has been variously defined by sociologists. Central to all of the definitions, however, is the idea of a shift in the economic base of a community or society from agriculture to manufacturing. The customary index of this shift is a decline in the proportion of the labour force employed in agriculture and an increase

in the proportion employed in manufacturing and service industries. In words of Tom Kemp, "The central characteristic of industrialization is machine production, the basis for an enormous growth in productivity and thus for economic specialization in all directions. It created a new environment for work, with its own demands and laws - the factory. It brought about the <sup>con-</sup>centration of workers in big industrial units and the growth of towns to house the working population, creating a new urban environment for social living. The new type of town, growing mushroom - like with industrialization, was not an adjunct to a predominantly agrarian society but a new dynamic force for change, the home of the majority of the population in a predominantly industrial society".<sup>9</sup>

Conceived in this way, industrialization serves as the label for a series of technological mechanical and engineering innovations in forms of social production.

The process of industrialization has two aspects - economic and social. While the economic aspect of industrialization has been widely discussed by both the sociologists and economist the latter aspect has been somehow of recent interest and the contemporary sociologists have

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9. Tom Kemp, op. cit., p.9.

made a great deal of it. The economic aspect of industrialization refers to the features like economic modernization, use of scientific knowledge, mechanical innovations, massive increase in output per man hour, complex hierarchy of organizational set up and division of labour. These common features lie for the most part in what Paul Meadows has called the inner structure of industrialization, i.e. "specialized machines and tools, a body of knowledge about machine processes, properties and tasks, and human beings disciplined for machine work.<sup>10</sup> But this aspect alone does not imply a kind of economic technological determinism. On the contrary, there are clearly institutional and organisational preconditions. Wilbert Moore's objection is quite appreciable....."extensive industrialization is quite unlikely in the absence of a highly specialized and coordinated labour force, monetary exchange and rationalized accounting system, the technology of precise measurement and production control and so on. ....Furthermore technology itself is properly viewed not as a kind of inanimate force but rather as a body of practical knowledge and skills; it is social product having social consequences."<sup>11</sup>

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10. Paul Meadows, The Culture of Industrial Man, Lincoln University of Nebraska Press, 1950, p.13.

11. Wilbert Moore, Encyclopaedia of Social Sciences.

The term industrialization gets, of course, some justification when considered as "economic modernization" but making it equivalent to economic development runs some risks. The risk is comparable to that displayed in Marxist theory which attaches structural and dynamic primacy to "the economic factor" but then includes "dependent" variables in the independent one so that the determination includes several elements and components that are independently variably. Similarly the industrialization has also some social consequences which is independent of its economic aspect and which has been widely discussed in the contributions of the contemporary sociologists.

Industrialization thus refers to the process which involves the use of mechanical power in the process of production with all the changes that it entails "in the technology of agriculture transport and communication and in the organization of market or finance".<sup>12</sup>

The term industrialization in the sense of use of mechanical power in the process of production is now ubiquitous. The following are random examples.

"An essential element of the industrialization ideology

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12. M.S. Gore, Urbanization and Family Change, India, Bombay, Popular Prakashan, 1966, p.41.



is the hope and expectation that newly launched industrial establishments will bring with them the powerful modern techniques used in advanced countries. Modern industry using power and machine is of course much more capital intensive than are traditional methods of production that do not utilize power and machine".<sup>13</sup>

"Industrialization refers to a specialized process in which the expansion of productive enterprise is the integrating factor in social life creating both a demand for skill and education as well as providing the central allocation and distribution mechanism".<sup>14</sup>

"Thus we advocate shrinking the concept of industrialization to encompass merely the process which involves a change over from either agriculture or domestic activity to factory production on a large scale."<sup>15</sup>

"Industrialization is by our most important mode of

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13. Gunnar Myrdal, Asian Drama - An Enquiry into the Poverty of Nations, vol.II, Penguin Books, London, 1968, p.1166.
  14. David E. Apter, "Political Systems and Developmental Change" in his Some Conceptual Approaches to the study of Modernization, Englewood Cliffs, New Jersey, Prentice Hall, Inc., 1968, p.40.
  15. J.P. Nettle & Roland Robertson, International System and the Modernization of societies - the formation of National Goals and Attitudes, Faber & Faber, London, 1968, p.40.

production just as guild production or slave production have predominated in other times and in other cultures.<sup>16</sup>

Whenever there is a change in the existing method of production which necessitates the replacement of hand-tools by power-driven machines, in other words, a change over to the modern factory system of production, we speak of industrialization. The industrial mode of production is too unique and complex in its manifestation that we cannot describe it adequately except by contrast with the pre-industrial mode of production.

#### Origin and Growth of Industrialization

The process of industrialization is generally marked with the beginning of the 'Industrial Revolution' in Britain although origins of modern industrialism can be found in the distant past. Peter Mathias finds its origin in as remotely past as the medieval age. "Did it begin with the gigmill or blast furnace in the fifteenth or sixteenth centuries, the fueling mill in the thirteenth century or water and wind mill in more remote classical and medieval times".<sup>17</sup> According to him the industrial

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16. Eugene V. Schneider, Industrial Sociology - The Social Relations of Industry and Community, McGraw Hill Book Company, Inc., 1957, p.1.

17. Peter Mathias, The First Industrial Nation - An Economic History of Britain 1780-1914, Methuen & Co. Ltd., London, 1969, p.7.

revolution should not be used just to denote industrial or mechanical innovation an advance in a technique of production or the mechanization of a process in a single industry or even the conversion of a single industry into a mass-production basis with large plants driven by more than human power. Rather the concept implies the onset of a fundamental change in the structure of an economy; a fundamental redeployment of resources away from agriculture becoming self-evident over time.

The phrase 'industrial revolution' has long been used to identify the period roughly from 1750 to 1825, during which the accelerated application of mechanical principles, to manufacturing in Great Britain produced an identifiable change in economic structure and growth. The factories in Britain utilized a few mechanical innovations primarily in textiles and iron manufacturing, which, with the application of the steam engine, made factory-sized scale the most economic size scale for the production unit. The proximity of others engaged in such manufacturing activities became a further cost-reducing factor of great importance, resulting in "external economies" that encouraged the grouping together of manufacturing enterprises and hence, the growth of new urban aggregations. The result was that Britain rapidly became the

first urbanized industrial state.

The social relations characteristics of the capitalist mode of production had existed for centuries before industrialization began, but they were not dominant. In primarily agrarian societies wage-labour was the exception. Most producers tilled the land in some forms of dependence and the dominant class lived on a surplus extracted from the direct producers by non-economic coercion. Since this surplus was used mainly for consumption and not for wealth producing, economic growth was slow or non-existent. At sometimes from about the sixteenth century, however, in the more advanced areas of Europe and then particularly in England, an economic backwater, a change began to take place. Capital was being accumulated and was finding its way into the enlargement of trade and increase in production, particularly in agriculture. There was a significant transformation of the agrarian sector; the break-up of the old feudal relation began and more goods were produced for the market. As a result, relation based on money, the cash nexus, increased in scope. The rise of markets was connected with the growth of towns, themselves based on trade. The number of landless and semi-landless people in the countryside grew, some, at least taking up industrial employment, usually in their own homes. In England where

these developments were most advanced, the landed estates to a growing extent were leased out to capitalist farmers. At the same time, wealth was accumulating in the hands of traders and merchants, the typical capitalists of the pre-industrial era. It was only when this long accumulated capital began to take hold of production that a new disruptive factor was introduced. This new phase sprang up during the eighteenth century when new inventions were made and this long accumulated wealth was used for the large scale production which in the long run led to what is known as the Industrial Revolution today.

Industrialization in Capitalist, Socialist and the Third World Countries

The time path of world industrial development is marked by the slow spread of the industry from Britain to the United States, to north-west and central Europe, Russia and Japan and then to other parts of the world. There are now industrial complexes in nearly all parts of the world, except polar regions. "One of the outstanding structural features of contemporary western societies is industrialism, whose most characteristic organizational form is the factory. Both industrialism and the factory system are becoming pervasive through out the world".<sup>18</sup>

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18. Anlan Datta, Socialism, Democracy and Industrialization, George Allen and Unwin Ltd., London, 1962, p.73.

The spread of industrialization from Britain to the continents of Europe and North America was assisted by the functioning of the mechanism of an integrated international economy. The flows of capital, labour and trade which linked together the countries of the world, provided the channels through which modern industrial technology could be diffused between nations. If the extent of this technological diffusion was limited to the nineteenth century, it was partly because the stock of capital and labour available for international transfer was limited and partly because not all of the countries desiring to import these extra productive resources were equally well placed to attract them. But what was an even greater obstacle to the spread of industrialization was the fact that many countries, even when they received inflows of foreign labour and capital, lacked the internal flexibility necessary for them to take advantage of the changing technological opportunities that presented themselves. It was this weakness rather than any fundamental deficiency in the functioning of the international economy as an 'engine of growth' that accounts for industrialization before 1914.

Like the neo-marxists A.G. Kenwood and A.L. Longhead used the beautiful model of the centre-periphery relation-

ship to present the true nature of the nineteenth century world economic system. "The nineteenth century world economy is best viewed as composed of a centre and a periphery, with growth at the centre building up economic pressure and tending to diffuse the development process to the periphery. Initially, Britain stood at the centre of this growth process but as the century progressed Europe, and the particular north-west Europe, came to play a larger part in fostering the spread of economic development overseas. Britain's central role in the world economy during these years rested on a technological revolution that began in the second half of the eighteenth century, and continued between 1820 and 1880 to transform a pre-dominantly agrarian economy into the world's first industrial nation. But imitators were not lagging behind and, partly through a flow of capital and skilled labour from Britain, the new industrial technology spread first to Europe and then to the United States, so that by the 1870s when Britain's rate of industrial growth began to slow down, these other countries began to play their part in the process of transmitting growth to the less developed regions of the world".<sup>19</sup>

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19. A.G. Kenwood and A.L. Lougheed, *op. cit.*, p.134.

Despite all until the 1950s there was no significant industrial power, except Japan, which was not a European country or an offshoot of Europe. The United States trailed the path of Britain in her industrialization process and enriched with population, raw materials as well as prompt entrepreneurship and supported by a free market economy soon became the leading industrial country of the first world even sometimes surpassing Britain, the sheet of industrialization. The United States developed a large scale industry and an extensive internal transportation sector before 1860. Then in the period extending roughly from 1870 to 1910, the United States experienced an accelerated development of heavy industry and surpassed all other nations to become and remain, the leading industrial power.

Under the Tsars Russia, presently known as the leader of the second world was unable despite abundant 'raw materials to achieve the other pre-condition for industrial development on a scale anywhere near its obvious potential and by 1914 it trailed Britain, Germany and France as an industrial power but was fourth in the world behind the United States, Britain and Germany as a textile manufacturer. After the emancipation of serfs in 1861, great efforts were made by the Russian Governments to achieve industrial growth and after the 1880s considerable



development occurred, especially in railroad construction. However, it was only after the Great Revolution of 1917 that Russia experienced the real growth in industrialization. Under the Soviet government after 1917, especially since the adoption of the first five year plan in 1928, the Soviet Union has become the leading European industrial power - although still a poor country on the basis of per capita income - and is second only to USA in many areas of industrial development. At present most of the countries of the second world are adopting the planned economic policy of USSR and have shown a good headway in the industrialization process although none has achieved any remarkable distinction as per their potential.

In Asia, Japan is a remarkable phenomenon in the history of world industrialization. Through the great efforts of the government and a cohesive ruling class Japan went from being a backward oriental feudal state to becoming a substantial industrial power in the years between 1859 and 1910, overcoming a lack of raw-materials and despite its rigid social customs. It is, however, interesting in this respect to contrast the experiences of Japan and China before 1914 when confronted by western technology and economic intervention. Displaying a common policy of exclusiveness and virtual absence of contracts with

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 foreign countries as well as social structure and system of land ownership that acted as a barrier to industrialization, their responses to western intervention in their affairs were totally different. Whereas Japan adopted western industrial techniques rapidly and succeeded in achieving economic "take off" seemingly without any major social or cultural changes, the Chinese government remained contemptuous of western civilization and opposed to all forms of social and economic change.

Industrialization in India till late 1950s has been limited to a few large cities. The origin and development of industrialization in India dates back to the colonial period. As was natural very little industrial growth could take place during the colonial administration. Britishers were mainly interested in strengthening the colonial character of Indian economy, and therefore, whatever industries they set up were meant to cater to the needs of colonial power rather than the people. As such the government of India as controlled from England, could not possibly protect and promote, assist and encourage Indian industries, because it was bound to secure and expand the British commercial vested interests. Consequently it followed a policy which was essentially "restrictive and negative". Whatever little industrial

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development and state assistance was found in India, it was due rather to a farsighted individual officer rather than any considered general policy.<sup>20</sup>

The development of modern industrial enterprise began in India after 1850 and the beginning marked with the plantation industry which was owned and controlled by ex-employees of the East India Company. Factory industry started developing by the end of the nineteenth century. The growth of industrial development, however, was slow and lopsided upto the First World War (1914-1918). It was only after the adoption of the policy of discriminating protection in the year 1922-23 that, marked progress became visible in a number of consumer goods industries. The second World War further gave a big fillip to the development of industries as India became an important supply base for the allied powers. After the attainment of independence in 1947, the national government restored to planned development policy.

As an outcome of this the country has noticed tremendous development in almost all sectors of industries. Industrial production has gone <sup>up</sup> by about five times during

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20. See Reports of the Indian Industrial Commission 1916-18, p.75.

this period. Apart from the quantitative increase in output, the industrial structure has been widely diversified covering broadly the entire range of consumer intermediate and capital goods. In most of the manufactured products, the country has achieved a large measure of self-sufficiency, providing the capability to sustain the future growth of vital sectors of the economy primarily through domestic effort. The rapid stride in industrialization has been accompanied by a corresponding growth in technological and managerial skills, not only for efficient operation of highly complex and sophisticated industrial enterprises but also for their planning, design and construction. Considerable advance has also been made in industrial research and in absorbing, adopting and developing industrial technology.

Patterns of Industrialization in  
three Worlds - A Scalar Analysis

The world today is divided into three worlds: the First World of the United States and its western allies, the Second World of Soviet Union and its eastern Block Allies and the Third World of non-aligned but variously committed nations of Latin America, Asia and Africa. In all these three worlds, the process of industrialization can be easily traced out but the spread of its evolution

has ever been different. Historical evidences show clearly that the process of industrialization started in the First World and thereafter spread to other parts of the world and this spread became possible only because of an international planned agreement. However, the development of industrialization in the second and the third world may be a consequence of this agreement but the evolution of industrialization in the first world is quite spontaneous and indigenous as well as the result of its own social system and requirements. Changes which took place in Western European nations and the United States have usually come about as a result not of invasion or of foreign conquest but through the internal breakdown of the older landed class, a general disintegration of agricultural societies or through the initiative and creation of new life-styles. The basic characteristic of the first world is that economic development was a consequence of the internal machinery of each nation and not the result of international planned agreement.

Marx said, "the country that is more developed industrially only shows to the less developed the image of its own future",<sup>21</sup> and this is what happened in the case of

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21. Karl Marx, Das Kapital, vol.1, Charles Kerr Publishers, Chicago, 1905, p.13.

the spread of industrialization from its birth in Britain to the countries of western Europe and thereafter other parts of the world. Nevertheless, the mechanism of the world integrated economy also helped much in its rapid spread. The country which fulfilled the basic prerequisites of industrialization and had a stable political system grew it faster than others. However, the conducive environments and a favourable social system also played a vital role in its quick spread.

In both the first and the second world the development of the process of industrialization has been more or less at the same level; of course much in the European region, but the process of industrialization in the countries of the third world is taking place in a very slow pace. The reasons are many but the factors like political uncertainty, scientific and technological backwardness, rigid social system and huge population growth are some important ones. An even greater obstacle to their development is the fact that many countries even when they receive inflows of foreign labour and capital, and other requisites, lack the internal basic flexibility necessary for them to take advantages of the changing technological opportunities that present themselves. And here Marx assumption that developed countries show to the under-

developed the image of their own future becomes questionable. Tom Kemp emphasizes the constant dependence of these third world countries on the advanced countries as the main factors of their economic backwardness or slow speed of industrialization. "The historical conditions that brought these countries into dependence on a world market dominated by a few advanced countries condemned them to be primary producers, disintegrated their internal structures and raised severe barriers to economic growth".<sup>22</sup>

The development of the first world - Britain in particular - is while quite spontaneous and a repercussion of her own social circumstances and requirements, the development of the industrialization in USSR might be considered a pivot between the first and the third worlds of development. Russia is both European and Asian. It has looked to the west for its economic ideology and turned to the east for her political domain. Russia is both liberator and exploiter, a nation which makes revolution in the name of all humanity and yet imposes the strictest class and party dictatorship on a nation. However, the third world industrialization is still dependent upon the advanced nations and advancing rapidly with the help of external

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22. Tom Kemp, op. cit., p.21.

assistance and its own commitments.

Despite all it is crucial that the process of industrialization is an evolutionary process and will engulf the whole world in the long run. However, with favourable circumstances and structures a country may play the role of a pioneer as seen in the case of Britain in Europe and Japan in Asia. In words of Myrdal, "industrial expansion once started, touches of a progressive spiral. In currently popular jargon it leads the economy from the take off to self-sustaining growth".<sup>23</sup>

#### Approaches to Industrialization

There are three major approaches to analyze the relationship between industrialization and society. They are as follows.

Moore's approach - Wilbert Moore stresses more on the social condition for the growth of industrialization than the economic factors although he simultaneously recognizes the importance of certain economic factors which make the process of industrialization take place very rapidly.

\*These (social conditions) then are the major social

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23. Gunnar Myrdal, An Approach to the Asian Drama: Methodological & Theoretical, Vintage Books (A Division of Random House), New York, 1970, pp.564-65.



prerequisites for industrializing an economy. To these we must add the more strictly economic condition relating to capital formation, investment ratios in the various sectors of the economy, and the character of foreign assistance and foreign trade. In combination they do not guarantee successful modernization, but absence of one or another condition will impede or prevent success".<sup>24</sup> E.A. Ramaswamy while agreeing with Moore attributes, however, some more factors as the prerequisites for industrialization. "The social make up of the industrial west is not result of industrialization alone. Other social forces, such as urbanization and western culture and civilization, have had a powerful impact on western society".<sup>25</sup>

Among various social prerequisites required for industrialization overall changes in the traditional norms, values and customs are the most important. The traditional values prove uncondusive for rapid industrializing for they create a rigid-system-following whereas the process of industrialization requires a fairly free and independent movements of enterprises. As Moore argues, "the value of economic growth requires, for example, a fairly high degree

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24. Nilbert Moore, Social Change, Prentice Hall of India Pvt. Ltd., 1976, p.102.

25. E.A. Ramaswamy & Uma Ramaswamy, op. cit., p.36.

of individual mobility and a placement system grounded on merit in performance and the requirement is likely to come into conflict with a number of strongly supported values relating to the primacy of kinship position and obligations as a moral virtue. In this sense extensive value changes are the most fundamental condition for economic transformation".<sup>26</sup>

The other essential social pre-requisites for the industrialization process are, institutions like marriage and economic exchange, an hierarchically governed bureaucracy, fiscal organization of state such as banker and tax collector as well as appropriate means of transportation and communication.

Besides these, Moore argues that a committed entrepreneur - 'the institutionalization of rationality - and a strong motivation for the widespread change in the existing social order is of more facilititious condition for industrialization "that some leading sectors of the population must be committed not only to the ideal of economic growth but also to its political implementation in terms of progress and places, the identification of necessary techniques to be borrowed or adopted or even

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26. Wilbert E. Moore, op. cit., p.98.

invented for unusual application".<sup>27</sup>

The role of entrepreneur in rapid economic growth is an established fact and even classical economists like Schumpeter have also been fully agreed upon it. In Schumpeter's system entrepreneurship is essentially creative activity. The entrepreneur is the innovating individual who introduces something new into the economy; a new method of production not yet tested by experience in the branch of manufacture concerned. Thus, as per this approach it is the social structure which leads to industrialization.

Marx's approach - Marxian approach, however, presents a reverse picture. Since it assumes that it is the mode of production which determines the super-structure, hence industrialization, instead of being affected by social structure, will itself bring changes in the society. "In Marxist economic literature the term 'Industrialization' is used in two different meanings. In the narrow meaning, it is applied to establishing and developing the production of the means of production; in the broad meaning, it signifies the completion of the industrial revolution and the transfer of the economy to industrial methods of production. These

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27. Ibid., p.100.

two meanings thus refer to the initial and the concluding stages of industrialization".<sup>28</sup>

Industrialization affects the social system in several ways. To begin with, it changes the mode of production or as Karl Marx said, it creates new relations of production. The new relations of production then give rise to new patterns of social relations, new values and norms and a new cultural ethos. One need not be a Marxian to accept the above facts. Thorstein Veblen, William P. Ogburn, Lewis Mumford, not to speak of others have all, in their own ways emphasized the crucial role of technology as an instrument of social change. In Marx's theory of history, "it is the conflict between the material or technological 'forces of production' and the relations of production, for example, the relations of private property which is the fundamental source of change".<sup>29</sup>

Change is inevitable and it is ultimately the culmination of a continuous class-struggle which can be traced out in all kinds of societies because of its dynamic nature. Marx rightly observes, "The history of all hitherto

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28. G.K. Shrikov, Industrialization of India, Progress Publishing, Moscow, 1977, p.7.

29. See Karl Marx, A contribution to the critique of Political Economy, Charles H. Kerr and Company, Chicago, 1904; and Karl Marx and Fredrick Engels, Selected Works, vol.I, Foreign Language Publishing House, Moscow, 1950.

existing society is the history of class-struggle. Freeman and Slave, Patrician and Plebian, Lord and Serf, Guild-master and journeyman in a word, oppressor and oppressed stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight, a fight that each time ended either in a revolutionary reconstitution of society at large, or in the common ruin of the concluding classes".<sup>30</sup>

Marx envisaged the emergence of industrial conflict as a culmination of the industrialization process. To him it is nothing but a part of the broader social conflict between the two classes - oppressor and the oppressed which he traced out in all societies and thereby used it to explain the fundamental historical process of change and development in human society. Thus Marxian approach to industrialization strongly considers it as one of the factors for social change in the society.

Veblen's approach - Veblen's approach stands for a dualism - the dualism of industry and business enterprise. He firmly believed that a clear explanation of the modern economic phenomenon is not accurately possible with other than an approach issuing from the businessman's standpoint.

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30. Karl Marx, Communist Manifesto, 1848, p.200.

"The industrial system constitutes the material framework of the modern civilized world, but the animating force in this context is business enterprise. Thus a theory of modern economic phenomenon must be a theory of business enterprise".<sup>31</sup>

According to Veblen the industrial development is very much dependent upon the business enterprise. It is the role of this institutional class which he terms as 'Captain of industry' that industries grew rapidly with an accelerated speed. However, he says that in the contemporary world, the sole motive of this class - the captain of industry - is only profit-making and not the production increase as seen in the past.

Simultaneously, Veblen also recognizes the social aspect of industrialization and holds the view that the present society with its cultural character is a direct offshoot of the machine civilization and nothing else. The people in this civilization are materialist in outlook and lead life accordingly - shaped by mechanization process. The importance that Veblen assigns to the cultural incidence of the machine process may be gleaned from the fact

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31. Thorstein Veblen, Absentee Ownership Enterprise in Recent Times - The case of America, Augustus H. Kelly, Bookseller, New York, 1954, p.290.

that in his mind the emergence of modern way of life is attributable mainly to the intrusion of a new technology, a new 'state of industrial arts', and not to any real progress in the political, religious or business endeavours of man. As a result of this technologic intrusion, the range of western man's diverse activities is now cosmopolitan in character, engulfing all the civilized nations not just Europe. Thus Veblen on the one hand, stands in terms with Moore's approach with regard to the role of entrepreneur in rapid industrialization and on the other, follows Marx in the social aspects of industrialization which is the sole factor for all sorts of changes in society. And this is the point where his dualism of both business enterprise and industry becomes obvious.

The foregoing review of these major approaches indicates that each approach has emphasized one or other variable ranging from entrepreneurship, social structure, technological development to industrialization. Moore has emphasized the dynamics of social structure and entrepreneurship. Marx on the other hand, emphasizes on the nature of mode of production, which includes both the relations of production and the form of production as the determinant of super structure comprising of politics, social structure, law, religion and ideology extra. Finally Veblen has

taken the intermediary approach when he gives due importance to business enterprise as well as mechanization. His point of view comprises of functional operationality, synthetic concretion and cultural integration. It seems that his approach is nearer to phenomenological stand point where the attributes of "here and now" is given primary importance. For instance, he talks of analyzing business enterprise from businessman's points of view. But at the same time Veblen considers that the sole motive of modern business enterprise is profit-oriented and not the production-oriented. And this is an offshoot of the machine civilization. Thus he stands for a dualism - the dualism of industry and business enterprise.



## CHAPTER II

### INDUSTRIALIZATION AND SOCIETY IN INDIA

India has been a manufacturing country since the ancient times. It is stated that India was the nourishing mother of Asia and the industrial workshop of the world. Dacca muslin and Calicos were in great demand the world over. Indian silk fabrics are said to have been sold in Rome in their equivalent weight in gold. The supremacy of Indian skill was admitted by the Indian Industrial Commission which remarked: "At a time when the West Europe, the birth place of the modern industrial system was inhabited by uncivilized tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen. And even at a much later period, when merchant adventurers from the west made their first appearance in India. The industrial development of this country was, at any rate, not inferior to that of the more advanced European nations!"<sup>1</sup>

The cause of decline and ultimately decay of Indian manufacturers are many and varied. The most important cause was coming in of Industrial Revolution in England and the

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1. Indian Industrial Commission (1918). (Statement taken from Industrial Economy of India, by M.S. Gupta and Dr. Amarjeet Singh, Light and Life Publications, New Delhi, 1978).

consequent importation of machine made cheap goods. Before further mentioning how this all happened on our land, it is pertinent to see what has been the exact nature of economy and society and the pace of industrial development of pre-colonial and colonial phase as well as what has been the role of the indigenous and foreign capital in the economic development in country.

