ECONOMIC² Development of India

(A TEN-YEAR PLAN)

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(A TEN-YEAR PLAN)

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PREFACE

In this memorandum an attempt has been made to present a brief view of the Indian Economic and Social problems and to work out an outline for our moral and material development. The proposed 10year Plan is somewhat different from other plans. If the "Bombay Plan" may be called big Industrialists' and Financiers' Plan, and "People's Plan" a plan from the socialistic standpoint, the present Plan can be called Producers' and Consumers' Plan in which different interests have so far as possible been adequately represented and conflicting interests of different classes and communities avoided to the maxi-In this plan the small agriculturist and the poor artisan find their due place, the big industrialist and financier pool their resources together not with a view to exploit the wage-earner and consumer but to help both the classes to make a comfortable living while getting a reasonable return on their capital. and organization.

Without adopting Socialism and Communism, with possible sabotage and bloodshed, the present plan makes an attempt to find a solution of unemployment and tries to remove glaring instances of social injustices. The present plan, in a nutshell, aims at guaranteeing maximum individual liberty and utmost opportunities to all at the minimum sacrifice. The proposed plan lacks idealism but aims at practicability

Ist January 1945 JHAJJAR GARDEN, RAMPUR STATE.

IHSAN MUHAMMAD KHAN

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CHAPTER I

THE NECESSITY OF PLANNING

What do we mean by planning, and why do we plan? To plan is to act with a definite purpose in view. Planning is, therefore, a conscious effort on the part of those who Introduction. want to participate in a programme for a specified time with a certain purpose. It is means to an end. not an end in itself Planning of late has been talked of a good deal but it is not a new thing. It is being acted upon from times immemorial in the limited sphere of every family and every Government The thrifty European housewife when she goes out shopping to buy articles of food, plans fo the whole week The prudent Indian housewife gone ally buys articles of food for the whole of the month She makes an estimate of her monthly income and expenditure and tries to visualise the relative importance of things and makes hip her programme accordingly. Practice makes her cleverer every time. Governments while preparing their annual budgets in fact plan the programme of their activities for the whole year. The question may be asked when every prudent man, woman and Government plans for future in advance why should we bother any further? The answer is when we plan for a short period say for a month or a year, we cannot clearly visualise the sum total of the entire effort in different spheres of life as a whole. It so happens that while we begin to go ahead in respect of certain activities each year, these of the other spheres of life

though of equal importance lag behind, and the result can be very well imagined if we bear in mind the resultant motion of a cart when either of its wheels moves at a different speed. But if we plan for a number of years and for all activities, we can be more sure of the resultant action. It is obvious that the period for which we plan should neither be so short as to prevent us from seeing the progress at a distance, nor so long as to make us lose sight of the end for which we had planned. The convenient period for planning can, therefore, be anything from four to ten years and after this period is over either a fresh plan may be drawn or the same plan may be revised in the light of fresh experience.

The next question that may be asked is with what purpose in view should we plan? The purposes of planning are different for countries, according to the peculiar circumstances of each country. In Britain planning, in fact, means or should mean, the redistribution of national wealth and income. With 9/10ths of the national income concentrated in the hands of 1/10th of its population, and with its high standard of production, any plan for Britain shall have to concentrate on a judicious redistribution of its national wealth and income without allowing the capital assets of the country to diminish and without letting its competitive strength suffer. This is why so much importance is given to Beveridge Plan of Social Insurance in Britain in the post-war reconstruction, because Britain wants to establish redistribution of national income on somewhat socialistic principles without adopting Socialism or Communism. In European and American countries, which have developed their industrial efficiency, the question of planning in effect does not mean so much the production of goods or increased efficiency in production as equitable distribution of national wealth and income through its transference from moneyed classes to the working classes.

The socialistic countries want to plan with a view to give everybody an equal share in the national income irrespective of the class, age and profession of the individual. The socialistic purpose of planning is also not quite applicable to Indian conditions for some time to come, since the national income per capita per annum is as low as Rs. 65/-. If the redistribution of national income is affected from moneyed classes to the working classes, the condition of the working classes is not likely to be appreciably ammeliorated.

The third purpose of planning can be, let everybody get what he deserves. This principle is also not applicable to India and the Indian traditions, as the Indian sentiment cannot let the idle and weak have nothing and perish. The fourth purpose of planning can be let the law of nature "Demand and Supply" function in the normal way and to let the Government adopt the policy of "Laissez Faire" (let things alone i. e., non-interference by Government in business). This principle is applicable to the people which can look after their own interest better than the Government, and where Government intervention means interference with methods of production and exchange. This principle is not applicable to India where the people are illiterate, poor, ill-fed, badly clothed, badly housed and are subject to frequent

attacks of epidemics and common diseases and have got a narrow and generally pessimistic outlook upon life, and where they have always looked upon the Government for the "paternal" care. The purpose of planning in India must be to raise the standards of living and to secure social well-being of the common people. In the words of Lord Wavell: "We must lift the poor man of India from poverty to security; from ill health to vigour; from ignorance to understanding; and our rate of progress must no longer be at bullock-cart standard but at least at the pace of the handy and serviceable jeep". In any programme of Economic and Social Development we should, therefore, see that adequate provision has been made for a simple but balanced diet, unostentatious apparel, reasonable shelter and for a minimum of desirable comfort and recreation of an ordinary peasant and worker. We have also to see that increase in wages is justified by an increase in efficiency, and that surplus wealth has been taxed through a progressive rate of taxation and death duties levied in such a way that anomalies in distribution of wealth are gradually removed, through accelerated evolution rather than through revolution. This can be achieved if we gradually reduce the pressure of population on agriculture by making the agricultural holdings of the cultivator an economic proposition through increasing the size of an average farm on the one hand, and through introduction of methods of intensive cultivation on the other. We have also to bring more "cultivable waste" of land under the plough, by putting in more doses of capital and labour on land and by absorbing the surplus agricultural population in cottage, medium-sized and large scale industries. We should not think in terms of economic self-sufficiency, unless it were in times of war or some other real emergency. We should try to derive full advantage from international trade, but the international trade should be based on mutual advantage and should not in any way mar or slow down the pace of industrialization in India.

Planning presupposes a particular attitude of mind, and a corporate action between the planners and those for whose advantage it is proposed to plan i.e., the Government and the different classes of people should be convinced of the purpose for which they are planning, and unless all concerned are confident of the mutual advantage of such planning no effort can be of any avail. It is, therefore, essential that before any programme is worked out, both the Government and the people, representing different classes and interests, should be cent per cent confident that such a programme would achieve the maximum social advantage to all the parties concerned, and that none of the partics should feel that it is going to be one sided.

It would not be correct to assume that future national Government at the Centre will dictate its policy on all India basis to the provincial Governments. On the contrary it will not be wrong to presume Assumptions. that future Central Government will act as the philosopher, friend and guide to the autonomous provinces and states and help them to evolve their provincial programmes, which without

overlapping the programme of the Central Government would supplement it. Each provincial unit will have as much liberty as possible within a broad and general outline as laid down by the Central Government. The trend of political events and parties compels us to assume that provinces will acquire the right of self-determination and that the influence of the future Central Government, far from being dictatorial, will be friendly, constructive and co-ordinating.

The basic idea underlying the 10-year plan is approximately to double the income amongst the masses (peasants and workers) with a view to increasing their standard of Main Purpose of the plan living. This can be achieved by reducing the pressure of population on existing cultivable land and by bringing home cultivators methods of intensive operative farming on the one hand and absorbing the surplus population in cottage, medium sized and large-scale industries on the other. This is the programme on the productive side. It is accompanied by a programme of re-distribution of national income by progressive taxation on the other. main purpose of the plan is to double the income on the pre-war price level, so that the following minimum standard of living may be established amongst the masses in India:-

- (i) Adequate provision for simple but balanced diet. A few standard forms of dietary tables are given elsewhere.
- (ii) Increase in the consumption of cotton cloth from 15 yards per person per year to 30 yards.

- (iii) Hygienic Houses with an average accommodation of 100 sq. fr. for every adult, with proper arrangements for ventilation, sanitation and water supply.
- (iv) The minimum standard of education should be: Literacy for the entire adult population, elementary education for all boys and girls of school going age. Increased facilities for the technical, scientific and higher education for the growing number.
- (v) A minimum standard of recreation may be prescribed for the working population.
- (vi) Reasonable medical and public health facilities be provided for all.

The second purpose of the plan is to make India so far as possible self-sufficient in her Defence and basic industries so that she may come in line with the progressive countries and may not be classified as a backward country.

There are innumerable difficulties to surmount, before the plan can achieve a reasonable success, but some may Difficulties. be enumerated as follows:—

- (1) International conditions over which India has got no control may stand in the way of the execution of the plan.
- (2) There is great scarcity of highly technically trained staff which can comprehend the plan or execute it in a satisfactory manner.
- (3) It is difficult, indeed to convince all the political parties and people concerned that the plan is going to be in the interest of all

people and interests. Unless all the political parties, or at least the major ones, are satisfied about their minimum political demands it will be wrong to count on the co-operation of the masses.

- (4) The plan would be a challenge to deep-rooted beliefs, age-old superstitions, customs and traditions. It will have to fight on all fronts with evil forces, and the executers of the plan should be well prepared to face all sorts of set-backs and disappointments.
- (5) The planners and the executors should be made to realise that during the performance of their official duties they are servants of the people in the real sense of the word, and that they should as such deal with men and matters sympathetically and tactfully.
- (6) There is at present a great dearth of people with initiative and drive, and such people are greatly required specially in the initial stages when momentum is necessary to be given to the static conditions.

The ten-year plan does not take into consideration the period which may be required in the preliminary stages which may be estimated from 2 to 3 years. The present plan is no doubt difficult but not impossible. With determination, courage and perseverance we are sure that the plan will be crowned with success.

Besides the preliminary arrangements which would take 2 to 3 years the plan will be a tenyear plan divided into two stages:

Stages of the (1) The first five years (2) and the plan. second five years,

In the first stage adjustments will be made from war to peace basis. There will be unemployment due to demobilization of the army and the adjustment of industries from a war to a peace basis. The programme has, therefore, been evolved in such a way that part of the un-employed population may be absorbed in agriculture on the culturable waste, and the balance employed in small-scale cottage industries and large-scale industries and in the Government services in the various expanding departments. sides this, the programme of Road and Building construction has to be taken up to absorb the surplus labour. It is also contemplated that during period, electrification, water-works and other big projects will also be taken in hand, so that the unemp-; loyment may be reduced to a minimum with the least amount of hardship. During the first stage, there is also emphasis attached to the works and projects which will result in increasing the productive capacity and income of the people, so that with the increased income they may be able to contribute more to the national dividend, and subsequently to the National Exchequer.

While in the first stage there is emphasis on employment and alternative jobs, in the second stage there is more emphasis laid on increasing the standard of living of peasants and workers, social insurance, general well-being of the masses and the elimination of control of trade cycles, industrial depressions and chance elements.

CHAPTER II

POST-WAR PROBLEMS AND THEIR SOLUTION

There is a great difference between post-war and peace-time problems, and as such they need different solution, both as regards means and ends. Wars in the past mostly affected the fighting forces of the belligerent countries and had little effect on the life of the civil population. Wars of the modern times are total wars and affect the lives of the military personnel, as well as those of the civil population. Wars of the modern era bring in their train increased demand for what are called war industries and give vent to inflated employment specially in war industries, inflated currencies, inflated prices and inflated wages for working classes, though not always in the same proportion as increases in the level of the cost of living. The price level of wages has a tendency to lag behind the general price level wholesale or retail. Inflation inflicts a hardship on an appreciable scale on classes which receive a fixed income, and favours the entrepreneurs who alone get full advantage of the rise in prices of finished articles. Inflation also results in a decreased or unequal distribution of the purchasing power.

The post-war period will, therefore, have to face, in the transitional stages, with the problems of unemployment on account of demobilization of the increased army personnel and the contraction of war industries, or the adaptation of industries connected with war to peace-time conditions and the consequent release of labour from war industries to civil vocations.

Localized famines and epidemics, new or old, belong to the post-war reconstruction period. Cut-throat competition between countries for consumption goods and the lowering down of prices in foreign countries would be another serious post-war problem. Every country would try to stabilise prices so far as possible. This will result in deflation of currencies and reduction in the prices level. Deflation in its turn would reduce the price level and cut rates and wages. Entrepreneurs will be reluctant to manufacture goods at a time of falling prices. This will result in accelerating the pace of un-employment, unless the economic and financial structure has settled down as a whole. War loans after maturity also shake the economic equilibrium of currency and credit, and would promote; inflation unless a countercheck is made. During the period of deflation, the salaried classes will be better off, while the entrepreneur classes and wage earners would suffer. In other words, the classes which were gaining during war would lose during the period of transition after the war. With regard to all these problems, it would be desirable in any country to maintain in different degrees a proper control over different activities of life until economic equilibrium These adjustments after the last is established. Great War had taken about five years viz., from 1919 to 1923, and it is obvious that the same period would be necessary after the present war is over. Some people think that as the pace of our social and economic mechanics of life has been greatly accelerated during the modern times, the period of acjustment would be comparatively shorter than the last period. We accept this opinion, but we should not forget that

our activities have also been greatly multiplied and, is such, what we have gained in speed is counter-· balanced by multiplication of our activities in so many other spheres of life. But the experience of price control during war time has amply shown that the Government Order of price control cannot be effectively enforced, unless Government has laid its hands on · sufficient quantity of controlled articles in stock. At the moment orders of control are issued the commodity in question disappears and is sold in the black market at exorbitantly high prices. For keeping a sufficient quantity of controlled articles in stock, it is necessary that the Government should know the legitimate demand of a particular locality, the demand and supply of the particular article of trade, and the different stages and processes of manufacture. For controlling whole-sale and retail prices of articles, the Government have to be closely in touch with the processes, technique and financial results of every particular section of the particular industry, and have to make adequate allowances for the reasonable return of different classes and kinds of people employed in and supported by a particular trade or industry. For this, a thorough and systematic survey of economic, industrial and social conditions would be necessary. An adhoc enquiry would make the situation still worse and would result in general dis-satisfaction by all kinds and classes of people. Partial cure is worse than no remedy.

If we want to plan for reconstruction of to-morrow, we have to take a bird's eye-view of pre-war and post-war conditions of the first world war (1914-18).

There are six periods distinctly noticeable within this period:—

- (1) 1909-1913, pre-war conditions.
- (2) 1914-1918. War period.
- (3) 1919-1923, First period of post-war reconstruction.
- (4) 1923-1929, Second post-war period of construction.
- (5) 1930-1932, World economic depression,
- (6) and 1932 to September 1939, period of preferential tariffs and currency manipulations.

The first period was of stability of prices and industrial activity.

