

Power Engineering Department importance will be attached to research work. There is very small amount of engineering research being conducted in the Universities and Technical Colleges in India. Research would be made a prominent feature, and it should help the student to appreciate the attitude and technique of science in seeking to enlarge the realm of scientific knowledge and this attitude he must have if he is to be a creative Engineer.

The intentions also are to arrange and invite specialists and acknowledged experts in various branches of electrical engineering in particular reference to power generation and development, to give a course of lectures in their specialised spheres and problems. It is here that another course could profitably be arranged. A course of short duration for Professional Engineers which

would serve as a Refresher Course, would be provided. The experts, who would be invited, will not be restricted only to this country but from other countries of the world—U.K., U.S.A., Russia and others. These experts would discourse on special problems which confronted them, the methods they adopted to get over their difficulties, and discuss with our engineers problems that might be confronting us and suggest from the light of their experiences possible remedies and solutions. With the birth of this new training scheme at the Indian Institute of Science, let us hope, would be born similar and many other scientific and technical training and research centres, and India would produce within herself her own Scientific and Technical Personnel, second to none.

M. S. THACKER.

INDUSTRIALISATION OF THE INDIAN CONTINENT*

SANKALCHAND G. SHAH

THE geographic distribution of India's natural resources makes it clear that industrial and economic planning of the country should be a subject of the Federal Centre. In order to achieve a progressive economy a Central Planning Commission should be appointed immediately, as the A.-I.M.O. has already recommended, to evolve a 'single cohesive plan for the whole country by integrating all regional plans in close association with all Provincial Governments, States, and industrial organizations'.

The United Nations' Far Eastern Group, in a report issued by them, lists the following as the main obstacles which retard economic reconstruction in the Far East—political and social unsettlement; training and education of personnel; provision of capital; foreign exchange resources; equipment and materials; monetary disorders and inflation; basic consumer goods and services; and application of technology and research. I may say that these obstacles exist in this country also.

The industrial activity of India has increased only by about 15 per cent. during the last ten to twelve years. Russia by a determined planning of industries has in-

creased its *per capita* income by 3½ times in ten years as a result of investing 4,700 crores of rupees in industries and 1,860 crores in transportation from the savings of the people. The *Bombay Plan* suggested that in fifteen years we could increase our national income by three times and double our *per capita* income by investing 3,475 crores in industries and 1,300 crores in transportation.

FIVE-YEAR PLANNING ADVOCATED BY SIR M. VISVESVARAYA

Sir M. Visvesvaraya pleaded at the last Annual Conference that an annual investment of Rs. 300 to Rs. 500 crores should be sunk into new industrial enterprises in the next five years if the Industrial development of this country is to be a *fait accompli*.

This advice of our veteran President—himself one of the greatest industrialists of India—must be acted upon in time, as by further indecision and theorising, valuable time will be lost, losing a start, that would enable Indian industries to brace themselves to meet foreign competition. Enough of "Paper Planning": we want concrete action.

FOREIGN CAPITAL AND JOINT VENTURES

I have stressed already the urgent need for the rapid industrialization and also the early necessity for planning the same. The

* Text of the Address by Mr. Sankalchand G. Shah to the All-India Manufacturers' Organization, 20th July 1947 at Bombay.

question now naturally arises, "Is sufficient capital available in the country to meet the needs of our industrial development?" I submit this is a matter of utmost importance to the country as a whole and should be tackled forthwith.

I believe there is not sufficient capital in the country for any large-scale promotion of heavy and key industries. There is a fairly large amount of hoarded wealth in the country. I am of the opinion that for some years to come at least the general public will hesitate to invest their capital readily in new ventures as we lack technical experience and the "know-how" of production at present. Confidence could be created in the public if foreign technical co-operation can be secured. It is, therefore, essential to invite both foreign capital and technical co-operation for starting heavy and key industries in India at least during the next few years. While it may be preferable to obtain foreign capital mainly in the form of loan, I am of the opinion that it will be more advantageous to start joint ventures with the co-operation of foreign industrialists. This question of Joint Ventures was personally discussed by me with many foreign industrial and business leaders while I was abroad recently as a member of the A.-I.M.O. Delegation. Most of them agreed that in all such joint enterprises the controlling interest should be predominantly Indian and that management also should be entirely in Indian hands. The share capital to be supplied by Indian industrialists and the foreigners may be, say in the ratio of 60 : 40 or thereabouts. The foreigner would subscribe his share of capital in the form of capital goods, machinery, services and supply of technical information. The Indian industrialist would subscribe his share in the form of buildings, labour, management, working capital, etc.

STATE AND PRIVATE ENTERPRISE

There is, however, one obstacle in this connection. There is a growing suspicion in the mind of many foreign industrialists and technicians that the National Government of India may nationalise large-scale industries in the course of the next few years. This suspicion may be baseless, but it is there, and early steps should be taken by the Government to remove it. I do not propose to go into detail on this question of relation between State and private enterprise as it was fully discussed at our last

Annual Conference at Delhi. I welcome in this connection the Hon'ble Pandit Jawaharlal Nehru's statement: "In the present stage there will have to be inevitably a great deal of private enterprise. I do not want to interfere with them. But if you are going to plan, even these private enterprises must function within that plan."

