INDUSTRIALISATION AND THE NATIONAL GOVERNMENT*

I often ask myself why a country like Canada, Australia or the United States of America is so prosperous and why India happens to be backward and poor. How are the citizens of the countries named able to live to twice the age that our people in India do, and how have they managed to raise their standards of living to their present high level and lead prosperous lives?

The reasons are plain. More than 85 per cent. of the Indian population is illiterate; the bulk of them have no idea of present-day world trends, of the changes that are going on in the conditions of existence and of the moral obligations and material precautions which could give them protection and safety. They do not know, for instance, that modern nations have acquired power and strength because they train themselves and give great attention to industries and earn larger incomes from industries than from agriculture. The Indian rural citizen who forms the great bulk of our population has a dislike to give up traditional habits, he has no idea what practices and behaviour really lead to profitable living, and he has no plan of life. When an Indian workman in the interior happens to have sufficient money in his possession to keep his elementary needs satisfied for a fortnight, he dislikes work and is inclined to take a holiday. His mind is not trained to take thought of the future and he has not got the capacity for group effort to promote beneficent practical ends on any appreciably large scale.

The main reason is illiteracy and ignorance, and the principal remedy to remove these defects is the long-range one of mass education.

One other special remedy for these weaknesses is for the Government to appoint boards or committees of leading men of

* Presidential Address by Sir M. Visvesvaraya, at the Second Quarterly Meeting of the Central Committee of the All-India Manufacturers' Organisation, July 11, 1948.
known probity and high character and charge them with the duty of preparing Rules of Conduct and Models of Behaviour, the practice of which is common among modern nations, and circulating the same by attractive propaganda. Good things will not come to our citizens without effort and preparations. We have to work for them; hence this suggestion that we should compare ourselves with nations who are leading orderly lives and are prosperous, and prepare slogans and leaflets based on such comparison to induce our large static population to lead more active and disciplined lives and thereby become more useful to themselves individually, and to the Indian nation collectively.

THE INDUSTRIALISTS' DIFFICULTIES

The country’s weaknesses as stated before are due to the traditional habits and unplanned life of the people and particularly to neglect of industries. The previous Government was by its very nature opposed to rapid industrialisation. The present Government is national and the business public expected much from it. They had hoped that all the handicaps that existed formerly would be removed at one stroke and that the business public including the labour population would benefit greatly by the change. In the opinion of business men who are in close contact with manufacturing activities in foreign countries, there is disappointment that problems are not widely and openly discussed and correct policies are not frequently enunciated to give confidence and hope to the public.

I asked a few business friends of our Organization in Bombay to meet together and give me a brief list of the impediments to industrial progress at the present time. Their statement is comprised under six heads, which, summarised, reads as follows:

1. **Raw Materials.**—Imports and supplies of essential industrial raw materials are, it is stated, restricted and controlled. Consequently delays occur and industrial operations, etc., suffer. Examples of such materials are steel, pig iron, virgin metals, industrial processing materials, fine chemicals including most of the organic chemicals, industrial solvents, industrial fuels and machinery.

It is recognised that there is a world shortage of all these materials, but a more business-like handling of the representations and complaints of delay by Government staffs could, it is said, very greatly ease the situation.

2. **Transport.**—Much inconvenience is caused by difficulties of transport. Cement is being produced in sufficiently large quantities but the A.C.C. Ltd. have had to close down two of their factories. Corruption and inefficiency are also said to be rampant which create artificial shortages. If the transport situation does not improve many other industries may have to be closed down similarly.

Shortage of petrol and diesel oil have curtailed the more general use of road transport. Coastal shipping has not sufficiently recovered from war effects. No systematic attention is paid to the development of internal river transport.

3. Provincial Governments very often adopt new policies without giving previous notice to the public. Orders are often issued which interfere with the regular operations in industries or the sale of their products without giving sufficient previous intimation.

4. Provincial trade barriers are created by restrictions put on the movement of specific materials like oil seeds or milk products or timber or machinery. The resulting necessity of obtaining licenses and permits leads to inordinate delays, corruption and hardship to all concerned.