#### Economic and Social Life in Pre-British India

India had a self-sufficient economy before English intrusion to our country and the villages in India were the basic units of its economic prosperity. What A.R. Desai has called them as 'autarchic' or R.K. Mukherjee as 'primitive democracy' remained same for many centuries withstanding so many invasions till the Britishers landed on and changed its village based feudal structure.

"The self-sufficient village as the basic economic unit had existed for centuries in India and except for some minor modifications, had survived till the advent of the British rule, in spite of all political convulsions, religious upheavals and devastating wars. It stood impregnable in face of all foreign invasions, dynastic changes, all violent territorial shifting in inter-state struggles, kingdoms rose and collapsed but the self-sufficient village

survived".<sup>2</sup>

The village population was mainly composed of peasants, artisans and industrial workers - such as a smith, a carpenter, a potter, a weaver, a cobbler, a washerman, a barber, an oilman and others. Further village community also included within it "a class of menials who did the work of scavenging the outcastes, most of whom were the descendants of the aboriginal population of the country who were absorbed in the Hindu society of these early days, instead of being exterminated".<sup>3</sup>

The village committee representing the village community was the de facto owner of the village land and distributed it among the peasant families in the form of holdings. The peasant family had the hereditary right to possess and cultivate its holding from generation to generation. No authority, neither the King nor his Viceroys ever challenged this customary right of the village community over the village land.

The village agriculture produced for the needs of the village, and excepting a share of this produce which the

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2. A.R. Desai, Social Background of Indian Nationalism, Popular Prakashan, Bombay, 1948, p.7.

3. Wadia and Merchant, Our Economic Problem, New Book, Bombay, 1943, p.30.

village had to surrender to the Lord of the moment, the entire produce was almost locally consumed by the peasant and non-peasant village population. The phenomenon of a market was absent and exchanges of products of all kinds were limited to the village community only.

Another feature of the village economic life was the low stage of the division of labour based on insufficient differentiation of agriculture and industry. While principally attending to agriculture, the farmer family also engaged itself in domestic spinning. Similarly the artisan who was often given a plot of village land by the village committee carried on agricultural activity for sometime in the year. Marx comments, "The broad basis of the mode of production is here formed by the unity of small agriculture and domestic industry, to which is added in India the form of communes resting upon the common ownership of the land, which, by the way, was likewise the original form in China. In India the English exerted simultaneously their direct political and economic power as rulers and landlords for the purpose of disrupting these small economic organisations. The English commerce exerts a revolutionary influence on these organisations and tears them apart only to the extent that it destroys by the lower prices of its goods, the spinning and weaving industries, which are archaic and

integral part of this unity",<sup>4</sup>

The village was almost self-sufficient regarding the raw-materials needed for the village industry. Except for iron which had sometimes to be imported from outside, the village artisans secured locally the raw-materials such as wood, clay, cotton and hides for their crafts.

The techniques of village agriculture and industry, however, were of a low level. Simple agricultural equipment and the hand manipulated tools for manufacture were all that were known. Since the economic life was constrained and exchange almost limited to the village, there was no necessity for travelling except on a marriage occasion; hence was hardly any means of transport other than bullock-carts.

In contrast to the village artisan industry which had to supply to the limited needs of a small village group, the urban industry produced goods of varied kinds and cater the needs of various strata of society. A.R. Desai talks of three types of such industries. "There was the first group of industries of a luxury or semi-luxury type which produced luxury articles for the aristocratic and

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4. Karl Marx, Articles on India, People's Publishing House Ltd., Bombay, 1951, p.85.

wealthy strata of society; Indian as well as foreign. These industries constituted the pre-dominant part of the total urban industry. Then there was a group of industries which satisfied the requirements of the state and other public institutions. Finally there were industries which included the main smelters...the salpeter workers, the bangle maker... They were mostly localized industries, carried on in some parts of India".<sup>5</sup>

The industrial workers were broadly divided into two categories - those who worked independently and those employed by the state, private corporations or private individuals on the basis of wages. Independent handicraftsmen owned the tools and raw-materials and produced finished good for the anonymous markets.

The most striking feature of the urban industry was the extremely limited character of their market. In the opinion of A.R. Desai, "This was due to the fact that they did not produce articles of daily use for the common people but functioned to meet the specific needs of the social strata and important institutions."<sup>6</sup>

Social life and culture in the pre-British period is

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5. A.R. Desai, op. cit., p.15.

6. Ibid., p.15.

marked by stagnation and dependence on the past. There was, of course, no uniformity of culture and social patterns all over the country. Nor did all Hindus and Muslims form two distinct societies. People were divided by religion, region, tribe, language and caste. Moreover, the social life and culture of the upper classes, who formed a tiny minority of the total population, was in many respects different from the life and culture of the lower classes.

Caste was the central feature of the social life and was rigidly followed by the Hindus. Caste rules were extremely rigid and strictly enforced by caste councils and panchayats. "The caste-stratified social organisation of the village population was not conducive to any development of individual initiative, adventure or striking out of new paths. The villager considered the caste-system as divinely ordained, docibly submitted to all its base and taboos and passively accepted whatever status and function 'the God created caste system assigned to him'.<sup>7</sup> The other social institutions as they existed in their integrity, were not individual but collectivist. The unit was not the individual but the family which regulated the relations of its members inter se. The inter-relation of different

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7. Ibid., p.19.

families were further governed by the village community and the caste councils.

Thus pre-British Indian society almost completely subordinated the individual to the caste the family and the village panchayat throughout its centuries old existence. D.P. Mukherjee observes, "Even at the end of the eighteenth century, the Indian social order was for the most part, equivalent to the discharge of obligation to the family, to the caste and the village panchayat working on the basis of an economic self-sufficiency in the rural units and in addition, to the guilds and corporation on the basis of trade and commerce between urban areas".<sup>8</sup>

Within the village the productivity of the labour based on low level of production technique was on a low and almost stationary level. As a result, there hardly survived for the mass of people either surplus of material and cultural life. Their scientific knowledge was also as meagre as their techniques of material production. Such a state of affairs was bound to develop the outlook of the village population on lines of superstitions, religious mysticism and the crudest form of worship of natural forces. A feeling of defeatism and frustration dominated their outlook.

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8. D.P. Mukherjee, Modern Indian Culture: A Sociological Study, Hind Kitabs Ltd., Bombay, 1948, pp.1-2.



While the economic and cultural life of the autocratic village was poor, almost stationary, stereotyped and scarcely transcending the perimeter of the village, that of the town was in sharp contrast mobile, rich, relatively progressive and in constant contact with the outside world. The town economy was more developed and differentiated since it had to cater to the highly complex and manifold needs of such social strata as the King and his nobility, wealthy merchants and religious dignitaries. A good proportion of land revenue appropriated by the state was spent in towns. The merchantile community too consumed its profit in towns. All this gave a fillip to the economy of the town, determined its production and brought into existence such industries as manufacture of superior qualities of silk and cotton cloth, artistic metal, marble ware and weapons of war.

✓ All the scientific, philosophic, artistic and religious-artistic culture of the period was concentrated in towns. While the superstition and the crudest forms of nature and God worship were rampant in the villages, most subtle, complex and logically most elaborate kinds of idealistic and spiritualistic philosophies thrived among the enlightened sections of towns people. The Kings, the nobility and the wealthy merchants provided patronage to a galaxy

of artists, scholars, philosophers, scientists and other technicians who were the best representatives of, and epitomised the entire culture of the period in its various aspects.

As regards economic prosperity and industrial grandeur which mainly comprised the artisan works and towns industries, the mention has already been made in the beginning of the chapter. The very fact that over and again the cities and temples were attacked and looted by the people from outside is enough to speak of the economic prosperity and the industrial supremacy particularly in artisan works of the pre-British India. Delhi was plundered by Nadir Shah; Lahore, Delhi and Mathura by Ahmad Shah Abdali; Agra by the Jats; Surat and other cities of Gujrat and Deccan by Maratha chiefs; Sarhind by the Sikhs and so on. Although constant political turmoil and uncertainty hurt trade and adversely affected urban industries India remained a land of extensive manufacturers. Indian artisans still enjoyed their reputation all the world over for their skill. India was still a large scale manufacturers of cotton and silk fabrics, sugar, jute, dyestuffs, mineral and metallic products like arms, metal wares, salpetre and oils. The important centres of textile industries were Dacca and Murshidabad in Bengal, Patna in Bihar, Surat in Ahmedabad

and Broach in Gujarat, Chanderi in Madhya Pradesh, Berhampur in Maharashtra, Jaunpur, Varanasi, Lucknow and Agra in U.P., Multan and Lahore in Punjab, Masulipatan, Aurangabad, Chicacole and Vishakhapatnam in Andhra, Bangalore in Mysore and Coimbatore and Madurai in Madras. Kashmir was a centre of woollen manufacturers. Ship-building industry flourished in Maharashtra, Andhra and Bengal.

In fact at the advent of the English India was one of the main centres of world trade and industry. Peter the great of Russia was laid to exclaim, "Bear in mind that the commerce of India is the commerce of the world and...he who can exclusively command it is the dictator of Europe".<sup>9</sup>

Economy and Society During the British Period: The Transformation Phase ✓

While the historians as well as sociologists believe that the changes in Indian society started occurring only after the interference of the Britishers, R.K. Mukherjee visualizes it from the very sixteenth century onwards... such a scattered information as is available today suggests that towards the end of the sixteenth and beginning of the

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9. Quoted by Bipan Chandra, Modern India, NCERT, New Delhi, 1971, p.37.

seventeenth centuries while the feudal grandeur of the Mughals had begun to intervene directly into the village community system - the backbone of India's economy and thus undermined the basic principles of the system. At the same time the Shakti Movement probably led by traders was spreading over India. This movement, with its application to caste system, was affecting the ideological stability of the village community system...<sup>10</sup>

With the defeat of Siraj-ud-Daula, the Nawab of Bengal, British exercised their control over India and thereby starts the real history of exploitation and transformation of Indian feudal agrarian structure fo a capitalist structure. Bipan Chandra writes, "It is a historical fallacy to assume that Indians under British rule did not undergo a fundamental transformation or that it remained basically traditional. From the mid-eighteenth century and, in particular, from the beginning of the nineteenth century, India had been gradually integrated into the world of capitalism though in a subordinate or colonial position"<sup>11</sup>. Karl Marx visualizes the British interference into the Indian social structure as a kind of social revolution,

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10. R.K. Mukherjee, The Rise and Fall of the East India Company, Monthly Review Press, New York, 1974, p.89.

11. Bipan Chandra, Nationalism and Colonialism in Modern India, Orient Longman, New Delhi, 1981, p.3.

"These small stereotype forms of social organism have been to the greater part dissolved, and are disappearing, not so much through the brutal interference of the British tax gatherer and the British soldier, as the working of English steam and English free trade. Those family communities were based on domestic industry, in that peculiar combination of hand-weaving, hand-spinning and hand-tilling agriculture which gave them self-supporting power. English interference having placed the spinner in Lancashire and the weaving in Bengal, or sweeping among both Hindu spinner and weaver, dissolved these small semi-barbarian, semi-civilized communities by blowing up their economical basis and thus produced the greatest, and to speak the truth, the only 'social revolution' ever heard of in Asia".<sup>12</sup>

However, when Marx spoke of British rule as causing a 'social revolution' in India and described England as "the unconscious tool of history in bringing about that revolution" he had in mind, as his explanation make clear, a two fold process - first, the destruction of the social order and second the laying down of the material basis for a new social order.

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12. Karl Marx, op. cit., p.28.

The British rule over India was a long drawn process and brought enormous changes in Indian feudal structure. It almost completely uprooted the feudal structure of this oriental society and made it a completely capitalist one although it remained as a subservient of the world capitalist system.

It caused to the decay or even extinction of old land relation and artisan and handicraft industries and led to the emergence of new land relations and modern industries. It was, therefore, bound up with the decay of old classes associated with old industries and land system and the rise of new classes resting on new land relations and new modern industries. In place of the village commune appeared the modern peasant proprietor or the zamindar, both private owners of land. While the class of artisans and handicraftsmen disappeared with the rise of modern industry and transport in India under the British rule, new classes appeared such as the class of capitalists, the class of industrialist and transport workers, the class of agricultural labourers, the class of tenants, the class of a new type of merchants connected with trade in products of modern Indian and foreign industries.

It was during Lord Cornwallis in 1793 that through Permanent Land Settlement Act, the two types of proprietors of land - the landlord and the ryotwari - was created

superseding the traditional right of the village community over the village land. A.R. Desai observes, while the British rule created in some parts of the countryside large scale landed ownership, in other parts it created individual peasant proprietorship. The latter was known as the Ryotwari. Under the ryotwari the individual cultivator was transformed into the owners of the land he tilled.

Thus private property in land came into being in India. Land became private property, a commodity in the market which could be mortgaged, purchased or sold<sup>13</sup>.

Till the village ownership of land existed, the village was the unit of assessment. It was the village which through the headman or panchayat, paid the state or the intermediary a specific portion of the annual agricultural produce as revenue. The Britishers eliminated this and by creating individual land holding made individual law assessment and revenue payment. However, in the new system, the individual proprietors were made to pay all revenues in cash only. This led to the commercialization of agriculture, namely production for village use, was replaced by that for market. In addition to being deprived of land, the village also lost the right to the free use of pasture

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13. A.R. Desai, op. cit., p.38.

and forest land in its proximity. The new state expropriated the village of its possession and free use of this peripheral land by the neighbouring village folk. Simultaneously, the new centralised government also took the responsibility of defence and justice which was earlier carried on by the village panchayat. In the meantime the commercialization of agriculture, introduction of new means of transport and finally the influx of machine manufactured cheap goods from Britain and subsequently from other countries had already affected the artisan industries of the villages. Even the village artisan had either to seek shelter in the nearby towns or depend ultimately on the agriculture leading to overburden and further split of land. This badly affected both the peasants and artisans as they were made to live in increasing impoverishment and indebtedness.

Thus, the unity of village agriculture and industry, the basic pillar of the pre-British self-sufficient village economy was disrupted. A.R. Desai remarks, "It was because of these functions such as the village agriculture under the control of the village, its neighbouring forest zone under its own possession and administration that a vital collective life existed and thrived in the village...with the removal of land, both agricultural and forest, from the possession and collective control of the village, and its transformation



into private and state property, the old bonds of economic co-operation and common interests between the village dissolved".<sup>14</sup>

With the increasing impoverishment and resultant indebtedness of the ever increasing strata of the agriculturists, land rapidly passed into the hands of rich landlords, merchants and moneylenders. This led to the growth of a new landlord class in addition to the class of zamindars created by the British rule. Thus a process of class polarization mainly of the cultivating owners and tenants and that of the non-cultivating landlords came into being. While the members of the landless peasants diminished that of the non-cultivating rent receivers continuously grew.

Another point of Britishers' attack was the village artisan industries which was at very low level of specialization with no external competition and very limited division of labour. Hence the influx of cheap British and non-British machine made goods into India easily outlived them. The introduction of railway and other means of transportation further accelerated this process of decline. Gadgil takes a positive view of the introduction of Railways to our land at least in the later phase of rapid industrial development of the country". The more direct effects of railway

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14. Ibid., p.45.

extension were a levelling of prices, those of food grain throughout India, the growth of a large export trade in raw-agricultural produce, and in a certain measure the extension of the cultivation of crops intended for exports; a large impetus was also given to internal trade. The railways were also instrumental in helping the growth of Indian industries, especially coal and cotton. The whole problem of the coal industry, for example, was that of carriage from the pithead to the place of consumption. In this matter of industrial development, however, certain factors detailed above, prevented the railways from pushing forward the growth of industries in India to the same extent as they would ordinarily have done.<sup>15</sup> Marx also had praise for this act of the English although their intention was different. "When you have once introduced machinery into the locomotion of a country, which possess iron and coal, you are unable to withhold it from its fabrication. You cannot maintain a net of railways over an immense country without introducing all those industrial processes necessary to meet the immediate and current wants of railway locomotion, and out of which there must grow the application of machinery to these branches of industry

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15. D.R. Gadgil, The Industrial Evolution of India in Recent Times, Oxford University Press, London, 1933, pp.131-32.

not immediately connected with the railways. The railway system will therefore become in India truly the forerunner of modern industry".<sup>16</sup>

Apart from the handloom industry in the village, the carpenter's work also got affected with the introduction of machinery in rural production.

The new economic environment had, however, little effect on the village blacksmith but adversely affected the village tanners a section of whom was employed in towns tanning industries. The other village industries were also affected in one or the other way ultimately leading to decline.

The effect of the British rule on the town handicrafts is succinctly summarized by Gadgil in the following words, "The only dramatic event in this economic transition is perhaps the decline of the old handicrafts. The collapse of them was sudden and complete".<sup>17</sup> The policy of the company was established to extract from the Indian producers as much as possible, and to give them in return virtually nothing or so meagre a remuneration that they ultimately became unable to maintain even the reproductive role of economy.

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16. Karl Marx, *op. cit.*, p.14.

17. D.R. Gadgil, *op. cit.*, p.6.

In the beginning artisans were drastically affected by this policy. They were forced to work in the English owned factories and in many cases were prevented from undertaking work from anyone other than the company. Besides this, Indian merchants suffered yet another discrimination practised against them with regard to the custom duties to be paid on internal trade. The English merchants were exempted from this. Even the servants of the company were involved in this malpractice. R.K. Mukherjee presents the nature of this malpractice in the following passage: "It has been noted before that in India the servants of the company in their personal capacity indulged in private inland trade. The company connived at it, for it was an indirect source of income to the company itself....Needless to say, following the footsteps of the company, its servants were also guided by the policy of buying cheap, and as mentioned before, in the pre-conquest days, used to make gross misuse of the dastak or the free pass to which only the company was entitled in order to carry its goods duty free".<sup>18</sup>

However, the destruction of town handicrafts in particular proved a positive impact for the latter industrial development of our country as opined by A.R. Desai, "It is

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18. R.K. Mukherjee, op. cit., p.176.

true that the destruction of urban handicrafts....caused a suffocating overpressure on India's agriculture resulting in the steady impoverishment of the rural population. But while feeling sad about these agonies of the people and the ruin of old industries, we should recognize the vital historical fact that the destruction of the pre-capitalist urban handicrafts and the village artisan industry of India brought about by the forces of modern industries and trade, made way for the transformation of India into a single economic whole".<sup>19</sup>

Thus deprived of foreign markets as well as home markets in the form of states, nobility and wealthy strata of society and even after repudiated by the new wealthy classes which replaced the old nobility and wealthy urban classes of the old states, the handicraft industries declined and almost collapsed.

#### British Impact on Social Life

The British impact on India not only led to the transformation of economic structure of Indian society but also its social character. Moreover, this social and cultural transformation under the British rule proved positive for the unity and growth of nationalism among Indians. Along

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19. A.R. Desai, op. cit., p.90.

with the British rule also came a link with the West and modern ideas which were first developed in Western Europe thus made their entry into India. These modern ideas spread through many channels: political parties, the press, the pamphlets and the public platforms. Bipan Chandra, Amal Tripathi and Barun De observe, "The intellectual life of the Indian people began to undergo revolutionary changes influenced by such ideas as democracy and sovereignty of the people, rationalism and humanism. These new ideas helped Indians not only to take a critical look at their own society, economy and government, but also to understand the true nature of British imperialism in India"<sup>20</sup>.

New ideas, a new economic and political life followed by modern industries, new means of transport, growing urbanisation and increasing unemployment of women in services promoted social change. Social exclusiveness and caste rigidities were eroded. The total destruction of old land and rural relationships upset the caste influence in the countryside. Though many of the evils persisted the penetration of capitalism made social status dependent mainly on money and profit-making became the most desirable social activity.

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20. Bipan Chandra, Amal Tripathi and Barun De, Freedom Struggle, A National Book Trust Publication, New Delhi, 1972, p.26.

Although in the beginning the policies of the colonial rule encouraged social reforms, it did not remain passive. In order to meet the growing challenge of nationalism, the rulers increasingly followed the policy of divide and rule and actively encouraged communalism and casteism.

The most striking facet of this cultural transformation was that while the orthodox and socially reactionary sections of the Indian society opposed the introduction of modern culture in order to preserve their threatened social and cultural position, certain sections of the middle and upper class Indian suffered from the opposite tendency. They blindly imitated western life and culture instead of carefully assimilating their positive, humanist and scientific features. They did not realize that modern ideas and culture could be best imbibed by integrating them into Indian culture.

Above all British rule brought the entire geographical area of the country under a single administration. It also unified the country by introducing a uniform system of law and government and modern methods of communication. The destruction of local economic self-sufficiency and the growth of internal trade created conditions for the rise of a unified Indian economy. A common pattern of education and the acquisition of modern ideas by the people all over

the country gradually gave birth to an all India intelligentsia with a common approach and common ways of looking at society. This all led to the emergence of a common national outlook which bound them together.

Thus the colonial character of India while on the one hand, gives a detailed account of the ruin, destruction, liquidation and total collapse of Indian self-sufficient economy and complete stagnation thereby as far as the development of industry is concerned, on the other hand, it paved the way of certain social and cultural changes which not only widened the mental horizon of Indian masses but also led to the growth of nationalism. As a result the reactionary forces inside the country launched a constant anti-imperialist movements, despite all suppression and torture. Marx presents a very melancholy picture of this English rule. "All the civil wars, invasions, conquests, famines, strangely complex, rapid and destructions as the successive action in Hindustan may appear, did not go deeper than its surface. England has broken down the entire framework of Indian society, without any symptoms of reconstitution yet appearing. This loss of his old world, with no gains of a new one, imparts a particular kind of melancholy to the present misery of the Hindu and separate Hindustan, ruled by Britain, from all its ancient traditions



and from the whole of its past history....."<sup>21</sup>

As far as the pace of industrial development during this colonial phase is concerned, it remained stagnant except at the latter phase when the Britishers established some industries in the country. As discussed in the first chapter the English had followed the policy of laissez-faire hence whatever industries they set up were aimed to cater to the needs of their own interests rather than the people as a whole. However, in the plantation industry particularly in the indigo plantation in the tropical areas, of course some development had been made but the fruits were reaped only by the English. Whatever indigenous artisan trade, or handicrafts industries existed were sacked and brought to an end. The cheap goods firstly produced in England later in India inundated the home markets and whatever internal trade existed, thus made to meet their Waterloo. Moreover, whatever capital accumulation was in the country which could have paved the way of industrial development in the country was plundered and liquidated by English/<sup>thus</sup> furthered the industrial revolution in their country. Biswanath Ghosh remarks, "Because of the acceptance of the policy of laissez-faire by the government of India, Indian

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21. K. Marx, 'op. cit., p.24.

industries remained backward during the British period. The relative backwardness of industrial development in India may be judged from the fact that in 1948-49 factory establishments accounted for only about 6.6 per cent of the total national income and that of the total labour force engaged in these was only about 2.4 millions in 1.8 per cent of the working population".<sup>22</sup>

#### Development of Modern Industries

It is only during the second half of the nineteenth century that the foundation of modern industry was laid in India. A.R. Desai considers it with the introduction of the Railways. "The establishment of railways in India, during the middle of the nineteenth century, enacted a condition for the growth of modern industries in India although its construction was primarily undertaken to meet the raw material and market requirements of the British". However, the history of organised industry in India may be traced back to 1854 when the real beginning of cotton mill industry was made in Bombay with pre-dominantly Indian capital and enterprise. The foundation of jute industry was laid near Calcutta in 1855, mostly with foreign capital

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22. Biswanath Ghosh, The Changing Profile of India's Industrial Economy, The World Press Private Ltd., Calcutta, 1974, p.33.

and enterprise. Coal-mining also progressed about this time. These were the only industries which had developed before the First World War. After the Report of Industrial Commission (1918) Indian industries were granted discriminating protection in 1922. This gave impetus to the rapid development of Indian industries and new industries like steel, sugar, cement, glass, industrial chemicals, soap, paper, matches, vanaspati and some branches of engineering came into being. The Second World War created further conditions for the maximum utilization of existing capacity in Indian industries. Hence, a good number of industries were set up during the years between the two wars. The following statistics reveal the progress made in some principal industries during the period.

Table 1

Items	Weight	1922-23	1938-39
Cement	tons	193,000	1,110,000
Coal	ml tons	19	2,803
Cotton piece goods	ml yards	1713.5	4269.3
Jute	ml yards	1187.5	1.774
Matches	Gross boxes (1934-35)	16,500,000	21,100,000
Paper	tons	23,576	59,198
Pig Iron	tons	455,000	1,575,500

(contd...63..)

(contd...)			
Sugar	tons	84,000	1,040,048
Sulphuric Acid	CWT	529,637	607,000
Steel Ingot	tons	131,000	977,400

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Refer to Wadia and Merchant, Our Economic Problem, 1943, pp.285-86.

L.C. Jain, however, does not consider the wartime industrial progress a real progress of the indigenous industries. He writes, "...such industrial progress as has taken place in the country due to war is somewhat real and permanent". He writes further, "On the whole, there is substantial evidence for the view that Indian industry during the war is falling behind its competitors in its degree of both mechanization and rationalization..... The post-war danger in India is industrial collapse, while the post war need is industrial expansion".<sup>23</sup>

In the immediate post-war years there was considerable investment activity leading to the establishment of industries like rayon, automobiles, ball and roller bearings, carding, engines, ringframes and locomotives but the overall picture was not as satisfactory as during the period between the two wars.

India won its independence in 1947 and at that time

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23. L.C. Jain, "Industrial Economy during the War", Civil and Military Gazette, Lahore, 1944, p.128.

its relative backwardness in industrial development may be judged from the fact that in 1948-49 factory establishments accounted only for 66 per cent of total national income. The total labour force engaged in different sectors of economy in 1950-51, is given in the following table.