The second period was of increase in prices and wages and inflation on a large scale, so much so that several Continental countries had to devaluate their currencies as it, was not worth the paper on which they were printed. The third period was of devaluation or deflation of currencies and un-employment, and adjustment and re-adjustment with all sorts of hardships to labour and industrialists. The fourth period was of the economic boom, which reached its zenith in 1928. The fifth period was that of the world economic depression and the sixth period was the period of preferential trade agreements between different countries and currency manipulations of period policies all kinds. Within this frankly speaking, based on preferential treatment within specified areas, and tariff protection was generally resorted to for fighting out un-employment.

Imperial preference was adopted by the British as well as the French nations, Germany adopted National Socialism as her socio-economic and political creed, and the same became the de facto policy of every progressive country. This period in other words, was devoted to the preparation of the second great war. History is likely to repeat itself, though with considerable modifications.

It would not be very wrong to presume that the world war would last until about 1945-46. The first five years will be a period of transition from un-employment of labour, deflation of currency, and reduction in prices and wages, Government control of prices and adjustments and re-adjustments. A good deal of hardship will have to be borne during this period. The next five years will be a period of industrial activity and regional or partial world economics, as it is impossible to conceive of a new order of world economy or world federation of nations.

Affiliations between countries will take place by tariff legislation and currency linking, and will be dictated by the political or financial influence of one country over a group of other comparatively backward countries, coloni s and dependencies. The next five to ten years will be a period of preparation of the third world war. It is necessary to mention at this place that economics cannot be altogether separated from politics, as each constantly acts and reacts on the other, and it would be wrong to deal with these two problems in water-tight compartments. What would be the exact nature of affiliations between different countries is difficult to concieve or

predict, but it can be said with some certainty that there would be a race for economic advantages and markets in less developed countries, between American and British Imperialism and Soviet Communism in the wake of the Allied victory combined, with leaving a sub-ordinate position to Germany and Japan. During the period 1947-51, the question of indebtedness to America will remain in-tact, and it is not clear how the "lease and lend" will operate in India. It is feared that the "lease and lend" may operate unfavourably to the industrialisation of India, as the Americans are likely to have their own industries established in India or markets captured, and it would be difficult indeed for the Indian industrialists to compete successfully with the American technique of mass production. The world planners of to-morrow be they Axis powers or the English speaking races, would not allow backward countries, colonies and dependencies to manufacture durable goods like machinery, tools and implements, but would give their consent to the manufacture of consumption goods only and that too under pressure.

According to European and American industrial powers, the danger to western domination lies in allowing Asia, Africa and Latin America to industrialise in general, or in durable goods in particular. India should bear these facts in mind while planning industrialization. It is still more essential that the position and implication of the "lease and lend" is clarified immediately, with reference to India and her industrialization with Indian capital and organization.

The linking of the Indian currency with sterling and the change of the Indian Rupee and British shilling ratio from Sh. 1/4 to 1/6 d in the past, has done a good deal of harm to Indian interests. It is, therefore, highly essential that the Indian currency should be based on the gold exchange standard, and not linked up with gold through sterling. India should not mind linking herself with the British Empire in its currency and tariff policy as long as the linking is not based on the political domination of Great Britain, and is meant for mutual advantage, and is purely a business proposition. It may be clearly stated once again that India is bound to give scientific protection against Imperial or other interests to her defence and basic industries, and other industries, of national importance, for some time till these infant industries have been fully developed to India's advantage. Where ever necessary, consumers should also get bounty, so that they may not have to make too much sacrifice in order to safeguard the interests of the manufacturers. This is inevitable for her, as long as she stands for her independence both on political and economic grounds. It would be advantageous to Britain, its Dominions and Colonies and India, that matters of mutual trade may be settled by mutual agreements. In other words, India will have to pursue a policy of economic self-sufficiency, so far as her defence and basic industries are concerned, but will not close its door to international trade in other durable and consumption goods, as long as they are based on mutual advantage between the exporting and importing countries.

With a view to find a solution of the post-war

problems, two main schemes have been put forward. One is known as the 'Bombay plan' written by Sir Purshutam Das Thakur Das and his seven other colleagues, and the other known as "People's plan for Economic Development of India"; which is a report of Post-war Reconstruction Committee of the Indian Federation of labour. The Bombay plan is a fifteen year economic plan, while the People's plan covers a period of ten years economic development.

The Bombay plan deserves commendation for evoking a great enthusiasm in the country for the economic development of India. The An Examination plan rouses us from the slumber of of the Bombay poverty and passive inactivity, to the consciousness of making an active effort for increasing our standard of living. It does not give vague aspirations, but tries to base the working of the plan on concrete facts. The plan has the following defects which may be seriously attended to:—

- 1. The plan starts with a number of presumptions, of which a good many are not based on facts. It presumes a strong Government at the centre with dictatorial powers and complete co-operation of all classes and parties, while the facts are that political parties in the Provinces are desirous of giving only residuary powers to the Centre. However, the Co-ordinating influence of the Central Government need not be minimised.
- 2. There is too much emphasis laid in the plan for production for profit, and that also primarily for big industry and big finance. It

can be easily gathered from the context that the authors of the plan are over-enthusiastic in giving subsidy to exports at the expense of both the tax payer, as well as the consumer. Production for use or service does not find a place it deserves.

- The development of basic industries finds 3. more emphasis than the development of con-It provides sumption goods industries. Rs. 1,000 crores to consumption goods industries, as against Rs. 3340 crores for the basic This is also very clear if we industries. watch the comparative progress in the three respective periods of the five year's plans of the U.S.S.R. Basic industries are gradually increasing, while consumption goods industries are gradually decreasing as we approach We have not to the completion of the plan. follow the example of Soveit Russia in respect of preferential treatment to basic industries, as she had to develope basic industries because of the necessity of self-defence, and this she was forced to do at a great sacrifice of consumption goods. Conditions in India are at the present time much different from what they were in Soveit Russia some twenty years back.
- 4. The authors of the plan have not touched the subject of distribution* of national wealth. They have visualised the subject anly from the stand-point of production and no national economy can be called balanced unless it

^{*} The promised second part dealing with this question is still unavailable to the public. Hence, this agreement is incorporated here.

takes problems of distribution of national wealth into serious consideration. The problem of distribution of national wealth is nearly as important as that of its production, as will be gathered from the following statement about the distribution of India's national wealth:—

Ten percent of the population possesses 35 percent of the wealth of the country. 32 percent of the population possesses 33 percent of the wealth of the country. 67 percent of the population possesses 32 percent of the wealth of the country.

- 5. It'would be a bold assumption that land will double its yield in fifteen years, that the industrial population can increase from 2½ millions to 12½ millions and that one-third of the capital can be raised by inflation.
- 6 The authors of the plan have suggested the financing of economic development by raising one-third of the capital through "created money". This method within proper limitation may to some extent be justified during war time, but it is full of serious abuses during peace time, and specially when a policy of strict control of the price level of all commodities has to be continued for a long period of fifteen years.
- 7. It does not deal with the post-war problem of unemployment resulting from demobilisation of the army personnel and rehabilitating wartime industries to peace time conditions.

- 8. The authors of the Bombay Plan do not seem to fully realise the importance of the problems concerning everyday life of the small agriculturist, nor do they appear to give the necessary importance to the rural cottage industries which it deserves.
- 9. While suggesting methods for collective farming on a whole-sale, basis they do not seem to understand the practical difficulties which will have to be faced in a backward country like India, where the idea of private ownership of land is deep rooted among the peasantry, and where a hundred and one prejudices have to be uprooted and the privations and hardships which will have to be borne as a result of the bold action proposed.
- 10. The authors of the plan would not allow that full advantage be taken of international division of labour and seem to aim at national self-sufficiency. In the modern era of quick transport, it would not be desirable to isolate our economic life from that of the world.

It lays too much emphasis on production for use and service, as against profit and exchange. It gives An examination equal importance to consumption of the "People's goods industries and basic industries. It is over-enthusiastic in freeing peasantry from the clutches of the usurers. It proposes elimination of the middle man through producers, and consumers societies. It seeks to reduce the general rate of interest. The People's Plan contains the following defects:—

- 1. It wants to nationalise land. The ideal is not possible to achieve without revolution and bloodshed as the scheme will be opposed tooth and nail by vested interest throughout the country.
- 2. Allottments in the "People's Plan" refer to British India only and not to Indian States, while those of the "Bombay Plan" pertain to the entire country.
- 3. It is a bold presumption that at the end of ten years, agricultural production will increase by 400 per cent or more and industrial production by 600 per cent, and that the standard of living of the masses will rise by 300 per cent exclusive of the social services like health, education and housing which will be provided for them by the State.
- According to the authors of the Plan, pro-4. duction for use will serve as sufficient stimulus for the execution of the Plan, where-as the human psychology wants a stronger stimulus which is personal gain private profit. Experience has shown that State ownership and State control of agriculture and industry, specially in the initial stages, do not pay themselves, as private ownership of land and industry, specially in the beginning when agriculture and industry need initiative and drive and is generally accompanied with lithargy and red tapism. Moreover, a fair amount of competition in industry and trade is

- necessary for the healthy growth of the industry and for the elimination of inefficient enterprises. State management and the rigid state control will give birth to monopolistic conditions, and eliminate even a fair amount of competition which is essential for the economic progress of the country.
- 5. Like the Bombay Plan, the "People's Plan" does not contemplate provision for unemployment and social security. It does not provide for any agricultural or industrial fluctuations and trade cycles, which we should not forget specially when we are going to tackle big problems which would envolve heavy risks and entail huge uncertainties.

The proposed Plan is somewhat different from both the Bombay as well as the People's Plans. wants to keep the profit motive as a The outline of necessary stimulus to production but the proposed wherever goods are produced for only profit and not for use, it wants the State to intervene. It thus puts a safety value to the uncontrolled machinery of capitalism. In the proposed Plan, we do not want like in socialism that every body should have an equal economic status, but that every body should have sufficient opportunities for developing his resources. We do not want that a man may lose his identity as in a socialistic state, and may become a mere cog of a big machine, but we do want that all barriers to individual developments be removed and that wealth in place of remaining concentrated in the hands of a few or a certain class of people should freely circulate from one individual

class to another and wherever modern machinery of capitalism may go wrong, the State should intervene in the matter and set things right. Let it be made clear that State control will be resorted to wherever cut-throat competition wants to ruin a certain class of industry or wherever monopolistic conditions are created and as such the natural law of demand and supply ceases to function in a realistic manner. The proposed Plan has no objection even to the State management of an industry, wherever it is essential for the development of that particular industry, specially in the initial stages where private enterprise is not in a position to take big risks. But, it wants to see initiative and private management normally working to the advantage of all and wherever any interest is likely to adversely affected, the State should use its influence and remedy matters. Although we generally favour the idea of private enterprize in practically all spheres of economic and industrial life of the country, we would like to see, so far as possible and practicable, . key industries owned and managed by the State in the interest of the country as a whole.

The plan is to be divided into two periods:-

- (a) The first five years of adjustments and readjustments from war to piece Two periods of basis.
 - (b) The second five years of development in practically all spheres of life.

The main problems of the first five years may be enumerated as follows:—

1. Un-employment due to demobilization of the army personnel and adjustment of industries from

war to peace basis. The unemployed population can be settled on land which is classified as "culturable waste", on the basis of co-operative farming by allotting on the average twelve acres of land. The Government will have to provide with funds and give other facilities. A questionnaire may be issued, and every soldier and technician may be asked to give his first and second choice and indicate his natural aptitude for a particular trade or vocation.

- 2. Electrification of suitable urban areas in order to settle technical personnel in cottage industries worked by power. In certain localities this will probably be cheaper than the settlement of ex-army personnel on land.
 - 3. A considerable number of people can be absorbed in road construction and the housing programme.
 - 4. Railways and shipyards.
 - 5. Health programme specially that portion of programme, which has to do with the filling of troughs and depressions as an anti-malarial measure.
 - 6. Training of personnel in different branches of social and economic activities.
 - 7. River-Engineering, post-war reconstruction, and big projects resulting in the absorption of an increased number of unskilled labour.
 - 8. Land-reclamation, training of rivers and irrigation.
 - 9. State control in agricutural products, trade and industries as well as in prices, wages and employment.

- 10. More or less equal emphasis on production of consumption and durable goods.
- 11. Starting of defence industries in right earnest.

The main problems of the second five years of post-war development may be enumerated as follows:—

- 1. More emphasis on production of durable than on consumption goods.
- 2. More emphasis on the increase in the standard of living of peasants and workers.
- 3. Strict enforcement of a minimum living wage by the Government in all organized industries.
- 4. Introduction of the elementary principles of social insurance.
- 5. Proper development of defence, basic and heavy industries.
- 6. Manufacture of machinery and plant on a large scale.
- 7. Economic self-sufficiency in Defence and Basic industries.
- 8. Intensification of the effort on education and health.
 - 9. Emphasis on technical training and efficiency.
 - 10. Insurance of staple and money crops.
- 11. Control of trade cycles and industrial depressions so far as possible.
 - 12. Miscellaneous items.

The minimum income per head per annum that is

The minimum necessary to meet minimum requirements of human life may be estimated as under:—

	Pre-war prices in Rs.
* Food	72
Clothing	6
Housing	6
Medical relief	_ 6
Education	6

Total

96

According to the estimates of the 'Bombay Plan', a minimum per capita income of Rs. 74 at pre-war prices is essential to secure a minimum standard of living. The estimates arrived at by us are very rough, but they sufficiently indicate that the estimates of the 'Bombay Plan' are too low, and that an annual income of Rs. 74 would not ensure minimum comforts. If we include to our estimates per capita income Rs. 12 per annum for recreation and cultural amenities we should have for an average family consisting of five persons (2 adults and 3 children) a sum of Rs. 30/- p. m. for a desirable comfortable living or an average wage of Re. 1/- per day at the pre-war level at the close of the 10-year plan. It is also desired that on the completion of the proposed plan, the agricultural production may be increased by 50% and industrial production by about 300% in the country as a whole.

^{*} For quantities of balanced diet a reference to Chapter V. may be made.

CHAPTER III

AGRICULTURAL DEVELOPMENT

The first problem that we have to tackle in a programme of reconstruction is to reduce the general poverty of the masses, and to provide them with a minimum standard of living which is well above starvation line. As 66 per cent of India's population is directly employed in agriculture, and nearly 90 percent lives in villages, development of agriculture and rural economy should be the first item on the programme of our economic reconstruction. Before we deal with the details of the programme, it would be desirable to remember a few facts regarding agricultural statistics. The total area of India inclusive of States is approximately 1.8 millions square miles. It is 2,500 miles from east to west and 2,000 miles from north to south Out of the total area of British India, nearly 37 percent (261.9 millions acres) is under cultivation, nearly 50 millions acres or 20 per cent of which is irrigated, and the rest depends upon monsoon, which at times is not very certain.

The rural population is generally rooted to the soil, and is usually stay at home. It is extremely conservative in methods of agriculture and modes of life. Diseases such as malaria, cholera, plague, dysentery and typhoid fever, small pox, tuberculosis and pneumonia take an enormous toll anually and reduce the period of continuous employment, and are responsible for diminishing the physical stemina essential for ensuring efficiency.

