CHAPTER I

THE RATIONALE OF INDUSTRIAL PLANNING

A Recital of Certain Fundamental Facts

In India to-day a large measure of industrialisation is considered necessary for various reasons. Firstly, the national income of India is extremely low and it is a universally admitted fact that the inhabitants of this sub-continent are steeped in a poverty for which there is no parallel in any part of the Western world. Although opinions may differ on the question whether poverty in India is on the decline or not, nobody seriously disputes the proposition that, judged by Western standards, the Indian masses are extremely poor. Secondly, there is no balance in the economic life of the country. As many as sixty-seven per cent. of the population are dependent on agriculture for their livelihood and it is notorious that nowhere in India is agriculture paying in any sense of the term. Moreover, the extent and variety of the few industries that have grown up during the last hundred years or so have not been commensurate with the size of the country and, not infrequently, ill-equipped or under-capitalised concerns have sprung up without
efficient direction or management and, as a consequence, have gone to the wall no sooner than they were started. Thirdly and finally, owing to the absence of a well-directed industrial policy, many important industries which could have been started with some protection from the State have not come into being at all and to-day, after nearly a hundred years of industrialisation, India is dependent on other countries for some very vital necessities of her economic life.

It is principally for these reasons that the demand for some sort of industrial planning has become so very loud to-day. People of all shades of opinion are more or less agreed on the need for some effective lead which would break the vicious circle in which economic India finds herself to-day. Until lately, capital has been shy; the necessary equipments are lacking; there are very few first-rate technical experts available amongst Indians; entrepreneurs are often inefficient and occasionally dishonest; the country has been more or less in a state of industrial stagnation. It is no wonder, therefore, that in such perplexing circumstances, most people seek a remedy in some sort of industrial planning.

An Historical Retrospect

The demand for industrial planning has be-
come intensified ever since provincial autonomy was inaugurated under the new Government of India Act. Under this Act, the provinces as autonomous units have come to possess a very large measure of power in the matter of regulating, controlling and promoting industrial ventures and, as a consequence, most of the provincial governments have begun to pause and think how a harmonious industrial development can be promoted in the country.

It is true that the Indian Industrial Commission made some recommendations in the year 1918 with a view to accelerating the pace of industrial development in the country, but even its limited and halting suggestions were not acted upon for a considerable period. Sometime in 1929-30, however, a very effective lead in the matter was given by Sir M. Visvesvaraya in a thought-provoking survey of the potentialities of industrial development in India. In a later book, in the year 1933, he again made an eloquent plea for the setting up of some sort of an Industrial Development Council. But no definite action could be taken as the political situation was in a flux and the majority of those who had begun to think seriously in the matter preferred to wait till the new constitution was inaugurated.
The Indian National Congress and Industrial Planning

The new constitution was inaugurated on the 1st April, 1937. It was only in August of that year that the Working Committee of the Indian National Congress formulated a definite policy with regard to industrial and social planning. That month they recommended to the Congress Ministries the appointment of a Committee of experts "to consider urgent and vital problems the solution of which was necessary to any scheme of national reconstruction and social planning."* It was recognised that such solution would require extensive surveys and the collection of data, as well as a clearly defined social objective. It was further recognised that any of these problems could not be dealt with effectively on a provincial basis as the interests of adjoining provinces were interlinked. Finally, in July, 1938, it was decided as a preliminary step to convene a conference of the Ministers of Industries of the various provinces and call for a report of the existing industries operating in different provinces and the needs and possibilities of new ones.

The conference of Ministers of Industries of the various provinces was held in Delhi in October,

*First Report of the National Planning Committee (Bombay, 1939).
1938, and the thesis was laid down that the problems of poverty and unemployment, of national defence and of economic regeneration in general cannot be solved without industrialisation. It was decided that as a step towards such industrialisation, a comprehensive scheme of national planning should be drawn up—a scheme providing for the development of heavy key industries, medium scale industries and cottage industries, keeping in view the requirements, resources and peculiar circumstances of the country. With a view to doing the preliminary work for giving effect to the above policy, a Planning Committee was appointed.

*Industrial Surveys in various Provinces*

Meanwhile, the various Provincial Governments (particularly those which did not owe a definite allegiance to the Indian National Congress) had not been sitting idle. In the year 1938 the Sind Government commenced a survey into the question of acute unemployment and the Assam Government appointed a committee to go into the subject of industrial development in that province. In Bengal early in 1939 an Industrial Survey Committee was constituted with eminent scientists, economists, industrialists and businessmen to make a thorough investigation into
prevailing conditions of large, medium-sized, small and cottage industries in order to assess their future possibilities and also to suggest new lines of development.

The War Intervenes

Before, however, any action could be taken either on the recommendations of the National Planning Committee, set up by the Congress, or on the various provincial surveys, war broke out and all long-range schemes of industrial development under a peace economy had to be shelved. This does not mean that the tempo of industrial progress received a set-back: it only means that industry had, of necessity, to be harnessed for war production and, as a result, only such industries as contributed directly to the war effort received a fillip, while others—particularly such consumers' goods industries as were mainly for civilian requirements—were left to carry on by themselves. The ultimate result, however, has been that India has made considerable advance in certain industries and it can be asserted without any fear of contradiction that the net gain to India has been substantial.

* For a detailed account of war-time industrial development in India, see Chapter V.
Post-War Planning

The need for a fresh approach towards the problem of industrial planning has been recently brought to a head by the general desire in every country for a thorough economic and social reconstruction at the end of the present war. This war has begot new needs and new ideas, and, unlike in the last war, the emphasis is being placed more on the economic and social aspects of post-war reconstruction than on the purely political aspects of it. The most important need, as far as India is concerned, is that the people must have that minimum of food, clothing and shelter without which, in the words of President Roosevelt, life itself would be impossible. This objective cannot, however, be fully achieved merely by increased production and better distribution of agricultural commodities. To increase the per capita income of the people and also to ensure that there is co-ordinated development of all the natural resources in this country, there must be proper industrial reconstruction as well, in the post-war period. To this end, there must be planning, i.e., the drawing up of a comprehensive programme which would make the fullest and best use of all the various factors of production.

*For further details about post-war plans for this country, see Chapter III
CHAPTER II

THE NATIONAL INCOME—A DIGRESSION

Estimates of the National Income

Estimates of average per capita income in India have been made since 1876, although satisfactory data on which such estimates can be made are conspicuously absent in India. In that year, Mr. Dadabhai Naoroji calculated that the average income per head of population was Rs. 20 per annum. In 1882, Earl Cromer (then Major Evelyn Baring) and Sir (then Mr.) David Barbour computed the average income per head at Rs. 27 per annum and in 1901 Digby put the figure at Rs. 17½/- only. Official statisticians, on the other hand, questioned the accuracy of these figures and, by a separate calculation, arrived at a figure of not less, and might be more, than Rs. 30.

In recent years, attempts at more scientific calculation have been made. Mr. Findlay Shirras made an estimate for the years 1920-21 and 1921-22, including in his calculation items that had been left out by the earlier computors, and arrived at the figure Rs. 107 for the year 1921 and Rs. 116 for the year 1922. At the same time two sets of Indian economists, Messrs. Wadia and Joshi on the one hand and Messrs. Shah and
Khambata on the other, had made calculations relating to the years 1913-14 and 1921-22 and arrived at two figures, Rs. 44.5.6 and Rs. 74.0.6, which were very wide of the figures presented by Mr. Shirras. Recently, another Indian economist, Dr. V. K. R. V. Rao, has made still another estimate, relating to the year 1925-29, and has arrived at the figure of Rs. 77.9 per head per annum. *

_Facts behind the Figures_

Now, all these figures are apt to bewilder rather than help the general reader. The figures have been quoted just to show what a wide diversity of views is possible even among experts on a comparatively simple subject. While comparing the various computations, the following facts should, however, be remembered. Firstly, they relate to different dates and if account is taken of the change in prices on those dates, much of the wideness of the margin of computation will disappear. Secondly, the area covered by these various computations is not always the same. Thirdly and finally, no standardised data having been available, these estimators arrived at their figures by widely different methods and it is

difficult to say which method is more accurate and scientific.