Table 2

Distribution of Labour in 1950-51	(In mil- lions)	Percent
Agriculture	103.6	72.3
Mines	0.8	0.6
Industrial establishments	3.0	2.1
Small enterprises	11.5	8.0
Industry (total)	15.7	10.7
Railway and Postal Services	1.4	1.0
Organised bank, Insurance companies	0.1	0.1
Other trades and transport	9.5	6.0
Total of trade & transports	11.0	7.7
Profession	6.4	4.5
Administration	3.9	2.7
Domestic services	2.9	2.0
Total services	31.3	9.3
	143.2	100.0

Source: Charles Bettelheim, India Independent,  
Khosla & Co., 1977.

The major emphasis in industrial development at that time in India had been on consumer goods industries, hence the development of basic and capital goods industries had

lagged behind. In the capital goods industries and industries manufacturing intermediate products the available capacity in the country was in most cases inadequate. A high rate of industrial advance was not possible without increasing substantially the production of iron and steel and of aluminium, ferro-alloy, caustic soda and soda ash, fertilizer and petroleum products. The objective of industrial planning was to make good these deficiencies as much as possible and to initiate development which would become the basis for the cumulative experiences of this sector. The Planning Commission was set up in March 1950 which prepared a draft outline of a plan of development for the period of five years in July 1951.

1st Plan and Progress: A total investment of Rs.707 crores was planned for industry, out of which, investment in the public sector was to be of the order of Rs.94 crores. The total capital investment necessary for industrial expansion in the private sector was estimated at Rs.233 crores. The major items in this sector were, iron and steel, aluminium, fertilizers, heavy chemicals and power alcohol and additional electric power. The expenditure on industry in the public sector was meant for the completion of various projects in hands such as the Chittaranjan Locomotive factory, the machine tools factory, the Coach factory, the

Sindri Fertilizers Plant expansion and a new steel plant.

Taking the period of first plan as a whole, the total fixed plan investment both public and private, in manufacturing industries amounted to the Rs.293 crores of which private investment amounted to Rs.233 crores. The production of capital goods increased by about 70 per cent. The production of intermediate goods, mainly industrial raw-materials, increased by 34 per cent. Similarly production of consumer goods increased by 34 per cent. The overall increase in industrial production amounted to 38 per cent.

In the private sector, investment targets in the plan were fulfilled and through the more intensive utilization of existing capacity, production was stepped up along the lines broadly envisaged in the plan. Production of mill-made cloth increased from 3718 million yards in 1950-51 to 5102 million yards in 1955-56. In case of sugar, sewing machines, paper and board and bicycles, production reached anticipated levels; cement production rose from 2.7 million tons to 3.9 million tons during plan. In the construction of industrial plant and machinery in the production of capital goods, valuable experience was obtained. Several new products were manufactured in the country for the first time and a number of new industries like ship-building, petroleum refinery, manufacturers of aircraft, railway

wagons, pencillin, ammonia, chloride and D.D.T. were established. The following statement of percentage increase achieved in a number of industries indicates the range over which advances were made during the First Five Year Plan.

Table 1

Items	Percentage Increase	
	1950-51	1955-56
<b>A. <u>Capital Goods:</u></b>		
Diesel Engines		87
Machine Tools		133
Wagons		100
Complete rings, spinning frames		230
Grinding wheels		134
Automobiles		53
Railway Locomotives		660
<b>B. <u>Intermediate Goods:</u></b>		
Cotton yarn		39
Jute manufacture		28
Plywood		109
Sulphuric Acid		65
Caustic Soda		211
Soda ash		80
Pig iron		14
Finished steel		30
Aluminium		99
Cement		71
<b>C. <u>Consumer Goods:</u></b>		
Cotton cloth		37
Rubber footwear		95
Soap		37
Vanaspati		80
Bicycles		408
Paper		64
Sugar		60

Source: N.S. Gupta & Amarjeet Singh, Industrial Economy of India, 1978, Light and Life Publishing Delhi.



### Second Plan:

The Second Five Year Plan programme of industrialization was based on the Industrial Policy Resolution of 1956 which envisaged a big expansion of the public sector. Total outlay in the public sector was proposed to be Rs.89 crores, i.e. 18.5 per cent of the total plan expenditure and Rs.720 crores in the private sector.

The most impressive achievement under the second plan was the setting up of the three steel plants of one million tonnes capacity each in the public sector in Bhilai, Rourkela and Durgapur and the completion of the modernization and expansion programmes of Tata Iron and Steel Company (TISCO) and Indian Iron and Steel Company in private sector. The investments in the steel programmes alone, which amounted to about Rs.750 crores during 1956-61 was about 2.5 times the combined new investment made by the public and private sector on new industrial capacity under the First Plan.

Due to shortage of foreign exchange and the larger time involved in making arrangements for the import of capital goods short fall in capacity occurred chiefly in fertilizer heavy electrical equipment, heavy machinery, cement, newsprint, chemical pulp, aluminium and certain items of industrial machinery like paper and cement.

The index of industrial production (1950-51=100) rose to 194 in 1960-61 as compared to 134 at the end of the First Plan. In second plan some success had also been made in the dispersal of industry. New centres of industry had been brought into existence in areas hitherto unexplored, e.g. Bhilai, Rourkela, Durgapur, Navali, Bhopal, Gauhati and Barauni. The claims of underdeveloped regions of the country had generally been kept in view to the extent in licensing of private sector projects.

### Third Plan:

The third plan was governed by the ever-rising need to lay the foundation for further rapid industrialization over the next 15 years. The development programme had an outlay of 2193 crores. The foreign exchange component was placed at about 1338 crores. Except for 1965-66 which was characterized by a severe shortage of raw-materials owing to import restrictions, the industrial output increased steadily at the rate of 7 to 8 per cent whereas the actual target was of average 11 per cent. Moreover the capacity and production targets visualized for several industries have been fully or nearly realized. Among these industries were aluminium, petroleum products, automobiles, ball and roller-bearings, electric transformers, machine tools, textile machinery, power driven pumps, diesel engines,

jute, textiles and sugar.

Production from public sector projects in the field of heavy engineering industries and coal mining machinery projects increased substantially. Three units of Hindustan Machine Tools were commissioned at Pinzore, Kalamassery and Hyderabad in 1963, 1964 and 1965 respectively. Improvement in production was achieved by other public sector units such as Hindustan teleprinters, Hindustan Cables and Indian Telephone Industries.

The private sector units recorded substantial progress particularly in the fields of aluminium, machine tools, earth moving equipment, tractors, cranes, steel castings and forgings, ball and roller bearing, heavy mechanical handling equipment, plant and machinery for cement, sugar, paper and paper pulp, transformers, motors and switchgears and a number of other items.

#### Annual Plans

Industrial progress had been marked uneven during the eight years which comprise the third plan and the subsequent Annual Plan. In the first four years, conditions were relatively favourable for industrial investment and growth and the progress achieved was significant. Thereafter for nearly three years the economy was subject to considerable stress and strain and the growth rate in

industrial production declined first slowly and then steeply till it reached virtual stagnation. This continued till the last year of 1968-69 and thereafter it showed distinct signs of recovery and hope for the future. Good weather conditions all over the country coupled with a marked improvement in wheat output under the high yielding varieties programme raised food grains production to a new peak. Substantial increase was also registered in the production of commercial crops. Industries producing some of the consumer durables also showed signs of recovery but the capital goods industry continued to be depressed. The growth of industrial production which had declined from the average of 8.2 per cent during the third plan period to a mere 0.2 per cent in 1966-67 improved slightly to 0.5 per cent in 1967-68. The index of industrial production for 1967-68 was 153.6 (1960=100) as against 152.8 for 1966-67. The following table shows the trend in the growth of industrial production since 1961-62.

Table 4: Index of Industrial Production 1960=100

Year	Index of Production	Percentage of increase over the previous year
1961-62	111.2	8.2
1962-63	121.9	9.6
1963-64	133.1	9.2
1964-65	144.8	8.8

(contd...72..)

1965-66	152.5	5.3
1966-67	152.6	0.2
1967-68	153.6	0.5

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Source: N.S. Gupta and Amarjit Singh, op. cit.

#### The Fourth Plan:

The fourth plan which commenced in 1970 instead of 1966 had a total outlay of Rs.24,398 crores of which the public sector shared Rs.14,398 crores and the private sector marked 10,000 crores. The development programmes were generated mainly to correct imbalances in the industrial structure and bring about conditions within which the maximum utilization of capacity built up was utilized. The growth rate was envisaged from 8 to 10 per cent during the plans.

The performance, however, fell short of the expectation and the achieved rate of growth was only 3.9 per cent per annum. While shortfalls occurred in relation to plan targets in most of the industries, progress was particularly very slow in consumer goods industries such as vanaspati, cotton cloth, sugar and soap. The output of capital goods and of intermediate goods such as coal, electricity, fertilizers, cement and aluminium generally exhibited a rising trend. Nevertheless in a number of industries inadequate capacity creation, as well as the shortage of inputs such

as fertilizers coal and steel affected the growth of production. Despite considerable investments the output of finished steel in 1973-74 was in fact lower than in 1968-69, and the shortage of steel seem to have affected not only production but also exports of engineering products.

The investment postulates in the industrial sector had also not proceeded in accordance with the plan assumptions. There were shortfalls in investments both in public and private sectors. As a consequence, a number of capacity targets could not be achieved.

Another important limitation for the slow rise in industrial production was under utilization of capacity in many industries. Some important factors which contributed to this phenomenon of unutilized capacity in Indian industries were: scarcity of agricultural raw-materials, electricity and steel. Progress made by certain important industries during the fourth plan period is given in the following table. (see table 5.)

#### Fifth Plan

The fifth plan laid emphasis on growth of core sector industries and increase in the production of export oriented goods and articles of mass consumption. The average rate of industrial growth was estimated at 7 per cent per annum

Table 5: Selected Industrial Physical Targets and Achieved Production During

	Base Year					Targetted production	
	Actual Production 1968-69	1969-70	1970-71	1971-72	1972-73	by end of IV Plan Year 1973-74	19 <sup>th</sup>
1. Steel ingots (M. tons)	6.5	6.4	6.1	6.4	6.1(a)	7.2	10.8
2. Cement (M. tons)	12.2	13.8	14.4	15.2	15.6	16.0	18.8
3. Power (M. Kwt)	14.29	15.5	16.5	17.7	18.0	20.0	23.0
4. Fertilizers (.000 tons) (Nitrogenous)	541.0	715.6	823.0	849.0	1200 to 1300	1501 to 1641	2500.0
5. Fertilizer Phosphatic (.000 tons)	210.0	221.5	228.0	290.0	377 to 409	450 to 490	900.0
6. Iron ore (M. tons)	28.1	28.0	28.0	34.0	34.0	40.1	51.4
7. Aluminium (.000 ton)	125.3	135.0	168.7	178.0	180.0	200.0	220.0
8. Newsprint (.000 ton)	31.0	38.9	40.0	41.0	41.0	41.0	150.0
9. Cotton cloth (M. metres)	4297	4192	4107	4042	4265	4500	5100.0
10. Machine tool (R. ml.)	247	272.0	370.0	500.0	550.0	600.0	650.0
11. Paper & Paper board (.000 tons)	6466	724.0	756.0	793.0	716.0	850.0	850.0

Source: N.S. Gupta and Amarjeet Singh, op. cit.

in the revised plan. The sharp increase in the prices of food-grains, fertilizers and oils seriously upset the assumptions on which the fifth plan had been framed. These new developments also lent urgency to a time bound programme of action in order to achieve a measure of self-reliance in food and energy.

The fifth five year plan (1974-79) had a total outlays of Rs.53,411 crores but due to the emergence of an unprecedented inflationary situation which was the result of steep increase in oil prices in November 1973, the plan outlays was modified and a total of 69,351 crores was fixed up in the revised plan of which public sector share amounted to 42,303 crore and that of private sector to 27,048 crores.

As against an average rate of growth of industrial production of 7 per cent envisaged during the fifth plan, the actual rate of growth achieved during the first four years of the fifth plan was 2.6 per cent for 1974-75, 6 per cent for 1975-76, 9.5 per cent for 1976-77 and 3.9 per cent for 1977-78.

The fifth five year plan was terminated one year ahead and it was decided to formulate a new five year plan from 1978-79 itself.

#### Sixth Plan:

After terminating the fifth plan in March 1978, the



then Janata Government at the centre formulated the draft sixth plan and toyed with the idea of rolling plans which involved a basic structural change in the planning process. The total outlays in the draft plan was Rs.116,240 crores with public sector's share of 70,000 crores. With the coming of the Congress (I) government at the centre in 1980, the planning commission was reconstituted and a final sixth five year plan was approved which had total outlay of 172,210 crores out of which public sector accounts for 97,500 crores. It aims at an annual growth rate of 8 per cent of industrial production during the five year period.

The mid-term appraisal of the sixth five year plan tabled in Parliament on 19th August 1983 does show improvements in some of the sectors of Indian economy but the overall expectation as per the plan target is still far from being materialised. The Times of India reports the fall of 2 per cent in growth rate in G.N.P. "Nothing that the remarkable recovery in the economy was achieved in 1980-81 in all the major infrastructural sectors which had stagnated in the years immediately preceding the sixth plan, the mid-term appraisal points to a disturbing fact of considerable lowering of growth rate in 1982-83. As against a growth rate in G.N.P. of 7.9 per cent recorded in 1980-81 in 1982-83 it was a meagre two per cent. The industrial

growth rate which was 8.5 per cent in 1980-81 and 8.6 per cent in 1981-82, fell to about 3.5 per cent in 1982-83. With regard to production target it reported shortfalls in the case of steel ingots and saleable steel, non-ferrous metals (aluminium, blister copper and zinc), caustic soda, soda ash and sulphuric acid, PVC, mill sector cloth, power cables and electronic transformers as well as in the electronic sectors generally. Production of synthetic rubber, caprolactam, cement, hydro and thermal turbines and agricultural tractors is likely to be equal to or near about the plan targets. The production of nitrogenous and phosphatic fertilizers is likely to be slightly short of target while production of iron ore and concentration is likely to fall appreciably short of target.

The production of crude oil and petroleum products will be substantially in excess of the original plan target. The additional electricity generating capacity installed over the plan period will be of the order of 14,000-14,500 MW. This is substantially lower than the target of 19566 MW. Coal production is expected to be 144 million tonnes, against the projected 165 million tonnes.<sup>24</sup>

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24. The Times of India, 19 August, 1983, Delhi.

Role of Capital - indigenous and foreign

The entire development of Indian industrialization right from the pre-British period till today show a two ways trend, e.g. the economic development under the indigenous capital and that of the foreign capital. The entire history of economic development clearly shows that the role of indigenous capital in the growth of economy during pre-British period and the post-independence period either in terms of trade or artisan industries has been remarkably appreciative. Before the Britishers came, India had already a sound self-sufficient economy as well as a foreign trade. Moreover, in the foreign trade the Indian artisan skills had a land of monopoly in some of the items as virtually there was no rival in the entire world. Industrial Commission truly remarked, "At a time when the west of Europe.....  
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 ...at any rate not inferior to that of the more advanced European nations". (referred in chap. 2, No.1, p.1.) It was because of this indigenous capital, the economy of India had developed to that much extent that India was known as 'granery of the east' and hence attracted a number of plunderers from time to time. The Britishers proved the strongest among them as they not only ruled for about 200 years but also drained its wealth to the extent possible

and thereby changed her entire economic character. Although the post-independence rapid development of Indian industries is an off-shoot of the long accumulated indigenous capital, the country had to of course depend on the foreign assistance in the beginning, its base was cemented with the foreign capital during the colonial period. However, this foreign capital was in fact the Indian capital which had been drained to outside India during the reign of the company and which had helped in the bringing about the Industrial Revolution firstly in England and later on in the entire Europe. Thus the role of the foreign capital in giving a base to our economy during the colonial period is a historical fact but the role of indigenous capital is highly noticeable in the rapid industrialization of the post-independence period with entirely indigenous capital and enterprises under the five year plan programmes. Here Bipan Chandra's view is remarkably appreciable who denounces the Gunder Frank's model that Indian capitalism was the result of an international integrated economic system. "The proposition that whatever industrial development occurred in India in the past occurred as a result of the integration of the Indian economy with the world capitalist system through trade and capital investment is disapproved by the very interesting historical phenomenon that the major spurts in Indian

industrial development took place previously during those period when India's colonial economic links with the world capitalist economy were temporarily weakened or disrupted. On the other hand, the strengthening of these links led to backwardness and stagnation. In India's case foreign trade and the inflow of foreign capital were reduced or interrupted thrice during the 20th century, e.g. during the two world wars and the Great Depression of 1929-34. Yet on each occasion far from production being checked, there occurred its further development; in fact the roots of industrial capitalist class reached deeper. On the other hand, as the international economy pressed back to reforge the links the gains of the Indian capitalist class were threatened and it has turned to support the nationalist movement which was at the time, pledged to break these links". He firmly believes that Indian capitalist development was neither a offshoot of world capitalist system nor a consequence of the British colonial intervention but it occurred on its own, "The study of the development of the Industrial capitalist classes makes it clear that such a development did not occur as a result of the forces of economic modernisation represented by foreign capital investment and international trade which, when capitalism is seen as a world system, merely produced economic development in Britain and in the crown colonies of

Australia and Canada and underdevelopment in India. Rather such development occurred only when the forces of colonial modernization were weakened. The development of Indian capitalism was of course stunted and limited. This was because it occurred within the parameters of overall colonial relations".<sup>25</sup>

Charles Bettelheim also argues partially with this contention, "throughout the nineteenth century a mercantile, moneylending, bourgeoisie was taking shape in Indian society, its roots already formed in numerous existing trade centres of varying prosperity. The growth of this class increased under British rule through the development of the means of communications, the ruins of handicrafts and the taxation imposed on the peasant class, which caused a commercialization of a good portion of the agricultural output. The misery of the peasant class also favoured the expansion of moneylending.....Indian commercial and moneylending capital was very quickly counteracted and soon became powerful, which helped its partial transformation into industrial capital".<sup>26</sup>

Bipan Chandra's approach of looking at Indian capitalist

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25. Bipan Chandra, op. cit., pp.7 & 10.

26. Charles Bettelheim, India's Independent, Khosla & Co., 1977, p.48.

development from colonial model and not from modernization model might give enough emphasis on the role of indigenous capital and circumstances but it is also a historically proved fact that India would not have developed so rapidly as it is today if the Britishers would not have ventured for its industrialization through setting up of big and small industries and the introduction of modern means of communication and transportation such as telegraphs, postal services, railways, steam engines, etc. The credit for the industrial development of our country during the years between 1857 and independence exclusively goes to the English and the foreign capital which at least provided base for our later development.

Thus to me, it appears that the role of indigenous as well as the foreign capital has equally been significant for the development of industrialization in our country although the part played by the former is of greater importance during the pre-British and the post-independence India particularly under three decades of plannings.

#### Models of Industrialization

Andre Gunder Frank's model finds development of capitalism and under development of the third world countries as two distinct processes which are dependent upon each other and the development of capitalism depends in the same

ratio on the underdevelopment of the third world countries as the underdevelopment of the third world depends on the development of the capitalism. "...development of underdevelopment are also related, both through the common historical process that they have shared during the past several countries and through the mutual that is, reciprocal influence that they have had, still have and will continue to have on each other throughout history".<sup>27</sup> Frank's thesis on development and underdevelopment which he presents through his model of the relationship of centre (advanced countries) and periphery (third world), does not fit very much to our Indian development process in the light of above mentioned arguments. The Indian development analyzed through colonial model and not through modernization model (Bipan Chandra) makes it very clear that it had nothing to do with the international integrated economy and had developed on its own. However, in the light of the fact how Indian wealth and raw-materials were drained outside helped bringing about Industrial Revolution and its products being flooded in the Indian markets thereby helping in the development of advanced countries (capitalism), show some relevance of Gunder's model to Indian development.

*W* Wilbert Moore's model of industrialization presents it as a process of social change which is facilitated by the

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27. A.G. Frank, On Capitalist Underdevelopment, Oxford University Press, India, 1975, p.1.



existence of certain social and economic conditions which in turn produce certain consequences. However, Moore stresses more on the social conditions for the growth of industrialization than the economic factors although he simultaneously recognizes the importance of certain economic factors which make the process of industrialization take place very rapidly. "These (social conditions) then are the major social pre-requisites for industrializing an economy. To these we must add the more strictly economic conditions relating to capital formation, investment ratios in the various sectors of the economy, and the character of foreign assistances and foreign trade. In combination they do not guarantee successful modernization but absence of one or another condition will impede or prevent success."<sup>28</sup> Among various social prerequisites required for industrialization Moore meant overall changes in the tradition of norms, values and customs, institutions like marriage and economic exchange, an hierarchically governed bureaucracy, fiscal organisation of state such as banker and tax collector as well as appropriate means of transportation and communications.

The process of industrialization started in India was

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28. W. Moore, Social Change, Prentice Hall of India Pvt. Ltd., 1976, p.102.

not as fast it occurred in other western countries. The resultant factor was India's socio-economic structure which proved impediment to this process. However, although with the passing of time, the agrarian feudal structure of India was converted into capitalist mode of production, its cultural unity and traditional norms remained tight, hence not only the process of industrialization remained slow but its ultimate consequences 'expected social change' also relatively remained very slow moving. Although in the later phase, a section of Indian society, e.g. middle and upper strata got encouraged to follow the western way of life and developed a scientific outlook that was more the result of the cultural awakening of the nineteenth century than the consequence of the industrialization.

Gunnar Myrdal while looking into the poverty of nations of the third world assumes that one of the major reasons for their extreme poverty is that they have not still acquired industrialization. To Myrdal the reason for this lagging behind in the industrialization process can be seen in their rigid and traditional social structure. His contention is that as long as this socio-cultural structure will continue, the process of industrialization can not take place, hence the vital need is to make a drastic change in this mode of production and outlook. Charles Bettelheim also holds similar view when he analyzes the

developmental process in independent India. "Everything, suggests thus that the fault lies in the country's social and economic structures (the maintenance of "semi-feudal" relation over large parts of the countryside, the power of commercial and moneylending capital in vast sectors, the strength of Indian monopoly capital and foreign capital in industry and banking, etc.). The result is that the resources are not used to the full, investments are badly distributed, the majority of completely or partial landless peasants with small parcels of land cannot find employment all the year round. These structures reduce production and prevent the domestic market from expanding rapidly and healthily. They are behind the weaknesses and the inefficiencies of recent industrial development",<sup>29</sup>

Hoore's approach is not at all applicable to India's industrial development for whatever industrialization took place in India was the result of the laissez-faire policy of the English and not at all the consequence of socio-economic transformation of Indian society. With the change in the feudal structures of India, industrialization did not occur; it occurred on Indian land only when after industrial revolution, the industrial bourgeoisie of England came into conflict with the commercial bourgeoisie

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29. Charles Bettelheim, op. cit., p. 364.

operating in India and finally rivalled them out in their constant struggle from the Indian market (R.K. Mukherjee) by their machine made cheap goods firstly produced in England and thereby in India.

The five year plan model which has been adopted from Russia has really paid a lot in the rapid development of the industrialization process and economic prosperity of our country. The five year plans firstly adopted in Russia showed tremendous achievement as most of the planned targets were achieved before the expiry of plan period contributing a miraculous economic advancement of Russia. This left an unforgettable imprint on the minds of the future planners of our country and they finally resolved to adopt it. Today, under the three decades of our planned economy, we have reached to such a peak of development which we could have simply dreamt of should we had adopted some other measures. It is because of these planning models adopted during the post independence day that India today stands before the world as the most leading country of the development world. Above all, it is the result of these planned economic venture that we have increased our industrial output manifold to become the tenth biggest producer of industrial goods.

## CHAPTER III

### A COMPARATIVE ANALYSIS OF INDUSTRIALIZATION IN VARIOUS STATES OF INDIA

Sound economic policies are more essential to economic development than mere expenditure of money by the government.<sup>1</sup> A developmental plan is envisaged on the basis of country's requirements. A planned economy presupposes the rational distribution of industries throughout the country for speedier development and accelerated rate of economic growth. Distribution of industries also involves strategic factor - a parallel factor to meet the requirements of decentralised development on social and economic grounds. The Planning Commission in India realized the importance of regional balance in terms of development as early as 1951 and a Research Programme Committee consisting of leading economists and other social scientists was set up in July 1953. The Committee decided four categories of subjects on which research was to be concentrated - (i) Savings, investment, employment and small scale industries; (ii) problems relating to regional development with special reference to problems of rapid urbanization; (iii) land reforms, cooperation and

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1. W. Arthur Lewis, Developmental Planning in Practice, Leading Issues in Developmental Economies, New York, 1964, p.523.

farm management; and (iv) social welfare problems and public administration.<sup>2</sup>

Industrial situation as obtains in the present day India is impressive and the country ranks tenth among the top industrialized countries of the world. But at the same time industrial development in the country marks a varied scene of regional imbalance. This is also true of the other sectors of our economy.

India is not alone picture of regional imbalances or uneven development. This is a common phenomenon in the whole world today. "Most of the countries of the world are faced with the problem of regional imbalances and regional inequalities. Even the most advanced nation of the world, viz. the USA, has not been able to solve this problem and there are glaring regional disparities in the levels of development between northern and southern states".<sup>3</sup> The problem in the developing world, however, has assumed such a magnitude that their very political and economic stability is threatened.