The average longevity of an Indian is about 25 years, as against double that period for the inhabitants of European countries. When fifteen years of childhood are taken away from the average life of an Indian, the average period of manhood that remains is about 11 years. This shows that an Indian can only render useful service to himself or to his country for 11 years only, while the inhabitants of Europe and America can render useful service to themselves and to their countries for at least three times as such.

The percentage of literacy in India is very meagre. According to the 1941 census figures, there is only 15 per cent of the people in the vast country which can read and write. Female literacy in India is much smaller still. The poverty of the Indian population can be well estimated by income per head of the population. The income per head is the average obtained by dividing the total national income by the total population of men, women, and children. annual income per head of India comes to Rs. 65/ per year, whereas the annual income for an inhabitant of Japan would come to Rs. 186/-, of Italy Rs. 319/-, of Germany Rs. 519/- of Great Britain Rs. 1,010/-, and of United States of America Rs. 1,184/-The income per head of the agriculturist is about twothirds of Rs. 65/-, viz. approximately Rs. 44/- per annum. The facts given above throw abundant light on the poverty, ill-health, illiteracy and other sources of misery of the Indian population in general, and the agricultural population in particular.

The average acreage per head of population employed in agriculture in British India is 3.3., and in India as a whole less than 4 acres, whereas the

comparable figures are 4.2 for Japan, 13 for France. 12 for Germany, 26 for the United Kingdom and 87 for the United States of America.

The yield of wheat crop per acre in India in 1931-1932 was 652 fbs. The comparative figures were 1,241 fbs. for Italy, 1,740 fbs for Germany, 1,508 fbs. for Japan, 1,813 fbs. for the United Kingdom, and 1,943 fbs. for the United States of America. Similar figures for the same year for rice were 1, 357 fbs. for India, 4, 601 fbs. for Italy, 2,767 fbs. for Japan, and 2,112 fbs. for the United States of America. The low yield of agricultural products is due to the following factors:—

- 1. The increasing high pressure of population on the land has resulted in subdivision and fragmentation of the holdings. The result is that most of the holdings in India have no longer remained an economic proposition, and it is, therefore, not possible in a number of cases to introduce modern methods of agriculture or increase the working capital.
- 2. Lack of care and attention paid to the improved variety of seeds and implements.
- 3. The misuse of natural manures, and a lack of proper rotation of crops and use of artificial manures resulting in further deterioration of soil.
- 4. Ignorance of plant diseases and want of control of insects and pests.
- 5. Multiplication of weak and unhealthy live-stock.
- 6. Lack of credit facilities, and the indebtedness of the agriculturist to the usurer;
- 7. Lack of marketing facilities, due to shortage of good stores and transport facilities; and

- 8. Lack of irrigation facilities and too much dependence upon monsoon which is subject to fluctuations.
- I. No efforts may be spared to reduce the Pressure on the soil. This can be done in two ways:—
 - (a) So far as possible, a bigger percentage of agricultural population may be profitably diverted to large-scale and medium-sized industries, and to cottage industries as a permanent vocation, and
 - (b) Methods of intensive farming may be introduced on co-operative basis where ever possible, and a drive to this effect throughout the country may be organized with all the vigour of the Government and public agencies.
 - 2. There is a "culturable waste" of 154 million acres available in India which has not yet been brought under the plough. How much of this area can be economically brought under cultivation, through a little more capital outlay, by means of tractors, and other modern machinery, may be a subject of proper investigation. A portion of this area should have been brought under cultivation as result of the "grow more food campaign" of the Government, had the Government planned the production of grain a good time before. and imported a sufficient number of tractors and other machinery from foreign countries. It is a great pity that sufficient efforts were not made by the Government, either in increasing the production of food through methods of intensive cultivation, or by bringing a good portion of culturable waste through an increased

number of doses of capital and labour at the beginning of the war. Had this been done, the land could have been utilised as a post-war measure, for the settlement of the demobilised army personnel with a little extra expense. It is high time that a proper investigation be made even now, and the personnel of the demobilised army may be settled on the culturable waste, after it has been brought under cultivation, and co-operative methods of farming be introduced on a large scale on these lands. The distribution of the farm proceeds may be so arranged that every-body working on the farm may get sufficient for his necessities of life and some of the desirable comforts. It is estimated that Rs. 40/- p. m. at pre-war standards per worker will be sufficient to maintain an average man, with a family consisting of himself, wife and three children. difficult indeed to suggest definitely how many persons can be settled on the culturable waste, but on the basis of our conservative estimate, it can be safely presumed that about one-fourth of the cultivable waste of 38 million acres, can be profitably brought under the plough, by administering more doses of capital and labour. The capital invested can be safely returned within ten years, if modern methods agriculture through mechanization are introduced on a co-operative basis. The cultivable waste is at the present time not under the plough for one of the following reasons:-

(a) The place is not healthy due to bad drainage. The whole of the 'Tarai' belt below the hilly tracts in the Nainital and Kumayun districts is like this. Most of the land can be drained, and it is estimated that drainage would cost nearly Rs. 2,000 per square mile,

and after the place has been made healthy it can be easily divided into suitable 'squares' and utilised for settlement. If methods of intensive cultivation are introduced, the entire extra capital invested in drainage could be returned within the next ten years.

- (b) No irrigation facilities are available and dry crops cannot be raised. The solution lies in storing monsoon water and utilising it at a proper time for irrigational purposes. This is possible through capital investment in properly prepared projects. These projects can prove two-fold purposes (i) they can provide facilities for irrigation, and (ii) through storage of water hydro-electricity can be generated at reasonable costs. Projects for the storage of monsoon water can be successfully attempted in Decean and Bundhel-khund Districts and other similar tracts. The example of Lyallpur is an established fact and needs no further comment.
 - (c) Hilly tracts of land which are dominant in alkalis cannot be economically exploited, but whenever possible a geological survey may be made, and if any minerals are traced may be scientifically exploited.

It has been suggested by various writers and students of economic planning, that communal or collective farming can be successful on a large scale in India. We doubt if such a thing can be successful on a large scale in India where the population is illiterate and poor, and lacks proper discipline and organization. It is but natural that an all round uplift will take some time. Communal or Collective farming is not possible without storage, and it would

not be feasible to introduce communal or collective farming with murder and bloodshed. Moreover the idea of personal proprietor-ship being deep rooted in general, in backward countries like India in particular it would take a long time to change the human psycho-It is, therefore, evident that co-operative farming may eventually be replaced by communal or collective farming, through accelerated evolution. rather than through revolution and bloodshed. Collective farming may, however, be profitably introduced in case of the settlement of demobilised army personnel on land, since they are used to discipline and organization. But the success of the communal farms will ultimately depend upon the military officer who will act as the general manager of the farm. Experiments of collective farming may also be made in other advanced societies of agricultural population, where they come forward with a free will.

In co-operative farming, unlike collective or communal farming, the proprietary rights to land are vested in for the peasants, and they co-operate for combined operations. There are a good many practical difficulties faced even in co-operative farming, but they are not unsurmountable if things are handled tactfully.

It may be further added that mechanised farming has not so far been successful in India, although quite a number of experiments have been made by individual enterprise in this direction. This is due to the fact that agriculture needs prompt action, and when the tractor or any other mechanised implement does not work satisfactorily, it requires spare parts and a good technician to set the machine in order,

and it has been often difficult indeed to get spare parts and a good technician on the spot within a reasonable short time. Mechanised farming is, therefore, possible only in those parts of India, where a few large scale farms can jointly keep a sufficient number of spare parts and can employ a good technician in a little workshop, or in the vicinity of an industrial city where spare parts and technical skill are readily available.

It is estimated that about 12 agrees of land can sufficiently provide for the reasonable existance of a family consisting of 2 adults and 3 children. If one fourth of the culturable waste is brought under the plough, it can provide for about three million families, out of which demobilised soldiers should get the first preference. After the first five years of the post-war reconstruction are over and conditions have been brought to normal, we have to seriously consider the question of increasing the size of the holding of the old cultivator, who has no future unless the size of his holding is increased and his fragmented pieces consolidated. The average acreage per head of population employed in agriculture in British India is at present 3.3. If we want the lot of the existing peasantry to be reasonably ameliorated, the average acreage may be increased, wherever possible, from 3.3 to at least 6 acres, within the next 15 years after the war is over. This will result in throwing of 3.50 cultivators out of employment. The programme may be so evolved that the men may be gradually absorbed within the next 15 years in industry, trade, commerce, Government service and similar other vocations. It is to be noted that the ideal economic holding which has been suggested for an average new settler is 12 acres, while at least 6 acres have been suggested for the peasant. This is due to the fact that the prospects of increasing the size of holding any further are very limited.

There are approximately 2 million men now employed in the Indian Army. It would not be wrong to presume that about half of the present strength would be absorbed in the expanded Defence services like the army, Navy and the Air Force, and other civil jobs, and that the other half would be demobilised and it would not be easy to fix them up in a It is, therefore, contemplated to permanent job. settle them on land. As the demobilized personnel is used to a higher standard of living than an average Indian peasant, it is considered that they should get a little more remuneration than an average Indian The present plan contemplates to give an peasant. average peasant family, consisting of husband, wife and three children, Rs. 30/- p. m. as total remuneration on the pre-war prices level. It is, therefore desired to give a demobilized soldier about Rs. 40/- p. m. as his remuneration. On an average, a holding of 12 acres can give a yield of approximately Rs. 500/per annum, on a rotation basis.

In order to give an impetus to an early settlement the Government will have to break the land by means of tractors free of charge. When the land has been broken, it can be used on a co-operative, collective, or a commercial basis. The State will have to provide irrigation facilities by means of canals, tube-wells and Persian wheels, without charging water rates for the first three years. The families will have to be fed at Government expense till they get their first crop. Housing accommodation will be provided on the hire-purchase system, but no rent will be charged for the first six months. It will cost the Government approximately Rs. 650 per demobilized soldier in order to settle him on land.

- 4. Good seed may be distributed through "Sawai Fund" wherever possible. This system is equally beneficial to both the cultivator and the supplier. This is to be arranged on such a large scale that at least one half of the seed requirements of the country are procured, through Government agencies.
- 5. Modern tools and implements and healthy live-stock may be supplied to the cultivator by the Government on the hire-purchase system and at a nominal rate of interest.
- 6. Research in crop insects and pests may be carried on by the Government and the results broad casted on a large scale in a simple and practical manner. Necessary chemicals etc., to eradicate plant diseases may be supplied by the Government at each seed store at a nominal cost. The seed store may be the pivot of the agricultural activities, and they should be located in the beginning at a distance of not more than five miles from one another. It is also necessary that a seed, implement and manure store may be situated in the neighbourhood of a veterinary hospital, so that intensive work on the improvement of agriculture and live-stock may be made possible.
 - 7. That adequate arrangements may be made for natural and artificial manures, and that rotation of

crops may be scientifically arranged.

- 8. That erosion of soil may be stopped through afforestation and other effective methods.
- 9. That reasonable marketing facilities may be provided on co-operative lines, and that if funds are required for the storage or distribution of grain the Government should provide them in the beginning at reasonably low rate of interest.
- 10. That in order to scale down rural indebtedness and to give relief to the agriculturist, a committee may be set up which may make recommendations regarding reduction of interest and establishment of an effective credit co-operative mechinery to finance agriculture.
- 11. That one week after every crop, when there is comparatively less work for the cultivator, be kept for all-round social service and village uplift, in which all men, women, and children of workable age, and all the relevant departments of the Government should actively participate. This may be accompanied with a general exhibition, in which Agriculture, Education, Health, Industry and Village Uplift departments of the State should all co-operate.
- 12. That subsidiary occupations may be provided according to the local conditions and environment, and that reasonable facilities are given by the Government for improvement and further expansion. Some of the main subsidiary occupations are as follows:—
 - (a) Handlooms for coarse textiles, weaving, 'niwars', towels and durries.

- (b) Knitting, 'Kamarbands' and nets.
- (c) Earthen pottery, leather salting, tanning and leather making with improved methods on cottage lines.
- (d) Button making, and comb making from natural horns.
- (e) Sericulture and spinning of silk yarn.
- (f) Hand embroideries.
- (g) Ropes, baskets etc.
- (h) Repairs of agricultural tools and implements.
- (i) Live-stock raising, dairying and poultry farming.
- (j) Carpentry, Wood work, Cart manufacture etc.
- (k) Dyeing and printing.
- (1) Plastics and rubber goods.
- (m) Fruit culture.
- (n) Kitchen gardening.
- Agriculture in India is a precarious occupation, and as such it is defined as "a gamble against monsoon". It is therefore, highly essential that irrigation projects, of both productive and preventive type, should be taken in hand and serious consideration paid to projects relating to storage of monsoon water and utilisation of tube-wells worked both by power and draught animals. • But this will only mean a partial solution of the problem. The element of chance can only be removed by introducing principles of crop insurance in India. Crop insurance is not possible and practicable in India to-day, where risks are not accessible because of the scarcity of necessary agricultural statistics and because of heavy rates of premium on account of the chance element being so very great. But after the necessary agricultural

statistics have been collected and the element of risks reduced to reasonable proportions, a modest start may be made with insurance of one or two important crops in each province by way of experimentation. proposed that in the beginning one staple food crop and one important "money crop" may be taken in each division of a province, and the results compared. To make a start in the direction a sum of Rs. 50 crores has been provided for this purpose. amount may be increased or decreased in the light of fresh experience. It was presumed under the fiveyear Russian Plan, that there will be no serious of harvest in the next five-years, but failure it so happened that the harvest in 1931 failed seriously on account of exceptionally unfavourable meteorological conditions. Hence, the necessity of crop insurance in a planned economy.

14. The total estimated expenditure on different activities concerning agriculture will be as follows:—

	(In crores of Rupees)		
•	Non-recurring	Recurring.	
Reclamation of land	200		
Irrigation	150	4	
Manures, Seeds, Live-stock etc.	150		
Collective farming	150	32	
Soil conservation and developme	nt	•	
of forests	110	4	
Rural Industries	150		
Crop insurance	50		
Total	960	40	

Grand total Rs. 1,000 crores.

CHAPTER IV

INDUSTRIAL DEVELOPMENT

The re-organization of agriculture must be accompanied with the development of industries, both consumer's goods industries and basic industries. But before we chalk out a detailed programme, we may have a peep into the historic back-ground of the Indian industry, especially of the handicraft type.

India has been the home of handicrafts from times immeniorial. She has produced fine gold and silver work, high quality brocade, and embroidery. Her fine calico produced at Calicut and the famous muslin produced at Decca have been exported to Europe for several centuries for the ball room dress of aristocratic families. The wood work of Nagina has for the last few hundred years deserved the praise of art lovers. The fine marble and stone work of the Taj Mahal at Agra and the mausoleum of Akbar at Fatehpur Sikri are the last words in architectural art which human skill has ever produced. But since the beginning of the industrial revolution in England during the 18th century, and the mass produced factory stuff at exceptionally low cost the Indian handicrafts have suffered a great set-back, and have either already decayed or are in the process of decay and unless some practical steps are taken to neutralise the effect of competition the cottage industries in India are doomed. War has, however, given a temporary stimulus to the cottage industries in general throughout the country.