One thing, however, is certain. *Per capita* income in India is conspicuously low when judged by Western standards. Admittedly, it is not fair to make comparisons when the figures called by the same name in different countries do not have exactly the same value, but the following comparative figures are too eloquent to be whittled away by any such arguments:

*Income per capita in 1939* *

<table>
<thead>
<tr>
<th>Name of country</th>
<th>Income per head per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>Rs. 1,406</td>
</tr>
<tr>
<td>Canada</td>
<td>1,038</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>980</td>
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<tr>
<td>France</td>
<td>621</td>
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<tr>
<td>Germany</td>
<td>603</td>
</tr>
<tr>
<td>Japan</td>
<td>218</td>
</tr>
<tr>
<td>India</td>
<td>65</td>
</tr>
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That *per capita* income in India is exceedingly low is also proved by the results of various intensive local enquiries that have been made from time to time. Three such investigators were

*Sir P. Thakurdas and others, *Plan of Economic Development for India* (Bombay, 1944)
Dr. Mann in Bombay, Dr. Slater in Madras and Major Jack in Bengal. They all found out that per capita income in the selected areas where they carried their investigations was something between Rs. 42-14 and Rs. 52 during the period immediately towards the end of the last World War.

The importance of these figures lies in the fact that they all reinforce the arguments for industrial planning. Even the most optimistic observer has to admit that in India to-day the margin between sufficiency and scarcity is a very narrow one, and if the monsoon fails over a considerable area there is at least a tendency towards actual insufficiency for the country as a whole, to say nothing of the specially afflicted areas. In a recent memorandum prepared by the Government of India, it has been shown that on the basis that an adult requires a minimum of 16 oz. cereals, 3 oz. pulses, 2 oz. sugar, 6 oz. vegetables, 2 oz. fruits, 1½ oz. fats and oils, 8 oz. of milk and 2.3 oz. of meat, fish and eggs per day, Indian production falls short of the national requirement by 1.5 million tons of pulses, .7 million tons of sugar, 9 million tons of vegetables, 2.6 million tons of fats and oils, 14 million tons of milk and 6 million tons of meat, fish and eggs. The deficit in production would not, however, have mattered very much, if the people of India, like the people
of many other countries, had a larger income to purchase these barest essentials of life from abroad. In other words, the main difficulty is the low per capita income, which in turn is due mainly to arrested industrial growth. The conclusion is, therefore, irresistible that agriculture must be supplemented by a well-balanced scheme of industrialisation and that the pre-war tempo of industrial development must be considerably accelerated before any substantial increase in the income per head can be achieved.

CHAPTER III

THE BOMBAY PLAN AND AFTER

The Bombay Plan: Its objectives

Earlier in this book, we referred to the general desire in every country for a thorough economic and social reconstruction at the end of the present war. This desire received its first concrete expression in this country in the famous Bombay Plan drawn up by Sir Purshottamdas Thakurdas and his seven colleagues.* In the words of the authors of the Plan, “the principal

*The Plan is called “A Plan of Economic Development for India” (Bombay, 1944)
objective of the plan is to bring about a doubling of the present \textit{per capita} income within a period of fifteen years from the time the plan comes into operation. Allowing for an increase in population of 5 millions per annum, which is the rate disclosed by the last decennial census, we estimate that a doubling of the \textit{per capita} income within a period of fifteen years would necessitate a trebling of the present aggregate national income. To achieve this increase, we propose that the plan should be so organised as to raise the net output of agriculture to a little over twice the present figure and that of industry, including both large and small industries, to approximately five times the present output.” Briefly, the plan aims at “raising the national income to such a level that, after meeting the minimum requirements, every individual would be left with enough resources for the enjoyment of life and for cultural activities.” According to the authors of the Plan, this can be achieved only by reducing the present overwhelming predominance of agriculture and by establishing a more balanced economy.

\textit{Industrial Planning in the Bombay Plan}

A programme of intensive development of industries forms the keystone in the arch of this Plan. It is proposed that the percentage increase
in the net income from industry should be at least 500 at the end of 15 years, as against a percentage increase of only 130 in the case of agriculture and 200 in the case of services. In the programme, basic industries* would have priority over consumption goods industries in the earlier years, because the former are “the basis on which the economic superstructure envisaged in the plan will have to be erected.” Also, it is an essential part of the plan that adequate scope should be provided for small scale and cottage industries along with large scale industries, because in the consumption goods industries in particular, small scale and cottage industries would largely supplement the larger units. Finally, the Bombay Plan envisages that, to increase the net income from industry by at least 500 per cent. at the end of 15 years, the total amount of capital required would be in the neighbourhood of Rs. 4,480 crores.

Criticisms of the Bombay Plan

The authors of the Bombay Plan have frankly admitted that their object is “to put forward, as

*Basic industries would include, among others, the following groups: Power—electricity; Mining and metallurgy—iron and steel, aluminium, manganese, etc.; Engineering—machinery of all kinds, machine tools etc.; Chemicals—heavy chemicals, fertilisers, dyes, plastics, pharmaceuticals etc.; Armaments; Transport—railway engines and wagons, ship-building, automobile, aircraft, etc.; Cement.
a basis of discussion, a statement, in as concrete a form as possible, of the objectives to be kept in mind in economic planning in India, the general lines on which development should proceed and the demands which planning is likely to make on the country's resources.” It deliberately refrains from making any reference to such essential matters as the organisation, methods and technique required for carrying out the plan.* It is not, therefore, fair to criticise the plan on the ground that the process of capital accumulation has not been explained or that the problems of finance and personnel have not been adequately dealt with. Nor is it a valid criticism to say that “the target of the Bombay Plan has been fixed at a level which is even lower than what was attained in Russia in a much shorter period.”† It should not be overlooked that, on the eve of the Soviet regime, Russia had a much better and higher industrial tradition and a far superior class of technicians than India can boast of to-day. Also, what could be achieved in a Communistic system of regimentation and compulsory utilisation of all available man power and natural resources may

* Vide the opening paragraph of the Plan
† B. C. Ghose: Planning for India, Chapter IV (Calcutta, 1944)
not be so easy to attain in a system which is expected to remain capitalistic and individualistic even during the period of implementation of the plan.