5. Ministers of Government sometimes express views which place impediments in the way of new industrial ventures and discourage investors. The opinion is widely held that the premature anxiety of the present Government for socialism and nationalisation is responsible for a feeling of nervousness about the country’s economic future.

Individual members of Government may hold socialistic views but they should not give expression to them unless their colleagues in the Cabinet have also accepted them. Such expression leads to uncertainties and loss of confidence.

6. **Labour Difficulties.**—Industrial production has fallen and costs of products have risen by frequent strikes. Costs of production are rising and there is a falling off in the quantities of manufactured goods. The present situation is attributed to the desire of some of the Ministers to please the working classes in order to be able to obtain their political support at the first election that may take place when the new
Constitution is adopted. Labour, it is said, is made a pawn in the political game. Even socialists and communists are said to be fomenting labour troubles and holding out impossible promises with a view to catch the labour vote.

Since the organized industrial labour forms less than 2 per cent. of the total population, such attempts at bolstering up the economic condition of the workmen at the cost of the remaining 98 per cent. of the population cannot but lead to great hardships and loss to the entire country.

**FIRST STEP SHOULD BE TO STRENGTHEN DEFENCE**

Industries needed to strengthen the country's Defences should be given preference over every other case which is working for profit.

As regards technological knowledge the most urgent need is to train people in mechanical engineering, chemical technology and other special subjects for the maintenance of a strong defence force for the country. Government may be satisfied with the adequacy and efficacy of their military arrangements; but in a democracy the public who give thought to these subjects will want sufficient information to be assured of the safety and security of their country against possible foreign aggression.

In America and Canada the national leaders are acquainted with defence arrangements and can get full information regarding the fighting strength of their people and also of their comparative international strength if they wish to have the information.

In India hitherto persons interested in such topics were not allowed even to look over the fence. Military secrets need not be revealed but it is hoped an early change will come over the attitude of Government and a good number of leaders in all parts of the country will be able to keep watch over the growth of the country's military strength.

The British Cabinet issues a White Paper periodically to give assurance to its public in this respect. The latest paper issued bears the title "Statement relating to Defence in 1948". The British public often enquire whether a sufficient number of leading men are retained in the Army and whether conditions in service establish-

ments are sufficiently attractive to draw a fresh supply of talented younger men.

There is great need that similar statements to assure the public that the country's security is closely watched, should be issued in India.

**NO STATISTICS AVAILABLE OF EXISTING INDUSTRIES**

This is an elementary duty of any Government interested in the business life entrusted to its care. The British Government were not in favour of any statistical measurement of the results of their Administration.

In Canada and Australia, progress in industries in such matters as:
- Number of establishments,
- Capital invested,
- Number of employees,
- Salaries and wages paid,
- Cost of materials,
- Quantity and gross value of products produced, and
- Per capita value of output,
are published once a quarter.

I have been appealing to Government in this country to remedy this defect ever since I took an interest in economic matters, both in public addresses and by publications. An Indian Economic Enquiry Committee appointed by the Government of India in 1925 of which I happened to be the Chairman made specific recommendations for collection of statistics. But no serious attempt was made by any responsible head of the administration at that time or subsequently to remedy this grave defect or even to discuss the proposals in public.

The capital invested in and the per capita income derived from industries, if correct statistics be available, will give an idea of the progress of the country in industrial activities and towards industrial prosperity. A legislative enactment has been passed to collect statistics but the Government have not enforced it everywhere. It is understood statistics have been collected for about 40 per cent. of the industrial establishments. These by themselves will be of little value to assess the progress made unless all the establishments are brought into the picture.

The present Government has been in office for less than a year and they cannot be held responsible but they must give the
public an idea of what they are doing and how soon this age-long defect will be remedied.

**Three Institutes of Technology**

It is learnt that the Government of India have decided to establish two Institutes of Technology, both of them on the M.I.T. model, one in or near Calcutta and the other in or near Bombay.