The large scale industries in India have in fact been started on modern lines since the beginning of the present century. These are few in number. The main of them are the textiles, the jute, iron, and steel, paper making, wool, silk, indigo, oils and oilcakes, tea, coffee, sugar, tobacco, and lac.

Since the last Great War, leather has also been manufactured on a large scale by modern processes in Cawnpore, Agra, Calcutta and Madras, and the work has tremendously increased during the present Great War, but still there is further scope for the expansion of chrome tanning, and glazed kid which have to replace indigenous tanning. The statistics given below will show the comparatively slow industrial advancement of India and the low efficiency of the Indian Industrial worker:—

Country	No of Industrial workers.	Gross value of products,	Net'value of products.	Net value of pro- ducts per worker.	Percentage of Working population absorbed in indus- tries.	Capital invested.
		[Crores Rs.]	[Crores Ra]	,	,	[Crores Rs.]
India	1,53,61,933	800	408	Rs. 265/-	10	700
The United Kingdom	77,00,500	4,260	1,925	Rs 2,500/-	· 41	7,067
The United States of America	1,41,10,625	19,444	8,857	Rs. 6,327/-	27	23,000
Japan	54,99,031	1,905	933-33	Rs 1,761/-	. 18	1,009

The total number of industrial workers in India is 1, 53, 61, 000 which forms only 10% of the working population of the country. The total number for the United Kingdom is 77, 00, 500 or about 41% of the

working population. The total number for the United States of America is 1, 41, 00, 000 or 27% of the working population. Japan's strength of the industrial population consists of 54, 00, 000 or 18% of It is evident that India is its working population. slow indeed in industrial development as compared to other progressive countries. We have, therefore, to absorb another 20% of the working population in cottage, medium-sized and large-scale industry in India within the next 10 years. The net value of products per worker per annum in India is Rs. 265/-. Comparable figures for the United Kingdom, the United States of America and Japan are Rs. 2,500, Rs. 6,327/- and Rs. 1,761/- respectively. If the efficiency is to be measured in terms of net value of products per industrial worker, the logical conclusion would be that the British Industrial worker is about nine times as efficient as his Indian comrade, that the American worker is about 23 times as efficient as the Indian worker. Even if we make an allowance for the increased protective policy of the American Government in the industrialisation of the State, the American and Japanese worker is many times more efficient than his compeer in India. It is, therefore, highly essential that we should not spare any effort in increasing the industrial efficiency of the Indian worker.

We have to evolve such a programme of industrial development in India in the first ten year plan, that (1) another 20 per cent of her working population may be permanently absorbed in industries and the pressure of population on land may be gradually reduced;

- (2) The efficiency of the present industrial population in India may be appreciably increased;
- (3) Cheap electricity say at 6 to 9 pies per unit may be available to the majority of urban and rural population in each province, so that cottage industries of urban and rural type worked by power may spring up with an accelerated speed of time;
- (4) Modern processes and technique of production may be usefully employed in cottage and other industries wherever possible and that the decaying cottage industries be brought in line with modern fashions and tastes.
- (5) Possibilities of new industries both small-scale and large-scale may be explored, and basic industries may be developed at an early date in order to give a fillip to industrialisation.
- (6) Scientific and industrial research may be carried on with vigour in every branch of industry and that results of research in cottage industries may be supplied to the cottage worker free of charge, while practical results of scientific and industrial research may be sold as patents to the business men who want to make use of them commercially.
- (7) Technical education may be extended along with the extension of industries so that the moment students come out of technical schools and workshops, they may be absorbed at once in the industries and may not remain unemployed like ordinary university graduates.
- (8) Suitable arrangements for financing industries may be made; and

(9) If necessary, scientific protection to industry be given. These are some of the main problems that we have to solve in order to give industrial planning a practical shape.

The question of the development of the cottage industries, in urban as well as in rural areas, is a matter of great controversy at the present time. It is, therefore, highly essential that some clear thinking be done about it.

A brief out-line for the policy underlying the development of cottage industries is given below, in order to facilitate the chalking out of a clear-cut programme. For determining the nature of the handicraft or industry of the cottage type, consideration must be given to natural or acquired facilities, the situation of the environments and the dwelling of the workers, and the space available on the premises. Certain handicrafts, which for their efficient working require electric power, frequent technical advice and ready marketing, have of necessity to be situated in the urban area or on its out-skirts. Others, while they may be exercised even in rural areas, require larger space than is normally available in conjected urban areas.

For our purpose, we shall assume that a normal peasant family consists of a man, his wife, children and dependants of little or no education, except, in some cases, being conversant with one or other simple handicrafts, which they exercise during the periods when they are more or less free from agricultural occupation. Their dwellings are usually a two-roomed

tenement, one for the entire family to live in. and the other to serve for storage of their seeds, corn and agricultural implements.

Handicrafts and industries more suitable for the urban areas are:—

(i) Handlooms for textiles, weaving, 'niwar'. 'towels' and 'durries'. It has been estimated that there are approximately 21 million handlooms spread throughout the length and breadth of the country, and that the number of dependants who rely to some extent upon the handloom industry is in the neighbourhood of 10 millions, a number greatly in excess of that supported by any other industry except agriculture.

The annual production of cotton goods on handlooms is approximately 2,000 million yards. industry should be taken up in right earnest and its position reviewed from time to time, and special interest should be taken so that it might not be wiped out as a result of competition with factory produced stuff. Should this competition be inavoidable the cottage industry should for its survival insist upon the Government to provide for special conditions. Indian handloom products in silk, artificial silk and wool will not able to compete successfully against Japanese manufactured goods. It is, therefore, unnecessary for India to specialize on a large scale in these lines, unless we have acquired a very special advantage over Japan by way of technical skill or availability of cheap raw materials. Indian handlooms can, however, specialise in cotton weaving of multiple coloured stuff artistic and hand made 'sarees' and 'safaz' and as such should take up these lines successfully against any foreign competitor, since India is the producer of

cotton and has acquired technical efficiency in these lines.

'Khaddar' will not be able to stand competition with cheap mill-made cotton goods. Besides, it becomes dirty much sooner than mill-made goods. Because of these two great disadvantages, it will not be able to survive competition from mill manufacture on economic grounds, and the sentiment which was aroused on political grounds will soon disappear when Indian mills, with Indian capital, take up the supply of manufactured goods. It will therefore, be unnecessary to waste time and energy on 'Khaddar propaganda'.

Kashmir tweeds, shawls and carpets will, however, stay on artistic grounds, and because of cheap labour. Calico printing cannot only stay against Japan Europe and America, but has got great possibilities of expansion, through increased exports to America if we can only organize the export on a large scale. We shall have, however, to depend on imported dyes for some time. We need not be afraid of competition of Japan or Europe in carpets and 'durries' since Japan does not manufacture these articles and India has got special advantage over Europe in the production of cotton.

While reviewing the position of cottage industries in India, as a long-term policy, we should not lose sight of the specialities of different districts and the historical background of each industry. A close study of the speciality of each district will enable us to see for ourselves the natural or acquired advantages of each industry in each district, and how they have acted and reacted with machine-made goods and how

disadvantages have been avoided in future. The speciality of Gorakhpur is crepe shirting weaving (2/20), with an average weaver working 8 hours a day producing by handloom 30 yards a day. Next to the Gorakhpur weaver comes the Punjabi, who can produce about 16 yards a day, while a Rohilkhand man can produce about 8 to 10 yards a day. Gorakhpur weaver has got an acquired advantage in this line over a Punjabi and a Rohilkhand man. This line of weaving has, therefore, to remain a virtual monopoly of the Gorakhpur man, till another district acquires that degree of skill. Bareilly has acquired a special skill in furniture and there is no district in India which can compete with Bareilly in this line. Similarly Mirzapur has acquired a speciality in cheap carpet making, and it would be long before any other district replaces Mirzapur's importance in that line. A careful study of these specialities will enable us to evolve a practical programme of the expansion of particular type of cottage industries in specified localities, and to apply with advantage modern processes and technique, fashions and tastes in the products of the existing cottage industries. If nothing else can be done, certain special counts should be reserved for the cottage industry and the use of these counts by mills may be prohibited.

When improved varieties of handlooms have worked in particular urban areas for some time, fly-shuttles and jacquard looms worked by power can be safely introduced in those areas. It is necessary to emphasise at this place the duty of the Government to evolve such schemes of generating electric power, that the electricity may be made available, at

approximately 6 pies per unit as at Mysore. The Government should not mind, in the initial stages of industrialisation, selling electricity at the generating cost, and should not care for profits since the income derived from income tax, as a result of industrialisation, will more than counterbalance the meagre profits earned by selling electricity at higher rates.

It would be of interest to an average man to learn a few technical details regarding textile weaving. An improved variety of handloom produces about 10 yards of cloth, working some 8 hours a day. If 3 as. yer yard be taken as wages and profit, the normal remuneration for the day would come to about Rs. 1/14/- a day, or say Rs. 50/- p. m., if we allow 4 days as holidays during the month. The efficiency of a power-driven fly-shuttle or jacquard loom is about three times as much as that of a handloom,

- (ii) Socks and cotton-knitting by hand-driven machines. This can easily give an average wage of a rupee per day of 8 working hours. If worked by power after some time, it can easily give 50% more wages than in the case of hand-driven machi es. If India wants to keep this industry going after the War, it will have to import cheap power machines from Japan or America, and will have to bring down cost of manufacture by increasing the efficiency of the Indian worker. In order to create confidence in the public mind, malpractices on the part of manufacturers should be stopped and business integrity encouraged.
 - (iii) Machine looms for 'Niwar' and luces. The wages in this industry can be any thing from As. 12 to Re. 1/- per day,

- (iv) Artistic pottery. India cannot compete with Japan in China ware, except in artistic pottery of local interest. We can of course make earthen ware pottery. It is a pity that owing to lack of constant temperature furnace, a considerable number of earthen pots are wasted and melted away due to the irregularities of temperature, thus causing loss to the potter's effective labour and increasing relative costs. Although experiments with constant temperature furnaces have of late been made at a few places in India, the results are far from satisfactory. It is highly necessary that, for the development of this basic industry, improved types of constant temperature furnaces as far as available should replace the primitive type of furnace. The essential cost of an improved type of constant temperature furnace comes to about Rs. 1,000/- and can be installed at places where a number of potters live and pursue their vocation. In the same way, the methods of glazing and designing of the pottery can also be improved. After these new ideas have been put into operation, the present wages of the potters can be easily doubled.
- (v) Leather-tanning and leather-making. Tanning is generally done, throughout India, according to primitive methods, but of late improved methods have been introduced most successfully in the United Provinces and Madras. There is still much room for its popularisation on a cottage basis. There is also a good deal of scope for leather-making on improved lines.
- (vi) Button-making and comb-making from natural horns. A good deal of work has been done by

Hyderabad and Mysore Governments in buttonmaking and it would be worth while to study their methods and technique and to establish a number of centres in Upper India for the expansion of this industry.

- (vii) Sericulture and spinning of Silk-yarn. Erisilk can be developed in any part of upper India. But there is a number of limitations on the development of mulberry silk. The eri-silk industry can, however, be developed in suitable urban and rural areas where it is desired to supplement family income.
- (viii) Embroideries-worked by hand as well as by machine There is sufficient of scope for this industry and there is less fear of foreign competition in this line for some time to come,

Handicrafts and industries which are most suitable for the rural areas are:—

- (i) Spinning of cotton and woollen yarn. The spinning of cotton and woollen yarn by improved methods can give a living wage. As it is a basic industry, it should naturally be developed.
- (ii) Handlooms for coarse textiles, 'Niwar-making' and blanket-making. Fly-shuttles worked with hand are very much in use in Bihar, Bengal, Punjab and the United Provinces. It is necessary that improved varieties of fly-shuttles should also be introduced in other parts of India.
- (iii) Knitting 'kamarbands' and nets. Handknitting of 'kamarbands' is very much in vogue among the female population of rural Punjab. A punjabi woman can easily knit twelve 'Kamarbands' a day and get about Re. 1/- a day as wages, working

- 8 hours a day. The knitting of nets bring about the same amount of wages.
- (iv) Basketry. This is a basic rural industry and, as such, it has to be developed.
- (v) Earthenware pottery. As has been already stated under the heading of artistic pottery in the urban areas, that the furnace can be improved and new ideas introduced so far as practicable.
- (vi) Rope-making. This is done at present on primitive lines. Improvement in this line has been long overdue.
- (vii) Leather-salting. This can be improved on modern lines.
- (viii) Hand embroideries. This will always remain in great demand after the standard of living has increased.
- (ix) Fruit culture. This can be taken up after ihe Punjab fashion in right earnest.
- (x) Plastics. This is a new line which can be easily developed and has got great possibilities.

Cottage Industries Institute

The function of the Cottage Industries Institute will be to develop the business as well as the artistic side of local cottage industries. It will also be partially educational and, in addition to the training of artisans it will aim at finding new methods and new designs and ascertaining market conditions and supplying improved type of appliances. The Cottage Industries Institute will aim at bringing home to the cottage artisans not only new methods and new designs in the same line but will also impart training

in new vocations which may show signs of development

In order to develop arts and crafts side by side with cottage industries, it is necessary that one or more district schools of arts and crafts be opened at suitable centres. The reproduction of traditional designs would not be sufficient for the growth and prosperity of local arts and crafts. It is essential that due allowance is made for the ever-changing demand of Dame Fashion, without dis-regarding the rules of beauty in design. The art should be further patronised by the aristocracy as well as by the departments of the State, and preference should be given to the purchase of goods produced by the schools of arts and crafts, as well as those of the Cottage Industries Institute.

In order to give a fillip to designs and quality or workmanship, it would be necessary to establish a museum of Arts, Crafts and Produce of Cottage Industries, and to have a loan collection which may be sent from place to place. Of course, the Museum as well as the loan collection will be a small affair in the beginning, but it will be gradually enlarged, as years go on, until it becomes a powerful means of securing freshness and vigour in the artistic handicrafts and industries in every corner of India.

Organisation and Control

Organised industries can afford to study the market and technique, standardise productions and arrange prompt supplies to push sales. Cottage industrialists, on the other hand, being mostly illiterate, poor and unorganised, have to depend for

their sale on local dealers, who exploit them to their own advantage instead of helping them. Such dealers, being themselves ignorant, neither know the changing requirements of the consumers, nor have means for getting into touch with distant markets. Their purchases from the cottage workers are somewhat in the nature of a gamble. Consequently, they try to sefeguard themselves against possible losses by cutting down the price they pay. This, in its turn, practically compels the cottage workers to resort to malpractices to eke out a living for themselves. Thus, the standard of the article produced deteriorates, the industry declines and ultimately dies out.

It would appear from the above that in the case of cottage industries, the problem of the sale of the article produced at a reasonable price is of very great importance, and mere improvements in the technique of manufacture will not suffice. On the other hand, sales and products being interdependent, sales cannot be developed unless production is also organised and where possible, standardised. There is a serious risk of failure, if either side of the work does not receive attention.