Problems Ahead

The above defence of the Bombay Plan does not mean that it is perfect and there is no room left for improvement. As a matter of fact, it must be evident to any serious student of planning that, in order to attain the objective of a doubling of the per capita income within a period of fifteen years, the most rigorous control by Government over individual liberty and private enterprise may become necessary. There may have to be controls over the exchanges, prices and the money market, priorities in the allocation of imports and in the use of skilled labour, and perhaps very high taxation. The calculations of cost and the suggestions as to methods of financing the Plan will perhaps have to be examined more carefully. It is also not improbable that, even with all the best intentions and the utmost sacrifices conceivable, the goal will not be reached within a period of fifteen years. Nevertheless, the social and economic aims set out in the Plan are highly desirable, and the policy proposed for the development of industry is also generally sound.
The Bombay Plan and After

As already stated, the Bombay Plan was the first concrete expression of the desire of Indians to have a thorough economic and social adjustment at the end of the War. Naturally, therefore, it attracted wide attention and was acclaimed with high enthusiasm by all persons who wanted to see India marching in line with other advanced nations of the world. New plans were elaborated by different political groups and even the Government of India woke up to the necessity of giving the matter their immediate and primary attention. A Reconstruction Committee of the Council was set up at the Centre and counterparts thereof soon came into existence in every Province and major State. Eventually, about the middle of the year, a new and separate Department of Planning and Development was set up by the Government of India with one of the authors of the Bombay Plan (Sir Ardeshir Dalal) in charge. All these are signs of the fact that the country as a whole is keenly alive to the complexity and magnitude of the problems ahead, and is genuinely anxious that the per capita income and standard of living of the half-starved, ill-nourished and half-naked millions must be considerably increased in the years immediately ahead.
CHAPTER IV

A Study Of Exports And Imports—Another Digression

Introductory

While drawing up a programme of industrial planning after the war, it would be desirable to study rather closely the foreign trade of the country—both during the period immediately before the outbreak of the war and after. If, as is generally assumed, the immediate objective of planning is to attain, as far as possible, national self-sufficiency and not primarily to capture foreign markets, this study becomes all the more imperative. In any case, even if the objective be somewhat different from what has been assumed above, a study of the main features and trends of our export and import trade would not be without some practical value.

Characteristics of the Foreign Trade of India

What strikes the superficial observer most is the fact that in this country the value of exports has always exceeded that of imports. There are isolated years (e.g., 1920-21 and 1921-22) when exports lagged behind imports in value, but there is no quinquennial period commencing from 1869-
70 (the Suez Canal was thrown open for navigation in 1869) when the average of exports fell below the average of imports. This habitual excess of exports over imports gave rise to the facile theory that it was a measure of the tribute paid by India to England for her political subjection, but as has been repeatedly pointed out by a number of economists, the excess represents payments of interest on debt of all types and annuities on account of railways and irrigation works, payments in connexion with Civil departments in India and the India Office, Army and Marine charges, payments for stores purchased and furlough allowances, and as such cannot be called a "drain" in any sense of the term. The inevitable conclusion, therefore, is that the mere excess of exports over imports does not furnish anything like a complete explanation of the backwardness and poverty of India. For that we must analyse the nature of exports and imports.

A careful analysis of the export and import trade of India shows that even now we are largely dependent for some of the ordinary requirements of life on imported manufactured goods. India is a vast country with a large home market and abundant raw materials, but instead of working these raw materials into consumable form, she seems to have preferred to export raw materials
and to import most of her requirements in respect of manufactured goods.

A Few Facts

In the year 1938-39 India exported about 162.79 crore of rupees worth of merchandise and, of these, manufactured goods* were worth only 47.6¹ crore of rupees, i.e., only 29.25 per cent. of the total. All the other items of export consisted of raw jute, raw cotton and raw wool, metals and ores, grains, pulses, spices and flour, wood and timber, fruits and vegetables, manures, hemp, hides and skins, fish, seeds and oilcakes, lac, mica, coffee and coir. Imports in the same year amounted to nearly 152.83 crore of rupees and of them only a small percentage (21.8 per cent.) consisted of raw materials or foodstuffs. These point to the fact that India’s economic development has been most uneven and her industrial progress anything but satisfactory.

Detailed analysis of the individual items of export and import reveals another interesting thing. India exports many raw materials to other countries, but later on she has to re-import those very items, with only this difference that the articles so sent are sent in a finished form. It

* These again were mostly jute manufactures, cotton manufactures, wool manufactures and tea.
would certainly save costs and also promote industrial efficiency if these raw materials could be "finished" in India. Unfortunately, however, India lacks machinery and expert guidance, and consequently she has to re-purchase practically her own goods at a considerably high price. Thus we find that in the year 1937-38 while India exported nearly Rs. 30 crores worth of raw cotton, she had to import almost as much (Rs. 27 crores) of semi-finished and finished cotton goods. Similarly, she exported Rs. 84 lakhs worth of raw rubber and imported Rs. 189 lakhs worth of rubber manufactures; she exported Rs. 200 lakhs worth of raw tobacco and imported Rs. 85 lakhs worth of cigars, cigarettes and finished tobacco; she exported Rs. 5 crores worth of raw hides and skins and imported Rs. 22 lakhs worth of boots and shoes.*

It may be argued that these figures of exports and imports are misleading in as much as exports may indicate a real surplus and imports a real demand which manufacturers within the country are unable to meet. A close analysis, however, shows that the position is not so simple. Many raw materials have to be exported because there are no manufactories in India where they can be

*The present war has further demonstrated the pathetic dependence of India on foreign countries with regard to some essential chemicals and certain kinds of paper, film etc.
worked out into a finished form. As far as the cultivator is concerned, he is interested mainly in getting a decent price for his product and his position is not in the least bit affected whether his commodity is used in the factories of his own country or elsewhere. The prices he gets for such commodities as cotton, sugar-cane and tobacco which are both exported abroad and used in local mills and factories show that he neither gains nor loses by a policy of exportation for manufacture abroad in preference to one of internal consumption.

India's Pathetic Dependence on Foreign Countries

A detailed study of the items of export and import is instructive from another standpoint. Although a few industries have been fairly well established during the last few years, detailed figures of international trade show that even in those industries India is still pathetically dependent on foreign imports. Thus we find that India had to import 2½ million lbs. of counts 31 to 40 and 4½ million lbs. counts above 40 cotton twist and yarn in the year 1937-38, although these counts could easily have been manufactured (and in adequate quantities) in this country. So far as twofolds (doubles) were concerned, there was
no internal production at all and the same year India imported from abroad 14½ million lbs. of this yarn. Again, in the range of fully manufactured cotton goods, India imported in 1937-38 as many as 591 million yards of cotton piece-goods (value nearly Rs. 12 crores) and there was a definite increase in the import of white and coloured goods. Other similar imports were Rs. 29 lakhs worth of hosiery, Rs. 43 lakhs worth of sewing thread and Rs. 6½ lakhs worth of haberdashery and millinery. Again, the total value of imports of artificial silk and silk manufactures rose from Rs. 371 lakhs in 1936-37 to Rs. 487 lakhs in 1937-38 and there was a phenomenal import of nearly Rs. 2½ crores worth of woollen manufactures, shawls, carpets and floor rugs alone.