#### Two Ways of Development

How is it that some regions of a country lag far behind

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2. Planning Commission, Second Five Year Plan, Govt. of India, p.246.
  3. Mahesh Chand & V.K. Furi, Regional Planning in India, Allied Publishing Pvt. Ltd., India, 1983, p.165.

others in economic development? The processes are to some extent natural and to some extent historical. Some regions of a country are endowed with more natural resources and once the spiral of development starts, they attract more industries especially industries where raw material considerations play an important role in deciding the location. This is known as natural process of development. However, it has been observed that in many cases economic activity gets started at some particular place in the economy (because of political social or other considerations) and then economic and industrial activity tends to concentrate around that place. In many countries such historical forces have proved to be more important than the natural ones and have had a decisive impact on all future economic growth. In India, the role of historical factors can be rightly observed in the development of the port towns (this will be shown at the end of this chapter) of Bombay, Calcutta and Madras which further guided the development of Maharashtra, West Bengal and Tamil Nadu which have maintained their highly industrialized status even today. On the other hand, the areas having natural advantages in the form of mineral resources such as Bihar, Orissa and Madhya Pradesh have lagged far behind. If Indian scene of development would have followed the natural process, the picture would have certainly been the reverse to the above.

The phenomenon of regional imbalances or uneven development is a long term phenomenon. In whatever way, natural or historical, development may get started in some particular regions, it tends to concentrate in and around these regions. There is a constant stream of inflow of labour, educated people, and entrepreneurs to these regions from the other regions of the economy. Labour migrates to these regions for better opportunities and more wages and since it is generally the dynamic, healthy and young that migrate, the age-structure of the other regions gets lopsided in that there is an excessive burden of children and old people on land. Because of increasing investment opportunities and expectation of higher profits, capital also tends to move to the rich regions. This outflow of capital generally accompanied by capital markets in the backward region further depresses economic activity in the backward regions. The banking system generally interested in assured income and low risks also gives preference to the developed regions in granting loans and advances and even the deposits of the underdeveloped regions are transferred to the developed regions as advances. Thus the poor regions are continually denuded of their resources. Thus, while the rich regions have a tendency to grow richer, the poor regions are compelled to remain backward.



These processes are further nurtured by the central government policies which in order to maximise the rate of national development, concentrated on those regions which are already well developed because it is easier to develop these. It is also because the government feels that once high level of development achieves in these regions, a transfer of its benefits in form of developmental grants to backward regions will be carried out.

It is in the light of these perspectives that we have to see the uneven development of different regions particularly their industrial developments and thereby determine the place of Bihar in that.

#### Disparities in Industrial Growth - An Analysis

An existence of disparity or unevenness in industrial development is a crude fact and despite numerous measures taken by the government in different plans, exists even today keeping in tune with the popular notion that 'planning has made the rich richer and poor poorer, now we have developed states becoming more developed and underdeveloped states remaining underdeveloped'.<sup>4</sup> Let us examine the level of industrial disparity today in the light of the available data. For the purpose of determining the nature of regional

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4. C.V.H. Rao, "Regional Imbalances in Development", The Economic Times, 19 May, 1970, New Delhi.

imbalances in industrial sector in particular, the following criterions can be considered - dispersal of industries, per capita industrial consumption of electricity, per capita income, budgetary position and developmental expenditure, percentage of financial assistance sanctioned to states by financial institutions, distribution of banking facilities, composite index, and levels of industrial development.

The criterions, however, have been chosen strictly in accordance with the available data, hence may not be at all sufficient, yet can show some trends of the industrial development.

"The level of disparity or unevenness in India is more prominent in the field of dispersal of industries in the states of India. On the one hand, there is disproportionate growth of a few large scale industries in a few selected areas, and on the other, there exists a virtual absence of such enterprises in the great part of India".<sup>5</sup> There pervades an unequitable growth of industrial areas or centres with large scale industries and the absolute negligence in other areas as evidenced from the data given in table 1.

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5. S.C. Michhal, The Industrial Economy of India, Chaitanya Publishing House, Allahabad, 1974, p.226.

**Table 1: Concentration of Large Scale Industries  
in Few Large Cities**

Sl. No.	Industries	Main Metropolitan Cities around which development took place
1.	Textile Machinery	Ahmedabad, Baroda, Bombay and Calcutta
2.	Machine Tools	Bangalore, Pune
3.	Tele-communications & electronics	Bangalore and Hyderabad
4.	Railway Coaches	Madras and Bangalore
5.	Heavy Electrical & Heavy Engineerings	Bhopal, Ranchi
6.	Automobiles, Components, etc.	Bombay, Calcutta, Madras, Pune
7.	Precision Instruments	Bombay, Calcutta
8.	Electrical Goods	Bombay, Calcutta, Delhi, Madras and Pune
9.	Small Machineries	Bombay, Delhi, Madras and Calcutta
10.	Locomotives - Steel & Electricals	Chittaranjan and Jamshedpur
11.	Defence Equipments	Kanpur, Pune
12.	Bicycles, Motor-cycles and Scooters	Madras, Bombay, Delhi and Mysore
13.	Diesel Engine	Pune
14.	Pharmaceuticals	Baroda, Bombay, Calcutta
15.	Basic industrial Chemicals, Fertilizers and Anti-biotics	Alwaye, Mangal, Kota, Rourkela, Trombay, Delhi, Pune and Ahmedabad.

Source: The Economic Times, New Delhi, 3 Sept. 1971.

Though data furnished in the above table is over a decade old and since then there has been a substantial industrial expansion. But unfortunately the industrial

growth during the intervening period has been confined to the areas already industrialized. Thus the table holds good for the present study as well.

Bulk of the industries (large scale) are concentrated in Bombay and Calcutta mainly because of the unbridled freedom enjoyed by the industrialists in promoting manufacturing enterprises and selecting their locations. This reflects also the historical factors which helped grow these cities at the early phase of industrialization. Whatever may be the factors, this shows disproportionate concentration of industries in a few cities. This trend had continued on and even today the tendency of dispersal is hardly noticeable as seen from the table 2.

The table 2 reveals that even after 25 years of planning there is no remarkable dispersal noticeable. In fact, the two states of Maharashtra and West Bengal alone account for more than one third of total factory employment, output, and value added by manufacture. If the four industrially advanced states of Maharashtra, West Bengal, Gujarat and Tamil Nadu, are considered together the true picture of regional concentration of industries is explicitly brought into prominence. The mere fact that approximately half of total industries and approximately 60 per cent of total value added and total output is found in these four states

Table 2: Principal data of factory sector, State-wise: 1974-75

State	Factory		Fixed Capital		Employment		Output		Value added	
	No.	% to total	Rs. Crore	% to total	No.	% to total	Rs. Crore	% to total	Rs. crore	% to total
1. Andhra Pradesh	5,542	8.6	661	5.5	439,943	7.3	1,453	5.6	262	4.3
2. Assam	1,945	3.0	129	1.1	106,811	1.8	398	1.5	109	1.8
3. Bihar	2,528	3.9	791	6.6	301,744	5.0	1,513	5.8	380	6.2
4. Gujrat	6,860	10.7	1,036	8.7	563,860	9.3	2,838	10.9	609	10.0
5. Haryana	1,243	1.9	355	3.1	120,259	2.0	658	2.1	132	2.2
6. Himachal Pradesh	151	0.2	35	0.3	22,131	0.4	33	0.1	9	0.1
7. J & K	230	0.4	12	0.1	16,243	0.3	32	0.1	8	0.1
8. Karnataka	3,978	6.2	526	4.4	292,817	4.8	1,034	4.0	275	4.5
9. Kerala	2,583	4.0	451	3.8	243,487	4.0	797	3.1	169	2.8
10. Madhya Pradesh	2,562	4.0	682	5.7	254,921	4.2	1,124	4.3	287	4.7
11. Maharashtra	10,835	16.9	1,943	16.3	1165,931	19.3	6,569	25.2	1,592	26.2
12. Orissa	914	1.4	419	3.5	98,440	1.6	391	1.5	105	1.7
13. Punjab	3,707	5.8	532	4.5	164,093	2.7	842	3.2	136	2.2
14. Rajasthan	1,399	2.2	423	3.5	122,215	2.0	562	2.2	117	1.9
15. Tamil Nadu	6,957	10.8	1,012	8.5	603,090	10.0	2,526	9.9	577	9.5
16. U.P.	4,819	7.5	1,475	12.4	507,245	8.4	1,778	6.8	395	6.5
17. W. Bengal	5,854	9.1	1,036	8.7	877,320	14.5	2,880	11.0	786	12.9
18. Delhi	1,648	2.6	198	1.7	104,642	1.7	443	1.7	85	1.4
Total										
All India	64,215	-	11,922	-	6052,804	-	26,099	-	6,081	-

Source: The Economic Times, 6 April 1977, p.6. Compiled from Annual Survey of Industries, 1974-75.

alone while the remaining 17 states and union territories contribute only 40 per cent of total output and total value added, is a proof of substantial regional concentration of industries in the four industrially advanced states of Maharashtra, West Bengal, Tamil Nadu and Gujarat.

There also exists a broad disparity between different states in per capita industrial consumption of electricity.

(See table 3.)

Table 3: Per Capita Industrial Consumption of Electricity in States

		(in KWh)	
State		1969-70	1976-77
1.	Andhra Pradesh	27.3	40.0
2.	Assam	10.8	16.6
3.	Bihar	39.4	46.3
4.	Gujarat	28.6	119.8
5.	Haryana	46.3	78.2
6.	Himachal Pradesh	-	12.9
7.	Jammu & Kashmir	18.2	11.0
8.	Karnataka	64.1	107.8
9.	Kerala	57.3	68.1
10.	Madhya Pradesh	36.9	61.1
11.	Maharashtra	114.0	120.4
12.	Nagaland	0.8	2.6
13.	Orissa	57.6	71.2
14.	Punjab	138.5	143.5
15.	Rajasthan	21.6	42.2
16.	Tamil Nadu	74.5	76.6
17.	Uttar Pradesh	39.2	41.5
18.	West Bengal	56.3	78.8
	All India	57.5	68.4
	Mean	57.5	68.4
	S.D.	36.2	40.12
	C.V.	62.9	58.65
	Range	137.7	140.9

Sources: Mahesh Chand & V.K. Puri, Regional Planning in India, Allied Publishers Pvt. Ltd., India, 1983, p.186.

The table 3 reveals disparities in per capita industrial consumption of electricity. In 1969-70 and 1976-77, per capita consumption was highest in Punjab followed by Maharashtra and Gujarat. The underdeveloped states of Bihar, M.P., and Rajasthan were way behind these states as far as industrial consumption of electricity is concerned.

From the point of view of per capita income of the state, there also exists massive disparity or uneven development. However, the criterion of per capita income for comparison and thereby showing the development of a region is not very sounding because of its own inherent faults. "Since (i) price levels are different in different states, (ii) Commodities included in the compilation of price level by different states are different, and (iii) weights assigned to different commodities in the compilation of price levels are not the same in all states, per capita incomes of different states are not comparable. And yet differences in per capita incomes have for long been accepted as the best indicator of imbalances and inequalities".<sup>6</sup> The table 4 gives estimates of per capita income for different states in India at current prices.

The per capita income of industrially advanced states

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6. Mahesh Chand & V.K. Puri, op. cit., pp.174-75.

**Table 4: Per Capita Income in States**  
(At Current Prices)

S. No.	State	(in rupees)									
		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
1.	Andhra Pradesh	584	625	647	829	994	903	901	1002		
2.	Assam	538	535	572	644	818	776	815	866		
3.	Bihar	402	440	489	575	687	661	700	735		
4.	Gujarat	842	837	762	1092	1033	1205	1341	N.A.		
5.	Himachal Pradesh	678	716	759	935	1068	1078	1029	1178	1267	
6.	Haryana	845	928	989	1174	1217	1274	1472			
7.	Jammu & Kashmir	524	572	601	721	825	883	897	986		
8.	Kerala	584	572	646	800	854	909	968			
9.	Karnataka	685	698	712	973	1077	1005	999	1129	1146	
10.	Madhya Pradesh	489	534	573	726	819	769	759	905	854	
11.	Maharashtra	809	850	881	1125	1380	1393	1505	1637	1694	
12.	Manipur	396	468	572	691	789	789	770	802	795	
13.	Orissa	502	501	599	718	730	747	695	857		
14.	Punjab	1030	1080	1172	1438	1525	1597	1812	1962		
15.	Rajasthan	623	564	593	824	840	850	907	969	1025	
16.	Tamil Nadu	595	667	695	830	874	840	946	1036	1151	
17.	Tripura	502	-	-	569	789	813	-	-	-	
18.	Uttar Pradesh	486	497	605	673	760	730	815	916	930	
19.	West Bengal	735	789	790	946	1040	1116	1302	1268	1279	
	All India	636	663	714	874	1007	1020	1086	1189	1249	

Source: Delhi Statistical Hand Book 1980 (Delhi: Bureau of Economics and Statistics, 1980), pp.36-39.



which was above the average national per capita income during 1970-71 was also above in 1977-78. The table 4 reveals that during 1970-71 the average national per capita income was 636 rupees. The industrially advanced states having per capita income above it during that period were: Gujarat, Rs.842; Haryana, Rs.845; Karnataka, Rs.685; Maharashtra, Rs.809; Punjab, Rs.1030; and West Bengal, Rs.735.

By 1977-78 the average national per capita income got almost doubled, so did the per capita income of the states. But there was hardly any state from the low per capita income as per 1970-71 average could compete to the national average of 1244 in 1978-79.

The unequal distribution of industries in the states of Indian union has been instrumental in envisaging disparity not only in per capita income but the budgetary position of the states are also unevenly placed as evidenced from the table 5.

Table 5: Budgetary Position and Developmental Expenditure of State Governments

State & Year	(Rs. in lakhs)	
	Total Expenditure	Developmental Expenditure
1. Andhra Pradesh:		
1980-81	116,113	85,770
1981-82	137,775	102,628
1982-83	154,646	114,723

(contd...101..)

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2. Assam:

1980-81	35,744	25,282
1981-82	40,225	27,933
1982-83	47,341	33,885

3. Bihar:

1980-81	92,853	62,919
1981-82	115,727	83,499
1982-83	126,806	93,980

4. Gujarat:

1980-81	90,326	68,816
1981-82	104,581	77,063
1982-83	111,983	80,066

5. Haryana:

1980-81	40,072	30,227
1981-82	47,723	35,700
1982-83	49,140	35,919

6. Himachal Pradesh:

1980-81	18,776	14,449
1981-82	20,227	15,169
1982-83	23,225	16,970

7. Jammu & Kashmir:

1980-81	27,326	19,667
1981-82	30,404	21,433
1982-83	32,982	22,659

8. Karnataka:

1980-81	89,490	60,562
1981-82	100,498	68,778
1982-83	117,665	81,297

9. Kerala:

1980-81	66,760	50,454
1981-82	76,713	57,279
1982-83	84,266	61,373

(contd...102..)

## 10. Madhya Pradesh:

80-81	101,616	75,334
81-82	108,690	76,370
82-83	126,830	81,319

## 11. Maharashtra:

80-81	191,704	127,787
81-82	226,369	145,108
82-83	247,017	156,756

## 12. Manipur:

80-81	7,048	5,151
81-82	7,958	5,443
82-83	8,422	5,783

## 13. Meghalaya:

80-81	5,982	4,311
81-82	6,613	4,733
82-83	8,151	5,793

## 14. Nagaland:

80-81	9,155	5,849
81-82	10,116	6,540
82-83	11,062	7,090

## 15. Orissa:

80-81	54,052	40,083
81-82	57,284	38,319
82-83	63,892	43,182

## 16. Punjab:

80-81	54,953	39,524
81-82	59,274	41,145
82-83	61,584	43,147

## 17. Rajasthan:

80-81	68,753	48,074
81-82	86,922	60,647
82-83	87,852	58,982

(contd...103..)

## 18. Sikkim:

80-81	2,982	2,477
81-82	3,536	2,994
82-83	3,562	3,000

## 19. Tamil Nadu:

80-81	115,525	82,773
81-82	129,782	95,102
82-83	137,004	95,924

## 20. Tripura:

80-81	8,721	6,708
81-82	9,067	6,738
82-83	9,755	6,738

## 21. Uttar Pradesh:

80-81	171,609	119,882
81-82	165,124	125,274
82-83	217,634	135,016

## 22. West Bengal:

80-81	111,521	70,355
81-82	142,714	100,722
82-83	154,014	106,343

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Sources: R.B.I., Report on Currency and Finance,  
1981-82, vol.II, New Delhi, 1982, pp.117-19.

The industrially advanced states have a fat budget and these states can afford to allocate substantial funds for the expansion and promotion of industrialization. Because of the availability of liberal financial resources at the disposal of the industrially advanced states, the latter have given due consideration for expenditures incurred on developmental activities of which industrialization comprise

the bulk portion. The industrially backward countries have also devoted bulk of the budgetary funds on developmental activities including industrialization as shown in the table 5 but their percentage of allocation has been comparatively lesser as compared to the industrially advanced countries.

Since 1970, the three central financial institutions (IDBI, IFCI and ICICI) in addition to other financial institutions have been granting direct assistance on concessional terms to units located in backward areas. "As agencies which mobilise a substantial portion of the community's savings, financial institutions like the commercial banks and term lending institutions such as IFC, IDBI, ICICI, ARDC to mention the major institutions, can play a dominant role in promoting balanced regional development of the country".<sup>7</sup> But even their role in sanctioning grants and assistance speak more in favour of the highly industrialized states than the actually backward ones. Let us have a look for this on the table 6.

The table 6 reveals that the combined share of Maharashtra, Gujarat, Tamil Nadu and West Bengal accounted for as

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7. K.V. Nambiar, "Flow of Institutional Funds and Regional Disparities in India", in K.R.G. Nair (ed.), Regional Disparities in India, Agricole Publishing Academy, New Delhi, 1981, p.94.

Table 6: Percentage of Financial Assistance sanctioned by Financial Institutions to States upto the end of 1977-78

State	ARDC	LIC	IFCI	IDBI	REC	HUDCO	ICICI	IRCI	NIDC	Total
Andhra Pradesh	10.3	5.9	7.5	5.2	7.9	5.0	4.7	0.7	8.2	6.6
Assam	0.9	1.8	1.4	1.4	3.4	0.4	0.7	0.1	2.1	1.6
Bihar	6.9	5.7	4.6	3.5	9.8	2.8	6.3	1.5	3.8	5.5
Gujarat	6.0	10.4	8.2	16.4	3.4	10.7	12.1	0.9	5.0	10.8
Haryana	7.6	3.3	3.6	2.5	2.4	6.5	2.7	0.9	2.8	3.8
Himachal Pradesh	0.2	0.3	0.4	0.6	2.5	0.5	-	-	1.0	1.5
Jammu & Kashmir	0.1	0.4	0.3	0.8	2.9	1.6	-	-	0.1	0.5
Karnataka	8.3	5.2	7.3	7.0	3.8	7.4	5.9	0.3	9.3	6.5
Kerala	2.5	4.6	3.2	3.5	1.7	3.2	2.0	0.6	2.3	3.3
Madhya Pradesh	8.4	4.1	2.4	2.6	11.4	6.6	2.5	-	9.4	4.9
Maharashtra	9.2	17.7	12.2	17.0	7.2	0.9	31.9	9.0	14.1	15.7
Manipur	0.1	0.1	-	-	-	-	-	-	0.1	0.1
Meghalaya	-	0.3	0.4	0.2	1.1	-	-	-	0.2	0.3
Nagaland	-	0.2	0.1	-	0.3	-	-	-	0.1	0.1
Orissa	4.7	4.1	2.1	1.6	6.1	1.7	1.5	-	4.8	3.2
Punjab	6.9	3.2	2.4	2.2	4.3	3.4	0.8	1.1	6.1	3.4
Rajasthan	6.1	5.3	4.6	3.6	8.4	7.0	2.3	-	4.5	4.9
Sikkim	-	-	-	-	-	-	-	-	-	-
Tamil Nadu	5.4	9.3	11.3	11.1	3.7	12.6	10.0	1.2	9.3	9.1
Tripura	-	0.1	0.1	-	0.6	-	-	-	0.1	0.1
U.P.	14.3	9.5	11.5	8.0	11.5	11.6	6.2	-	11.2	10.0
West Bengal	2.4	7.8	8.6	7.1	7.6	4.3	6.8	82.1	5.2	7.0
Union Territories	0.3	0.7	1.8	4.8	-	5.8	3.6	1.6	0.3	2.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Sources: K.V. Nambiar, "Flow of Institutional Funds and Regional Disparities in India", in KR3 Nair (ed.), Regional Disparities in India (Agricole Publishing Academy, New Delhi), 1981, p.99.

much as 42.6 per cent of the total assistance. Even Maharashtra showed the greatest consumption of IFCI assistance alone with 18.2 per cent share. The financial assistance to backward states like Bihar, Madhya Pradesh, Rajasthan and Orissa stands far behind the developed ones.

This tendency is true even with the banking facilities provided to these regions. The Economic Survey 1980-81 provides data on statewise distribution of bank offices - aggregate deposits and total credit of public sector banks at two points of time - June 1969 and March 1980. The table 7 shows that between the period June 1969 to March 1980 as many as 16,129 new branches were opened of which 4,862 were established in the backward states of Madhya Pradesh, Uttar Pradesh Bihar and Orissa. The matter for concern is the fact that out of 16,129 new branches, as many as 5,350 or 33.17 per cent were opened in the four advanced states of Maharashtra, Tamil Nadu, Gujarat and West Bengal. The data also reveals that the four advanced industrial states accounted for 51.17 per cent of total deposits and 64.06 per cent of total credits in the period ending June 1969 showing that those states got a greater share of the credit than their percentage share in total deposits. The survey also shows that for a number of underdeveloped states such as Bihar, Assam, Himachal Pradesh, Manipur, Meghalaya, etc., the credit deposit ratio was less than the national credit deposit ratio of 0.78 in

June 1969. Against this, the credit deposit ratio was greater than the national credit deposit ratio in the relatively advanced states. This shows a flow of funds from the less developed to the more developed states. (See the table 7.)

The magnitude of the problem of industrial imbalance in the various states of India was recognised by the Union Government, which took steps during the course of five year plans to reduce this disparity (as described in succeeding pages). It deems appropriate here to have the categorization of states as industrially advanced and backward. This will facilitate our understanding of the subject.

The National Development Council while considering the problem of industrial backwardness among the various states of India, set up a working committee under the chairmanship of B.D. Pandey. This came to be known as Pandey Working Group. The task of the working group was to recommend criterion for identification of backward areas.

#### Recommendations of Pandey Working Group

Pandey Working Group recommended that a district should be treated as a unit of industrially backward region or area. It further mooted the suggestion of selecting certain backward districts only in industrially backward states for special



**Table 7: Statewise Distribution of bank-offices - aggregate deposits and total credit of public sector banks (as percentage of total)**

States/Union Territories	Number of offices at the end of				Deposits (in %)		Bank Credit (in %)		Credit Deposit Ratio	
	June 1969		March 1980		June 1969	March 1980	June 1969	March 1980	1969	1980
	No.	% to total	No.	% to total						
Andhra Pradesh	444	6.65	1490	6.5	3.11	4.23	4.02	4.92	1.01	0.81
Assam	67	1.00	378	1.7	0.85	1.05	0.42	0.56	0.39	0.43
Bihar	269	4.03	1373	6.0	4.33	4.74	1.71	2.90	0.31	0.42
Gujarat	750	11.25	2113	9.3	10.30	8.24	6.42	6.62	0.49	0.56
Haryana	140	2.10	487	2.1	1.25	1.57	0.76	1.62	0.48	0.71
Himachal Pradesh	41	0.61	259	1.1	0.32	0.55	0.12	0.25	0.28	0.32
Jammu & Kashmir	17	0.25	151	0.7	0.48	0.51	0.03	0.27	0.05	0.36
Karnataka	510	7.65	1595	7.0	4.82	4.74	4.71	5.86	0.78	0.86
Kerala	331	4.96	976	4.3	3.00	3.27	2.54	3.02	0.66	0.64
Madhya Pradesh	332	4.96	1523	6.7	2.76	3.57	2.08	2.69	0.59	0.52
Maharashtra	946	14.18	2692	11.8	23.16	19.24	30.05	23.06	1.07	0.83
Manipur	2	0.03	32	0.1	0.03	0.05	0.005	0.02	0.14	0.36
Meghalaya	7	0.10	49	0.2	0.23	0.16	0.08	0.04	0.28	0.16
Nagaland	2	0.03	30	0.1	0.03	0.06	0.002	0.02	0.06	0.24
Orissa	96	1.44	576	2.5	0.76	1.20	0.48	0.90	0.50	0.52
Punjab	290	4.35	966	4.2	4.76	4.50	1.66	2.71	0.27	0.43
Rajasthan	311	4.66	985	4.3	1.09	2.14	1.26	2.08	0.52	0.67
Tamil Nadu	721	10.81	1749	7.7	6.00	6.68	10.26	8.74	1.33	0.91
Tripura	5	0.07	45	0.2	0.10	0.10	0.005	0.06	0.04	0.45
U.P.	639	9.58	2726	12.0	8.65	9.79	5.07	6.51	0.46	0.46
West Bengal	428	5.42	1642	7.2	11.71	11.88	17.33	10.36	1.15	0.60
<b>Union Territories:</b>										
Delhi	207	3.10	623	2.7	9.23	9.74	8.07	13.84	0.68	0.98
Other UTs	124	1.76	339	1.5	2.30	1.96	29.8	2.74	1.00	0.97
<b>Total</b>	<b>6669</b>	<b>100.0</b>	<b>22798</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>		

Source: Mahesh Chand and V.K. Puri, Regional Planning in India, Allied Publishers Pvt. Ltd., India, 1983, pp.213-14. Computed from Economic Survey, 1980-81, Statement 4.7, p.106.

treatment and incentives. Pandey Working Group categorized the states of Indian Union as industrially productive on the basis of composite index as shown in the table 8. This composite index is based on such criterion as (i) total per capita income, (ii) per capita income from mining and industry, (iii) number of workers in registered factories, (iv) per capita annual consumption of electricity, (v) length of surface roads in relation to the population and the area of the state and also that of railway mileage.