The above organisation and control can only be possible under the patronage and fostering care of the State, without which it would be a mistake to xpect any good results. We should insist upon the State giving the necessary help to cottage industries as well as to the arts and crafts, but in order to give a fillip to the cottage industries as a whole in the beginning, it will be desirable, wherever possible, to buy raw material centrally, to sell it to the cottage workers with nominal profit, to place orders for the

finished articles of specific designs with the cottage workers, to buy finished articles at a reasonable price, and to market them centrally. Wherever feasible, freshness and vigour must be given to designs and technical processes and changes in taste and fashions brought home to the cottage worker at Government expense. This is the practical way of saving the cottage worker from the clutches of the middle man, and to assure a living wage to him without putting the Central Organisation to any loss or inconvenience. The middle man's profit, which is to be earned by the Central Organisation, should be such as to cover the cost of supervision and other connected expenses. The Central Organisation may either be run by Government or by particular trades on a co-operative basis. Those run by the Government have to be gradually replaced by co-operative societies.

We have duly emphasised the importance of the cottage industries in India, first of all worked by hand, and eventually worked by power. It does not mean that we are opposed to the introduction of the factory system in certain lines of industry, and as an industrial policy of India. We do not hold, like certain abstract thinkers and idealists, that there are inherent defects in the factory system. There are no inherent defects in the factory system. It is just the methods with which it is worked under the present circumstances. No system can be altogether bad, provided the evil tendencies pertaining to it are kept under proper control. The present factory system, which is based as it is on the capitalistic method, is full of abuses as it provides too much of wealth for the entrepreneur and the capitalist, and too

little for the wage-earning class. If the distribution of the profits and wages be regulated on humanistic and equitable principles, the factory system will not have many important disadvantages. If the scale of returns to different earning classes be so regulated that every class gets sufficient for the necessaries of life as well as some of the comforts, while the entrepreneur class gets necessaries of life, comforts and some of the desirable and healthy luxuries, few will object. But when a small band of people known as capitalists becomes millionaires and multimillionaires and waste crores of rupees on the satisfaction of unwholesome desires. while the working classes are not allowed even the bare subsistence of life, then the whole criticism is properly levelled against both the factory as well as the capitalistic There are some industries which cannot be economically worked on the cottage basis eig., the manufacture of tanks, motor cars, aeroplanes and railways, as well as the mining industries. therefore, essential that such industries should be humanised on the lines indicated above, rather than the industrialisation of the country is slowed down for the simple reason that certain industries cannot be economically worked on cottage basis.

The most important amongst the large-scale industries are :—

- Group I Mining-coal, petroleum and metallic ores, Iron and Steel and their products and bi-products and Engineering industries.
- Group II Hydro-electric and electric-appliances and machinery.

Group III Chemicals and drugs.

Group IV Defence Industries and Arms, amunition and military stores, automobiles, ships, and aircrafts.

Group V Railway plant, including rolling stock.

Group VI Cotton, silk and woollen textiles.

Group VII Agricultural tools and machinery.

Group VIII Jute industry.

In relation to the world cotton textile industry the Indian Industry comes next to the British and American industry as far as the contextiles.

Textiles. Sumption of cotton is concerned.

The mill industry at present consumes more than 50% of the total Indian cotton crop.

more than 50% of the total Indian cotton crop. It gives direct employment to 6 lacs workers.

Total production of cloth in 1938-39 amounted to 4,269 million yards. Handloom weaving is responsible for giving whole-time and part-time employment to 10 million workers who produce nearly 2,000 million yards of cloth. Thus, the total production of both mills and handloom is approximately 6,269 million yards.

On the basis of 30 yards of cloth for each person per year, the annual requirement for the present population of 390 millions would come to 117,00 million yards. In order to meet the future home demand, the present production has to be increased by 47%. The cotton mill textile industry has therefore, got a great scope in our post-war reconstruction plans.

But here it is necessary to sound a note of warning. The textile machinery is, generally speaking, obsolete and out of date. It is, therefore, essential

that sufficient reserves be accumulated by the cotton mill industry during the war boom while the sum shines so that new and up-to-date machinery may be imported soon after the hostilities cease. Silk and woollen textiles can also be expanded to some extent, provided silk and woollen yarn are available in sufficient of quantities.

Eastern Bengal and Assam enjoy a world monopoly of this industry, because of special geographical and climatic conditions. Out of 104 jute mills available in India, only a few are lute Industry entirely owned and managed by Indian Coal Indu companies, the majority of them are owned and mana-This industry employs ged by foreign companies. about 3 lacs of workers. India generally consumes only 20 to 25 per cent of the goods manufactured by the local This is one of the in India. There is jute mills, the rest being exported. best organized large-scale industries in India." the Indian Central Jute Committee to watch over the interests of all branches of the jute trade, from the field to the factory and to the consumer. This industry has not got a great future in normal times. The Bengal and Assam Governments will have to control to some extent the prices and cultivation of jute after the war is zover. The manufacture of jute has been increased from 1,774 million yards in 1938-39, to 1,968 million yards in 1941-42.

This industry is both a basic, as well as a defence industry. Its growth on modern lines was hastened by the last great war, and it has come from and Steel of age as a result of the present war! her industry, bey industry, bey industry, bey industry, bey industry, bey industry, bey acid steel has been responsible for the manufacture of wheels, tyres and axles. Special alloys for

armour plates and steel suitable for the latest type of guns, barrels, ammunition and bombs, have been produced during the present war by the Tatas. 9,77,400 tons of steel ingots were produced in 1938-39 while the 1941-42 figure is estimated at 12,00,000 tons. This industry has enjoyed an uninterrupted boom for the last 6 years, and has got a great future for expansion, with the development of industrialization in India.

The coal industry has not enjoyed much prosperity as a result of the present war. This is due to the coal prices remaining low, while the cost of production having increased on account of rising prices of colliery stores and increases in wages. The industry is not likely to make much progress in the future until it rationalizes itself and ensures an effective control of prices by avoiding cut-throat competition. The amalgamation of small collieries into bigger units will go a long way towards bringing prosperity to the industry.

India's Engineering industries before the mainly consisted in under-taking repair work, supply of common stores and small-scale pro-Engineering duction of many types of simple tools Industries. and parts, and accessories, general and electrical. We did not know the technique of mass production of specialized products. There has been no systematic large scale production of machinery or machines and tools in India. The war has been responsible for the opening of several machine and tool workshops of medium and large-scale, but it has not vet encouraged the manufacture of complicated machinery or fine work of a specialised nature. manufacture of lathes, drillings furnaces and power blowers has been undertaken at the instance of munition factories established at a number of places in India, but free wheels, chains, boilers, engines and advanced types of machinery have not so far been manufactured in India. This industry has got a great future and can compete easily with foreign products, provided we get the average worker trained in advanced lines of engineering.

What we have said of the Engineering industries holds good for railway plant, hydro-electric, electric appliances and machinery and agricultural tools and machinery.

The Indian chemical industry was started as an infant industry a little before the war. It is still in its infancy. Sulphuric acid is one of Chemical & Drugs. the main products of the heavy chemical industry. It is essential for the manufacture of other acids and salts. India is still very deficient in the manufacture of sulphuric acid and heavy chemi-Large deposits of high grade sulphur have been discovered by the Geological Survey of India at Koh-i-Sultan in Baluchistan. These have to be scientifically exploited on a large-scale, so that their products and by-products may find a ready market. The production of fertilisers and manures would depend a good deal on the ready supply of the sulphuric acid. It has been estimated that in 1939 the Indian production of sulphate of ammonia was 20,000 tons, against a consumption of at least 90,000 tons per year for the present. We shall also have to produce huge quantities of caustic soda at an economic price, in order to help our soap and textile industries, and soda ash for the glass industry. The manufacture of dyes colours, drugs and medicines and essential oils will also have to be taken locally on a large scale in India.

Arms, ammunition and ordnance factories have been sufficiently expanded during war-times. In place of evincing any further expansion during postwar period, their production will have to be severely curtailed. As far as the automobile industry is concerned, it will have to face severe competition with British and American manufacturers in the beginning of the post-war period. Two new automobile concerns financed and managed by Indians have recently been floated. They will have to import engines and a few other specialised parts in the beginning and will have to face keen competition with foreign manufacturers, but if they persevere a bright future is assured.

For the ship-building and aircraft industries reference may be made to the chapter on transport. For ship-building industry it may, however, be stated here that this industry, besides giving employment to several thousands of men, will encourage such other auxiliary industries as iron works, cable manufacturing, rope making, electric appliances and metal works by creating fresh demand for their output.

Some of the medium-sized and small-scale industries are:—

Group I Building-cement, lime and glassware, furniture and wood work. Group II Reading and Writing-books, printing paper, news print wrapping paper. Group IIIFood-sugar, food, drink and tobacco.

Group IV Leather, rubber products and plastics.

Fértilisers.

It will, however, be worth while to say a word or two about the future trend of these industries.

The building industry has got a great future after the war is over, as cement, lime, glass and furniture will be demanded in great abundance, because of the heavy constructional programme during the post-war period. There will also be a heavy demand for industries connected with reading and writing. An increase in the standard of living will give stimulus to the food industries. Rubber products and plastic goods will also be demanded in increased quantities. With the mechanization of agriculture and the introduction of intensive methods of farming, there would be excessive demand for fertilizers.

The alround expansion of the Engineering industries will give fillip to the metal industry. Within the scope of a small memorandum like these, it is difficult to deal with the relative importance, merits, demerits and location of the large-scale, medium-sized and small-scale industries. Questions, like these may be taken up on a proper industrial survey conducted on scientific lines, by an expert body in each district. While making specific recommendations the expert body is expected to take into consideration the question of rationalization of the industry in that particular locality.

Durable goods have been given a little more importance than consumption goods, but a proper balance may be struck between them.

Rs. 1500 crores may be provided for Finance.

durable goods in 10 years, and Rs. 1,000 crores for consumption goods. Half of the grant may be allocated for each for half the period.

CHAPTER V EDUCATION

The percentage of literacy in India is low indeed. There are only 15 per cent people in the vast country who can read and write, while 85 Introduction per cent are illiterate. In advance I countries the percentage of literacy is round about 80. In Great Britain in the pre-war period Rs. 33/2/- per head of population were spent from public funds on education, while the comparative figure for India was -/8/9 per head. The backwardness of India in education, therefore, needs no further emphasis.

Before we suggest any programme of educational reconstruction, it would be fruitful to see the main trend of denominational education in India, and its action and reaction on the modern English system of education in India.

Muslim education in India is generally imparted in Arabic "Maktabs" and "Madarasas" where the system of education has become all traditional and static and devoid of constructive criticism, experimentation and research. Although the religious and ethical background of education has got a good effect on character building, most of the Arabic institutions have become out of date and lost touch with the needs of the modern times.

The Hindu institutions in India have for the last seven or eight hundred years lost to a great extent the religious and ethical background, with the result that there has been less emphasis on character building. There has been no unity preserved between

the spiritual and the practical points of view, and this has often led to impractical other-worldliness on the one hand and narrow vocationalism on the other. The Hindu system of education has, however, earned a name for itself in the past, for the proverbial cordial relations between the teacher and the taught as well as for being the least expensive.

The main weaknesses of English education in India have been:—

- (a) The neutral attitude of the Government in religious education and ethics resulted in weakening of character building.
- (b) Too much importance on literary education resulted in producing a number of Indians qualified for nothing except the work of "Baboos" who possessed no technical efficiency nor any strength of character.
- (c) The utilitarian and materialistic out-look of English education in India made the people crazy for material wealth and advanced their pursuit of higher standards of living without a corresponding amelioration of their economic condition.

The main strength of the English system of education in India have been :—

- (a) That by over-emphasising the utility conception of education it has created a sense of practicability in the existing systems of education in India.
- (b) That it rightly emphasised the modern method of creative criticism, as opposed to traditionalism, through induction.
- (c) That it gave the necessary importance to physical education, which the Hindu and Muslim systems looked at without much favour.

In the light of the above mentioned historical retrospect, the following programme of educational reconstruction is suggested:—

(1) That basic education which may include both primary and middle standard should be compulsory and free from 6 to 14 years of age both for boys and girls, in order to ensure that the children at school will not only acquire effective and abiding literacy, but will also develop sufficient sense to understand and appreciate social problems, habits and attitudes.

The primary education may not be made compulsory through basic craft only but also through the project method or activity school. English or any other foreign language should not be introduced in the stage of Junior basic (Primary) school. At least one-half of the cadre of teachers at this stage should consist of women. Qualified teachers who should be adequately paid may be entrusted with the work. The remuneration and social status of the teachers is to be raised.

- (2) Teacher incharge of primary education should normally look after 25 to 30 pupils. A primary school may be provided for every thousand of population or a primary school may be situated within a radius of 2 miles, whichever is more convenient. A middle school may be provided for every 5 primary schools and a high school for every 5 or 6 middle schools.
- (3) That some of the cultural subjects which cannot be correlated with the basic craft should be taught independently.
- (4) That proper arrangements for religious and cultural education may be made by the State.

- (5) That while judging results, more importance be given to regular work rather than to examinations.
- (6) While agreeing with the rate of average salary per teacher and other recurring expenses as suggested by the Central Advisory Board of Education, we differ from them regarding the rate at which primary education, should be enforced. They have suggested that it will take 30 to 40 years to complete the programme at a recurring expenditure of Rs. 200 crores per year. We would suggest that the speed of the programme may be accelerated, and that the whole programme may be completed within the next 20 years by doubling the expenditure to Rs. 400 crores. While Soviet Russia could reduce the illiteracy within 20 years from 78 to 8 per cent, we do not see any reason why India should not be able to do so within a similar period.
- (7) Admission to the High Schools should be on a selective basis, and only those may be taken in, who show promise of taking full advantage of the opportunities provided. The net estimated cost of recurring expenditure on high school education, which will cover both academic and technical education, would be Rs. 100 crores.
- (8) In university and higher education, closer personal contacts between teachers and pupils should be established and more emphasis laid on research work.
- (9) It would be desirable to treble the existing number in the Universities within the period of the plan.

On the basis of the calculations of the Central Advisory Board of Education it is estimated that the net recurring expenditure will amount to Rs. 10-18 crores per annum.

- (10) In view of the heavy demand in industry and commerce during the post-war period for skilled technicians, the net expenditure on Technical, Commercial and Art education shall be at least Rs. 24 crores, which is three times as much as that suggested by the Central Advisory Board of Education in their report on "Post-war Educational Development in India".
- (11) It is estimated that even with the introduction of a compulsory primary education there will be over nine crores of adult illiterates to be dealt with. On the basis of the average cost per literate of Rs. 4/8/-, the total expenditure would come to Rs. 40.5 crores. If Rs. 4½ crores be provided in the first year, and Rs. 4 crores in each of the subsequent years, the whole programme can be completed within a period of ten years. While tackling the problem of adult education on an All-India basis, we should try to enlist help of a voluntary nature as well, and try the well tried expedients like "Each one teach one"; "Make your home literate".
- (12) That there should be a social and Recreation centre attached within a radius of every 2 or 3 miles, where a small library, a radio and some material for sports may be made available. A lump sum amount of Rs. 8 crores may be provided for this purpose.
- (13) Educational museums specially for imparting education in arts and sciences is the common feature in advanced countries. India should also establish a few scores of educational museums at a cost of Rs. 3 crores.