These figures show that even within the range of well-established industries, development has been proceeding along certain stereotyped lines and very few industrialists have cared to analyse figures of import and embark on new items of production. It may be argued that no country, least of all India, can become self-sufficient in respect of all the items in a particular branch of industry, but in the opinion of the present writer, there is no reason why this should not be possible in at least those industries which are more or less well established. That it is possible for India to
become almost completely independent of foreign supplies in some items is proved by the recent phenomenal growth of the sugar industry: only Rs. 19 lakhs worth of sugar were imported in the year 1937-38 and that also mainly for re-export, but twenty years prior to this, the people of India were almost wholly dependent on foreign sugar.*

The War and India’s Foreign Trade

India’s foreign trade has undergone some changes as a result of the present war, but its character has not altered materially. As is inevitable, her imports have suffered and exports have increased considerably (the merchandise balance of trade in favour of India was Rs. 84.21 crores in 1942-43 as against Rs. 16.87 crores in 1938-39). The proportion of manufactured goods exported out of India increased from 29.25 per cent. in 1938-39 to 46.10 per cent. in 1942-43, while, on the imports side, the proportion of manufactured goods imported declined from 60.9 per cent. in 1938-39 to 54.1 per cent. in 1942-43. The relative increase in the export of manufactured goods need, however, be no cause for jubilation because it has been due to such abnormal causes as the need of Allied countries for huge quantities of

* Review of the Trade of India in 1937-38 (New Delhi, 1939).
jute manufactures (mainly sandbags), for appreciable quantities of cotton yarn and cotton manufactures which their civil industries are finding difficult to produce on account of pre-occupation with war work, and for tea which, while no longer available from China, is being increasingly consumed to keep nerves steady. In addition, there has been a substantial fall in the export of certain raw materials because of difficulties of transport and of the entry of Japan, an important market for Indian raw cotton, into the war. On the imports side, the factors responsible for a decline have been rigid exchange and import control, the inability of many suppliers abroad to send goods for civilian consumption, and the shortage and high costs of transport. The fall in imports, particularly in manufactured goods, has, however, proved helpful to local industries, some of whom have made the fullest use of the opportunity and successfully filled in the gap.

The Problem Re-stated

We thus see that in the present war, our imports have suffered relatively more than our exports, but this has indirectly helped our local industries. Secondly, in the balance-sheet of total exports, the proportion of manufactured goods has steadily increased, but this has been due to
certain abnormal factors and need not cause any special jubilation. In other words, the character of India's foreign trade remains fundamentally the same even after five years of war.

It is, therefore, essential that we should study India's economic and industrial requirements from the standpoint of the nature of her exports and imports and not merely with reference to the countries with which she trades. The attention of our politicians at Delhi and Simla has been directed so long more to the question whether an agreement with Great Britain and the Dominions is beneath the dignity of India or not, and less to the fact that with judicious expansion it might become both feasible and convenient for India to become completely independent of foreign supplies in at least certain items of manufacture. The result has been that our industrial manufacturers have gone on extending their old plants or setting up additional ones mechanically and along traditional lines of production. Because cotton manufacture appeared to be quite paying, hundreds of cotton mills were set up all over the country, but there were few entrepreneurs who thought of setting up artificial silk or wool factories. Because sugar mill owners seemed to be making money rather easily, sugar mills were founded even in remote corners of India, but few thought of starting a rubber
factory or a salt manufactory. It should be one of the duties of Industrial Planning Commissions and Committees to analyse in detail the nature of overseas trade and to indicate in what specific directions development would be desirable.

CHAPTER V

THE WAR AND INDIAN INDUSTRIES

*Industries on the eve of the War*

Till the outbreak of the war in 1939, India was in the process of a very gradual and slow transformation from the agricultural to manufacturing economy. A few large-scale industries, such as iron and steel, cotton textiles, jute, paper, cement, sugar and coal had been established, but, judged by Western standards, the industrial output was low and the lines of development were traditional and conservative. On the one hand, some industries were suffering from over-production; on the other hand, fixed plant or equipment was lying idle in many manufactories. Then again, there were certain serious gaps in the industrial structure. Even as late as 1939, there were no machine manufacturing, ship-building,
automobile, aeroplane and aluminium smelting industries. The production of heavy chemicals, machine tools, electrical and general engineering apparatuses was also conspicuously low. Finally, in many industries, the machinery employed was out-of-date or obsolete and modern methods of rationalisation were virtually unknown.

The Impact of the War on Indian Industries

With the war came a rapid fall in the imports of many items of manufactured goods. The import of cotton manufactures fell from Rs. 1415 lakhs in 1938-39 to Rs. 137 lakhs in 1942-43; that of silk yarn and manufactures dwindled almost to nothing; only Rs. 36 lakhs worth of glass and earthenware were imported in 1942-43 as against Rs. 164 lakhs worth of goods imported in 1938-39; even under the head "machinery," imports fell from Rs. 1972 lakhs in 1938-39 to Rs. 1053 lakhs in 1942-43. India thus has had a unique opportunity to fill in these gaps by increasing her home production. Then again, there has been considerable additional demand from abroad for the products of Indian industries, particularly from Russia, China and the Near East. Of course most of this demand has been in connexion with the requirements of the war, but it was not merely munitions that were wanted: they wanted textiles
of various kinds, engineering and hardware stores, leather products and foodstuffs. From the outbreak of the war to the end of March 1943, the total value of contracts placed by the Indian Supply Department alone amounted to over Rs. 548 crores. *

A Detailed Analysis: Existing Industries

Let us examine in some detail to what extent and in what manner the war has benefited the more important industries in this country. We may take the cotton textiles industry first. On the eve of the war, this industry was in a state of depression, night shifts having been stopped in some mills and many looms and spindles having remained idle. But by 1942, as a result of huge Government orders and steep fall in imports, production had increased by 481 million yards over the production in 1939-40. The average dividends of cotton mill companies increased from 10.50 per cent. in 1939 to 14.44 per cent. per annum in 1941. §

In the jute industry, however, increased prosperity has been less marked, partly because the industry had already been fairly well-established and on a secure footing and partly because

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in this war the demand for sandbags—the principal item of production—has not been steady and continuous. On the other hand, as a result of the war, several new lines of manufacture have been taken up by the industry. For instance, the war has seen the development of the rot-proofed bag; it has led to the production of paper-lined and roofing materials, hitherto unknown; dyed and polished yarn and twine are also being manufactured in certain mills; finally, different types of canvas and jute carpets are being produced by Indian jute mills—a development likely to prove of great value when peace returns.

The most spectacular development has taken place in the iron and steel industry. This is but natural because iron and steel are of fundamental importance in a modern war. It is true that India’s production of steel is only a very small part of the total world output, * but what is more important is that the production of both pig iron and finished steel has at least doubled during the last five years. § Also, as in the jute industry, new lines of manufacture have been taken up by all the major steel concerns. The Tata Iron and Steel

* The world production of steel ingots and castings was 157,795 thousand tons in 1940: of this, India produced less than 3,000 thousand tons.

§ For reasons of security, actual production figures of iron and steel are no longer published.
Co., Ltd., the premier steel concern in India, for instance, have produced, during this war, armour plate and armour-piercing steel conforming to the highest British specifications. They, and the Indian Iron and Steel Company and the newly formed Steel Corporation of Bengal, have been making all kinds of alloy steel, spring steel, nickel steel, high carbon steel, etc., on a scale which was almost unimaginable during the pre-war period. "The electric arc furnaces and high frequency induction furnaces, and the rolling and forging equipment of the Company, have enabled every type of high grade quality steel to be manufactured in India, and made the country relatively independent of outside imports ............ The Company has also developed a successful welding technique for the electric and gas welding of chromemolybdenum steel required in the manufacture of aircraft, and has been conducting experiments so as to discover the possibilities of the manufacture of high silican steel sheets for motors and transformers etc., required by electrical industries."* In addition, a number of auxiliary industries have sprung up, manufacturing wire and wire products of every description,

* G. W. Tyson: *India Arms for Victory*, Chapter VI (Allahabad, 1944).
the rolls necessary for the production of steel, tools of various kinds, and tin plates and sheets.

Development has been impressive in two other industries—cement and paper. There are at present about 20 cement factories with a total capacity of about 2.8 million tons and 17 paper mills producing nearly 2 million cwts of paper. Imports of cement are now only nominal, while imports of paper, pasteboards and stationery in 1942-43 were less than half of the quantity imported in 1938-39.