Table 8: Ranking of States in terms of the Composite Index Backward Ranking

Ranking	State	Backwardness Index (composite)
1	Nagaland	28
2	Jammu & Kashmir	59
3	Orissa	72
4	U.P.	76
5	Assam	78
6	Madhya Pradesh	80
7	Rajasthan	81
8	Bihar	85
9	Andhra Pradesh	87
10	Kerala	111
11	Karnataka	118
12	Haryana	120
13	Punjab	137
14	Maharashtra	146
15	Gujarat	147
16	Tamil Nadu	154
17	West Bengal	160
	All India	100

Sources: Report of the Pandey Working Group, New Delhi, 1969. Quoted from S.C. Kuchhal, The Industrial Economy of India, Allahabad, 1979, pp.239-42.

On the basis of this ranking of states of the union, the states were categorised as below:

- (i) Backward States: The states whose composite index was below 90 were given the status of being industrially backward. These were Nagaland, Jammu & Kashmir, Orissa, Uttar Pradesh, Assam, Madhya Pradesh, Rajasthan and Bihar.
- (ii) Industrially Developing States: The states whose composite index is between 90 and 120 were given the status as industrially developing states. These were Andhra Pradesh, Kerala and Karnataka.
- (iii) Industrially Developed States: The states having composite index as 120 and above were declared as industrially developed states. These were Haryana, Punjab, Maharashtra, Gujarat, Tamil Nadu and West Bengal.<sup>8</sup>

On the basis of this categorization the eight states including Bihar were declared industrially backward states.

To support this categorization further let us consider some studies conducted by some individual researchers.

V. Nath<sup>9</sup> attempted to highlight disparities in India

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8. For details, see Report of the Pandey Working Group, New Delhi, 1969. See also S.C. Kuchhal, The Industrial Economy of India, Allahabad, 1974, pp.239-42.

9. V. Nath, "Regional Development in Indian Planning", Economic and Political Weekly, Annual Number, Bombay, Jan. 1970, pp.242-60.

considering data for 14 states and thereby ordered the ranking of different states. He took the following indicators into account: (i) per capita income, (ii) proportion of urban population to total population, (iii) proportion of male workers in manufacturing industries to all male workers, (iv) proportion of population living in districts at two higher levels of development. Taking an overall view and considering the total rank score, the first seven states in order of development as per Nath's ranking, are: Punjab, Tamil Nadu, Haryana, West Bengal, Kerala, Maharashtra and Gujarat. Surprisingly the most industrially advanced state of Maharashtra gets the second position. (This shows that any study of Nath's type is materially affected by the indicators that are included in it.) The other industrially advanced states of West Bengal, Tamil Nadu, and Gujarat get the third, the fourth and the sixth rank respectively. Bihar, Rajasthan and Madhya Pradesh ranks at the eleventh, the twelfth and the thirteenth position.

In his attempt at studying regional disparity in India S.K. Rao<sup>10</sup> considered six variables of which three relate to industry and thereby grouped states into three categories. Rao's study included the following variables - (a) drop

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10. S.K. Rao, "A Note on Measuring Economic Distances Between Regions in India", Economic & Political Weekly, Bombay, 28 April, 1973, p.796.

output per head, (b) male workers in manufacturing other than household industry, (c) per capita consumption of industrial power, (d) per capita output for organized industry, (e) infant death rate, and (f) literacy rate.

S.K. Rao grouped states into three categories - (i) the most developed, (ii) not so developed, and (iii) the least developed. The results of the study were presented for the early fifties and sixties.

Classification of States	In early fifties	In early sixties
a. Most developed Group	West Bengal, Maharashtra, Gujarat	Maharashtra, West Bengal
b. Not so developed	Madras, Mysore, Punjab	Gujarat, Madras, Mysore, Punjab, Andhra Pradesh
c. The least developed	Kerala, Andhra Pradesh, Rajasthan, Bihar, Assam, Orissa, Madhya Pradesh, & U.P.	Assam, Orissa, M.P., U.P. Rajasthan, Bihar, Kerala.

Sources: Mahesh Chand & V.K. Duri, op. cit., p.199.

Thus Rao's study reveals that during the period between the early fifties and the early sixties, there was no evidence of reduction in disparities. The position in the early sixties is practically the same in both the periods except that (a) Gujarat slipped from the group of most advanced states to the group of not so developed states,

(b) Andhra Pradesh moved up from the group of least developed state to the group of not so developed state, and (c) this shows that the states of Assam, Orissa, Bihar, M.P., U.P., Rajasthan and Kerala remained backward during 15th years of planning.

Yet another available study on regional unevenness is that of Hemlata Rao<sup>11</sup> who chose 14 states for study and selected 24 variables from the following four specific sectors - agriculture, industry, education and banking. (In industrial sector indicators chosen were: (i) number of factories per lakh of population (ii) number of factories per 1000 km., (iii) percentage of workers in the total population, (iv) percentage of industrial employees, (v) factory employees per 1000 km., (vi) factory workers per 1000 km., (vii) high voltage industrial power consumption per factory, and value added by manufacturers per capita.)

To form an overall view of regional unevenness, Hemlata Rao combined the indices obtained from the agricultural, industrial, banking and educational sectors into a composite index of development. The composite index shows that West Bengal was the most developed state in all the three years -

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11. Hemlata Rao, "Identification of Backward Regions and the Trends in Regional Disparities in India", Artha Vijnana, June 1977, vol.19, No.2, pp.93-112.

1956-61 - 1965 (her study saw development at these three points of time). The second position was enjoyed by Maharashtra followed by Tamil Nadu and Gujarat in all three years. The Index value for the states of Orissa, Rajasthan, M.P., Assam and Bihar was below the national average (which was 13.37 in 1956, 14.65 in 1961 and 15.96 in 1965) in all the three years and consequently these states are classified by Hemlata Rao as "less developed states".

The above mentioned all factual data conclusively substantiate to the single fact that there still exists a clear cut unevenness in the industrialization of various states of Indian union. Though simultaneously other regions have also shown progressive industrial development which is the result of various programmes undertaken by the government to obtain equality of distribution of industrial development, the overall picture still appears the same with some progress made here and there. Hence before making any categorical statement on overall industrial picture today, it is better to review the various measures taken by the government for tiding over regional unevenness in respect of industrialization.

#### Measures taken for Balanced Growth

The essence of government policy with regard to industrial development was envisaged in the Industrial Policy Resolution of April, 1948. It categorically stated, "....

..in order that industrialization may benefit the economy of the country as a whole, it is important that disparities in the level of development between different regions should be progressively reduced. The lack of industries in different parts of the country is very often determined by factors such as the availability of the necessary raw-materials or other natural resources. Concentration of industries in certain areas has also been due to the ready availability of power, water supply, and transport facilities which have been developed there. It is one of the aims of national planning to ensure that these facilities are steadily made available to areas which are at present lagging far behind industrially.<sup>12</sup>

With a view to thwart measures of further concentration of industries in pre-industrialized regions and envisage regional development, the Indian Government passed the Industrial (Development Regulation) Act of 1951. The provisions of this Act made it imperative for an industrialist to get a licence before he establishes a new enterprise or intends to expand his existing unit. Before issuing the licence the Licencing Committee was expected to consider the suitability of the location and ensure that regional

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12 Government of India, Industrial Policy Resolution 1948, New Delhi, 1948.



balance was not upset by issuing licence to the new venture. 'Besides, the union government also established a large number of industrial estates which provide incentives and facilities to small scale industries'.<sup>13</sup>

When India embarked upon planned economic development under the First Five Year Plan (1951-55) the main emphasis of the industrial policy was on equalising the regional imbalances. The Industrial Policy Resolution 1948 and Industrial Regulation Act of 1951 were the main guiding principles. The regional imbalance as being a perennial problem was not possible to be tackled with short-term programmes, hence remained intact despite measures taken in the First Plan.

The Second plan recognizing the lopsided industrial development in the country adopted the new Industrial Policy Resolution of 1956 which provided for the following programmes to achieve balanced development.

- (1) Priorities were to be accorded to the development of different parts of the country in the location of new enterprises whether public or private.
- (2) Facilities such as power, water supply, transport and communications, training institutions, etc. were

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13. N.S. Gupta and Amarjeet Singh, Industrial Economy of India, Light and Life Publishers, New Delhi, 1970, p.54.

provided in the backward regions and in those regions that faced acute problem of unemployment.

- (3) Programmes for the expansion of village and small scale industries.<sup>14</sup>

For the purpose of implementing these programmes, the second plan laid stress on mobilising the available resources. Some big public sectors projects like Bhilai, Durgapur, Rourkela, Heavy Electricals, etc. were located relatively in backward areas of the country.<sup>15</sup> The problem, however, continued unabated.

The Third Plan devoted a separate chapter (ch.IX) to 'Balanced Regional Development'. It was once again emphasized that "balanced development of different parts of the country, extension of the benefits of economic progress to the less developed regions and widespread diffusion of industry are among the major aims of planned development".<sup>16</sup> The following steps were taken:

- (a) Licencing policy should be such that it encourages dispersal of industries in the underdeveloped regions.
- (b) There should be an extension of adequate training

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14. Condensed from the Second Plan Document. See Planning Commission, Govt. of India, Second Five Year Plan, New Delhi, 1957, p.246.

15. Gupta & Singh, op. cit., p.55.

16. Planning Commission, Third Five Year Plan, New Delhi, p.142.

facilities particularly in the less developed regions of the country.

(c) Handicaps of certain regions should be removed by making use of advances in science and technology.

(d) The plan also envisaged the construction of about 300 industrial estates particularly in backward areas.

(e) The budget for 1965-66 made a special provision for encouraging dispersal of the existing industries.<sup>17</sup>

Consequent upon the completion of the Third Five Year Plan, the Planning Commission reviewed the relative position of industrial development in various states and found that the target of equalisation of regional disparity was nowhere near expectation.

The Fourth Plan stepped into the direction by devising a three pronged measures - (i) allocation of Central Assistance, (ii) location of central projects and concessional finances for backward districts. It introduced such programmes as Small Farmers' Development Agency, Marginal Farmers' and Agricultural Labourers' Development Agency, Drought Prone Area Programme, Crash Scheme for Rural Employment, Pilot Intensive Rural Employment Project for the benefits of the poor. 'Since a large number of the rural poor live in relatively less developed regions, all these

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17. Ibid., pp.143-44.

programmes were expected to benefit the less developed regions more in comparison with the developed regions<sup>18</sup>. Besides, a number of state governments and financial institutions also announced special concessions to industries established in the backward areas so that entrepreneurs could be attracted to invest in such areas. Gupta and Singh summed up these measures - (a) Availability of developed plots with power and water supply on a 'no profit no loss' basis; (b) Tax relief on property, octroy charges, etc.; (c) Preferential Treatment of states from all industries located in the state.<sup>19</sup>

However, despite these massive programmes and measures the picture remained the same.

Besides the policies and programmes of the Fourth Plan, the emphasis was laid on Area Development in the Fifth Plan period. The various area development programmes undertaken during the Fifth Plan can be classified as follows:<sup>20</sup>

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|---|--|
| (a) Resource/problem based area programme | The Drought Prone Area Programme, The Command Area Development Programme, Hill Area Development. |
|---|--|

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18. Mahesh Chand & V.K. Pari, op. cit., p.172.

19. Gupta & Singh, op. cit., p.58.

20. Planning Commission, Draft Sixth Five Year Plan, 1978-83 (now defunct), p.159.

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|---|--|
| (b) Target Group Programme                    | The SFDA Programmes, The Tribal Development Agency Projects. |
| (c) Area Specific Incentive Programmes        | Concessional Finance, Investment Subsidy Schemes.            |
| (d) Comprehensive Area Development Programmes | Sub Plans for the Hills and Tribal Areas.                    |

Even after the completion of the Fifth Plan, the state of affairs with regard to uneven distribution of industries resulting in the regional imbalances has remained the same. There appeared a marginal improvement in some areas but the resultant effect was that industrially advanced states became more richer whereas the backward areas remained backward industrially as compared to the advanced states. This fact is amply clear from the table 9.

The table 9 reveals that the level of regional disparity still exists among different states of India. The Draft Sixth Plan documents also records that industrially advanced states have improved considerably whereas the backward states have not only lagged behind rather their situation has worsened. The document has categorised the states into three groups on the basis of the data as per table 9.<sup>21</sup>

- (a) The old established industrial states of Gujarat,

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21. Planning Commission, Draft Sixth Five Year Plan, 1980-85, New Delhi, p.342.

Table 9: Levels of Industrial Development

State	No. of factory Empl-oyees per 1000 in 75-76	Share of regis-tered Manu-uring inSt-ate prod-uct	Share of Un-regi-ster- ed Manu-uring inSt-ate prod-uct	Perce-ntage gr-owth in Fa-ctory Em-ple-ymen-t	Value of pr-ope-rt-ty held by Ce-ntr- al Go- vt. pub-lic En-ter-prise-s as on 31. 3.78 per Ca-pita (Rs.)	Disbursal of all Ind-ia financ-ial Institu-tions per capita in		Disbursal of all India financ-ial Institu-tions percentage distribution	
						69-74	74-78	69-74	74-78
Maharashtra	19	18.2	7.2	36.4	100	42	72	27	20.8
Gujarat	18	14.6	7.0	52.3	235	35	73	11.9	11.2
W. Bengal	10	14.6	5.7	20.3	239	15	34	8.6	8.7
Tamil Nadu	11	11.9	7.6	53.5	137	23	50	11.6	11.9
Karnataka	11	8.5	9.2	100.0	144	18	54	6.5	9.2
Kerala	11	6.1	6.4	50.3	152	8	37	2.2	4.5
Punjab	9	5.6	5.3	103.9	167	8	33	1.4	2.5
Haryana	10	7.0	3.6	N.A.	144	26	49	3.2	2.8
Andhra Pradesh	8	6.6	5.2	61.6	113	7	23	3.9	5.7
Madhya Pradesh	6	6.6	4.9	79.1	431	6	9	3.4	2.3
Assam	5	7.9	3.6	3.8	248	9	22	1.6	1.9
Bihar	5	10.6	2.9	77.0	500	10	12	7.1	4.0
U.P.	5	5.2	5.1	50.6	55	6	9	7.0	7.9
Rajasthan	4	4.5	5.0	93.0	108	8	24	2.4	3.6
Orissa	3	4.5	4.0	146.7	298	6	13	1.7	1.6
Himachal Pradesh	4	1.5	2.0	N.A.	253	4	23	0.2	0.5
Jammu & Kashmir	3	1.7	5.3	N.A.	12	1	34	0.1	0.9

Sources: Planning Commission, Draft Sixth Five Year Plan 1976-83, New Delhi, 1979, p.199.

Maharashtra, West Bengal and Tamil Nadu.

(b) A group of states that recorded significant industrial development mainly after independence. Andhra Pradesh, Kerala, Karnataka, Punjab and Haryana.

(c) The states which are still industrially least developed: Assam, Bihar, U.P., M.P., Orissa, Himachal Pradesh J&K and Rajasthan.

It also appears that there exists a tremendous difference in the income structure from manufacturing between the above mentioned three categories. The states in group (B) do not display a substantial difference over the industrially backward states in the field of registered manufacturing. The industrially backward states including Bihar, which falls in the group (C) suffer high degree of disparity in terms of per capita disburseals, in disburseals of assistance by the all financial institutions and even in the distribution of central investments. Even among the backward states, the case of Bihar presents a dismal picture. Despite the fact that the state of Bihar is endowed with rich mineral wealth, its industrial advancement is very slow.

It is now easily discernible from the preceding pages, that the problem of regional disparities with regard to industrialization in various states of India is of immense magnitude and still exists as a scar on Indian plain pooh-

poohing at the very bankruptcy of our planning strategy.

Factors Responsible for Uneven Growth:

Now the question arises, why is it so? and why all the efforts to put the menace to an end have failed utterly? The reasons are many and need detailed discussion for most are inherent in our own social structure.

Factors for Unevenness:

Indian phenomenon of industrialization is not a natural process. It is a legacy from the Britishers who while blocking all possible ways of its national development consciously or unconsciously (as has been widely discussed in the second chapter) brought industrialization on the land as per their own requirements, hence the phenomenon finds its better origin in the historical context.

India is one of those countries which remained under foreign domination for a considerable period of time and, as could be expected, the development of the country was guided by the economic interests of the foreign power ruling the country. The interests of the ruling countries in the colonial economy is to "use" the dependent countries or colonies both as a supplier of raw material to the home country's manufacturing industry and as a market for its products. Their attempt, therefore, was to hamper and



suppress the growth of indigenous industries in colonies and force them to become supplier of important primary goods. The ruling party paid special attention to the development of those regions of their colonies, which could serve as suppliers of raw-materials to the industry of the home country or which could supply other important basic primary goods to their economy. For this purpose they invested money on the development of railways in those specific regions and connected them with the ports, and sent skilled labour, enterprise and capital to those regions while the rest of the economy was ignored. This resulted in the creation of 'pockets' or 'enclaves' of development in the dependent countries while the rest of the economy was continually impoverished. 'A dualistic economic structure was promoted, a high productivity sector producing for export coexisted with a low productivity sector producing for the domestic market'.<sup>22</sup> Such forcible creation of enclaves of development disregarded all natural potentialities of different regions of the dependent countries and, in some cases, proved to be positively harmful. In many dependent countries the enclaves of development never became part of their internal economic structure in the purely geographical sense. Singer rightly says, "Economically speaking, they were

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22. Mahesh Chand & V.K. Puri, op. cit., p.168.

really an outpost of the economies of the more developed investing countries".<sup>23</sup>

India is a lively example of all these theoretical perspectives - The British rulers were interested in obtaining raw material to support their own industry in Britain and therefore concentrated specially on those regions in India from where these raw-materials could be procured. They initiated the construction of railways in 1853 and within 25 years the railways had a vast network of tracts. The construction started from the main port town of Bombay and Calcutta and spread towards the interior with the intentions of traversing important agricultural tracts so as to facilitate the exports of agricultural produce. Since the U.K. was interested in the import of raw cotton to nurture and develop its own cotton textile industry it made ample arrangements to ensure its supply from India. Gujarat cotton tract, Khandesh and Berar cotton tracts and Karnatic cotton tracts were all connected with Bombay by 1870. Thus, the sources of those raw-materials as were required by U.K. economy were linked to the ports from where these raw materials were shipped to Britain.

The further processes of industrialization and

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23. Singer quoted in Mahesh Chand & V.K. Puri, Regional Planning in India, Allied Publishing Pvt. Ltd., India, 1983, p.167.

urbanization in India, as is generally seen in the underdeveloped countries, were closely linked to these port towns of Bombay and Calcutta. The development of transport (especially the railway) also played an important role in ensuring development of these towns. The growth of Gujarat and Madras followed the same line. Consequently the later economic activities centered around these towns as seen in any case of development. We have already discussed in the beginning of this chapter how later economic activities get concentrated on the developed region or around it if it gets started. Since the development of transport was not done after taking into account the requirements of different regions, the growth centres of the regions, natural and comparative advantages of different locations, and the potentials of industrial development of different regions, it played a decisive role in guiding the pattern of development all over the country. The port towns and various towns linked to them receiving most of the share of industrialization, urbanization and modernization while other regions continuously getting neglected. This led to a lopsided development of Indian economy because it ignored the development of a number of places and centres which could have otherwise developed. Thus rightly observes S.R. Hashim "The foreign trade oriented policy thus, resulted in the industrial growth of a few centres near the port and a general industrial deterioration

of the interior".<sup>24</sup>

The further development of these cities and regions around them and the underdevelopment of the regions other than them in the country was also facilitated of the fact that these were the regions where the English came, settled and carried out their activities in the beginning. These regions, thus, were not only the centres of their economic and political activities but also of their cultural activities which guided the further process of industrialization and urbanization in the country.

The development of these enclaves was also the result of the military activities of the English as well as the other European powers who in order to impose their superiority over Indian land confined to a particular region and exercised all their military activities from there. As these regions served as the centres for military concentration and other activities, their development was highly considered by the foreign ruler over the particular land and thus its all round development could get materialized. As generally happens, once development got started to these areas, it spread to nearby regions as well; thus further leading to a lopsided development in the country. The states of West Bengal and Tamil Nadu which

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24. S.R. Hashim, quoted from Mahesh Chand & V.K. Puri, *op. cit.*, p.170.

evolved around the cities of Calcutta and Madras are a case to it. Lahore is also an example of it but, since our discussion is confined to Indian territory and Lahore now falls inside the boundary of divided Pakistan, we will not go for its detailed discussion. Remarks Mahesh Chand and Puri, "In India the historical factors guided the development of the port towns of Bombay, Calcutta and Madras and these three cities have, in turn, worked as nuclei for the development of Maharashtra, West Bengal and Tamil Nadu respectively which are at present the most industrially advanced states of India."<sup>25</sup>

The history of industrialization in India shows that not all regions toyed the historical processes for its development as seen in the preceding pages, but we have examples from many regions where structural factors too played an important role in the industrialization and consequently coincided with the natural processes. The development of Calcutta (its development, however, is the result of both factors as will be shown subsequently) Nagpur, Ahmedabad and Sholapur which have led to the industrial development of the states of West Bengal, Maharashtra and Gujarat are some examples to it.

The jute industry got concentrated in Bengal and

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25. Mahesh Chand & Puri, op. cit., p.166.

especially around Calcutta because of vast tracts of jute production in that region. The intimate agricultural connection of the industry, the long association of English invasions with Calcutta and the good transport relations of the place for purposes of exportation also facilitated its further development. Thus while out of 75 jute mills in 1919 as many as 71 were concentrated in Bengal only 3 mills were located in Madras and one in the United Provinces. The number further rose to 93 in Bengal in 1935 out of a total of 100 jute mills in the country. The pace of industrial development in this region, thus, was widely determined by its potential property. Similarly, Nagpur, Ahmedabad and Sholapur have vast cotton tracts, hence the cotton industry mainly concentrated to these areas only. This is also clear from the fact that though the first cotton mill was created in Calcutta by the middle of the nineteenth century, the industry grew up in Bombay also became its centre of concentration. Thus it was not the historical efforts of the Britishers but the potentiality of the vast cotton tracts of the region that played significant role in the development of these regions. However, the role of the Britishers cannot be undermined absolutely. The development of railways and the connection of Bombay with the cotton growing tracts of Nagpur, Ahmedabad and Sholapur, led to setting up of cotton mills in these cities and they spread rapidly. In 1919, out of the 246 cotton mills in British

India, as many as 79 mills were in Bombay. By 1931, the cotton mill industry had gained a certain measure of dispersion; yet out of the 305 mills in that year, 208 were concentrated in Bombay. This trend can be traced even at the present day in high concentration of the cotton mills in the state of Maharashtra.

The potential capacity of a region in determining the course of industrialization can be examined even at the micro level with the finer example from the state of Bihar. The high concentration of most of the mineral based heavy industries in the belt of Chotanagpur and its still fast growing industrial status as compared to the other two regions - north and south Bihar, is an evidence to the fact that the heavy deposits of minerals in the region determined its development not only in the past, but still guiding the course of industrial development today. Thus the efforts of the government in establishing some big public sector projects such as Iron and Steel Projects at Bhilai, Durgapur and Rourkela and Heavy Electricals at Ranchi in relatively backward areas after the second five year plan was highly determined by the fact of the mobilization of the available resources. The early development of Raniganj and Jharia coal field is also an example to it.

As the gift of natural endowments helped in the birth of Industrial Revolution on the land of England in the world, so

is the case of the developments of certain 'pockets' or 'enclaves' in the country. The early developments of the cities of Calcutta, Madras, Bombay, Cochin and Goa and thereby states around them was also facilitated by the natural endowments to them. These regions were well connected with the foreign trade through sea-routes since remote past. Some of these had rich potentials too. The pre-British India had already foreign trade with other countries, hence their development as a centre of trade was already in progress. The development of railway and other similar measures simply gave a further push to it. This natural and comparative advantage was not equally enjoyed by all other regions and so lagged far behind.

Yet another structural lacunae that has thwarted the development of backward areas is the wrong emphasis on capital investment priorities. The prospective entrepreneur is attracted towards the already industrialized states. The bulk of the private sector's new enterprises have been established in industrial states. On the other hand, the backward states are usually ignored by them. The maxim that 'backward regions which are likely to break through economically should receive all prior considerations',<sup>26</sup> has found favourable response

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26. R.C. Patnaik, "Regional Economic Development in India with particular reference to Orissa", The Indian Economic Journal Conference, Nov. 1974, p.302.



neither from the government nor from the private sector.

Finally the establishment of industrial enterprises here and there aiming at the attainment of parity among the various regions through rapid industrial development of backward areas is more of a politically motivated proposition rather than an economically sound step.

The political aspect is the most vital for it alone speaks of the basic faults of our political decisions with regard to making efforts for equalising the industrial development in the different regions of the country.

The moot problem lies in the very wrong policy held and nurtured by the government particularly one in an underdeveloped country. Since the major objective before the government in these countries is to maximize the rate of national development, it concentrates on those regions which are already well ahead of others because it is easier to develop them. The government follows such 'economic growth'<sup>27</sup> policies because it maintains that once a sufficiently high level of economic development in these regions is attained, a transfer of 'benefits' in the form of developmental grants to backward

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27. Economic Growth - The advocates of economic growth generally state that while growth can be redistributed poverty cannot be redistributed. Therefore, one must aim at economic growth first, redistribution can be considered afterwards. See Mahesh Chand & V.K. Furi, op. cit., p.168.

regions will be made possible. Thus, the wrong perspective of economic growth policy becomes the official sanction for the lop-sided development in the country and this is seen with most countries in the underdeveloped world.

Fortunately the policy makers of our country realized the loopholes of this policy and hence did not adhere to it. Instead they made conscious attempts to get rid of the perennial problem right from the very beginning as discussed earlier in this chapter, still the policies, which they followed, were not all without lacunae. The persistence of unevenness even today simply disposes it.