(14) The total expenditure on education which is based on the pre-war standards will be as under:—

(In crores of Rupees) Basic (primary and middle) Education 400 High School Education 100 University Education 10.18 Technical, Commercial and Art Education 24 Adult Education 40.50 Social and Recreation Centres 8 Educational Museums 2 Total Rs. 584.68

Note:—These estimates do not take into consideration the cost of buildings but include the cost of repairs.

(15) The question of the allocation of funds for education between the Central and Provincial Governments should be taken up by an expert body separately.

CHAPTER VI

PUBLIC HEALTH

The condition of Public Health in India can be visualized from the following comparative table, which gives rates of births and deaths, Introduction. rate of infant mortality and expectation of life in several countries of Asia, Europe and America:—

Country	Births per 1000 population	Deaths under one year per 1000 living births	Expectation of life
India ,	32.8	24.5	26.7
U.K.	16.3	ı 2·5	57∙હ
U.S.A.	18.9	11.3	56.4
Germany	17.5	11:1	49.0
Japan	32.35	18-17	44.2

It is evident that India is a country of high birth rates accompanied by high infant, maternal and general mortality rates, low expectation of life and a poor standard of health and happiness. There is abject poverty, mal-nutrition, sickness, epidemics, pestilence periodical outbursts of famine in the country. This was the condition before the war. The war has greatly added to the miseries of the people all over the world, and public health has suffered and is likely to suffer a great set-back due to

war. The general vitality of the people and their resistance to disease has without doubt come to a very low ebb. The end of the war will bring new diseases or old diseases and epidemics in a more acute form. It is, therefore, high time that we concentrate on questions of public health, and evolve an effective programme to cope with the problem at the right time.

The public health department will have to employ methods for prevention and cure of diseases in order to bring the medical and public health services as near to the rural areas as possible and in order to provide them with amenities of life for promotion of health and happiness.

Throughout discussion of the subject, a practical view has been taken, rather than ideals, which cannot be worked in a sub-continent Medical and of India, suggested. One Medical Public Health Officer for 30,000 rural population, Aid. sanitary inspector for 7,500 people, one midwife for 7, 500 population, one trained 'Dai' for every 2,000 population, and one health worker with 8 coolies for every 30,000 rural population have been suggested as the practical steps to aim at. In the urban areas, one doctor (Assistant or Sub-Assistant, Surgeon) for 1,000 population, and one trained 'Dai' for 1,000 female population have been suggested, The 'Dais' locally available will be trained in each district by instructor midwife, and there will be a short course of training lasting for one year. There should be one properly equipped dispensary within a radius of every five miles.

In India hospital accommodation is available at 3 beds for 1,000 population (i.e. 3 beds per 1,0000 men). In the advanced countries of Expenditure on Europe and America, beds are available at the rate ranging from 1.5 to 5.8 per 1,000 population. According to orthodox expert advice, 4.5 beds per 1,000 of the population is the ideal to be aimed at. But we are of opinion that, for the purposes of this programme, it would be desirable to have at least one bed for every 1,000 population in this country.

Health workers both in urban as well as rural areas treat simple cases themselves, refer difficult cases to the nearest branch dispensa
Infectious Diseases ries, and still more difficult cases to the District Hospital, which is fully equipped and properly staffed with well-qualified medical officers and personnel, including specialists in different branches of medical science, In order to locate infection at a particular place and to stop a rush of such cases to the District Hospital, it would be desirable to have an Infectious Diseases Hospital, established in each district with a population of five lakhs.

- 1. On account of staff and establishment: -
 - 1. Medical officer (M.B.B.S.) @ Rs. 200/- p. m.
 - 2. Assistant.

@ Rs. 100/- p. m.

3. Compounders.

@ Rs. 25/- p. m.

4. 'Kahar.'

@ Rs. 10/- p. m.

5. 'Bhistin.'

@ Rs. 10/- p. m.

6. 'Dhobis'.

@ Rs. 10/- p. m.

m C....

@ Rs. 10/- p. m.

7. Sweepers.

Total estimate Rs. 720/- p. m.

or Rs. 8,760/- P. A..

2. Medicines and disinfectants Rs. 5,000/- P. A. Total Expenditure Rs, 13,760/- per annum

Malaria is undoubtedly the most dreaded common disease in India. It takes a toll from one million to three million lives every Anti-malarial measures, T. B. year. Various complications result-Hospitals and ing from repeated attacks make life Maternity miserable for even a larger number of Hospitals. people, and greatly affect the efficiency of the working population of India. It is therefore, highly essential that both preventive curative and measures are adopted on a large scale. For the supervision and control of the disease it is suggested that Rs. 50/- lakhs may be spent in five years in every big province, and that a suitable amount in a small province in experimenting on anapheles type of mosquitoes and clearing their breeding places and annihilating their larvaes.

Next to malaria, we have to wage a war against T. B., which is responsible for taking an annual toll of half a million lives in India, and makes five times of that number sick. In order to get rid of the malady, over-crowding may be removed, housing conditions and personal and social habits may be improved and hygienic conditions and proper nutrition provided. In India we have at the present moment one bed for every 85 deaths while in advanced countries there is generally 1 bed for every death. We should have at least 1 bed for every 10 deaths in India during the period of the proposed plan. Military camps may be utilised as T. B. colonies, and one of the buildings used as a specialized T. B. hospita after the end of the war.

Nutrition is the most pressing problem in India.

Its importance is due to the fact that it is the one factor that contributes more than any Nutrition. other single factor to the well-being of individuals and communities. Nutrition work should form an important activity of the Public Health Department.

Food serves as fuel for the body, and it contains proteins, fats, carbohydrates, vitamins and various mineral salts. The nutrition workers, in setting up standards of foodr equirements, ignore the remarkable faculty of the body to adapt itself to semi-starvation His standard of food intake implies full satisfaction, enough to enable human beings to lead an energetic life at a reasonably high level, in terms of working capacity. Quantitative food requirements usually estimated in terms of heat units calories. The Physiologists agree that the well balanced and satisfactory diet of an adult person must possess the heat units of approximately 2,800 calories. following tables give balanced diet for upper and working classes, while compiling these tables their comparative incomes have been duly taken into consideration.

Balanced Diet for Upper Classes.

1. Vegetarian.

(a)	Atta10	OZ8	or	Б	chs.
	Rion5				
	Milk8				
7.15	Data (Data)				

(d) Pulses { Dal arhar 1 oz } black gram 2 oz } 3 ozs or 11 ohs.

(e)	Non-le	afy vegeta	ıbles	jal, les fing te guar ter bea nstick	d,	,	
				1	0 oz	or	5	chs.
L	enf	y ve get	ables $\left\{\begin{array}{c} t \\ c \\ t \end{array}\right.$	maranth les Irumstick spinach	ves }	•		
(1	f)	Mustar	d Oil or	Ghee	2 oz	OL	1	ch.
• (8	z)	Fruits	{	llangoes ipe plantains	$\left. \left. \right _{2} \right.$	oz or	1	ch.
2. N	on.	-vegeta		-	, -	. •		•
(a				10) oz	ОГ	5	chs.
(b	•			5	oz oz	or	2 l	ohs.
(o			_	8	oz	οr	4	chs.
(d				3	oz	or	11	chs.
(e)	•		y & leafy		~	-	- ¥	
, ,		regetabl		} . 10	oz	OΓ	5	chs.
(f)	(Jhee	*******	2	o z	or	l	ch.
(g))	Fruits	**********		oz	or	l	ch.
ם	-1-	, T	f T	AT 11. O	` 	_		
	ato	ince L	-	Vorking C	lasses	5		
			In Sum	ner (A)				
(a) For h	ar	d work	•		•			
			Proteins	Carbo- hydrates	Fats	ł	Calc	ories.
Wheat	6	chs.	.60	4.32	.09	•	1197	·84
Gram	4	che.	.732	2.00	·19	•	744	8
Rice	2	ohs.	12	· 1*8	_		39 4 ·	0
'Dal'	2	chs.	· 42	1.06	03	;	371-1	6
Vege-			. •	•	-			
tables.	2	chs.	.02	·1		. 4	12.00)
[∵] Oil	1	ch.	_	_	1.0	5	268-0)

9 08

3,017.80

1.31

Salt etc.

Fruit 1

Milk 2 chs.

(chenp quality)
Total 20

ch.

1.89

(b)	For	moderaté	work.
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		را . الوسال وفي مائيسيان	Proteins -	Carbo- hydrates	Fata	Calories
Wheat	5	chs.	5	. 3.6	.08	998 2
Gram	4	chs.	·73	2.0	•19	744.1
Rice	2	chs.	·12	1.6	_	394 0
Dal	12	chs.	·36	.92	.03	324.76
Vege-	•					
tables.	2	cha.	.02	-1		42.00
Oil	<u>\$</u>	ch.		_	•75	201.00
Salt	-	_	_	_	_	_
Milk	2	chs.			_	• —
Fruit	1	chs.	_	_		-
(cheap	qua	lity)				
		·-·		·		
Total	18	3 1	1.73	8.22	1.05	2704.06
			In Wint	- (R)		•

(a) For hard work.

Total	, 2	201	1.85	9.39	1.40	3160.9
(cheap	qua	lity)		• .		\$5.00
Fruit	1	ch.	-	`\`_ <u>a</u>	ار دو د. پاکستان پرو د دو	. F -
Milk	2	chs,	`	-		
Salt etc),			<u> </u>		· ^
oa	1	ch.	_	- 20 miles - 20 miles = 10 miles	- <u>-</u> -	· · · 268·00
Gur	1	oh.	_	.47	j. <u>1</u> 4. 4	128 00
tables.	2	ohs.	.02	· 1	1 00	42.00
Vege-						
Dal	2	chs.	-42	1.08	•03	371-16
Rice	1	ch.	·06	•8	_	197.00
Juar	2	chs.	:•15	1.34	·05	378-88
Bajra	2	che.	.17	1.46	.09	432-16
Gram	4	chs.	·73	2.00	·19	744.8
\mathbf{W} heat	3	che.	.03	2.16	.04	589.9

(b) For moderate work.

			Proteins !	Carbo- hydrates	Fats	Calories.
Wheat	2	chs.	.02	l·44	.03	399-28
Gram	4	chs.	•73	2.00	-19	744.80
Bajra	3	chs.	-26	2.2	•14	648.24
Juar or			•			•
Maize	2	chs.	.15	1.34	·05	378 88
Dal	2	obs.	.42	1.08	.03	371-16
Vege-						
tables,	2	chs.	.02	-1	_	42.00
Gur	1	oh.	-	•47	_	64.00
Oil .	8	ch.	_	_	•75	201.00
Salt etc.		_	 .	_		_
Milk	2	chs.	_	- •	· — •	_
Fruit	1	oh.		_	<u> </u>	– .
(cheap c]ua	lity)				
Total		19	1.78	8.61	1.19	2849.36

Public health is of fundamental importance. It must be considered under two Health Education & aspects: acquisition of knowledge, Physical culture, and diffusion of knowledge.

The first involves researches in laboratories, science at the bed side and investigations in the field. The demonstrations of science underlie all sound health administration and are the safe guide for health education. Special schools are needed to prepare for public health service; and better instruction in hygiene and sanitation is called for in medical schools.

In the diffusion of knowledge concerning health and prevention of diseases, public health authorities should take a leading part. Many other agencies, however, should assist in placing the facts plainly a before the people.

Education in sex hygiene and the venereal peril accomplishes a certain amount of good.

The old style innocence, however must be regarded as present day ignorance. Every boy and girl, before reaching the age of puberty should have an elementary knowledge of sex, and every man and woman before the marriageable age should be informed on the subject of reproduction and the dangers of venereal diseases.

The value of physical education is now generally recognized, and in all educational institutions of the modern type provision is made for the physical training. The training, however, is not compulsory and full advantage of it is not taken. Not only every boy and girl of school age should compulsorily participate in military drill or outdoor games, but a man and woman of every age should make it a religious habit to take a regular part in one physical exercise or other. What is required at the present time is a detailed and inexpensive programme for mass education in health and physical culture, both for urban and rural populations. Indian exercises may be revived and inexpensive European exercises may be adopted according to the aptitude of the people and the environment of the locality.

The relative importance of matters concerning Public Health and Medical Science specially during the post-war period can be visualised from the following quotation from the speech of General T. B. Hance, Director General, Indian Medical Service though he seems to probably aim at the ideal conditions with which we do not agree in toto:—

"There are 40,000 medical practitioners registered in India today. To assure positive health to this sub-continent 3,00,000 are required. There are 7,000 trained nurses registered in this country and to ensure positive health to the people 7,78,000 are needed. There are approximately 1,000 trained Health Visitors in the country and 70,000 are required. In India there is one trained midwife per 70,000 of population. There are approximately 5,000 trained midwives and 90,000 are required. There is one trained pharmacist to every 4,000,000 of population, 100,000 such pharmacists are required, and there are in India 75. There are in the country approximately 1,000 qualified dental surgeons and 120,000 are required."

The conditions of health in the urban areas and specially in the industrial towns are much more deplorable than in the rural area.

The Panel system proposed for all introduce the "Panel System of family doctors" which is prevalent in some of the cities of England.

According to the "Panel System" the physician is paid by the contribution of the residents of a particular quarter of the city whom he serves. The number of his clients is so regulated that he can look after them without any difficulty. Patients in ordinary ailments come to the residence of the doctor, while the doctor attends to important cases at the patients' residence. The advantage of this system is that no time is wasted of both the doctor and the patient, in giving to the doctor the detailed family and personal history of the patient concerned and

conditions of the environment. One doctor for every 2.000 population would do for the present. In India he will also be responsible for thoroughly examining all his clients once a year and keeping a proper personal record of each client. If the doctor (an M.B.B.S.) without private practice is paid say at Rs. 400/- p.m., 400 families consisting an average of 5 persons per family will have to pay Re. 1/- p.m. to the doctor. We would suggest that half of the doctor's salary may be paid in the initial stages by the local body and the other half by the families. This would be the best arrangement for ensuring health and a family could easily contribute 8 as. a month towards this handy but essential service. Of course ordinary medicine and drugs will be supplied free by the State.

The necessity of intensive work for the alround uplift of the rural area in which the Agriculture,

Public Health, Education, Medical,

Industries and Revenue Department of the Government on one hand and the cultivators on the other should actively participate for a week after every crop, has already been emphasised in the chapter on Agriculture and the portions need not be repeated here.

Rs. 400 crores may be spent in 10 years in all the activities concerning prevention and cure of diseases and raising the standard of health of the workers and peasants. Out of these Rs. 400 crores, Rs. 200 crores may be spent in the first five years, and the balance in the next five years.