In the tea industry also, production has increased appreciably—over 550 million lbs. of tea having been produced in 1943 as against 450 million lbs. produced in 1938. Similarly, the figures of production of sugar show an increase of nearly 100 per cent. over the figures of 1938-39, notwithstanding the fact that the internal demand for sugar has suffered owing to the all-round rise in the prices of sugar as well as other items of food.

A Bird’s Eye-view of New Industries

Equally, if not more, interesting is the development of certain new industries as a result of the abnormal conditions created by the war.

The most important new industry is the aluminium manufacturing industry. Up to 1940,
there was not a single aluminium smelting or
sheet-rolling mill in India.* Although there
existed rich deposits of bauxite in C. P., Bihar,
Bombay and certain Indian States, India depended
entirely on imported aluminium (the imports
amounted to 58,000 cwts. in 1938-39) before the
outbreak of the war. It was only in 1937 that
the Aluminium Corporation of India, Ltd., the
first company of its type, was floated, but due to
the outbreak of the war and consequent difficulty
in getting the requisite machinery, actual produc-
tion did not commence until the year 1943. Mean-
while, another company called the Aluminium
Production Company of India, Ltd., was formed
by English and Canadian interests and this latter
began its operations early in 1943. The establish-
ment of these two companies would be of great
help to India during war as well as peace.
Aluminium is an essential strategic raw material
and as long as the war lasts, Indian aluminium
will find a thousand and one uses in the production
of munitions, machinery and aircraft. During

* There were quite a few companies manufacturing aluminium
utensils for domestic use (e.g. Jeewaulal (1929) Ltd., Aluminium
Manufacturing Company, Ltd., Wolverhampton Works Co., Ltd.,
Anant Shivaji Desai and Lalubhai Amichand), but all these firms
used imported aluminium. The position became so precarious in the
early years of the war that in 1940 these firms had no raw material
supplies at all!
peace-time, aluminium would have larger domestic uses and would also be utilised in various types of factory equipment on account of its lightness and durability. Finally, the demand for it would certainly increase many times as and when the aircraft manufacturing industry develops.

Next in the order of importance are the paints and varnish industry, the glass industry and the plywood industry. Although these industries cannot be called "new" in the strict sense of the term (there existed quite a few factories manufacturing paints and varnishes, glass and plywood even before the outbreak of the present war), they have attained some sort of national importance only as a result of the conditions created by the war. There are now some 62 paints and varnish factories in India, although the first paint factory was established only in 1902. The industry has received its impetus mainly as a result of the war—war is a voracious consumer of paints and finishes for multifarious purposes—but the prospects are bright in the post-war period also, as enamels, paints, distempers and dry colours are as much needed in peacetime. Similarly, there were only

*Of these, 22 are in the neighbourhood of Calcutta and 28 in the neighbourhood of Bombay. This pronounced localisation in Bombay and Calcutta is due largely to their being the most important consuming centres.
some 70 glass factories on the eve of the war (of these, as many as 26 were engaged in the manufacture of bangles alone), but the number now exceeds a hundred. In addition, new lines of production are being explored, the most recent success having been the manufacture of windolite, a substitute for glass for building purposes. Scientific glass apparatus of various kinds are also now being made in India and there has been an almost general change-over from old-fashioned pot furnaces to tank furnaces or modern pot furnaces. Thirdly, the plywood industry has had a phenomenal growth, the number of factories rising from 3 to 30 within a period of six or seven years. Here again, not only is ordinary plywood for tea-chests being manufactured, but resin-bonded plywood, which is specially required for aircraft and marine construction, is also being made.

Among other new ventures, mention may be made of the Hindusthan Aircraft Factory set up in Bangalore, mainly for the assembling of aircraft from imported parts, and a ship-building programme undertaken by the Scindia Steam Navigation Company at Vizagapatam. † As already

† In the manufacture of heavy chemicals and drugs also, development has been phenomenal. Sulphuric acid, alkalis, dyes and colours and drugs and medicines of various kinds are now being manufactured in prodigious quantities, mainly of course to meet the war demand, but partly to meet civilian needs as well.
noticed, there has been a remarkable growth in the manufacture of various kinds of engineering appliances, machines and machine tools. Bicycles are also being manufactured and India is fast becoming totally independent of imports in respect of all bicycle parts. Finally, India has been producing such diverse articles as sewing machines, electric fans, motors, transformers and insulators of various kinds, plastics, power alcohol, etc.

Cottage and Small-scale Industries

The war has considerably stimulated the cottage and small-scale industries as well. This has been due to three principal reasons. Firstly, a considerable proportion of the so-called “war” demand has gone to the small establishments. During two typical years, 1941-42 and 1942-43, direct war orders * to the value of Rs. 498 lakhs and Rs. 610 lakhs respectively were placed with small-scale industries alone. Secondly, owing to difficulties of transport, it became necessary to produce certain articles locally, and, in this, small establishments have naturally played an important part. Thirdly, the bigger factories and establishments have devoted themselves almost entirely to the mass production of certain

* These orders consisted of camouflage nets, woollen blankets, leather goods, pith helmets, durries, tentage, etc.
standard items which are most in demand, with the result that only the smaller establishments can cater for the special requirements of the consumer.

The resultant gain to India has been considerable. "A lot of raw material that would have otherwise lain dormant is being brought to light, and skilled labour in out of the way places is now being harnessed to the economic system of the country." As has been well stressed, if this dormant raw material or labour were harnessed under the roofs of big factories, it "would have meant the breaking down of a hard core of conservatism, no less than the infliction of social hardships and would have left lacunae of varying sizes in India's rural economy"—"a game that would not have been worth the candle."

Some Aspects of the War-time Development

The foregoing description would lead one to think that industries in India have made a tremendous advance during the present war and the future outlook is quite bright. That certain industries have reaped enormous profits (notwithstanding the excess profits tax and other "monstrosities" imposed by the State) is not denied. As a matter of fact, even a casual glance at the stocks and shares index would show that
investment in the shares of banks, cotton mills, jute mills, engineering and metal works, paper mills, cement factories—to take only a few examples—is considered to be very lucrative.

"Capital" Stocks and Shares Index*  
(August 1939=100)

<table>
<thead>
<tr>
<th></th>
<th>Govt. securities</th>
<th>Banks</th>
<th>Cotton Mills</th>
<th>Jute Mills</th>
<th>Engineering &amp; Paper Metal works</th>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>1939</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>1940</td>
<td>95.0</td>
<td>97.1</td>
<td>131.5</td>
<td>116.5</td>
<td>110.7</td>
</tr>
<tr>
<td></td>
<td>1941</td>
<td>100.5</td>
<td>111.3</td>
<td>174.9</td>
<td>127.7</td>
<td>142.5</td>
</tr>
<tr>
<td></td>
<td>1942</td>
<td>99.1</td>
<td>117.1</td>
<td>210.7</td>
<td>128.5</td>
<td>155.2</td>
</tr>
<tr>
<td></td>
<td>1943</td>
<td>101.6</td>
<td>147.7</td>
<td>250.7</td>
<td>165.5</td>
<td>184.6</td>
</tr>
<tr>
<td>July</td>
<td>1944</td>
<td>104.7</td>
<td>168.0</td>
<td>249.6</td>
<td>210.1</td>
<td>247.5</td>
</tr>
</tbody>
</table>

The above sharp rise in the market value of certain industrial securities is, however, apt to be misleading. If we analyse the sum total of industrial activity in India during the present war, we would find that the net advance has been very much less than is generally made out to be.