There has been lack of rational approach in channelizing the allocation of central funds to the industrially backward states. During the course of the Fourth Five Year Plan the union government followed a revised formulae of allocating central assistance to the states. Even under the revised formula Bihar and Uttar Pradesh, the two most backward states, received central assistance which was less than the average per capita assistance given to all the states in the country. As against Rs.63 per capita assistance for the country as a whole, Bihar and U.P. got Rs.57 and Rs.56 respectively, whereas Punjab, a more industrially advanced state, got Rs.66.<sup>28</sup> Even

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28. Gupta & Singh, op. cit., p.62.

the revised criterion adopted during the fourth plan failed to provide adequate relief to the backward areas.

Similarly the policy of locating central projects in backward areas has failed to provide the desired results. The per capita statewide investment in central industrial projects as on March 1978 (see table 9) has been the highest in Bihar (Rs. 500) followed by Madhya Pradesh (Rs. 431) and Orissa (Rs. 298). Despite these measures, the location of these capital intensive central projects proved unable to envisage any specific result which could be instrumental in growth and diversification of the regional economies of these areas. The factors like dearth of fiscal and monetary incentives, limited infrastructure and lack of encouragement for developing ancillary or secondary or tertiary industries in the industrially backward areas, have also envisaged the industrial lag in these regions.

The faulty licencing policy has also been instrumental in uneven spreading of the industrial units. It has failed to bring about the desired results. During 1974-75, sixty per cent of the licences were issued to five industrially advanced states of Maharashtra, West Bengal, Tamil Nadu, Karnataka and Gujarat. The Industrial Licencing Policy Enquiry Committee headed by S. Dutt reported in 1969 the failure of the policy in achieving balanced regional development. It noted that the more advanced states received a large

number of licences.

The role of individual political leaders both at the centre and in the states, have also been very vital in the development of a particular region particularly with regard to setting up new industries. These leaders with their unending acumen and struggling zeal succeeded in many cases to get some big industries allocated to their regions and thereby the region experiencing rapid industrial development because the setting up of a capital intensive industry automatically leads to the setting up of various ancillary and secondary industries in the region around.

Thus while Bihar experiences rapid growth in the railway tract networks and some related industries to it under the leadership of late Mr. Lalan Mishra, Rajasthan too did not lag far behind and saw setting up of a number of industries such as Khetri Copper project which is second largest in the world, at Khetri, H.M.T. at Ajmer and Rajasthan Atomic Plant at Kota under the state following leadership of Mohanlal Sukhadia whose contribution in building modern Rajasthan is really unparalleled.

Thus there prevails a sad state of affairs with regard to the uneven distribution of industrial development among the states of Indian union. The backward states have become more backward in recent years while the already developed

states are becoming more and more advanced. The state of Bihar which has an advantage in respect of the availability of raw-materials, has remained at the low ebb in the ladder.

## CHAPTER IV

### INDUSTRIALIZATION IN BIHAR

The preceding chapter clearly shows that there has been uneven industrial development in the country and Bihar stands as one of the most backward states in the overall ladder of this industrial growth. The present chapter after presenting in details the social structure and industrialization in Bihar, examines the various aspects of our hypothesis formulated in the first chapter. Thus such issues as what has been the level of industrialization in Bihar, why it has remained backward, and what trends it shows for the future, what has been its overall impact and who are the people actually benefited and which model is applicable to its evolution, are some of the focal points which have been thoroughly examined in this chapter

Modern Bihar came into existence in British India in 1936 when the old province of Bihar and Orissa (created in 1912 separating it from the Bengal Presidency) was divided into two separate provinces, Bihar and Orissa. Since then Bihar has remained one administrative and political unit except for some minor boundary adjustments after independence and when the Indian states were recognized along linguistic

lines in 1956.<sup>1</sup> Spread over an area of 173,876 square kilometers the state lies between 21.58° and 27.31° north latitude and 83.20° and 88.32° east longitude. It is bounded on the north by Nepal, on the east by West Bengal, on the west by U.P. and Madhya Pradesh and on the south by Orissa.

#### Physical Features:

Bihar consists of two distinct physical units of nearly equal area - (i) the Gangetic plain, and (ii) the Chotanagpur plateau. The river Ganges divides the plain into two divisions - the North Gangetic plain and the South Gangetic plain thereby dividing Bihar into three exclusive geographical regions - North Bihar, South Bihar and Chotanagpur plateau.

#### Forest & Minerals:

Bihar has an area of 29,559 sq. kilometers - about 17 per cent of the total area - as forest, most of which lie in Chotanagpur plateau. The major products of these forests are timber and firewood whereas the minor products consists of bamboo, sabai grass, Kendu leaves, lac, gum, resin, sal seeds, etc. The per capita forest area in Bihar is 0.05 hectare as against 0.14 hectare at all India level.

Nearly 42 per cent of the total mineral produce in India

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1. V.P. Menon, The Story of the Integration of Indian States, The Macmillan Company, New York, 1956, p.173.

comes from Bihar. The Chotanagpur belt contains the world's largest reserves of mica as well as large quantities of iron ore, copper, bauxite, limestone, kyanite, China clay, fire clay, etc. Bihar produces 100 per cent of copper and apatite, 95 per cent of kyanite, more than 50 per cent of coal, 60.34 per cent of mica, 48.28 per cent of India's iron-ore, and accounts for 40 per cent of India's known deposits of coal and cent percent of its cooking coal. Sixty per cent of India's lac also comes from this state which has rich deposits of uranium and bery too. There is 26.47 million tonnes of bauxite deposits in Bihar. Other minerals having significant production in Bihar are manganese, limestone, graphite, chromite, columbite, pyrite, saltpetre, glass sands, asbestos, silver, dolomite, building stones, felspar and radioactive minerals.

#### Animal and Fisheries:

With the total livestock of 267 million the state occupies the fifth position after U.P., M.P., Rajasthan, and Andhra Pradesh. With 8 to 9 per cent of the all India population of cattle, buffaloes, sheep and goat Bihar produces a large volume of hides and skins. The estimated annual milk production in Bihar is 90 lb and the meat consumption per head is 1.3 lb. The density of animal population is 264 per square miles. It is generally higher in the plains than in hilly regions. Bihar ranks first among the states in



fresh inland water fish.<sup>2</sup>

### Irrigation and Power:

Bihar has abundant water resources. Here the average rainfall is nearly 129 cm., received mostly from the south west Monsoon. The major irrigation projects are on rivers Kosi, Gandak, Sone, Badua, Chandan, North Koel, and Bagmati. There are a number of small and medium irrigation projects to benefit tribal areas. Several flood control schemes are in the various stages of completion.

Major power projects are the Patratu thermal power station, Barauni thermal power station, Subarnrekha and Kosi Hydroelectric power station under Bihar State Electricity Board and Bokaro, Chandrapur and Durgapur thermal power station along with Titaiya Maithon and Panchut Hydel power station under the Damodar valley Corporation. The total installed capacity as on March 1981 was 2301 MW, however, a recent survey of Times of India reports to the increased capacity of 2753 MW.<sup>3</sup>

### Transport and Communication:

The state has total railway networks of 5312 km. and is

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2. C.D. Singh, "Bihar" in T.N. Kapoor's Industrial Development in the States of India, Sterling Publishing (P) Ltd., Delhi, 1967, p.94.
  3. The Times of India, Delhi, 24 Nov. 1983.

served by three different gauges: the North-Eastern (metre), the Eastern and South Eastern (broad) and the light railway (narrow). There is one kilometer of railway for every 12970 persons as against 11088 in India (as on March 1981).

The total road network in Bihar is 76922 kms. Most of the roads are unmetalled and many of them become impossible in rainy seasons.

Besides, Bihar has three main aerodroms and 32 landing strips. The state is also served by 1743 kms of waterways which comprise 1370 kms of rivers and 373 kms of navigable canals.

#### Population and Density:

Bihar is the second largest state in India by population and ninth by area. According to 1981 census, its population stands at 69,823,154 with 8,699,013 or 12.46 per cent of the total being in urban areas. Its literacy rate is 26.1 per cent as against 36.17 of the all India average.<sup>4</sup> The density of population is more heavily in North Bihar with 1058 persons per square mile than in the South Bihar or the Chotanagpur. (See table 1.)

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4. Census of India, 1981.

Table 1: Regional Distribution of Population and Population Density

Region	Percentage of total area	Percentage of total population	Percentage of density
North Bihar plain	30.5	46.5	1058
South Bihar plain	23.7	28.5	836
Chotanagpur plateau	45.8	25.0	378
Bihar	100.0	100.0	694

Source: Census of India, vol.IV, Bihar, Part II A (2), General Report on the Census (Delhi Manager of Publications, Govt. of India, 1977, pp.49-50.

#### Livelihood Pattern and Social Structure

Bihar is still mainly an agricultural state where majority of people derive their livelihood from agriculture. No less than about 86 per cent of population is dependent upon agriculture. There is perhaps no state (except Madhya Pradesh) where the dependence on agriculture is so great.<sup>5</sup> According to 1981 provisional population figures (workers and non-workers), Bihar has 32.23 per cent workers as against 37.55 per cent of all India level of which 33.08 per cent came

5. C.D. Singh, op. cit., p.94.

from rural areas and 26.26 per cent from urban areas. (See table 2.)

Out of a total working population (main workers) of Bihar 43.77 per cent are engaged as cultivators, (against 41.53 per cent of all India level) 35.44 per cent as agricultural labourers (against 25.16 from all India) 3.01 per cent are engaged in household industries and 17.78 per cent are engaged in other works (construction, trade and commerce, repairing, servicing, storage, etc.) as against 29.32 at all India level. This not only shows better working population in Bihar but also more dependence on agriculture. It is further interesting to note the livelihood pattern in Bihar as 89.37 per cent of rural population being dependent on agriculture and only 23 per cent urban workers depending on agriculture. This can be discerned from the table 3.

As seen in the wider social structure in India which is primarily based on the caste stratification, Bihar nowhere differs from it and has primarily a caste laden social structure. Sharma writes, "The caste system is a pivotal institution in Hindu society. It shapes and directs the relationships of its members in a number of ways. Caste has been considered both as a unit and as a system of social stratification. As a system of social stratification, it places its units, sub-units and all its members in an order

Table 2: Total Population, Main & Marginal Workers and Non-Workers  
1981

India/ State	Total Rural Urban	Total Per- sons	Main Workers		Marginal Workers		Non-Workers	
			Absolute	Per- cent- age of Total Popu- lati- on	Absolute	Per- cent- age of total popu- lati- on	Absolute	Per- cent- age of total popu- lati- on
India	Total	658140676	220082531	33.44	27065784	4.11	410992361	62.45
	Rural	501952169	174529113	34.77	23553400	4.69	303864576	60.54
	Urban	156188507	45553418	29.17	3512304	2.25	107122785	68.58
Bihar	Total	69823154	20712215	29.66	1792981	2.57	47317958	67.77
	Rural	61124141	18480627	30.23	1739726	2.85	40903788	66.92
	Urban	8699013	2231588	25.65	53255	0.61	6414170	73.74

Table 3: Distribution of Main Workers by Broad Categories

India/ State/ UTs	Total Rural Urban	Persons	Percentage of Main Workers			
			Culti- vators	Agricul- tural laboure- rs	House- hold Indust- ries	Other Workers
India	Total	220082531	41.43	25.16	3.99	29.32
	Rural	174529113	51.00	30.12	3.40	15.48
	Urban	45553418	5.25	6.15	6.25	82.35
Bihar	Total	20712215	43.77	35.44	3.01	17.78
	Rural	18480627	48.13	38.61	2.63	10.63
	Urban	2231588	7.68	9.18	6.14	77.00

Source: Extracted from Census of India, 1981, Series 1 India Provisional Population Tables - Workers and Non-Workers, Registrar General & Census Commissioner for India, p.54, p.31.

of high and low ranks".<sup>6</sup> M.N. Srinivas, however, finds the caste system in all constituent units of the Indian social structure. "It is important to note that caste is found not only among the Hindus but also among the Muslims, Christians, Sikhs, Jains and Jews. Caste is ubiquitous, and this has resulted in an ideology of diversity... Commenting further on its characteristics he observes, "The features of caste prevailing through the past centuries may be described under nine heads: hierarchy; endogamy and hypergamy, occupational association; restriction on food, drink and smoking; distinction in custom, dress and speech; pollution; ritual and other privileges and disabilities; caste organization and caste mobility".<sup>7</sup>

The social structure of Bihar could also be expressed through the structure of the existence of class system, but the class system in Bihar and for that in the whole Indian society exists so interwoven with the caste system that it hardly appears as a system independent of the wider caste system. Truely writes Sharma, "The two systems have changed simultaneously and inseparately because they never existed as separate or independent principles of social relations. They could be characterized in terms of change by flexibility, adaptability,

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6. K.L. Sharma, Essays on Social Stratification, Rawat Publications, Jaipur-Delhi, 1980, p.63.

7. M.N. Srinivas, India: Social Structure, Hindustan Publishing Corporation (India), Delhi, 1982, pp.1 & 5.

rejection and accretion".<sup>8</sup>

There are numerous castes, sub-castes and sub-sub-castes in the state. It somewhat is difficult to determine their exact number. However, according to one estimate,<sup>9</sup> total number of caste groups in Bihar is 275 out of which 4 are upper castes, 128 are backward or intermediary castes, and the rest 140 are the scheduled castes. Besides there are numerous scheduled tribes.

The caste structure of Bihar can be better understood in the following three broad categories, besides the Scheduled Tribes which forms yet another important ladder in the social structure of Bihar.

- i. Forward Castes or Upper Castes;
- ii. Backward Castes or Intermediary Castes;
- iii. Scheduled Castes or Harijans; and
- iv. Scheduled Tribes.

(1) Upper Castes:

The upper caste in Bihar consists of the Brahmins, Bhumi-hars, Rajputs and the Kayasthas. An interesting fact of these castes is that though they constitute only about 14 per cent

8. K.L. Sharma, op. cit., pp.20-21.

9. Amrish K. Sinha and Anand Verma, "Behind the Caste Riots", Mainstream, New Delhi, April 29, 1978, pp.11-12.

of the total population in the state they dominate in most walks of the life. In ritualistic matters, the Brahmins enjoy the supremacy and also share a major portion of land like Rajputs and Bhumihars. However, it should not be mistaken from this fact that all Brahmins are economically very sound. The Kayasthas, though low ritually and economically, have been more advanced in the field of education.

Besides the ritual, economic and educational fields, the upper castes have been dominant in the politics as well in the state. It is clear from the fact that the majority of state legislators and the chief ministers between 1947 to 1983 belonged to the upper castes.

The table 4 shows the caste composition of the political parties and coalition in power in Bihar Vidhan Sabha during 1962-77.

Table 4: Caste Composition of Political Parties in Different years (figures in percentages)

Groups	1962	1967	1969	1975	1977	State Population
Brahmin	14.1	8.6	11.8	16.0	2.8	4.6
Bhumihar	13.6	11.1	10.5	9.3	12.0	2.8
Rajput	14.1	24.1	19.1	14.4	19.4	4.1
Kayastha	6.0	3.1	2.6	1.5	5.1	1.21
Total Forwards	47.8	46.9	44.0	41.2	39.3	12.7
Upper Backwards	23.9	25.9	25.6	22.1	23.5	18.8
Lower Backwards	0.5	3.1	1.3	1.5	2.3	31.2
Muslims	8.2	4.9	8.6	10.3	6.5	12.2

(contd...148..)



(contd...)

Bengalis	1.1	3.1	0.0	0.5	2.3	2.4
Scheduled Castes	17.4	11.7	12.5	15.5	18.0	13.8
Scheduled Tribes	1.1	4.3	7.9	6.8	8.3	8.9
<b>Total</b>	<b>100.0</b>	<b>99.9</b>	<b>99.9</b>	<b>99.9</b>	<b>100.2</b>	<b>100.0</b>

Source: Harry W. Blair, "Rising Kulaks and Backward Classes in Bihar", Economic and Political Weekly, January 12, 1980, p.68.

The table 4 reveals the dominance of the upper castes in the state politics of these, the Rajputs seem to have more consistent record followed by Brahmin and Bhumi-hars respectively. Kayastha shows the lowest position in political dominance among upper castes.

#### (ii) Backward Castes:

They are put between the upper castes and the Scheduled Castes. Thus these backward castes are below the upper castes but above the Scheduled Castes in the traditional caste hierarchy of Bihar. They are numerically the strongest caste group, constituting about 52 per cent of the total population in the state. Prominent among these are the Yadavas, Kurmis, Vaishyas, Hazams and Koeries. Educationally they lag far behind the upper castes. For instance, in the year 1931, 372 Kayasthas out of 1000 were literate, whereas literacy among the Kurmis and the Yadavas was only 50 per thousand.<sup>10</sup>

10. See Ramashray Roy, "Caste and Political Recruitment in Bihar", in Rajni Kothari (ed.), Caste in Indian Politics, Orient Longman, New Delhi, 1970, p.230.

However, the Yadavas, Kurmis and the Keories own a large part of land in the state and in many villages, they have succeeded in acquiring the status of a dominant caste. The Kurmis and the Banias (Banias particularly in state's business economy) can be considered as some of the affluent castes in the state.

Despite their numerical strength, the middle range castes played a subsidiary role in the state politics till the year 1977. They used to align with one or the other upper caste to achieve their specific ends. On some occasions, the intermediary caste men became the chief minister as well. Moreover, in the year 1978, they got a majority victory in acceptance and subsequent implementation of the recommendations of the Mungeri Lal Backward Classes Commission, by the state government headed by Karpoory Thakur, a backward caste person. With this a new era of caste conflict and tension heralded in the state. This event undoubtedly brought solidarity among the different backward caste people and prepared them to challenge the upper caste dominance in the state.

The Backward Castes have been divided into two groups on the basis of their socio-economic conditions: (i) upper backwards, and (ii) lower backwards. The upper backward castes include the Banias, Yadavas, Kurmis and the Keories. The Lower backward castes comprise of the Barhi, Dhanuk,

Hajjam, Kahar, Kandu, Kumhar, Lohar, Malleh, Tatwa, Teli, and other Shudras. The table 5 shows percentage of different backward castes in Bihar.

Table 5: Percentage of Different Backward Castes in Bihar, 1961

Category	Caste (Group)	Percentage of total population
(A) Upper Backward	Jania	0.6
	Yadav	11.0
	Mirmi	3.6
	Koeri	4.1
	Total	19.3
(b) Lower Backward	Barhi	1.0
	Dhanuk	1.8
	Hajjam	1.4
	Kahar	1.7
	Kandu	1.6
	Kumhar	1.3
	Lohar	1.3
	Malleh	1.5
	Tatwa	1.6
	Teli	2.8
	Other Shudras	16.0
Total	32.0	
Total Backwards		51.3

Source: Harry W. Blair, op. cit., p.65.

It is clear from the table 5 that the Yadavas, with a percentage of 11.3 in the total population in the state, are numerically stronger than the other castes in Bihar. They are socially and politically prominent, and are concentrated mainly in the northern districts of Darbhanga and Saharsa,

though they have spread to other parts of the state also. They are the traditional traders of milk and milk products and possess a good deal of landed property.

The Yadavas have had frequent conflicts with the Bhumi-hars and the Brahmins because they (Yadavas) have tried to identify themselves with the latter and sought the ritual recognition. Besides they have clashed with the Kurmis also, though on some occasions, the Kurmis have joined hands with them in order to combat the Rajputs and the Bhumi-hars".<sup>11</sup>

After Yadavas there comes the Keoris and Kurmis who are prominent in their numerical strength. They are mainly engaged in cultivation work and in many parts of the state, they have been successful in becoming dominant castes. The Keoris are concentrated in Patna, Samastipur, and Vaishali districts, while the Kurmis are found primarily in Patna, Gaya and Nawadah districts. The Kurmis were the most conscious group among the backward castes and they formed their caste association of the inter-state level much before independence in order to move up in the social hierarchy. With regard to education, the Kurmis are the leading backward caste in the state.

Politically too, the Kurmis have been quite vigilant. As early as in 1937 Gur Sahai Lal, one of the Kurmi leaders,

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11. In 1934, Triveni Singh, a union of three castes, Yadavas, Keoris and Kurmis, was formed and thus started the mobilisation of the backward castes in Bihar.

became minister in the interim government headed by Sri Krishna Singh. Another leader, Dev Sharan Singh, became the speaker of the State Legislative Council. The Kurmis adopted the title of 'Singh', but it was dropped in the late sixties. However, they identify themselves with the Rajputs. A very interesting fact which can be seen everywhere in Bihar today is that the Kurmis now appears to surpass the traditionally dominant Yadav in all walks of life in the state and thereby replacing their dominant status in the rank stratification or the Backward Caste structure.

(111) The Scheduled Castes:

According to the 1971 caste census the Scheduled Castes constitute 14.11 per cent (7,059,652) of the total population of the state. They are scattered throughout the state, though their large percentage is in the districts of North Bihar. In Chotanagpur region, they are less than 10 per cent. The ratio of the Scheduled Caste population to the total population is highest in Palamau, closely followed by Gaya.<sup>12</sup> There are twenty three Scheduled Castes in Bihar, out of which the Chamar, Dusadh, Misahar, Dhobi and Pasi together constitute 80 per cent of the total population of the Scheduled Castes in the state.

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12. See Sachidanand, The Harijans Elite, Thomson Press (India) Limited, New Delhi, 1977, p.15.

Despite many government measures for their upliftment, they are still quite backward in terms of education and economic development. Their literacy rate<sup>13</sup> has not shown any substantial increase even after the grant of reservation in the educational institutions. The majority of them work as agricultural workers for the upper and intermediary castes and are ill-treated most of the times. This at times, leads to inter-caste conflict. Only in a few villages in the state one finds the Scheduled Castes land owners. All this speaks of their pathetic life.

(iv) The Scheduled Tribes:

There are twenty-nine major and minor Scheduled Tribes in Bihar and they altogether form about 9 per cent of the total population in the state. According to the Census of 1971, their total number was 4,932,767, out of a total state population of 56,353,369. Majority of the Scheduled Tribes live in the districts of Ranchi (60 per cent), Hazaribagh (36 per cent), Dhanbad, Singhbhum, Palamau and Santhal Pargans (44 per cent). These districts are in hilly regions of Chotanagpur and Rajmahal. The tribal communities are also found in certain parts of Sasaram Bhabua, Champaran, Purnea,

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13. According to 1971 Census literacy rate among the Scheduled Castes in Bihar is only 6 per cent which is much lower than that among the Scheduled Tribes.

Bhagalpur and Monghyr.<sup>14</sup> All these tribes belong to the Proto-Australoid stock, though there are slight physiological differences among them.<sup>15</sup> "The chief representatives of the Dravidian races inhabiting the tribal region of Bihar are the Hos, the Santhals, the Oraons, and the Mundas and they together constitute almost four-fifths of the total tribal population of the State".<sup>16</sup> Important tribes of Bihar are Mundas, Santhals, Hos, Oraons, Paharias, Birhors, Kharias, Bhumis, Asurs, Cheros and Tharus. The largest population is of Santhals followed by Oraons and Mundas. The table 6 gives population figures of different tribes found in Bihar.

Table 6: Scheduled Tribes, Bihar (1961 Census)

Name of Tribes	Population
1. Asur	5,619
2. Baiga	951
3. Banjara	42
4. Bathudi	456
5. Bedia	36,241
6. Binjha	6,725
7. Birhor	2,438
8. Birjia	4,029
9. Bhumis	101,057
10. Chero	30,845

(contd...155..)

14. Narmadeshwar Prasad, Land People of the Tribal Bihar, Bihar Tribal Research Instt, Ranchi, 1961, pp.16-17.
15. R.R. Diwakar, Bihar through the Ages, Orient Longman, Bombay, 1959, p.74.
16. Ramchandra Prasad, Bihar, National Book Depot, India, New Delhi, 1983, p.35.

11.	Chikbaraik	30,770
12.	Gond	33,521
13.	Gorait	4,793
14.	Ho	454,746
15.	Karmali	26,509
16.	Kharia	108,983
17.	Kharwar	109,357
18.	Khond	814
19.	Kisan	12,011
20.	Kora	13,824
21.	Korwa	21,162
22.	Loharaor Lohak	92,609
23.	Mahali	67,979
24.	Malpaharia	45,423
25.	Munda	626,931
26.	Oraon	735,025
27.	Parhaiya	12,263
28.	Santhal	1,541,345
29.	Sauria Paharia	55,606
30.	Bavar	1,561
31.	Unclassified	16,930
	total	4,204,770

Sources: L.P. Vidyarthi, Cultural Contours of Tribal Bihar, Purthi Pustak, Calcutta, 1964, p.295.

The tribes in Bihar are no longer in their primitive state. They are undergoing changes due to benefits derived from the governmental schemes in general and the role of Christian missionaries in particular. Economically they are more secured today. Educationally they are better than the scheduled castes. They interact well with other caste groups and a large number of them go to different parts of the state for working in mines, factories, construction sites etc. The tribal leaders are also making their dent felt in the state politics.



### Review of Bihar's Economy

Both agriculture and industry are equally important for causing overall development in the state of Bihar. It is not generally realised that in a situation such as ours industrialization of a level which would make a dent on poverty and mass unemployment can come only after we have achieved agricultural prosperity....the absence of food and agricultural raw-material surpluses is also an important barrier to rapid industrialization".<sup>17</sup> Hence a review of both is presented here to show the pace of development in Bihar today though the stress is more on industrial development keeping up the spirit of the present study.