The following proposals may be given effect to:-

- 1. That it is the duty of the State to provide adequately for preventive as well as curative medicines in order to maintain and preserve public health.

 General Recommendations.
- 2. That research work may be carried on by the State in the field of medicine and health;
- 3. That due provision may be made for the qualified medical men and women and that duly qualified health visitors may supervise the work;
- 4. That the drugs and medicines required for the common diseases prevailing in India may be manufactured by the State at reasonable prices and adequately distributed;
- 5. That quack or patent medicines whose formulæ of ingredients are not given on the label, may not be allowed to be sold in the market;
- 6. That research work may be carried on at State expense in Alopathic, Homœopathic, Naturapathy, Ayurvedic and Unani systems of medicines;
- 7. That the standard of diet may be properly raised and that balanced food may be consumed;
- 8. That a suitable programme to make the nation physically and mentally healthy, may be evolved and that the marriages of unfit persons may be discouraged, and that persons suffering from insanity or other transmissible diseases of a serious type may be eventually sterilized;
- 9. That adequate provision for the amenities of life for all classes and kinds of people may be made:

- 10. That due emphasis may be laid on living in healthy homes, villages and towns and the modern methods of personal and social hygiene may be brought home to every citizen of the common-wealth;
- 11. That drainage of the village and town may be adequately provided for and drinking water may be provided for on hygienic principles. That adequate arrangements be made for sewage and removal of night-soil;
- 12. That flies and mosquitoes and rats may be eradicated from Indian villages and towns so far as practicable;
- 13. That adulteration of food should be strictly prohibited by legislation and public opinion;
- 14. That so far as possible arrangements for the manufacture of scientific and surgical instruments be made in India;
- 15. The Panel system of family doctors is more feasible for cities in general and industrial towns in particular;
 - 16. So far as possible the standard of balanced diet may be adhered to;
 - 17. Due arrangements for health-education and Physical culture be made;
 - 18. Adequate provision may be made for fighting out malaria, T. B. and venereal diseases and providing child welfare and maternity centres and hospitals.

The question of housing is a difficult one indeed, and the financing of the scheme is no less onerous. It is extremely difficult to cater for individual requirements and tastes, and it is equally difficult to prescribe a single standard

for a vast country like India where climatic, social and economic conditions are so divergent. We have, however, tried to follow in the first instance the noncontroversial health standards, and in the second instance we have made an attempt to find common points in social and economical conditions bearing climatic conditions of the country in mind. It would be impracticable to suggest that all the houses in India may be modernised within ten years' time, as the question of finance, material and skilled labour will have to be faced all atonce and it would be impossible to solve them within a limited period of time. It will be, however, possible to take up the question of slums, houses of the depressed classes and factory workers in toto and to set up model houses in increased number in each "mohalla" for the city population as well as model villages in each "tehsil" by the State, and arrange easy terms for the acquisition of the houses by the occupants on hire-purchase system. As far as new factories and their labour colonies are concerned, we have suggested elsewhere that the management should be made to provide them housing accommodation at the minimum rent, and cater for such amenities as parks, play-ground etc. If necessary the Government may advance part capital for housing factory labour at low rates of interest say at 2 to 3 per cent.

The present industrial population of India is about two crores. On the assumption that on the average one house is required for 5 persons, 40 lakhs of houses are required for the industrial workers. According to our estimates it would cost on the average about Rs. 600 per house at the pre-war price

level. It would thus require Rs. 240 crores to construct modern houses for the present industrial population. The houses of the depressed classes would require about Rs. 500, and it would be sufficient for the present to allot Rs. 100 crores for their quarters. Rs. 160 crores may be allotted for the model houses of other classes of population of the city excluding industrial workers and depressed classes.

The model house of a cultivator would cost approximately Rs. 500. It will be a "Kacha" house but will have "Pukka" walls 11 ft. above the ground level and brick floors so that the floors may be washed and kept clean. The remaining portions of the walls will be made of "Gonda" (well pressed earth). These houses will be tiled and as such will not catch fire which is the constant worry of the cultivator. It is proposed to construct 50 lakhs of model houses which can be bought by the cultivators on "Taqavi" basis, free of interest or on a nominal rate of interest.

With a view to encourage savings for the construction of houses for the rural population, it is proposed that the Government may start immediately a "Savings Scheme for the housing of rural population" on a nation-wide scale, and declare that a free site for model houses will be given immediately to all those who save Rs. 500 within the next few years, and that the Government will pay 4 percent interest on such accumulations. In order to give the scheme an impetus, it is proposed that out of 4 per cent interest, 1 per cent may be given on annual accumulations for the purpose to the "Mukhya" or "Pardhan" and 1 per cent to the "Patwaris" of the village, through whose efforts the cultivator is to respond to the

Housing Scheme. It may also be made clear that the accumulations for the construction of model houses will be returned to the cultivator with interest soon after the war is over. This scheme will serve a two-fold purpose. In the first instance it will supress inflation, and help the War-effort. In the second instance it will stop the cultivator from wasting his money on buying all sorts of alloys in the name of silver and gold. The Indian cultivator can only understand direct advantage to himself. He cannot understand at present collective advantage to the community. As such, the 'Post-war Rural Reconstruction Fund' or 'Cultivators' Post-war Welfare Fund' can have no meaning and cannot inspire sufficient of confidence in the cultivators' mind.

It may be made clear that the models suggested are given only by way of illustration. These can be changed to suit the convenience of the occupant or climatic conditions in a particular locality.

The financial results may be summarized as follows:—

Houses for industrial workers	Rs. 240 crores.
Houses for depressed classes	
·Houses for other class of the	· · · · · · · · · · · · · · · · · · ·
urban population	Rs. 160 crores.
Houses for model villages	Rs. 250 crores.

Total Rs. 750 crores.

CHAPTER VII

COMMUNICATIONS

The social and economic and to some extent even political awakening of a community depends a good deal upon the means of transport of the country. If we compare transport statistics of India with other advanced countries, we will find that India is very backward indeed. The total road mileage in British India and Indian States is approximately 31 lakhs whereas compared to 4,20,000 miles in Canada, and 3 million miles in the U.S.A. The Railway mileage in India is 42,700 as compared to 43,000 in Canada and 2,62,000 in the U.S.A. The total gross tonnage of merchant vessels in India is 2,71,000, as against a comparable figure of 14,63,000 for Canada, 35,56,000 for France, 1,34,42,000 for U.S.A. and 1,96,72,000 for the United Kingdom. India is still more backward of advanced countries in Civil aviation. If aviation may be compared on the basis of passenger miles flown the figure for India is 1,44,000 as against 40,00,000 for Canada, 58,00,000 for France and 16 lakhs for the U. K. The number of post offices and telephone connections is still smaller in India than in any other advanced country.

The economic and social development visualized in the plan will naturally lead to an enormous increase in the circulation of goods in every corner of the country. Hence, the necessity for developing the means of communication in India.

The total length of existing roads in British India is 2,85,000 out of which 83,600 miles is metalled and 2, 01,400 miles is unmetalled.

It is difficult indeed to even roughly estimate the total mileage of roads

in Indian states but basing our calculations on meagre statistics available for a few Indian states, it would not be very wrong to presume the total mileage in Indian States of metalled roads as approximately 20,000 miles and unmetalled roads round about 50,000 miles. Since the idea is to open the country as much as possible it is proposed to nearly double the existing road mileage. The estimates are given below:—

Roads	British India (crores of Rupees)	Indian States (crores of Rupees)
Central & Provincial		
Roads (32 ft. wide)	138	32
District Roads (12 ft. wide)	138	32
Village Roads (crete ways 2' plus	2') 69	16
Total	345	80
Improvement of the		
existing Roads	80	· 20 .
	425	100

Grand total for India 525 Crores.

It is proposed to construct, so far as possible, all these roads with cement-concrete. Asphalt will only be used wherever it is extremely essential. Although it would cost about three times as much as on the construction of "Kanker" or Damar Road, yet the cement-concrete road would be 5 to 6 times more

durable than the "Kank r" or Damer Road. Besides, the repair charges on the cement-concrete road will be practically negligible.

We have not suggested the construction of "Kacha" roads any more as it would be both expensive and difficult to maintain. However, "Pakka" culverts and bridges may be constructed at "Kacha" roads wherever necessary.

The total length of the existing Railway line in India consists of 42,000 miles. It is proposed to increase the present mileage by 25 Railways. per cent and invest Rs. 200 crores more on the Railways. While opening the new Railway lines, we should bear in mind the following points.

- 1. That the lines which are vitally important for the national defence should be taken in hand first.
- 2. That the relative importance of trade and traffic and distribution of food-stuff in times of scarcity be kept in mind.
- 3. That the Railways are not meant to be competitive but complimentary to the Road traffic.
- 4. That parallel roads and railways may be avoided unless essential from military considerations.

The existing tonnage of Indian owned vessels is approximately 2,72,000 which is very meagre indeed,

when we take the large coast line of
Shipping India and her scanty Naval Defences
Transport into consideration. It is, therefore,
recommended that the present tonnage
be trebled within the next 10 years at a capital cost

of Rs. 100 crores, and harbours and shipping conditions be improved and that the Indian personnel specially in the higher services of the Navy be increased with great speed.

Civil aviation is likely to take an important role in the post-war development of India because of (1) enjoying a central geographical position in the world (2) meteorological Civil aviation conditions being fine for about eight months in a year, and (3) the large commercial centres being situated at considerable distances from one another and the quick transport enabling to accomplish saving of valuable time. Air transport cannot pay for itself for some time to come. It is, therefore, essential that the Government should encourage local enterprise by paying subsides or by giving main contracts on easy terms so that the Air transport may become self supporting. The Government will also have to undertake the necessary equipment of all landing grounds in India and provide wireless and meteorological facilities as well air crew and all categories of technical personnel required for the training of the Government aerodromes and radio services; the establishment of a few schools at suitable places will be necessary and several workshops for the repairs of the aircraft will be necessary.

Details of special routes for the international air services. All-India trunk air services and local air services will have to be worked out by an expert body. The possibilities of establishing an aircraft industry in India may be explored but according to some Government experts the number of aircraft required by India would be so small even after the

War that private aircraft manufacture enterprise could not function economically. When a small country like Australia with a population of six million people can successfully develop the manufacture of every type of aircraft, it is to be considered why India with a population of 390 million should not be able to establish an aircraft industry in India. The successful establishment of the Hindustan Aircraft company, though taken over by the Government on account of military reasons, affords us a good example for the future prospect of the industry

The total expenditure on account of transport and communication will, therefore be as under:—

	Capital expenditure
	(in crores of rupees)
Railways	200
Roads (new construction)	425
Improvement of the existing roads	100
Shipping	100
Ports	25
Inland navigation	25
Posts, Telegraph etc.	40
Civil Aviation	10
Grand 1	Total 925

CHAPTER VIII

UNEMPLOYMENT & SOCIAL INSURANCE

The trend of the post-war economic and social reconstruction seems to be towards quick socialisation of different institutions affecting human lie. The policy as enunciated by the Allied Nations in the Atlantic Charter aims at the same goal. Freedom from want is one of the big four issues which the Atlantic Charter purports to tackle. **Various** schemes for Social Insurance have been suggested by different Governments representing the allied nations. The Beveridge plan is one of them. The Beveridge Plan, in a nutshell, aims at unemployment insurance and against disability, old age, widowhood maternity. It also provides for medical treatment and post-medical rehabilitation. All these insurances are based on the contributory principle, and are meant for ensuring social security for all classes and for people of all ages. The plan for Social Insurance is unlimited in time and does not require a means test at any time. It proposes a flat rate of subsistence benefit as well as a flat rate of contribution for It keeps room for further voluntary It does not prevent a person from providing for other facilities, besides the subsistence benefit. It also aims at the unification of the administrative responsibility. The Beveridge Plan can be appreciated on the following grounds:-

(1) That it tries to solve the problem of economic insecurity in a simple manner through democratic

and capitalistic principles, wi hout adopting revolutionary methods of replacing the capitalistic system by Communism or Socialism.

- (2) That like communism or socialism it does not aim at equal distribution of national wealth and income but provides for the subsistence allowance for all and leave sufficient scope for individual initiative and development.
- (3) That it is much simpler from the administrative stand-point than the application of principles as enunciated under communism or socialism.

The following are some of the main criticisms which can be levelled against the Beveridge Plan:—

- (1) That it provides for social security for unlimited time and without the means test at any specified time. The non-limitation of the time without a means test will be a great liability upon the State, and it is not certain that the future national income, which cannot be properly estimated at this juncture, will be sufficient to provide for it adequately. Besides, the war finance cannot be compared with a normal budget during peace time.
- (2) That by providing for a flat rate of subsistence benefit it does not take into consideration varied and different needs of different social classes. Even the rate of subsistence allowance cannot be taken as uniform, as rents of different localities differ from each other appreciably.
- (3) That by providing a flat rate of contribution it does not take into consideration the minimum rate of contribution or maintenance by different classes of people. Besides the weekly rate of 4 sh. 3 d. per

week seems to be a high figure for the wage earners getting £ 2/- a week. The rate of contribution seems to be too high for the employers. It is feared that the increased rate of wages may effect relative cost of articles of production and export prices and these factors might make the competitive strength of the United Kingdom weaker than those countries, which are comparatively as efficient as the United Kingdom but do not provide for these extra compulsory contributions.

The application of the Beveridge Social Insurance Plan to India as a whole is not possible or practicable for a long time to come. As India not only suffers from want but also suffers from ignorance, undesirable social habits, lack of organization, disease and idleness on a large scale, it would be a Herculean task to solve even one of these problems in a satisfactory manner. Besides, unemployment insurance in the United Kingdom is a national matter, and sickness insurance is usually effected through friendly. societies, some of which are affiliated to insurance In India unemployment insurance is not a national matter, nor are there insurance companies or friendly societies in existence in India. Moreover, available in India for the there are no statistics recording of unemployment and sickness, from which an insurance company or friendly society could assess For these reasons it will not be possible to form social insurance companies or friendly societies for some time to come. We have, therefore, to examine if we can take up preliminaries of Social Insurance first in order to eventually apply the principles of Social Insurance to India.

Before we take up even the question of preliminaries of Social Insurance, we have to visualise what classes of people are likely to be effected from unemployment after the War, and what would be the estimated duration of adjustment of labour from one vocation or trade to another. After the war is over, it is evident that a large number of army will be suddenly disbanded which will throw a considerable demobilized army out of employment until they are absorbed in other trades. This assimilation will not take place all of a sudden. It will take some time and entail much hardship.