"Capital" Index of Industrial and Trade Activity.†  
(Base 1935=100)

<table>
<thead>
<tr>
<th></th>
<th>1938-39</th>
<th>1939-40</th>
<th>1940-41</th>
<th>1941-42</th>
<th>1942-43</th>
<th>1943-44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian Cotton consumption</td>
<td>120.4</td>
<td>114.3</td>
<td>128.2</td>
<td>150.3</td>
<td>154.4</td>
<td>167.3</td>
</tr>
<tr>
<td>Jute manufactures</td>
<td>121.8</td>
<td>128.0</td>
<td>110.8</td>
<td>122.1$</td>
<td>117.8$</td>
<td>99.7</td>
</tr>
<tr>
<td>Steel ingots</td>
<td>113.4</td>
<td>142.3</td>
<td>139.1</td>
<td>187.5(e)</td>
<td>199.7(e)</td>
<td>199.7(e)</td>
</tr>
<tr>
<td>Pig iron</td>
<td>103.6</td>
<td>127.1</td>
<td>136.5</td>
<td>141.6(e)</td>
<td>130.6(e)</td>
<td>136.3(e)</td>
</tr>
<tr>
<td>Paper</td>
<td>125.1</td>
<td>147.8</td>
<td>183.6</td>
<td>193.2$</td>
<td>159.9$</td>
<td>148.0$</td>
</tr>
<tr>
<td>Coal</td>
<td>118.8</td>
<td>120.1</td>
<td>124.5</td>
<td>116.6(e)</td>
<td>114.7(e)</td>
<td>111.6(e)</td>
</tr>
<tr>
<td>General Index</td>
<td>111.1</td>
<td>114.0</td>
<td>117.3</td>
<td>122.7$</td>
<td>108.3$</td>
<td>109.4$</td>
</tr>
</tbody>
</table>

* Vide Capital, Calcutta (August 17, 1944).
† Vide Capital, Calcutta (August 8, 1944).
The same story is told in the *Monthly Survey of Business Conditions in India*, issued from New Delhi by the office of the Economic Adviser to the Govt. of India. In a recent issue of this informative monthly bulletin, we find the following striking figures of production of certain articles and of electrical energy sold:

<table>
<thead>
<tr>
<th>Year</th>
<th>Production of cotton piece goods (Million yds.)</th>
<th>Jute Manufactures (Thousand tons)</th>
<th>Tea* (Million lbs.)</th>
<th>Electric Energy sold † (Thousand units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938-39</td>
<td>4,269</td>
<td>1,222</td>
<td>385</td>
<td>1,691,827</td>
</tr>
<tr>
<td>1939-40</td>
<td>4,012</td>
<td>1,277</td>
<td>391</td>
<td>1,819,928</td>
</tr>
<tr>
<td>1940-41</td>
<td>4,269</td>
<td>1,108</td>
<td>415</td>
<td>1,940,624</td>
</tr>
<tr>
<td>1941-42</td>
<td>4,403</td>
<td>1,259</td>
<td>475</td>
<td>2,556,822</td>
</tr>
<tr>
<td>1942-43</td>
<td>4,109</td>
<td>1,042</td>
<td>453</td>
<td>2,416,004</td>
</tr>
</tbody>
</table>

We cannot, therefore, help coming to the conclusion that the so-called industrial advance is more superficial than real, and there is no justification whatsoever for feeling self-complacent about it.

*Other Disquieting Features*

Then there are other disquieting features in the situation. Many of the advances made have been dictated largely by immediate considerations of the war: the post-war industrial future of India

* The figures for tea are for calendar years 1939 to 1943.
† The figures are for British India only and exclude units of electric energy generated and sold by the Public Works Departments and military stations in British India.
appears to have had very little influence in shaping policy. As a result, nationalist India is extremely critical of Government's dilatoriness in the matter of establishment of the automobile industry, the broad-gauge locomotive factory and the fertilisers industry. Secondly, Indian industries are very much in need of rationalisation. Inefficient and antiquated plants must be pulled down, cooperation between different establishments within the same group of industry must replace the present cut-throat competition and there must be more of research within the industry itself. Existing industries have expanded with almost reckless zeal, without any eye to wear and tear, and as soon as peace returns, they will have to pay the price. Thirdly, the strains and stresses of this war have brought to the forefront India's singular deficiency in technical personnel. Notwithstanding the very considerable achievements of the all-India Technical Training Scheme,† India still lacks the requisite number of trained workers, chargemen and supervisors. Even demobilisation and the consequent release of the large number of persons at present employed in the Army, Navy, Air Force and Ordnance factories are not likely

† Under this scheme, suitable young men are given a rapid and intensive course of training in certain selected trades at State expense in certain approved institutions all over India.
to help matters, if the aim is, as in the Bombay Plan, to increase the net income from industry to some 500 per cent. More people must be trained up regularly and systematically, not merely for the lower paid jobs as mechanics, but also for superior supervisory posts.

All these only re-inforce the argument for planning on a comprehensive scale for the post-war period. We must take stock of our existing resources—raw materials, labour, capital and managerial ability—and see how best these can be integrated so as to bring about a rapid increase in industrial production and eventually in the aggregate of goods available for distribution.

CHAPTER VI

PROBLEMS OF INDUSTRIAL PLANNING:
RAW MATERIALS

What Industrial Planning Includes

The phrase “industrial planning” conjures up such vague dreams and aspirations that it is necessary at the outset to understand what exactly it means. While it does not necessarily imply State ownership or even State control of all industrial undertakings, it does involve far-reach-
ing economic and social adjustments. Then again, in the actual drawing up of a plan, there must be close and detailed study of the various factors of production—raw materials (agricultural and forest products as well as minerals), capital, enterprise, labour, skilled workers and electric power, as also of such matters as marketing and transport which very much affect the price and competitive position of industrial products. In a country like India where nearly 70 per cent. of the population are dependent on agriculture for their livelihood, it also includes a study of (a) industries subsidiary to agriculture and (b) so-called cottage industries.

A word about the nature and method of this study. It is possible to make merely a subjective and detached study of the factors of industrial production and other allied matters, but the industrial planner cannot rest content with a mere study. He is more interested in devising practical courses of action whereby harmonious industrial development may be promoted and the rate of industrial production as a whole accelerated. His object is to make concrete suggestions about the steps which should be taken in this regard both by the State and by private entrepreneurs. He definitely wants to get the industrial machine going.

Turning to India, one is at first apt to be
bewildered by the vastness and complexity of the problem. The need for action appears so urgent and in so many directions that one is tempted to apply the surgeon's knife everywhere without pausing to consider whether the economic system can withstand so many incisions at a time. It is here that the industrial planner can make a valuable contribution. Based as his suggestions are on a study of the various phases of economic life and their complex and multifarious interactions, he would place first things first, and see to it that potentialities and resources are utilised gradually and in conformity with a definite objective and not in a haphazard or hasty manner.

Importance of Raw Materials

As has been stressed already, the problems that face the industrial planner are many and complex. First and foremost may be mentioned the problem of raw materials. Raw materials for almost every industry are being exported every year in large quantities on the plea that the producing country has no use for them. So far no comprehensive scientific study of the raw materials available has been made nor has it been adequately assessed to what extent ingredients which are still imported can be worked out from
India’s own natural resources. On the other hand, methods of agricultural production are still unsatisfactory and the undoubtedly valuable scientific crop studies that have been, and are being, made in various Government farms and agricultural research stations have failed to make their impress on the average cultivator in the fields. * The plight of sugar manufacturers a few years ago, unable to keep factories going or meet demands in the market, because sugarcane of the requisite quantity and quality could not be had during the crushing season, shows that even in the matter of agricultural production drastic changes are necessary. Again, the cultivation of long-staple cotton has not been attempted yet on any large scale and the results of research work in the agricultural departments of Government have so far not been made available to illiterate cultivators. What prospects are there of the successful building up of a sugar industry or a cotton industry dealing in finer counts as long as the problem of raw materials, viz., adequate and effective supply of sugarcane and long-staple cotton is not tackled?