It is also gratifying to learn that certain prominent leaders in South India have decided to start an Institute of Technology in Madras City. Although the resources so far offered are slender, the initiative taken in this case is most praiseworthy.

Great care is necessary to see that it does not take much time to equip these three institutions with buildings, machinery, staff and essential apparatus and furniture. Here is an opportunity for Government to lay aside routine methods and resort to some kind of serviceable rush tactics. Otherwise it might take decades before satisfactory institutions in these three cases come into view. Since the private endowment for the Madras Institute is small, it is the duty of the Government of the Province to go to its rescue and make liberal grants.

One way of getting this done is by appointing a Sub-Committee of three leaders (or one capable reliable man if one such both reliable and capable could be found) to help to construct buildings for, and equip these three institutions speedily on a contract basis. Respectable firms should be invited to consider the proposal. It must be recognised that Government establishments will not be adequate to cope with the demands in this respect within a reasonable time.

The times are abnormal, the need for developments is urgent and the procedure to be resorted to to gain the objective, even if unusual, should not be rejected.

Respectable business firms may come forward and undertake to do their best if the transaction is entrusted to their care as in the case of contracts in war time. In such cases the risk must be taken; a good offer should be accepted. In the present circumstances it would not be inappropriate for a Minister or the Cabinet to invite offers, formally or otherwise, and accept any reasonable proposals finally with the approval of the majority of members of the Cabinet.

**Past Attempts to Establish Technological Institutes**

There is a sorry tale to tell of past attempts at establishing such institutions in Bombay and Calcutta.

It is probably not remembered that the establishment of an Institute of Technology on the model of M.I.T. was recommended by a Bombay Government Committee in 1921-22. The Indian members of the Committee unanimously supported the proposal while the European members opposed it and the Bombay Government of those days shelved the whole report.

The University of Bombay being dissatisfied with the Government attitude to a problem of this importance appointed a committee of its own to arrange for instruction in Chemical Technology. That Committee recommended the establishment of a University Department for the purpose. The Department has been since established and is now working satisfactorily in the quarter of Bombay known as Matunga.

The Institute now proposed to be established in or near Bombay will, it is hoped, be mainly to promote knowledge and skill in higher technology in engineering and research in industries, in the first instance, and to enlarge the same gradually by adding new departments as funds and experience become available.

They have a National College of Engineering and Technology at Jadavpur in Calcutta which is entirely independent of Government help or control but owing to its slender resources, the scope of instruction attempted is limited. I understand no Government grant was asked for nor given. I have not yet heard whether the new Government of West Bengal has begun to give substantial help to this very deserving institution.

**Present Three Urgent Wants of Industries**

Some of the more urgent wants of industrialists and business men at the present time are capital, machinery and experts.

No country can be said to be militarily or economically self-contained and strong if the people are not trained to manufacture heavy and delicate machinery and tools. India cannot be regarded as an Industrialised Modern State if its skilled public is not equipped with such capacity.
I have dealt with the question of the need of capital in the previous discussions. Heavy industries cannot be developed without large investments in the shape of capital. Canada has invested about Rs. 2,500 crores of capital and the benefit to that country is that the gross value of products manufactured annually is more than Rs. 2,500 crores. Similar results or even comparatively better results may be expected in the early days of this new development in this country.

It is feared that this aspect is not given the importance due to it by the authorities in power either in New Delhi or in some of the Provinces.

Nationalisation would be quite good as a policy for the manufacture of defence machinery. Some few small Government plants exist on the Bengal side which were started in the days of British rule. Nationalisation of selected key industries which do not pay business men to take up may not be objectionable. Government management will not be economical in the present circumstances. This frequent reference to nationalisation by Government authorities has unnerved industrialists and business men and confidence is shaken throughout India. I do not know what steps Government of India are going to take to bring back confidence to investors and make the wheels of industry go round smoothly in future.