### Agricultural Development:

The total agricultural land area in Bihar is about 115000 square kilometers of which 35 per cent marks as the net irrigated area. As seen earlier, majority of population in Bihar, derives its livelihood from agriculture. Agriculture in Bihar, however, is characterized by low productivity on account of the uneconomic size of average landholding (4.1 acre), inadequate irrigation facilities making much of agriculture dependent on vagaries of the monsoon and primitive

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17. Pradhan H. Prasad, "Dynamics of Growth in Rural Bihar", The Times of India, New Delhi, 17 March, 1983.

methods of farming.<sup>18</sup> The total consumption of fertilizer in Bihar in 1981-82 was 2.8 lakh tonnes which worked out to 19.9 kg. per hectare as against the all India average of 35 kg.<sup>19</sup>

The First Plan in Bihar laid emphasis on agricultural production and continued in the second with a view to achieving self-sufficiency in food-production. It also included aim to increase the production of industrial raw-materials. The development of village and small scale industries was extensively taken up to shift the burden on agriculture in the second, third and fourth plans. Programmes for irrigation and flood control, distribution of improved seeds and fertilizers, taking up plant protection measures, adoption of improved and scientific farming techniques, research were also made for raising agricultural output.

During the period 1952-53 to 1969-70 the growth rate of agricultural production at 0.7 per cent per annum was much lower than the all India average of 3 per cent.<sup>20</sup> The

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18. Kedarnath Prasad, The Economics of a Backward Region in a Backward Economy: A Case of Bihar in relation to other states of India, Scientific Book Agency, Calcutta, 1969, pp.146-216.

19. The Times of India, op. cit., 24 Nov. 1983.

20. Ramchandra Prasad, op. cit., p.116.

cropping pattern, however, is changing in favour of rabi-food grains and the cultivation of cash crops are increasing day by day.

Yet none can say categorically that no improvement has taken place in agriculture. Improvements did take place as seen from Bihar's total production gone from 71.4 lakh tonnes in 1961-62 to 104 lakh tonnes in 1981-82 but it still lags behind other states when compared in light of its vast cultivable land and working force. The fact is whatever benefits accrued, have gone in the selected pockets. As a result the agricultural labour who really run farm activities are paradoxically at the lowest ebb of the ladder.

The main reason for this state of affairs lies in the history of Bihar and the story starts from 1793 when Permanent Settlement of land was made by the Britishers. Under the system zamindars and Barons became intermediaries between the government and the tenant, collecting the rent on behalf of government.

Today, 0.4 per cent of the people hold more than 50 acres of land and 9.5 per cent hold the total agricultural land. Another 5.2 per cent owning more than 15 but less than 50 acres of land hold 17.14 per cent of the total agricultural land. Thus 5.6 per cent of the agricultural families hold around 30 per cent of the total population. (See table 7.)

Table 7: Pattern of Land Ownership

Size of Holding (in acres)	Percentage of Households	Size of Households
Less than 1	21.5	4.7
1.0 - 2.4	26.7	5.1
2.5 - 4.9	23.4	5.8
5.0 - 7.4	12.2	6.6
7.5 - 9.9	5.1	7.3
10.0 - 12.0	3.7	7.1
12.5 - 14.9	1.8	8.3
15.0 - 29.9	4.2	8.9
30.0 - 49.9	1.0	9.5
50 and above	6.4	9.5
<b>Total</b>	<b>100.0</b>	

Source: S.R. Bose, "The Structure of Bihar Household", Journal of Social and Economic Studies, vol.III, No.1, 1975.

Thus general mass has got small size of landholding. Lack of irrigation on the one hand and rising prices of seeds, fertilizers, and other requirements on the other, compel them to sell their land. The result is that the number of agricultural labourers increased from 23 per cent in 1961 to 35.44 per cent in 1981.

A kind of bonded labour practice is still existing in South Bihar in form of 'Saikia' system which gives a pathetic account of exploitation. "In the Saikia system - if a man takes a loan of any amount, he will have to work for the moneylender as and when required till the loan is paid back. He gets a morning breakfast, a mid-day meal and two 'kachhi

seers' of paddy, maize or dal. With this he will have to feed his family and pay back the loan. If they absent themselves for any reason, be it sickness, marriage or visiting a relative, they incur a debt of Rs.2 per everyday they are absent. They just cannot fight back and so bow under the inevitable and keep working.<sup>21</sup>

This system is existing in one form or the other in the whole of Bihar but is the most pathetic in tribal areas. This exploitation (of feudal sort) is the common feature of agriculture in the state; hence Bihar's agriculture could be rightly characterized as semi-feudal with regard to its mode of production. The government since Independence adopted two land reform measures but due to some structural constraints inherent in the system itself these measures failed to stand by people's will. By Bihar Land Reforms Act of 1950, zamindari system was abolished and in 1961 the Bihar Land Reforms (Ceiling) Act put a ceiling on land holdings. But the working group on Land Reforms of the National Commission on Agriculture concluded in 1973 after a visit to Madhubani and Muzaffarpur districts that land reforms in the state was "sour joke". It commented, elsewhere in the country, the law evaders have a sneering respect for the law enforcement authority. Their

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21. Quoted in "J.P.'s Real Mission" Economic and Political Weekly, 22 March 1975.

approach is furtive, their methods clandestine. In Bihar the landowners do not care a tuppence for the administration. Their approach is defiant - their "modus operandi" open and insolent.<sup>22</sup>

### Industrialization in Bihar

"Gone are the days when Bihar was known as one of the industrially backward states in the country.....Bihar has now reached the take off stage for finding its due place on the industrial map of the country. Industrial revolution is round the corner".<sup>23</sup>

Let us review the industrial progress of Bihar in the light of this statement of Dr. Jagannath Mishra made in the capacity of the former chiefminister of Bihar.

From the point of view of industries Bihar may be regarded as being in a state of transition.<sup>24</sup>

Upto the mid-nineteenth century, Bihar enjoyed a fair share in India's trade and manufactures in hydro, saltpetre, textiles, opium, etc. It suffered along with the rest of the country in the general decay of handicrafts that followed consolidation of British policies and economic power in

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22. Mohan Ram, "The Sarvodaya Farce", Economic & Political Weekly, Bombay, May, 1975.

23. Jagannath Mishra, "Towards Building a Better Bihar", The Times of India, New Delhi, 14 January 1982.

24. Ramchandra Prasad, op. cit., p.121.

India.<sup>25</sup> The period of nineteenth century passed on without any remarkable industrial venture in the state except for the raising of the coal for the first time in India from collieries of Bihar. However, the first organized effort in the direction of heralding a new industrial age in the history of Bihar took place in 1907 when the greatest ever large industrial establishment of TISCO was set up at Jamshedpur. Soon this 'Tatanagar' became the centre of a wide group of associated industrial development. Much later Dalmianagar emerged as another notable industrial centre with sugar, paper and cement factories. Thereafter, Bihar caught up the speed for rapid industrialization and its enormous mineral resources aptly supported it in the direction. However, the real progress of industrialization in Bihar marked under the planned economic development after independence.

The distribution of industries in Bihar today is based on easy reach of base raw materials. Thus while agriculture based industries are mostly located in North and South Bihar, industries based on minerals are mainly located in Chotanagpur, with a dispersal of some small scale industries in South Bihar. The existing industries on the sources based may be classified into following categories:

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25. C.D. Singh, op. cit., p.121.

1. Mineral Based Metallic Industries - (i) iron & steel, (ii) Aluminium, (iii) Copper, (iv) Uranium, (v) Foundaries and General Engineering.

2. Non-metallic industries based on Extracting Raw Material - (i) Cement, (ii) Glass, (iii) Oil-refinery, (iv) Heavy Chemicals and Fertilizers, (v) Coal, (vi) Mica.

3. Agriculture based industries - (i) Sugar, (ii) Jute, (iii) Cotton, (vi) Rice mills, (v) Cigarettes.

4. Forest based industries - Lac & Paper and Board.

5. Others - (i) Cottage Handicrafts, and Silk, (ii) Miscellaneous.

#### Mineral based Metallic Industries:

TISCO and the Bokaro Steel Plant are the major iron and steel plants in the state. While the establishment of TISCO dates back to 1907, the Bokaro Steel Plant, a central Government enterprise, was commissioned on 25th February 1978. The TISCO produced one million tonnes of pig iron and 0.7 million tonnes of steel ingot prior to the commencement of First Plan. Its capacity has since increased to 2,000,000 tonnes of ingot steel and 1,500,000 tonnes of saleable steel by February 1978. The manufacture of iron and steel is a basic industry which has control over many other industries, thus leading to the growth of a number of satellites around TISCO, of which



Agrico, the Tin Plate factory, the wire factory, the Telco etc. are important, Existing engineering units in the vicinity of Bokaro would be engaged in meeting the project's requirements of spares. The iron and steel industry has a bright future in the state. The state has vast aluminium resources (bauxite mines) in Lohardaga area, despite that, the industry is not showing rapid growth in the state. The Indian Aluminium Company Ltd. at Muri and Aluminium Corporation of India at Ranchi are the only major concerns in the state. Copper industry on the other hand is one of the flourishing industries in the state. Copper ores are extracted from Mosabani and Badia mines at Ghatsila, and thereby is transported to Maubhandar where the sulphur is separated from the ore to extract pure copper. The Indian Copper Corporation and the Hindustan Copper Ltd. (Jaduguda) are the major concerns functioning in the state. Jaduguda in Bihar has adequate uranium reserves. It is fast urbanising because a mine supplying uranium ore is being developed. To process the ore a uranium mill has been built near the mine by Indian Engineers of Atomic Energy Establishment. The uranium mill has been designed to increase the element of self-sufficiency in nuclear energy programmes for research as well as for peaceful power development.<sup>26</sup>

As regards engineering industries, observes the Planning

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26. Radarnath Prasad, op. cit., p.138.

Commission, 'over the years engineering industries in the country have registered a phenomenal growth to generate a strong base in a wide range of heavy and light engineering industries covering a broad spectrum of capital goods and consumer durable products<sup>27</sup> and Bihar shows a fair deal in that. Hatia in Ranchi is the home of numerous engineering projects being developed. The engineering works at Kumardhubi, Asian Refraction Ltd. Bokaro, Garden Reach Workshop Ltd. Ranchi, The Hindustan General Electrical Corporation Ltd. Chota Amber, Hindustan Steel Ltd. Dhanbad, Indian Steel and Wire Products Ltd. Tatanagar, Indian Tube Co. Ltd. Jamshedpur, the Metal Corporation of India, Tundo, the Railway Engineering Workshop. Jamshedpur, and Usha Martin Black Ltd. Ranchi, etc. are some of the big concerns in the state.

Big foundaries are situated at Morhowrah (Saran), Muzaffarpur and Tatanagar. The Saran Engineering Co. Ltd. of Morhowrah and Messrs Arthur Butler Company of Muzaffarpur are big engineering firms engaged in heavy iron casting and repairing of sugar and paper mills.

Besides there are a number of medium size engineering factories and foundaries situated at Patna, Ranchi, Muzaffarpur and Jamshedpur which produce chaftcutter, sugar cane crushers and agricultural equipments. In addition to it

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27. Planning Commission, Sixth Five Year Plan, 1980-85, p.246.

there are numerous small fabricators spread all over Bihar which produce consumer items.

### Non-metallic Industries:

Rich in the principal raw materials such as limestone, clay, and coal Bihar is one of the largest producers of cement in India. Vindhya plateau of Shahabad has sufficient limestone to feed cement factories at Dalmianagar, Benjari, Kalyanpur, Japla Khalari, and Sindri. The future of the industry seems assured as the Government of India has assured the state to make slags available from the fourth furnace of the Bokaro Steel Plant.

The glass industry stands prospective but the shortage of sulphate sometimes creates problems. The deposits at Jodhpur are being exhausted. The glass factory at Patna is a small concern but one at Bhandarinagar is a big concern set up with Japanese aid.

Oil refinery is a relatively emerging industry in the state with one big concern set up at Barauni, in Russian collaboration. A master plan is under preparation for constructing various industries based on products of petro-chemical industries.

Bihar is the largest producer of coal in India. There are a number of coal washeries at Jandatra, West Bokaro, Lodna, Karguli (Near Bokaro) Dugda, Bhojudih, Pathardih

Keranpura and Kathara, with the establishment of National Coal Development Corporation which has taken over many of these washeries, the production has gone far ahead. The coke oven plants are located at Sindri, Barriahdih and Dhanbad. The Bihar High Tension, Insulator Project (Namkum) manufactures high tension electrical insulators and a few low tension posts and telegraph insulator.

Mica is yet another industry in which Bihar leads the country. Since its an export-oriented industry, its future stands fair. The main centres of the industry are Jhumari Telaiya, Giridih, Domchanch and Pachanba. One of the significant developments in the industry is the establishment of a micanite factory at Jhumari tilaiya to producing micanite, micalinen, mica silk, mica paper and micanite tubes etc.

As regards heavy chemicals there were only five registered units in the state till 1960 and the state could not mark any satisfactory development in this sector during the period thereafter. With the establishment of Bihar state Pharmaceutical & Chemical Development Corporation in 1978-79, a new future is ahead. The dent has already been made with the construction of a number of plants. Malathion, Naptha Chemicals, Akyd, Dyeing testing and Quality Control Laboratory (Ranchi) are some of the ventures in the offing. The new Industrial Policy of 1980 gives top priority to the industry and provides for good incentives to new entrepreneurs.

The Sindri Fertiliser factory is the largest fertiliser plant in the East India. The Bihar State Superphosphate Factory (Sindri) with installed capacity of 72,000 tonnes has been established to produce superphosphate for distribution among peasants within Bihar. The future of this industry is bright. Steps are on to set up a coal based fertiliser factory at Giddi in Hazaribagh. Action on scheme for manufacture of phosphate and sulphuric acid based on pyrites available has also been initiated. Necessary provisions have been made in the state's next plan for preparation of a feasibility report by the government of India. Industries based on limestone are also being promoted.<sup>28</sup>

#### Agriculture based Industries:

Bihar is third in sugar production. Except for a few khandasari mills in Bhagalpur, Monghyr and Gaya districts, there are as many as 29 sugar mills in Bihar mostly located in the plains of North Bihar. Though the state is very close to West Bengal in the production and acreage of jute, it has only three jute mills employing merely 7,404 persons in all. The state rather plays an insignificant role in the production of cotton. Its cotton mills are small and located at Gaya, Phulwarisharif, Buxar, Dumraon, Mokameh and Ormanjhi. The

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28. The Times of India, New Delhi, 14 January 1982.

sixth plan of the state proposes to open 9 more cotton mills. Thus this industry has assured future. Besides, the state has a large cigarette factory at Dilwarpur in Monghyr and as many as 245 bidi factories all located in Singhbhum. Thus the agriculture based industries in the state have marked a transition in development process.

#### Forest based Industries:

Lac and paper based are the only industries in Bihar which have marked some progress during the period. Bihar had 73 small scale lac industries in 1956 which produced 27,300 tonnes of shellac. But thereafter the industry marked a decline. The first paper machine factory was set up in 1938 with a capacity of 6000 tonnes. Since then the industry has gone far ahead. The hardwood available adequately in the forests of Chotanagpur makes it a prospective industry. Presently paper mills at Dalmienagar, Samastipur and Darbhanga and two plywood factories at Chakulia are leading concerns in the state.

#### Cottage, Handicrafts and Silks:

Of the various cottage industries in the state, the most important is handloom weaving industry. This is one of the oldest industries and in 1956 there were more than 2 lakh handlooms employing about 10 lakhs people. The state government spends 25 to 30 lakhs annually for its development. A

high sum of 2.64 crores was meant for 1980-81 budget to recover its setback over last few years. Some other items which come under cottage industries in Bihar are hand-pounded rice, hand-processed flour and pulses, soap making, gur khandsari, hand-made paper, ghani oil, bee keeping, carpentry, blacksmithy and fibre industry. The Khadi and Village Industries Commission is playing vital role in the growth of cottage industries in Bihar. The government has taken special steps to revive and promote traditional arts and crafts.

The state has marked tremendous growth in silk production particularly in non-mulberry and tasar silk. Over 80,000 kilograms of tasar raw silk are produced annually and nine tasar seed supply stations, 20 sub-stations, 7 training centres, 2 marketing centres and 15 cooperatives have been set up by the state government for its development. Two eri seed supply stations have also been opened in Sitapur and Sakra to promote eri silk industry in North Bihar. The industry thus is rapidly developing.

#### Miscellaneous:

Apart, there is a number of other industries in Bihar. The saw mills in Bihar total more than 300. The core of its leather industry lies at Digha and Mokameh. There are small tanneries at Bettiah, Bihta and Gaya. Although there are 7 distilleries, the state has another 800 lakh litres of surplus

alcohol which can be used for industrial purposes. There is thus plenty of scope for setting up pharmaceutical, plastic and chemical units in the state based on alcohol.

#### Financial Assistance:

The Bihar State Financial Corporation, Bihar State Credit and Investment Corporation and Bihar State Industrial Development Corporation are three financial institutions which sanction finances to industries. The authorised share capital of BSFC is Rs.10 crore of which Rs.9.54 crores has already been subscribed. The BSIDC has authorised capital of 15 crores whereas it has already invested about 20 crores in various industrial units of public sector, joint sector and subsidiary companies. The Bihar State Credit and Investment Corporation sanctioned 12 crores in the single year 1980-81. Apart from these financial facilities, the government also grants a number of incentives. All these mark a really golden future for industrialization in Bihar.

#### Industrial Area Development Authorities and Industrial Estates

There have been running six industrial area development authorities at Adityapur, Bokaro, Patna, Darbhanga, Ranchi and Mazaffarpur. Each authority has the overall responsibility for the planned development of its area under its jurisdiction. It allocates land and sheds to the entrepreneur



and is ultimately responsible for the development and maintenance of infrastructure facilities. Apart, there are 29 industrial estates in the state. The private agencies can also be assisted financially for setting up industrial estates if they form a cooperative society with Rs.1 lakh paid up share capital or if they form into a company registered under the Company Act.

The Industrial Policy of 1980 and the New Industrial Climate in Bihar

The new Industrial policy of Bihar was announced on 17th November 1980. While framing the new industrial policy the government laid emphasis on balanced growth of industries as also on promoting such industries as were ignored in the past. The government has laid stress on promoting chemicals, pharmaceuticals and light engineering industries as priority sectors. As regards agro-based and forest-based industries, the policy emphasizes for long term availability of such raw-materials as bamboo, soft and hard wood, salseed etc. The policy further aims at developing special complexes for setting up food processing units in suitable areas.

With regard to mineral based industries, the strategy will be two fold - processing and fabricating industries based on mica will be encouraged through special efforts while for graphite and apatite it will be through the use of modern

technology developed by National Metallurgical Laboratory. The setting up of at least one nucleus plant in each district and the revival of Industrial Development Council are yet other aims.

Finally for generating employment, special efforts will be made to boost the labour-intensive sectors of handloom, khadi and village industries and sericulture.<sup>29</sup>

Steps are already on to implement the new industrial policy. Top priority is being given to the chemical industry. The caustic soda plant at Palamau and a chemical complex around it will go a long way in promoting the chemical industries in the state. Under the 20-point programme a ceramic industrial estate is being set up by the Bihar Pharmaceutical and Chemical Development Corporation in Santhal Pargana with great employment potential of engaging local Harijans and Adivasis.

The state government is making efforts to set up a chain of industries based on by products from the coke ovens of the Bokaro steel plant. As a result several important units such as synthetic tanning materials and dyeing are coming up. Another unit namely the Eastern Nephtha Chemicals has gone

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29. Extracted from the Statement on New Industrial Policy and Strategy, issued from Commissioner and Secretary, Industries Department, Bihar, Patna.

into trial production. Efforts are also being made for setting up of a petro-chemical complex at Barauni. A unit for manufacture of glucose and starch is being set up at Pandaul. Besides, schemes for setting up industries based on alcohol and similar products have also been drawn up and necessary steps taken for implementation of the same.

With regard to mineral based industries steps have been taken to set up a coal based fertiliser factory at Giddi in Hazaribagh. Apart, three cement factories at Patratu and Bhavnathpur are coming up under Bihar State Industrial Development Corporation.

Necessary agreements have been executed with four collaborators, out of seven proposed cotton mills, and arrangements are afoot for setting up a spinning mill at Bhagalpur in public sector. The government also proposes to set up central processing plants at Gaya, Ranchi and Bhagalpur to ensure facilities of dyeing and printing of fabrics.

In order to develop industries in small and tiny sectors efforts are on to promote ancillary and allied industries. There is being set up a nucleus complex each in Palamau and Madhubani districts. Another industrial estate is being set up at Jhanjharpur in Madhubani. The sixth plan proposes to set up new industrial area at Samastipur, Kishanganj, Forbesganj, Rosera, Purnea, Tenughat, Sambalpur, Chandbara,

Lohardaga, Sahebganj, Chakulia, and Barajanuda.

Due importance is also being given to silk industry as a decision has been taken to sanction grant-in-aid at the rate of 2000 per acre to promote sericulture.

Special arrangements have been made for helping entrepreneurs of weaker sections of society. A special component plan costing Rs.276 lakhs is being implemented for the benefits of about 30,000 scheduled castes people. Three model tanneries are also being set up at Gumla-Hiranpur and Latihar in the tribal areas of Chotanagpur and Santhal Pargana.

All the districts have been declared backward for 15 per cent capital subsidy. The amount of subsidy on captive diesel generation and for preparing project report has been enhanced. With a view to solve entrepreneur's problems of unnecessary delays at procedural levels, the government has authorised the development commission to take final decision on all issues relating to industry. Monetary arrangements have also been made for proper implementation of the industrial policy.

The industrial policy is being mainly implemented through the state public undertakings which have been made more active and effective. The result is that most of these undertakings are fast achieving their goals. In a very short time, Bihar State Electronics Development Corporation has started production of T.V. sets and mining equipments. The Bihar State Textile Corporation has set up central process houses at Gaya

and Ranchi and is further setting up spinning mills at Madhubani and Jasidih. The Bihar State Industrial Development Corporation has taken steps to set up a sponge iron plant, a caustic soda plant, a paper mill and expansion of high tension insulator factory. A ceramic capacitor plant and a glazed tiles factory are coming up under Bihar State Pharmaceutical and Chemical Development Corporation.

Financial institutions are also actively joining hands. The loan sanctioning limit of Bihar State Credit and Investment Corporation has been raised from 30 to 60 lakhs. It has sanctioned around 12 crores in 1960-61 whereas Bihar State Financial Corporation has sanctioned 16.40 crores in the same year.

#### Industrial Growth: A Misleading Impression in Bihar

From the preceding descriptions appear a very sound picture which is sufficient to mislead somebody to believing that Bihar is a highly industrialised state endowed with rich potentialities. The impression further gets enhanced when one looks into the new industrial policy of the state and the efforts made thereafter by the government to implement it, and the achievements noted during the last few years.

This, however, is a misleading profile of Bihar's industrial development. The fact is that Bihar remains far behind other states in terms of industrialization particularly when

we see to its vast natural resources and its limited industrial development in proportion to that. No doubt all, except a few, its industrial sectors are moving up fast, the growth rate achieved is very meagre, particularly stands nothing in the light of the growth rate marked by other states with relatively limited mineral potentialities. This aspect has been amply shown in the third chapter. Even today only 5.07 per cent of the total working population in the state is deriving its livelihood from industry as compared to the all India average of 9.46 per cent. The state stands very poor not only in per capita consumption of industrial electricity with only 46.3 per cent in 1976-77 as against 120.0 per cent for Maharashtra, 119.6 per cent for Gujarat, 78.8 per cent for West Bengal, 76.8 per cent for Tamil Nadu and 68.4 per cent for the all India average, it also shows poor status in the concentration of large scale industries. (See table 3 of chapter III.) Eventhough Bihar has the largest share in the central government public enterprises, it stands 12 in the ladder of the overall industrial development of the different states in the country. (see table 9, chapter III.) The per capita income in 1977-78 worked out to Rs.737 as against the all India average of 1189. Even this little per capita income was marred with uneven distribution in different regions of Bihar. According to data made available by the employment exchange, there were 2.67 lakh

unemployed in the state in 1968. In December 1972, the number of unemployed has increased to 7.13 lakhs. Since then it is rapidly increasing despite various schemes of mass employment launched by the state government. This alone shows the poor industrial development of the state.

However, though the figures till today have shown that Bihar has remained a backward state, no categorical statement can be made as it will remain the same in the coming future. The trend noted in the previous two years shows more of a transitional stage than that of a stagnant stage. The government's strict adherence to the implementation of the new industrial policy and thereby to contribute to the government of India's efforts in the balanced industrial growth marks a prospective future of a transitional stage than the previous scenario of industrial stagnation particularly in the light of the recent achievements made.

#### Factors for Industrial Backwardness:

The factors of backwardness are many and have already been discussed in detail in the third chapter. The most vital reasons for its backwardness can be seen into the historical factor. Bihar no doubt has more than sufficient raw materials necessary for industrialization, but its mobilization started very late. The sole reason for the highly industrialized states like West Bengal, Maharashtra, Gujarat and Tamil Nadu

is that they have been the main centres of colonial activities and all of them lie on the navigational zone. Hence their development started long back. Trade with far off places further contributed in their rapid development. Bihar being deprived of such colonial circumstances remained unnoticed till the early years of the present century. It was only in 1907 that the first ever biggest industry of TISCO was established in Bihar. Late initiation for industrialization in Bihar is thus a vital factor for its backwardness.