The same remarks apply to forest and animal products and minerals. It is well-known that

* N. Das: *Agriculture in India—Past, Present and Future* (Calcutta, 1944).
India possesses an enormous wealth of timber which may be utilized for industrial purposes (e.g., manufacture of pulp for paper, matches, packing cases etc.) but no comprehensive exploration has yet been made nor has anyone seriously attempted to find out ways and means of commercial utilisation of these resources. Turning next to animal products, we find that not only is the quality of animals poor, but no proper survey has been made of the nature and quantity of such of these products as are still available. In minerals, on the other hand, India is supposed to be one of the largest and, in some cases, the foremost producer in the world, but, barring the cases of iron and steel, coal, petroleum, and, lately, aluminium, a primitive type of exploitation is almost all that we know of mining activity in this country.

Conclusion

The conclusion is thus inescapable that any scheme of industrial planning must take into account the fact that our knowledge about raw materials available for industry is meagre and incomplete. We must make a study of our raw materials (agricultural, forest, animal as well as mineral) before we can plan a scheme of industrialisation: we must know the nature and quality of these indispensable accessories before we com-
mence building up a structure. It is true that the present war has driven some of our industrialists and entrepreneurs to fathom many untold mysteries of nature that lie hidden under the earth or in the air, but a more planned and scientific survey than any yet undertaken would be a wise precaution.

CHAPTER VII

PROBLEMS OF INDUSTRIAL PLANNING: CAPITAL

A History of Capital Investments

The next problem that planners have to face is that of capital. A persual of the history of industrial development in India shows that industrial activity here is not more than fifty or sixty years old. It is true that a few industrial undertakings were started in the first half of the nineteenth century—by British capitalists in the Bengal Presidency and by some Indian merchants in the province of Bombay, but they were more or less simple pioneer undertakings started in rather a haphazard fashion and none of them presented the elaborate problems of modern capitalistic enterprise—the problems of finance and management.
It was only after the *Swadeshi* movement of 1905 that more and more people turned their attention towards the promotion of new industrial ventures and then difficulties began to be encountered. These difficulties have increased with the passage of years.* Entrepreneurs complain that capital is inadequate both for the launching of new enterprises and for the development of existing ones and for this they blame the apathy of the general body of investors and the conservative policy of banks. Investors and the general public, on the other hand, reply that it is the defective management of industrial enterprises that is at the root of all the trouble.† The task of the industrial planner is to find out whether these apparently conflicting statements can be reconciled and, if so, how.

**Capital Requirements of Industry**

It is generally asserted that industrial development has been slow because both fixed and working capital had, and still has, to be obtained at rather a high cost. Although in recent years.

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*N. Das: *Banking and Industrial Finance in India* (Calcutta, 1936).

† Of course during the present war, there has been far too much money floating about and awaiting investment, but this is a purely abnormal state of affairs, arising out of the war. Moreover, this surplus money is concentrated in a few hands and does not reflect a lasting increase in ultimate financial resources.
the tendency has been towards securing block or fixed capital by public or private subscription of shares or debentures, it is well-known that the method of direct deposits and of providing money on private account by an individual or partnership has been the vogue in many industries. This latter method has in practice been found to be inefficient and uneconomical for various reasons. Firstly, owing to the prevalence of this system of finance, industry has come to be dominated too much by financial considerations, and too little by industrial ones. Secondly, no mill company has been able to develop its own system of finance independently of its managing agents. Thirdly, a direct consequence of financial control has been that managing agents have, in recent years, been inclined to usurp for themselves more and more power through the instrument of agency agreements, and outside investors have become rather unwilling to put their money in undertakings which are too rigidly controlled by certain groups of agents-financiers. *

*For a detailed study, see N. Das: Industrial Enterprise in India (London, 1938).*
well. Broadly speaking, there are four sources of working capital—(1) public deposits; (2) private deposits or money on private account provided by entrepreneurs, their friends, and/or managing agents; (3) advances by indigenous shroffs; (4) advances by joint-stock banks. Now, in all industrially advanced countries, by far the largest proportion of working capital is supplied by banks, but in India this has not been the case, and for a variety of reasons. From the very beginning, the orthodox tradition of English banks, viz., the practice of giving loans for short periods and against certain forms of security alone has been very rigidly followed by all joint-stock banks working in this country, both Indian and European. Most of the advances given by joint-stock banks are against tangible and marketable securities lodged or pledged with the lender or against personal credit with a second signature on the pro-note. In India there are very few clean advances without a second signature—a class of advances which occupy an important place in the highly developed banking systems of Europe and America. This rigidity in the matter of short-term credit has both affected, and been affected by, the managing agency system of organization in Indian industries. It has affected the system in two ways: firstly, it has made many
managing agents almost unwilling to go to a bank for a loan which would require them to pledge their stocks and thereby might entail loss of the confidence of their public depositors; secondly, the two-name rule has made the backing of managing agents in the matter of finance virtually indispensable and has thereby effectively curtailed the independence of industrial units. On the other hand, the very responsiveness of the managing agency system to their demands has made it possible for banks to remain rigid with regard to their loans and advances and to insist on full backing by the agents.

Rigidity is not the only defect of short-term credit in India. In recent years, it has tended to become costly also. In course of the enquiries made by the Indian Central Banking Enquiry Committee during 1929-30, it was repeatedly asserted by Indian entrepreneurs that the rates of interest charged to industry for loans and advances are generally higher than industry can bear. The larger joint-stock banks make advances usually at the official bank rate or at 1 per cent. higher; but the smaller ones—and there is a multitude of them—charge at least 2 to 4 per cent. higher. As a matter of fact, many banks admitted before the Banking Enquiry Committee referred to above that they usually advanced loans at
rates varying from 10 to 15 per cent. even on the security of mortgage bonds.

**Problems of Industrial Finance**

Industrial planners cannot afford to overlook these facts, because in the absence of a regular and fairly inexpensive supply of capital, any scheme of industrial expansion is likely to founder on the rocks of finance. The problem is to find out whether any special financial institutions should be set up (either with or without the backing of the State) to provide capital to industry or whether, by legislation as well as by persuasion, existing joint-stock banks should be forced to give up their present conservative attitude towards industrial promotions in general. There are dangers in madly rushing to either of these two alternatives. A State-aided Industrial Bank may easily lead to political pressure of various kinds on industrialists; it may also mean constant official interference in matters which should best be left to the decision of industrialists and entrepreneurs. Again, it is doubtful if, in the present position of the capital market in India, a private Industrial Bank with fairly decent financial resources should be started at all; the failure of the Tata Industrial Bank established in 1918 with a very efficient directorate and an intelligence
service composed of a number of select technical experts and commercial men must make any enthusiast pause and consider. On the other hand, in the present stage of industrial development, most of the Indian joint-stock banks hesitate to combine investment banking with commercial banking on the lines followed by German and other Continental banks. Banks in India are small with inadequate resources of paid-up capital and reserve, and their assets which consist largely of customers' deposits liable to be withdrawn at short notice, cannot obviously, without incurring serious risks, be locked up in long-term advances or loans to industry. Moreover, the whole history of industrial finance in India shows that investment banking by institutions which are organized as commercial banks inevitably leads to speculation and rash promotion. * Mixed type of business requires much experience and an established policy of sound banking, both of which the bulk of the joint-stock banks in India lack.