**Prospects of Obtaining Help from Big Industrial and Financial Corporations of U.S.A.**

America has been willing to supply these wants namely, machinery, experts and even capital.

It is true on account of the last war the manufacturing countries in the West have had to replace the worn-out plant of their own industries and it is difficult for them to supply what this country wants in proper time. But there are various ways of getting over the difficulty.

I can speak from personal knowledge that large financial firms in America like the financial firm of Rockefeller of New York are willing to help this country in this emergency if only there is a satisfactory understanding between the two countries at the Government level to remove impediments and allow facilities to flow freely into India from that quarter.

It is not meant that Government should take any financial responsibility. The financial firms in America should be placed in contact with the business firms in India who undertake to organise large-size industries. It will be a transaction between the business Boards or managing agencies in India in charge of large industries and financial and other firms in America who are accustomed to export machinery and supply of experts for setting up industries of large size in foreign countries.

The financial houses have access to trusted groups of manufacturers, technologists, machinery manufacturers and others in their country and they are willing to supply to any important undertaking in India all that the latter may want. They feel a sense of responsibility for all work undertaken through their agencies.

When blue prints are ready, orders may be placed with the industrial groups under the influence of the parent financial firm. The latter will take the responsibility for fair dealing to a certain extent.

The supply of machinery can be quickened. The financial firm will organise and place valuable facilities at the disposal of promoters of any industry in this country provided the promoters make it worth its while.

Business men in India know how the late Mr. C. P. Perin of New York helped to build the first steel industries in India. Men of Mr. Perin’s calibre and probity can be had even now if a close search is made for them. But they must be paid high fees and remunerated liberally. Mr. Perin was paid a fee of Rs. 25,000 to Rs. 30,000 per month for the time he spent in India. I can say from personal knowledge of the services he rendered that he was not overpaid at these rates.

Next to the understanding between the Governments, money can buy anything that is wanted if not from U.S.A., at least from one or more smaller countries of Europe. The supply of machinery can be also quickened if in special circumstances sufficiently high prices are paid to make it worth the while of manufacturers to supply them.

As stated above next to the understanding between two Governments money can buy anything which our industries require if not from U.S.A., or U.K., at least from the smaller countries of Europe.
like Sweden, Switzerland, Hungary and Czechoslovakia, among others.

SOME FEW DEVELOPMENTS CONSIDERED VERY NECESSARY

Some few important developments are considered necessary in the present industrial organization of the country. These are:

(1) Appointment of a Deputy Minister.—The industrial needs of more than 300 million population are entrusted along with the question of supply to one Minister. In spite of very able men being in the Ministry, in spite of their exceptional very hard work, big questions necessarily take a long time to get settled and delays in current matters create untold hardships to the industrialists public. The appointment of a Deputy Minister seems necessary who should be made responsible for the routine business of the Department leaving the Chief Minister time to get into closer contact with leading manufacturing firms and industrialists.

The addition to the staff of a responsible Deputy Minister ought to help greatly to increase production and minimise malpractices. The present hardships of a vast population will be substantially eased.

(2) An Economic Council.—An Economic Council, that is, a representative body to give continuous attention to the economic interests of the country is also a necessary measure to bring Government authorities, officers, industrialists and business leaders into closer contact. This will lead to more rapid promotion of business because the official mind will be better known to the public and the needs of the public better understood by officers and authorities.

(3) A Liaison Agency.—It is suggested that two or three members of the Economic Council may be specially selected for employment to be used as a liaison agency both by the Government and the Council. The picked men who would be serving on this Agency may be made to work up schemes in cooperation with promoters of such schemes by collecting all necessary details for them from any part of the country or of the world, by air travel. In this way when pressed for time any large industry can be organised and started in about three months time.

(4) A Special Bureau or Board.—A special Bureau or Board should be brought into existence for maintaining a continuous study of the latest developments in industries in Western countries. Much of such information can be gathered also through technical journals and publications. The country should be kept up-to-date by such means in the sphere of industries.