The society in Bihar is still characterized as a feudal structure. The feudal mode of production is the greatest barrier to industrialization. The people of Bihar, particularly the landlords or those having accumulated wealth, for a longer time, avoided to invest their capital in economic activities other than agriculture, or even neglected this sector (industrial) by virtue of their feudal tendency. The rigid social structure based on restricted social mobility further delayed this process. This, however, had a bad repercussion on industrial development. Thus Wilbert Moore's assumption that a total transformation of the social values, norms and attitudes of people is a necessary prerequisite for industrialization easily corroborates to the industrial backwardness of Bihar. "The value of economic growth requires for example fairly high degree of industrial mobility and a placement system grounded on merit in performance and that requirement is likely to come into conflict with a number of



strongly supported values. In this sense extensive value changes are the most fundamental condition for economic transformation".<sup>30</sup>

Trade development and agricultural surplus are two important necessities which prepare the background for industrialization. The highly skilled artisans of West Bengal enjoyed a fair share in the international market even before the English came. Bihar lacked much potentials right from the beginning. Even today its share in the external trade is comparatively very meagre. Pradhan argues, "It is not generally realised that in a situation such as ours industrialization of level which would make a dent on poverty and mass unemployment can come only after we have achieved agricultural prosperity.....the absence of food and agricultural raw-material surpluses is also an important barrier to rapid industrialization".<sup>31</sup>

In Bihar around 86 per cent population is dependent on agriculture. The pressure of population on land further results in low per capita output. The uneconomic holdings of land, a common phenomenon in Bihar, further reduces the output. However, it is well known that increased output in agriculture

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30. Wilbert Moore, Social Change, Prentice Hall of India Pvt. Ltd., New Delhi, 1978, p.98.

31. Pradhan H. Prasad, op. cit.

would lead to surplus production which will serve in the formation of capital, the very basic requirement for industrialization. But in Bihar the low agricultural output as the outcome of population pressure has diminished all hope for rapid industrialization despite external assistance.

The partiality of the Central Government in making allocation to the state is yet another reason for its low level of industrialization. As seen in the previous chapter, the state of Bihar because of its low budgetary allocation could not invest much for its industrial sector.

The lack of base industries is yet another reason of its backwardness. The base industries provide background for the emergence of "secondary and auxiliary sectors which play vital role in speedy industrial growth. The setting up of base industries comes under the planning of the Central Government. The Central government as the experience till today shows, has leaned more towards already developed regions for speedy growth than to the backward regions. Consequently, Bihar has ever been deprived of important base industries.

Private investment plays vital role in industrial development. Private sector however has a tendency to concentrate on an already well developed area because of certain advantages, viz. labour, infrastructure facilities, transport and market. In Bihar, the industrial situation is deplorable

because of the little interest shown by the private investors.

The faulty planning at state level is another factor responsible and the lopsided industrial development in the state is a result of this. North Bihar marks for a few sugar and jute mills and some industries of secondary sector. The Chotanagpur belt on the other hand is the heavy concentration of various industries. South Bihar, however, enjoys a better position today than north Bihar. This has also resulted in the disparity of income in the various regions of the state. While the people from Chotanagpur are highly benefitted and are in a position to invest in new enterprises, the people in the North are nowhere in a position to go for new enterprises. The second state plan was committed to achieve balanced industrial growth but the signs for that is nowhere seen even today. This has resulted in a slow growth of industries in the state.

The state's industrialization process has also been adequately affected by the instable political situation in Bihar as well as in the centre. The rapidly changing political scene not only affected the industrial policy but also delayed the implementation of so many industrial schemes.

E.A. Ramaswamy and Uma Ramaswamy also emphasize for this aspect, "unstable political conditions create uncertainty for the business enterprise and its growth. Given a stable

polity and an expanding market, the key to successful industrialization is the mobility of basic resources, especially labour and capital".

The lack of staunch leadership in state politicians at centre particularly in getting schemes allocated for the state in the central planning is yet another reason for its backwardness. So far we had seen this leadership quality only in late L.N. Mishra, the former Railway Minister, during whose time, the state marked for a number of new schemes. Since then, we have been lacking such staunch personalities.

Besides, low rate of literacy, irregular supplies of industrial power, recurring problems of management-labour conflict, lack of technical manpower, high degree of competition with outside state in products distribution, lack of proper external assistance and growing number of sick units are some of the other factors which have summarily affected the rapid industrialization in Bihar.

#### Test of Models: Relevance and Validity

It is at this stage pertinent to examine the trend of industrial development in Bihar in the light of different theoretical models raised earlier which is also one of the focal points of the present study.

The evolutionary model of Prof. Rostow visualizes the economic development through five fixed stages and if put in

that context, Bihar is bound to achieve the final stage of high mass consumption as it has already reached to the 'take off' stage which Rostow characterises as the great watershed in the life of modern societies.....when the old blocks and the resistences to steady growth are finally overcome.... growth becomes its normal condition. Compound interest becomes built as it were into its habits and institutional structure".<sup>32</sup>

The experience with the development in Bihar, however, does not stand valid to Rostow's assumption. Bihar heralded on its industrial development since as early as 1907 when Tisco was formed. But despite its comparative advantages over other states in respect of vast reserves of minerals, it has lagged far behind. While some of the states are reaching to the optimum stage, the position of Bihar has remained on the ladder of extreme backwardness with no even far off hope of reaching it to the high mass consumption stage. Apart from it Bihar still being in strong grip of semi feudal social structure has failed to adapt to the full utilization of modern improved techniques. The very evolutionary implication that a 'favourable condition' in terms of available raw-materials will facilitate the growth rate

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32. Walt W. Rostow, The Stages of Economic Growth - A Non-Communist Manifesto, Cambridge University Press, London, 1960, p.9.

relatively has also failed to adhere to the trend of industrial development in Bihar.

Wilbert E. Moore accounts for certain social prerequisites as being essential for the industrial development. Among such prerequisites, the over all change in the traditional norms, values and customs is the most important. He feels the persistence of such norms, customs and values leads to a rigid system following whereas the process of industrialization needs fairly free and independent movements of enterprises. As regards other social prerequisites, he includes the institutions of state, bureaucracy, marriage, economic exchange as well as the role of an entrepreneur.

When we look at the industrial development of Bihar (as it appears today) we hardly find the accurate applicability of this model to the industrial development of Bihar. Industrialization in Bihar started in the early years of 20th century and since then it has been making progress although it has been a relatively slow moving process as is clear from the fact that it has lagged far behind other states in respect of the level of development. This has happened despite the fact that Bihar still characterises a semi-feudal social structure where 85 per cent of the population are deriving livelihood from agriculture and living in the rural areas and still hold such norms, values and customs which have been

persisting in the society for long. As per Moore's model, strictly speaking, only a change into these systems will lead to the industrialization process. Whereas the fact shows that Industrialization does have taken place in Bihar despite the continuance of these social norms and values. On the other hand, Bihar never showed lack of entrepreneurs or the institutions of marriage, economic exchange, state and bureaucracy. Still it could not give a push to the industrialization as seen from its backwardness today.

Gunnar Myrdal's institutional model assumes that the greatest hurdle to the rapid industrialization in the underdeveloped country is the persistence of different social institutions and attitudes which promote a tendency to strive for nothing more than to preserve their customary low levels of living. Hence the need is for a change in such social structure. He concludes no industrial development will take place unless the socio-economic structure is changed.

This model of Myrdal too hardly fits to the economic development of Bihar. While Myrdal visualizes no industrialization unless change in the socio-economic structure is made, there is evidence that industrialization does have taken place in Bihar simultaneously with the persistence of rigid social attitudes and institutions. Even though the mode of production was changed here from feudal to capitalist line

(as discussed in the second chapter showing commercialization of agriculture and decline of handicrafts), this could not lead to a rapid industrial growth. A few ventures made during the 19th or early 20th century was more a result of specific interest either of person or an alien power than an organized effort in direction of country's industrialization. However, the state of Bihar has been experiencing rapid industrial progress (as the trend shows particularly after the second plan) under the planned economy despite the fact that here the same attitudes and institutions are still markedly available in the society.

Finally we have the model of planned economy which evolved in Russia in the early twenties and which is being followed in our country since independence. So far there have been six five year plans in operation and this has given a tremendous boost to the growth of our economy. While the central plan aims at the overall development of the country, the state plan works at the state level only and its aims and strategies are all determined keeping in tune with the country's plan. Bihar has experienced the real industrial growth under these various national and state plans. While the state saw the setting up of a number of capital intensive public sectors under the various national plans, the state plans undertook various measures for its rapid development in all industrial sectors within the state and working under these two, the



state is ever progressing on. Hence could be derived the conclusion with a few limitation that the best model to understand the industrialization in Bihar is that of the plans and the trends hitherto, show that under these plans Bihar is passing through a 'transitional phase'. The limitation, however, arises of the fact that we cannot simultaneously undermine the role of historical factor in at least initiating the industrialization process.

The preceding descriptions clearly indicate that industrialization in Bihar is not the inevitable consequence of a change in its socio-economic structure. There are rather evidences to the fact that industrialization does cause changes in the social structure. Let us see some studies in this context.

A paper by Martin Orans, "A tribal people in an Industrial Setting" is one of the earlier publications dealing with the effects of industrialization in Bihar. His paper deals mainly with the impact of Jamshedpur's urban and industrial milieu on traditional Santhal culture. His findings are that though most Santhals say that they migrated to Jamshedpur for economic reasons he feels that the basic reason is the attraction for cultural climate of the city. The second impact is on the decreasing view points of city Santhal on the witch craft. While these beliefs and practices of Witchcraft have not changed for last fifty years in

the village, it has decreased considerably among the city Santhals although it is still persisting among the Basti Santhals, a group living at the fringe of the city more like their counterparts in the remote villages. Third impact which he notices is of the growing political consciousness among the city Santhals which is the result of the increased contacts with the non-Santhals.

Yet another famous study in the context of industrialization is one by Pranab Kumar Das Gupta which he conducted in 1947 to examine the effects on industrialization on the Ho tribes of Singhbhum. 'Transformation of Tribal Economy in An Industrial Context: A Case Study of the Ho of Singhbhum' is one of the earliest studies in which he shows how industrialization in the tribal belt of Singhbhum district has transformed the economic life of Ho and also shows how the group basically oriented to a tribal form of society adapts itself to the industrial complex. The study shows that the Ho did not suffer much in adapting to the industrial work at Jhinkapani because the kind of work they had to do, they were already used to. The study found that the people maintained their traditional ties with land and most of their income from factory occupation was utilised for expanding agriculture. This dependence on land may be because of the fact that the cement factory at Jhinkapani offers limited opportunities.

Michael Ames' study 'Modernization and Social Structure: Family, Caste and Class in Jamshedpur' is another important study on the changing joint family structure in the context of industrialization. While he shows how class dimension of social structure becomes more prominent in the city than the caste dimension which is still a crude evidence of villages, he concludes that the effect of industrialization on family structure can be examined only with regard to different dimensions of family. He analyzes three dimensions of family- and concludes that it is only household dimension which is widely affected by the industrialization. The study also shows that under industrialization immediacy of joint rights and duties is lessened and individual freedom is enhanced. It also reduces the opportunities for conflict and the pressure on ancestral land.

L.P. Vidyarthi has extensively studied the phenomenon of industrialization with special reference to Bihar. He completed a Planning Commission sponsored study of the Heavy Electrical Corporation near Ranchi. This is a longitudinal study. In this study he has first studied the impact of Ranchi city on the tribal culture in the preindustrial phase and then undertakes a longitudinal ethnographic study showing its effect on all aspects - political, social, economic and religious - of the tribal people.

Economically he feels that although agriculture remains the major and most important occupation in the interior areas, in the village like settlement in the municipal area of the city, agriculture has been replaced by other occupations. The subsidiary industries emerging even away from the main industrial centres have also affected the agricultural economy of the tribals and they have accepted it as subsidiary occupations during the agricultural slack seasons. Impact on social sphere of the adivasi could be traced through changes in the traditional activities, participation in the dance and other cultural activities, dresses, food habits and even in the role of the social leadership.

There is also a remarkable change in their outlook in their world view, value attitude system and above all in the very philosophy of their life. A new model of modernisation and mechanisation has emerged which has thoroughly shaken their very ethos of traditional culture marked with homogeneity, simplicity, cooperation and leisuroly life. The study marks not only a growing lust for material comfort and sense of individualism but also strong lack of love for the traditional code of conduct and social taboos. Besides, owing to changed nature of work and venue of work, the tribal, have also picked up urban habits of visiting hotels and movies, drinking distilled liquor and listening to radio etc. In short, the study shows, the tribal villages have witnessed revolutionary

transformations marked by individualisation, secularisation, social disorganization and religious disruption.

Since majority of industries are located in Chotanagpur areas which is primarily populated by the tribals, the impact of industrialization has been widely investigated on the lives of these various tribes.

### Impact of Industrialization

The impact of industrialization on Bihar has been manifold. The greatest impact, however, is on the changing mode of economy. The economy of Bihar is largely characterised as feudal economy but this is undergoing changes under industrialization. The cultivation is no longer done with the primitive means. The new scientific agricultural equipments are widely used throughout the state. The cropping pattern is also changed. The peasants grow commercial crops or only those crops which have better demand in the urban areas and which gave them better returns. Thus while throughout North Bihar cane production is a direct offshoot of a number of sugar factories established there, the similar is the case with jute production in the districts of Darbhanga and Purnea, and tobacco production in Singhbhum districts where majority of bidi and cigarette factories are located.

The areas in close vicinity of industrial set up has especially noticed changes in the occupational structure. People enthusiastically prefer to go for jobs in factories or

offices. This, they feel, gives them a better social status.

The living standard of the general masses have improved a lot. The people, because of increased output and income from the factory jobs, have enough means to lead a better life. They live in better houses, put on better clothes, send their children to schools and even poor villagers and urban slum-dwellers are seen owning bicycles, watches and transisters radios. This, however, is not the common scene throughout the state; it is rather confined mainly to the highly developed industrial regions of South Bihar and Chotanagpur belt where there is heavy concentration of industries.

Industrialization has offered new tempo of life. People try to adjust to it. Villagers are loosing their attachment to their villages and are moving in large numbers to cities in quest of a better life and greater excitement. The present rate of industrialization, however, is not fast enough to provide work for all of them.

One of the most striking effects of industrialization in Bihar is that in the slow development of capitalism and slow disappearance of traditional structures, social contradictions have increased. The corollary of this is the new concentration of economic and political power in certain sections of society which were relatively poor and powerless a few decades ago. Trade unionism and growing class-consciousness in urban areas

and the conflict between landlords and peasantry and caste atrocities are a direct manifestation to it. The growing demand for a separate Jharkhand state is another outcome of the same development. Industrialization has led to increased means of transportation and communications. As a result the contacts between people from different regions have increased. This has resulted into greater degree of cultural assimilation. This, however, has adversely affected the innocent people from interior villages particularly in the tribal areas because a new class of exploiters - money lenders and businessmen - found an easy way to penetrate.

Industrialization has summarily affected social life and has brought changes in values, attitudes, beliefs, traditions and even in social institutions. Today, success is measured in pecuniary terms and a better social status is accredited to a person working in factories or offices. Caste barriers are fastly loosening their grounds in urban-industrial centres and social intercourse between people of different castes has become a common phenomenon. Although traditional social institutions such as family and caste are showing flexibility but they are still largely an urban phenomenon. Industrialization in the tribal areas has created a new outlook and a new model of modernization. This can be better characterized with individualism, secularism, rationality and a lust for

material comforts. Finally a change in the habits of people with regard to cultural activities, dresses, food habits, and social interactions is seen throughout the state.

In the colonial India, mechanization completely destroyed cottage industries and other domestic production. This is not true in the case of Bihar. The industrial development has rather given new life to many cottage industries. The Bihar State Khadi and Village Industries Board has sustained many cottage industries by providing them improvement techniques produced by approved manufacturers.

Thus industrialization has brought tremendous changes in the life of the people in Bihar. But simultaneously the actual beneficiaries of this have largely been the tribal folk and some people in the South Bihar. The people of North Bihar have remained deprived of any such benefits. Even among the tribals, the benefits have gone particularly to those who live on the fringe areas of various industries and not to those living in remote villages. Though the tribals are marked with a better socio-economic life today, the real monetary benefits of industrialization are enjoyed either by the elites among tribals or money lenders and businessmen from outside - mainly Punjabis and the people from the plains - who play vital role in tribal community everywhere.



The above description including the empirical findings as well as many other studies clearly indicate that changes did take place in Bihar under the impact of industrialization and will continue to take place in the future. However, it is nowhere seen that a change in social structure has ever facilitated the process of industrialization anywhere in Bihar.

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## CONCLUSION

The present work is an attempt on industrialization. The purpose is to present an in-depth study of the subject-matter on the one hand and to analyze the inter-relationship between industrialization and society on the other. Specifically the emphasis is to understand the trends and development of industrialization in India in general and in Bihar in particular. We have analyzed various factors responsible for Bihar's backwardness in the field of industry. Our premise is that Bihar's backwardness is mainly due to its social structure and unevenness of the distribution of dividends of industrialization amongst the various sections of its people.

There have been mainly two lines of thinking in regard to relationship between industrialization and social structures: (1) that social structure is the primary factor leading to industrialization, and (2) that it is the industrialization that affects society and determines the nature of social structure. The second view in regard to relationship between industrialization and social structure in the context of Bihar has been examined. Finally we have analyzed different approaches to the study of industrialization.

There are four chapters in the dissertation. We have discussed the main theoretical points in the first chapter. We have discussed concepts, origin, nature, spread and

development of industrialization in India and in other countries. The chapter broadly examines the spread of industrialization in three different worlds - the capitalist, the socialist and the third world. A scalar analysis of the process of industrialization has been the focal point in this chapter. A discussion on different approaches, namely, that of Marx, Moore and Veblen is given in this chapter along with the other theoretical discussion.

The second chapter deals with the pace of industrial development in the country during three different phases - pre-colonial, colonial and post-colonial. We have examined how the village-based self-sufficient economy in the pre-colonial period declined under the British and the beginning of changes which led in small measures to the establishment of capitalism in India. We have also discussed subsequent changes brought about in the social structure during the different phases as well as the role of capital, both indigenous and foreign in the development of industrialization. Our analysis shows that both the indigenous and the foreign capital have equally been significant for the development of industrialization in the country, although the part played by the indigenous capital has been of greater importance during the pre-British period and in the post-independence period in particular. We have analyzed different models of industrialization at the end of this chapter. The various models

have little relevance to the Indian situation except some contingent significance. We feel that it would be proper to see industrial development in India in terms of its historicity and the five year plans.

The third chapter provides a comparative analysis of the industrial development in the various states of India and places Bihar in regard to extent and nature of industrial development. A few variables viz. per capita income, per capita industrial consumption of electricity, budgetary position and developmental expenditure, percentage share of financial assistance sanctioned by financial institutions, distribution of banking facilities and composite index, have been taken into consideration and thereafter the level of industrial development in Bihar has been examined in the light of various data available for the industrial development of the various states in India. The chapter also examines various factors responsible for the prevailing unevenness in industrial growth in the various states of Indian Union. The discussion leads to the conclusion that there has been wide disparity in the industrial growth in different states of India and this has persisted on despite various measures undertaken by government for the balanced growth under different plans. Our data show that Bihar is industrially the most backward state in the country. This conclusion has also been supported by some empirical studies.

In the fourth chapter our focus is on social structure and industrialization. Subsequent to an exhaustive discussion on the social structure and the pace of industrial development, various models have been examined in the light of industrialization in Bihar. The nature of inter-relationship between industrialization and social structure has been examined at the end in the light of our data as well as on the basis of few empirical studies.

The pace of industrial development in the state though appears impressive, however, the impression is highly misleading. This becomes more obvious when we compare the industrial development of Bihar with the development in other states, particularly in the light of the vast potential of Bihar. However, when we look at the recent industrial development in the state particularly at the achievements following the announcement of the new industrial policy of 1980 and the strict adherence of the government to the speedy implementation of the proposed industrial schemes, it is noticed that Bihar is passing through 'a transitional phase' and if the present momentum is maintained, it might improve the situation in Bihar.

Our analysis shows that there have been various reasons for the slow growth of industrialization in Bihar. The most noticeable factor is the late start of the process of industrialization in the state. The fact is that the state of

Bihar has always been deprived of the infrastructure which has led to the early industrialization of other states. The development which started in 1907 remained utterly slow.

A multiplicity of factors could be attributed to the industrial backwardness of Bihar. No single factor can be attributed to this situation. An exact measurement of these factors would be immensely difficult. Bihar's backwardness in the industrial field has repercussions on agricultural production and other aspects of Bihar's economy.

The impact of industrialization in Bihar has been manifold. It has led to enormous changes in political, social and economic life of the people in the state. A sense of dynamism has been injected among the people. The weakening of major social institutions particularly in the urban-industrial centres is another offshoot of the process of industrialization. The changing moorings of economy, occupational structure and social mobility are the other dimensions of industrialization. Sharp class polarisation, militant trade unionism in the urban-industrial centres and the growing incidence of caste-atrocities and peasant-landlords conflicts are other political and social dimensions of the process of industrialization. Rational outlook, growing individualism, secularism, improved standard of living, increased social contacts, materialistic attitude, occupational diversification and new basis of social status and prestige are

some of the consequences of industrialization noticed.

Our discussion shows that the impact of industrialization has not been even. The effect has been intense in places of heavy concentration of industries or places having direct or indirect nexus with major industrial centres. Changes in the peasant economy become possible only when there is large scale industrialization. This is also supported by Pranab Kumar Das Gupta's study of the Ho of Singhbhum district.

Since industrial growth is limited to a very narrow geographical area, only some segments of Bihar's population has been the beneficiaries of industrialization. As seen earlier the Chotanagpur belt particularly - Ranchi, Singhbhum, and Dhanbad districts have the greatest concentration of various industries. Some other areas in South Bihar too have experienced some industrial development. The scenario in the North Bihar is somewhat different. Except for a few jute, sugar and tanning industries there are no major industries in North Bihar. Obviously the beneficiaries of industrialisation in Bihar have largely been the people who have been able to get jobs in various industries in Bihar. However, even among the people from Chotanagpur region, the greatest beneficiaries have been the tribal elites and moneylenders and businessmen. The latter are mainly from North Bihar and are known as Dikhus.

The present study is only an attempt to understand the various dimensions of industrialization at an analytical level. Empirical investigation will be carried out at the Ph.D. level. Our analysis is based on the available literature, documents and reports. However, we don't claim that we have been able to exhaust all the information available on the subject.



APPENDIX

LIST OF OTHER BACKWARD CLASSES IN BIHAR  
PREPARED BY THE MUNGERI LAL COMMISSION 1976

<u>Sl. No.</u>	<u>Caste/Class</u>	<u>Sl. No.</u>	<u>Caste/Class</u>
1.	Abol	42.	Chondravasha (Kahar)
2.	Agrariya	43.	Churihar (Muslim)
3.	Aghori	44.	Chanau
4.	Amat	45.	Jadupatia
5.	Kasab (Muslim)	46.	Jogi (Jugi)
6.	Kawut	47.	Tikulahar
7.	Kadar	48.	Dafali (Muslim)
8.	Kewet	49.	Dhekaru
9.	Kalander	50.	Tanti (Tatwa)
10.	Keura	51.	Turha
11.	Kavar	52.	Tomaria
12.	Koch	53.	Tiyar
13.	Korku	54.	Tomoli
14.	Kumar Bhag Pabarua	55.	Teli
15.	Karmi (Mahto)	56.	Tharu
16.	Kagji	57.	Deohar
17.	Kanu	58.	Dhanuk
18.	Kamar (Lohar & Karmkar)	59.	Dhobi (Muslim)
19.	Rishwaha (Koeri)	60.	Dharis (Muslim)
20.	Kaparia	61.	Dhanin
21.	Kosta	62.	Dhankar
22.	Khatik	63.	Dhesar
23.	Khanger	64.	Nai
24.	Khatwa	65.	Nat (Muslim)
25.	Khatwe	66.	Nurian
26.	Kharwar (Siwan & Rohtas)	67.	Namsudra
27.	Khatori	68.	Naiya
28.	Khelta	69.	Nalband (Muslim)
29.	Khond	70.	Pamriya (Muslim)
30.	Gorhi (Chavi)	71.	Prajapati (Kamhar)
31.	Gaddi	72.	Pando
32.	Gandharbh	73.	Pingania
33.	Gangai (Nagesh)	74.	Parthe
34.	Gangota	75.	Pradhan
35.	Gor or God (Saran & Rohtas)	76.	Pahira
36.	Gulgalia	77.	Pal (Bherihar-Gareri)
37.	Gaur	78.	Bekhara
38.	Ghatwar	79.	Bagdi
39.	Cheek (Muslim)	80.	Banjara
40.	Chanye	81.	Bari
41.	Chopota	82.	Beldar

Sl. No.      Caste/Class

83. Bind  
 84. Barhi  
 85. Barai  
 86. Bania\*  
 87. Bhatiyara (Muslim)  
 88. Bhar  
 89. Bhaskar  
 90. Bhuihar  
 91. Bhuiyan  
 92. Dhat  
 93. Mali (Malakar)  
 94. Mallah (Surahia)  
 95. Madari (Muslim)  
 96. Mehtar, Lalbegi,  
 Halkhore Bhangi  
 97. Miriyasin (Muslim)  
 98. Majhar  
 99. Malor (Malhor)  
 100. Mangar  
 101. Markandey  
 102. Maulik  
 103. Makri  
 104. Madar  
 105. Mauriyari  
 106. Mirsikar (Muslim)  
 107. Momin (Muslim)  
 108. Yadav (Gwala, Ahir,  
 Gaura, Ghosi & Mehar)  
 109. Rajbhar  
 110. Rajdhobi

Sl. No.      Caste/Class

111. Ravansi (Risya & Polia)  
 112. Rangwa  
 113. Rangraj (Muslim)  
 114. Rauttiya  
 115. Rain or Ranjara (Muslim)  
 116. Laheri  
 117. Vedia  
 118. Banpar  
 119. Shivhari  
 120. Saunta (Sota)  
 121. Sai (Muslim)  
 122. Sonar  
 123. Sutradhar  
 124. Sangatras  
 125. Suklar  
 126. Idrasi or Darji (Muslim)  
 127. Christian Harijans  
 128. Christian other backward  
 classes.

\*Banias Category includes Sudi, Halwai, Ravniyar, Pansari, Modi, Kasera, Kesarwani, Thathera, Kalwar, Patwa, Kamplapuri, Vaishya, Sinduria Banias, Awadh Banias, Bangiya Vaishya, Mahuri Vaishya, Varnawal, Agrahari Vaishya and Poddar.

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