During the present war, however, in most of the belligerent countries, the State has become the principal supplier of finance. This may have been due to the peculiar difficulties inherent in the

*N. Das: Banking and Industrial Finance in India (Calcutta, 1936).*
financing of war industries (new plants or extensions necessitated by the rapid and extensive change-over to war requirements had to be set up and additional working capital provided for, as defence programmes got into full stride), but the fact remains that orthodox ideas of finance have been given up with a view to speeding up production. At the end of the war, therefore, the same considerations might weigh with the industrial planner and a bold industrial programme may have to be supported by an equally bold financial policy.*

*India’s Potential Financial Resources*

Behind the problem of finding capital for new industrial promotions lies the larger problem of India’s potential financial resources. In the long run, the problem of industrial finance is a problem not only of the mobility of the financial resources of a country but also of its quantity and quality. The development of banking depends to a very great extent on the growth of the investment habit which in turn depends on the earning capacity of the people, their will to save, the incentive to save, and the facilities for investment. The

present position, however, is that although there are fairly good facilities for investment, people do not put enough of their savings either in banks or in industrial promotions. Perhaps the situation can be improved if existing banks are consolidated, all mushroom banks and loan offices willed out and a comprehensive reform of banking law undertaken. But this by itself is not likely to lead to the results that are desired: better still would be the setting up of an organization which would teach the average investor in India to think industrially, to take and make bold ventures and to have a long view of things. Institutions like the Investment Trust Companies of Great Britain and the Unit Trusts and Investment Trusts of U.S.A. might usefully be set up in this country, with necessary modifications to suit local conditions. It may also be possible to start a Bankers' Industrial Development Company, as in England, whereby the large joint-stock banks could supply medium and long-time credits to industry.*

*The Eastern Economist, New Delhi (July 23, 1944).*
CHAPTER VIII

PROBLEMS OF INDUSTRIAL PLANNING: LABOUR.

The Problem of Labour

No workable plan can be put forward unless due note is taken of the most important factor in industrial production, viz., labour. With the steady progress of large-scale industries and the rise of factory towns, modern labour problems as understood in the West have gradually come into prominence in this country. There is a new awakening and workmen have become more and more conscious of their privileges and rights. On the one hand, it is often assumed by employers that good conditions of work for labour involve a sacrifice for industry. Workers, on the other hand, seem to think that they can go on strike as often as they like and on all sorts of pretexts, and at the same time remain unaffected by the losses sustained by industry. The industrial planner’s duty would be, firstly, to reconcile these two divergent ways of thinking and, secondly, to suggest how best labour can be harnessed as an important factor of production in industry.

The most interesting point about labour supply in the mines and factories of India is that most
factory labour is still drawn from rural areas and the migration from the rural areas to the factories is not generally a permanent exodus. It is, in the minds of those who undertake it and to a large extent in fact, a temporary transfer, and recruits to industry continue to regard as their home the place from which they have come. This does not mean that factory workers are all agriculturists: there are in the villages important sections of the population whose occupation is not primarily agricultural and may not be agricultural at all, and they generally drift to the towns to work in mills and factories. The desire to maintain contact with villages, however, remains and has important effects on the efficiency of labour as a whole. This home-sickness makes it difficult for industrial workers to get reconciled to changes in environments and to acquiesce in unsatisfactory conditions, and also necessitates a continuous turnover of employees, many of whom may be entirely new to a factory, its machines and methods of working, with a consequent loss of efficiency which reacts on both the management and the workers. On the other hand, this contact with villages has its advantages. Firstly, it means that most industrial workers have been brought up in more natural surroundings and have a better standard of physique than could be built
up in many industrial areas. Secondly, the combination of urban and rural life brings a width of outlook which is apt to be lacking in a purely urban population. Finally, the villages provide a measure of insurance against the effects of various changes which may reduce, interrupt or destroy the earning capacity of workers. *

Efficiency of Industrial Labour

The question of efficiency of industrial labour is so important that any scheme of industrial planning must suggest ways and means of increasing it. Although it is impossible to measure the comparative efficiency of labour directly, owing to differences in the processes adopted and in the organisation, machinery and quality of the raw materials used, it is universally admitted that the Indian industrial worker produces less per unit than the worker in any other country claiming to rank as a leading industrial nation. This is due partly to climate and to long hours of work in an uncongenial atmosphere, but the most powerful cause is the low standard of living. There is a vicious circle in this: weakness arises from the hardships to which the worker, who starts with an indifferent physique, is subjected and especially

* Report of the Royal Commission on Labour in India (New Delhi, 1931).
from his unsatisfactory diet and the conditions under which he is generally compelled to live; these hardships and conditions are mainly the result of inability to afford anything better, and this in turn arises from low efficiency. Thus "poverty leads to bad conditions, bad conditions to inefficiency and inefficiency to poverty". Notwithstanding the advances made in industrialisation, the impression one gets of the life of industrial workers in this country is one of "great poverty, extremely overcrowded and unhygienic conditions of their homes, the lack of privacy and ordinary family life, the great paucity of educational, medical or recreational facilities, their chronic state of indebtedness and the slender margin of their staying power, their low money incomes and the poor quality and insufficient quantity of the food they consume." *

The question now arises how the efficiency of labour can be increased. Here, it may be noted that the standard of living of our workers is so low that anything that may be done towards raising it would be reflected, in the long run, in increased efficiency. The standard of living may be raised in two ways—(a) by increasing the

* D. R. Sadgil: Regulation of Wages and Other Problems of Industrial Labour in India (Poona, 1948).
money wages paid by the employer and (b) by direct or indirect help given by the State or society to raise the standard of living. On the one hand, there should be regulation of wages, particularly of the lowest paid categories of workers, by Trade Boards. On the other hand, the State must spend, and spend generously, for the welfare of the workers. The State must accept responsibility for their education; it must arrange to provide nutritious food to them; it must embark on a well-thought-out and co-ordinated plan of slum clearance and house building; it must provide regular medical treatment; and, finally, it must create conditions which would give the worker a sense of security.

The Problem of Industrial Disputes

Another important matter which should engage the attention of industrial planners is the frequency of strikes and other industrial disputes. While assumption by the State of the responsibilities enumerated above is likely to improve the standard of living of the industrial worker and make him more contented, it would be rash to suppose that this would entirely eliminate future strikes and lockouts. Various causes, economic and political, are bound to lead to disputes between employers and employees, and it should
be the duty of the State to convince them that compulsory stoppage of work is harmful to both the parties. It should also be possible for employers to permit the formation of Workpeople’s Welfare Committees or similar organisations, as these would enable the management and workers to get into closer touch, resulting in a better understanding of each other’s point of view. An external machinery for settling disputes, i.e., some authority either entirely or partly independent of the industry concerned, may be helpful at times, but it can never be a proper and adequate substitute for an organisation within the industry to deal with disputes as they arise.

CHAPTER IX

A FURTHER DISCUSSION OF THE PROBLEM OF WAGES AND INDUSTRIAL EFFICIENCY

The Royal Commission on Labour and After

The last twenty-five years in India have been so very much crowded with almost continuous industrial strifes and the appointment of committees and commissions to enquire into, and make recommendations in connexion with, the causes of