(5) Decisions and Action.—The democratic ideal is that decisions should be made by a Committee or other democratic body but that the responsibility for action should be entrusted to one, or a few men, of capacity and character. There is wisdom in a multitude of Councillors but for implementing a scheme or a project, one person of capacity and probity, or a group of three persons of character and capacity, should be selected and given full responsibility for execution. Time, funds to be spent, and the specific form of results expected may be prescribed. In other respects this small executive agency should be given full freedom and discretion. One or two cases may go wrong but that may be counted as part of the price paid by the country for rapid or efficient execution.

(6) Machinery Manufacture.—An effort should be made on an extensive scale to spread the knowledge of mechanical engineering and machinery manufacture in the country. Factories and workshops with this definite objective should be established to make up for past omissions. The people should be given opportunity and freedom to manufacture machinery and machine tools. Rewards should be given for skill in this respect. One Japanese way of development was to take a foreign machine to pieces and distribute the pieces among skilled workmen or students with instructions to each person to prepare an exact counterpart. When all the parts were ready a new machine similar to the original one was produced. This may be taken as one of the many practices which enthusiastic instructors usually adopt to teach the younger generation the ability to manufacture machinery. Due to lack of opportunities for practice, there is an appalling dearth of original thinking and enterprise in this respect in our midst.

(7) Selection of Experts.—In order to get satisfactory men from abroad the Government or the business firm concerned
may have to pay two or three times the fee or salary that experts get in their own country. The price paid for securing efficient experts is often a flea-bite compared to the value or the results obtained by securing good men and by making good use of them when secured.

In deciding all these matters the broad facts should not be ignored that we are dealing with the country’s industrial production which the modern world considers to be of the greatest value for any country’s protection from foreign aggression and protection from want, and we are dealing also with a national emergency brought about by the systematic retardation of industries for over a hundred years.

**CONCLUDING OBSERVATIONS**

I have said before that large sums of money have to be invested if there is to be any real progress in manufacture or production under the head industries in this country. I have elsewhere suggested that not less than Rs. 490 crores per annum should be invested as capital in industries for the next five years of which Rs. 100 crores may be investment direct by Government. We may have to spend from current revenues on staff, equipment, subsidies, etc., at least Rs. 10 crores more every year for encouraging the birth of new industries. The experience in this field is: “You must spend well in order to earn well.”

Business leaders Mr. G. D. Birla and Mr. A. D. Shroff have been suggesting the same thing namely the need of large investments if the country is to make a mark in industries. Even if Rs. 400 crores per annum are spent during the next five years, the total capital expenditure at the end of the fifth year will be not more than what Canada with a population of only 12 million has already invested in industries. Money has to be borrowed as soon as necessity is felt and America would be quite willing to supply it if satisfactory business relations are established between the two countries at the Government level. The contracting parties to the loans will be not the Government of either country but financial or other large firms in America which lend the money on one side and private business firms in India which use it on remunerative industries on the other.

The arrangements here indicated are similar to what America herself followed in building up her industries by borrowing money from England towards the end of the last and the commencement of the present century. Before the first World War, America in her relations with Great Britain was a debtor country. She built up her industries and ten years later became a creditor to Great Britain herself. Investment of capital will lead to increase of gross products and income. Extreme caution in borrowing and investment will leave the country weak and poor. Courage is needed. Conditions in India have been extraordinary. Having been subjected to suppression and retardation in the past, industries are no more than a wreck at the present time and they therefore are in need of strong Government sympathy and support.

With an uneducated population and its abnormally low earning power, new methods similar to those suggested by the practices of the West, are necessary for industrial rehabilitation and such necessity should be recognised by the Governments both at the Centre as well as in the Provinces. There should be no objection to borrow money, if, as is believed, it can be done in this case without political risks, and use it as capital to promote industries because the money so used is not actually spent on current needs but will be invested in industries and become real interest-yielding assets. The present emergency demands that Government should follow courageous policies and take all reasonable measures necessary to raise the working power of the people and through the working power the prosperity of the country.