GERMAN EXPERTS

I now turn to the very important subject of securing first-rate experts for starting and running our industries. As a result of my personal investigations while abroad, I am of the opinion that it would be highly advantageous for us to have experts from Germany. Experts from other countries such as the U.K., U.S.A., or Continental Countries are not generally available due to the demand in their own countries for post-war reconstruction, or even if available, can be secured only on very high salaries. Further many of them will not like to stay in India for any length of time and will at least like to return to their country at intervals, and this will naturally prove very costly. In the case of German experts they are willing to leave their country and settle in India, as the future of Germany is more or less sealed at least for the coming twenty to thirty years, and as they are not hopeful of their future in their own country. I, therefore, urge that it be taken up with the Government of India immediately, and that they be moved to secure for industrialists the services of the best available technical experts from Germany.

CAPITAL EQUIPMENT

I would also like to refer in this connection to the question of obtaining capital equipment for our industries. We have pressed the Government of India on so many occasions that there should be the fewest possible restrictions on the import of capital goods from abroad. Partly as a result of this agitation, I am glad to observe that the Government of India have revised their import policy. In their Press Note, dated 16th May 1947, they have announced that licences for importing a number of types of machinery and certain essential raw materials will be granted freely. While I welcome this, I regret to note that automatic revalidation of licences, which expired on the 30th June 1947, has not been permitted in the case of capital goods, though the same has been done in the case of a number of other articles, I find no valid reason for this

discrimination and, therefore, urge upon the Government of India to remove it forthwith. As regards obtaining capital goods, I would like to make a suggestion. Till now the country has been looking forward to the U.K. and the U.S.A. mainly for obtaining its requirements of capital goods. There are good prospects for obtaining the same from Continental countries such as Sweden, Switzerland, France, Belgium, Czechoslovakia and others, and I would like to urge that they be explored and availed of immediately. Furthermore every effort should be made for obtaining India's share of reparations from Japan mainly in the form of capital goods. Before I conclude this subject of capital goods, I would like to stress that special attention should be paid to the local manufacture of machinery with the aid of foreign experts where necessary. In the beginning the quality of such machinery may not be high or quite up to the standard, but with the passage of time and with Government's support and encouragement it is bound to improve.

TAXATION

I now pass on to the subject of Taxation. At present the Indian industries are subject to an intolerable burden of taxes. If this continues, I do not know from where will Companies and individuals get money to build, equip or expand their activities. I, therefore, submit that the present severe rates of taxation should be revised and reduced, and part of the money now flowing to the Government Treasuries from industries should be diverted to its most fruitful and productive channel, *viz.*, the development and maintenance of industrial enterprises. This step is necessary if Indian industries are to carry on successfully in the future when more competitive conditions will prevail and also to undertake the expansion which is contemplated under various post-war industrial expansion schemes. I would like to make a suggestion in this connection. During the course of discussions in the Central Legislative Assembly, the Hon'ble the Finance Member assured that a Committee of Experts would be set up to examine the provisions of the Income Tax and E.P.T. (Amendment) Act, 1947, and to make recommendations to Government to remove the difficulties in the Act and to suggest how Government could make it more effective and easy to administer. This Committee has not so far been set up by the Government, and I urge that it be

done without any further delay and that representatives of Industrial Organizations like ours should be included in the same.

RESEARCH

Another important problem facing the Indian industries is that of provision for industrial research. Under the urgent and pressing needs of War, new types of machines and materials which were not dreamt of formerly have been discovered. Progress in industrial research is vital to India. Our country has vast and varied resources of wealth, but they will be useful only if they are made to serve industrial needs. I am glad to note that our National Government is alive to this desideratum. Provision has already been made for starting a number of research laboratories in the various parts of the country, and I am confident that we may expect further progress in this line in future.

IMPORT-EXPORT CONTROLS

I have often criticised in the past our Government's import-export control policy which hampered the growth of indigenous industries. I have also urged that the best possible use of India's foreign exchange resources should be made by restricting the import of some consumer and non-essential goods. In the Press Note on Import Trade Control issued by the Government on the 16th May 1947, I notice with satisfaction that there has now been a marked change in Government's policy. It has been announced that no licences would be granted for about 350 items. Another welcome announcement already referred to is that henceforth licences for import of capital goods, machinery, and certain essential raw materials will be granted freely.

LABOUR-MANAGEMENT RELATIONS

STEPPING UP PRODUCTION

Industrial Production to-day is at a low ebb; and with it an ugly mark has been left on industry, on its Labour and Management. On account of increase in prices and lack of sufficient food a demand of a revolutionary type from labour is taking place in the industrial organization of the country. Demand for higher wages and less number of working hours is the cry to-day. The management who have tried to meet their demands to a great extent have to view their new problems with grave concern. The future *labour-management* relations must be conceived from the background of world movements. The A.-I.M.O. has advised the manufacturers time and again to