The labour exchanges whenever properly established will try to reduce the period of demand and supply of labour. Still there would be more unskilled and technically skilled people available than can be absorbed quickly. The unskilled labour can be eventually absorbed in agriculture on the cultivable waste, if modern methods of cultivation are introduced and the Government are prepared to give reasonable facilities. It could be absorbed in cottage industries or factories if the Government besides giving them other necessary facilities also take upon them scientific protection for a limited period of time. There is likely to be a better demand in the beginning for unskilled labour in India, as a number of reads and buildings which could not be constructed during war time, because of scarcity of materials, and transport and heavy cost of materials, will be taken in hand by Central and Provincial Governments, as well as by Indian States and private individuals. It is, therefore, reasonable to conclude that the absorption of unskilled labour will not be very hard and should not

take a long time in the beginning. But the technical labour which is now so much absorbed in the army and war factories will not be so easily absorbed in either Government jobs or peace time industries. is, therefore, essential that we should try to find some solution for unemployment of the technical labour during the post-war period. As suggested earlier, if the Government take up a bold policy of intensive cultivation through modern methods, a larger number of the technical skill can be absorbed in technical jobs connected with farming and farm engineering. the same way if a bold action is taken in pursuing a policy of industrialization (with scientific protection) there would not be much trouble over a long period in absorbing technical labour in new enterprizes. Still the absorption of technical labour over a number of years will take a proper thinking and planning in advance in order to avoid hardship. But if bold action is not taken in regard to both intensive farming and industrialisation, it is to be feared that the hardship and privation suffered by the technical labour will become intense in effect and long in duration

In both cases it is necessary that we should try to do something better for the technical labour, than for the unskilled labour which is likely to suffer more during the post-war period. However, we have not to ignore unskilled labour altogether.

The following are some of the practical suggestions which we give in order to cope with the unempleyment and other problems connected with labour in India.

- 1. That it is not proposed to insure Government servants against unemployment, as they are already governed by Government servants, Conduct and Appeal Rules and will retire on proportionate pension. Moreover, the number of the unemployed Government servants will be very meagre and it can therefore be omitted from serious consideration for the time being.
- That a minimum living wage may be fixed by the Government in organised industries and later on in unorganised industries. The minimum living wage should include subsistence allowance for self, wife, and three children, as well as house rent. primary education for children as well as minimum amenities of life necessary for the particular trade or class to which the worker belongs should be provided by the Government. Un-organised industries pay notoriously low wages, and the conditions of work are most unhealthy and undesirable than in the cases of organised industries. It is, therefore, necessary that the definition of organised industries may be so amended as to include 10 or more workers in a concern worked or not worked by power. The definition of organised and unorganised industries may be more quickly changed than at present so that labour conditions may be uniform throughout the country.
 - 3. Labour Exchange should be established atonce which should run uptodate information Bureaus for the benefit of both employers and employees. The information Bureaus should also publish cost of living indices whole-sale and retail price indices and should make enquiries regarding family budgets

concerning standard of life of different classes of people.

- 4. Sickness leave with full pay subject to a maximum of 15 days in a year and with half pay for a maximum of 15 days with free medical treatment in the factory Hospital. It will be necessary to keep an adequate number of beds in the fictory hospital. There are two methods for ensuring sickness benefits: (a) through sickness insurance on contributory principle. (b) through sick leave with full and half wages with free medical treatment. It would not be possible and practicable to adopt the first method in India where rates of wages as well as efficiency are low and where statistical data regarding rate and duration of sickness are not available. We will. therefore, recommend the latter method in preference of the first.
- 5. Every new factory or an old factory whose financial position is ound should provide housing accommodation for workers at a reasonable rent. If necessary the Government may advance capital for housing factory labour at low rates of interest say at 3 % per annum. The factory plan must be approved of by the Government in the health department.
- 6. Unemployment Insurance in toto is not possible and practicable in India for a long time to come as previously stated. We do not therefore suggest contributory or any other kind of Un-employment Insurance. We will however, suggest an introduction of G. P. (General Provident) Fund Rules based on contributory principle which should be compulsorily enforced for all workers employed more or less on a permanent footing. The minimum rate

of G. P. Fund, which should be enforced on all unskilled labour, may be 1/16th of the wages (i. e. one anna in the Rupee) paid by the employee and 1/16th paid by the employer with a reasonable rate of interest on G. P. Fund accumulations. With a view to being better equipped with a saving for the rainy day after the war, it is suggested that the minimum rate of G. P. Fund contribution in case of technical labour should be 1/12th of the wages or salary paid by the employee and 1/12th paid by the employer. In case of factory labour it is also suggested that after the War is over and if and when unemployment may occur, the G. P. Fund accumulations together with interest may not be handed over to the fund contributor concerned, but should be disbursed by the Labour Department of the Government according to the rate of subsistence. This will cover atleast the maximum period of transition till employment is available, but this would also mean the maximum relief under the circumstances which of course fall short of the Unemployment Insurance for unlimited In order to inculcate habits of self-respect, in ease unemployment occurs, the G. P. Fund accumulations of the factory worker will be utilised first-After these have been exhausted, resort will be made to the utilisation of funds from the Social Insurance Fund for which Rs. 150 crores have been provided and which would mean the maximum relief to the maximum number of people. The Social Insurance Fund is meant to cover all cases of unemployment, but strict control will be kept so that only deserving cases may get a help and that too for a period while such a help is essential. A worker in all cases will be

subject to a means test after every six months after his unemployment and this means test will take place every six months till he remains out of employment. If his unemployment is due to changes in method of production or on account of grounds of technical efficiency, he will have to undergo a suitable course of training which will be supplied free of charge by the Government.

Along with Social insurance the following problems will have to be carefully looked into:—

- (1) Industrial Fatigue—A proper record in each trade will have to be maintained, and a suitable solution found.
- (2) Adjustment of wages to changes in the cost of living—an equitable method will have to be evolved.
- (3) Hours of work and conditions of employment—54 hours per week in winter and 48 hours per week in summer will be a good workable standard followed by paid weekly holidays and 12 days holidays with wages in a year.
- (4) Trade Unions—Trade Unions will be formed in organised industries.
- (5) Special Machinery for expeditious disposal of labour disputes will be set up in each trade.
- (6) Child labour—Child labour below 14 years of age will not be normally employed.
- (7) Efficiency wage—In order to increase efficiency of the Indian worker the system of efficiency wage will be introduced.

CHAPTER IX

.FINANCE

The plan will need financing. Money as a medium of exchange will continue to function as the sole measure of value will have to bow low. In simple language, money will have to serve all classes and interests, and not to dictate to peasants and workers.

The ten-years budget estimates of income and expenditure are given below:—

INCO	ME		EXPEND	TURE	
Head	First five years,	Second five years.	Head	First five years.	Second five years.
()	Rupees in	rores)	(H	tupees in	orores)
Savinge	1250	1250	Agriculture	475	475
Increased taxa- tion (by 25 to					
50 %)	800	800	Crop Insurance	25	25
Hoarded wealth	150	150	Durable goods industry	750	750
Sterling securities	500	500	Consumption goo	de	
			industry	500	500
Balance of Trade	250	250	Communications	465	460
Foreign borrowin	g 250	250	Public Health	200	200
			Housing	375	37 5
			Education	290	295
		1	Social Insurance	75	75
•			Miscellaneous	45	45
Total	3200	3200	Total	3200	3200

The main items of the budgetary income may be explained as under:—

Savings in the United Kingdoms are approximately 7% of the national income. As India is extremely poor and there is comparatively less margin left for surplus over ordinary expenditure it will not be wrong to presume savings at 5% of the national income.

Thus, the total savings during ten years can be estimated approximately at Rs. 2500 crores. This duly takes into consideration the increased income which will accrue from the gradual completion of the plan.

The percentage of total revenue to total income in British India is 12, while a similar percentage in case of United States, Canada, Japan, France and the United Kingdom are 10, 16, 17, 18 and 35 respectively. We can without much difficulty increase taxation in India by 25 to 50 %. The increased taxation will be made in the form of Income-tax at progressive rates, Death duties and excess profit taxes on big business which will fall on those who can afford to pay. will not touch an average man and will, therefore, be not unpopular. It is more just and correct to levy a direct tax on those who can easily afford to pay, rather than charge tax indirectly from the poor classes either by increasing rates of excise or tariff, or by easy means of inflation or 'created money'. The creation of money through inflation is full of abuses. Once inflation starts, it keeps to no bounds, and the question of control of prices of different commodities by themselves and in relation to other classes and groups of commodities becomes almost impossible.

experience of inflation of Post-War Europe is a clear proof of it and the fresh experience of the control of prices in India itself affords evidence in the same · direction. Besides there is always a gulf between the purchasing power and the volume of commodities available. As there is always a time-lag between wages and prices level of manufactured articles, it becomes impossible to bridge this gulf. The rigorous control of prices will in fact greatly affect the individual freedom and will not allow the law of demand and supply to operate freely which will be greatly resented by the people who have already got fed up with the control of prices during the duration of the present War. It has also been observed that, once artificial conditions are created in one direction, a vicious circle soon sets up and creates all sorts of difficulties, some of which become impossible to surmount for some time to come. It may not be forgotten that not only does the inflation affect some of the classes there are limits to which the policy can be pursued. Inflation helps the industrial classes, because of the time-lag between the prices level of manufactured goods and wages paid. It also helps contractors for the same reasons. It is also advantageous to the borrowers as they have to pay the same amount of money as they have borrowed, but this money is cheaper than the money actually borrowed in terms of its purchasing power. Inflation is for the same reasons detrimental to those classes of people who get fixed salaries or fixed remuneration and also for the creditors. The policy of inflation can be persued only in War times when the life of a nation is at a stake and when every body is prepared to make any sacrifice for the sake of liberty and national honour,

but it can not be persued in peace times without incurring the risk of revolution as it affects the masses who simply get fed up with the every day increase in price level and are prepared to take desperate action at times. We have, therefore, suggested only methods of direct taxation which are more just and equitable, than indirect methods of taxation which are based on selfishness of the industrialists and capitalistic classes and which cannot be adopted without taking a long plunge in the dark. It may not be forgotten that the war and the policy of inflation have been responsible for redistribution of national wealth and income from the hands of fixed income and creditor classes to the hands of industrialists, contractors and debtors and it is necessary that so far as possible some sort of adjustments may take place again after the war is over rather than the same classes may grow richer and richer. It is always better from the social and ethical standpoint that there should be circulation of wealth from one class to another rather than wealth may be amassed and concentrated in the hands of a limited number or a particular class of people.

At the present time hoarded wealth is shy to come in the market. It can only come for investments when it has confidence in the Government which can be created by a substantial transfer of power by Britain in the hands of the representatives of the people both in the Provinces as well as at the Centre.

Our sterling securities in the Reserve Bank of India now amount to approximately Rs. 856 crores. they can be easily increased by Rs. 150 crores provided the War prolongs by an year or two and Britain goes

on placing orders in India at the rate hitherto followed.

Foreign borrowing has been reduced to a minimum and can be further reduced provided we get increased income from other sources as a result of revising our estimates at a later date. There is no harm in foreign borrowing as long as it is not accompanied by political influence and is entirely based on business considerations.

On the expenditure side, we have given the bigger half to productive projects, and the smaller half to social services and as such it can create confidence both within the country and outside. As such, there would not be any difficulty in raising loans within the country or in foreign countries. As to the question of exact nature of raising money it cannot be said with certainty what method will be preferred. This will depend upon the trend of world events as well as upon the political and economic trends in the country and on the position of money market at a particular time.

CHAPTER X

EXECUTION OF THE PLAN

The present plan aims at increasing the standard of living of the masses by increasing their efficiency and by redistribution of national income with a view to securing the maximum well-being of all concerned without encouraging socialism or communism through revolution and bloodshed. It tries to harmonise the conflicting interests of capital and labour. It may not be theoretically ideal and ambitious and it may not give exaggerated hopes and high aspirations which cannot be fulfilled but tries to do practical justice to all the parties and interests concerned. is in fact a producer's and consumer's plan alike, and not the plan of the capitalists and industrialists who concentrate all the time on production and want to face other problems as a corollary to production. They are not directly interested in increasing the standard of living of the people but only indirectly. They want to increase production and for the sake of increase demand for the goods they have produced for, they want to see the people better off. They do not care whether whole-some or un-whole-some desires of the people are on the increase. What they look forward is that the desires should increase so that they may consume more and more and the industrialists may produce more and more. In short they are less interested in "Production for use" than for "Production for profit".

The present plan is not a programme of mere economic development. It is a plan of social and economic

uplift and as such it envisages development of both social as well as economic conditions and contemplates a thorough co-operation between Government and people and between different sections and interests of the people themselves. It is self evident that no co-operation can be lasting for long if it is based on exploitation of the masses for the benefit of a special class or a limited number of people. Our programme on the other hand aims at giving a fair deal to all classes and kinds of people. It tries to strike a balance between capitalism and socialism, between employers and wage-earners, between a landlord and a tenant and between a ruler and a subject. makes an attempt to place before people the human values of things in a practical manner rather than aims at reaching a high ideal of mere theoretical importance.

It, therefore, contemplates sincerety at the heart of those who will be responsible for working out the details of the plan and its successful execution. It is no good entrusting the best plan to mercenary officers unless they in the heart of their hearts feel in terms of the welfare of the people. It is much better that the plan be not taken up rather than be placed in the hands of those who have no active sympathics with the cause. We already know about the fate of the best programme if entrusted for execution to those who do not see eye to eye with the originators of the plan. After a careful search of the heart of the people, we shall have to find out if they have got the requisite technical or other qualifications to watch and work out the piece of job which is entrusted to them. In the initial stages we shall have to find a lot

of difficulty in finding out people who possess the necessary initiative and drive. We shall have to take immense pains in finding out such men. The difficulties on the wayside should not deviate us from the right path.

After the selection of the right sort of people, we shall have to set up a Central Board of Control consisting of representatives from the Central Government and other interests. This board will work under the chairmanship of the Development Minister of the Government of India and who will be an elected member of the Assembly. This board will meet atleast twice in a year and lay down a broad outline of policy and will co-ordinate with all such constituted Provincial Boards of control. These boards would meet at frequent intervals and will be responsible for the detailed control of the Provincial Plans which will be prepared and submitted by the Provincial Boards for the approval of the Central Board of Control.

The Provincial Boards consisting of different interests and co-opted Experts will supervise and control the work of the provinces under the chairmanship of the Development Minister.

The Provincial Boards will be autonomous bodies as far as their jurisdiction, sphere and powers are concerned within their own area, but will be under the general guidance, supervision and co-ordination of the Central Board. In case of difference of opinion between the Central and Provincial Boards the matter will be referred to the Governor General of India, who will try to mediate between these two bodies.

There will be department-wise committees under the general supervision of the Central and Provincial Control Boards, which will set up small departmentwise sub-committees for the detailed execution of the plan concerning activities in the particular sphere of life. The head of the district in a particular department will have wide powers and discretion in passing orders. Of course, such a man is bound to be very trustworthy and of unusual qualities of head and heart.

The plan will have to be thoroughly reviewed after a year's working, and results compared in each district and in each province department-wise and as a whole.

After the completion of the first five years programme in each province the results will be compared. This will have a great educative value for the second stage of the plan.

As soon as the department-wise sub-committees have been established in the districts, the question of the training of the personnel required in that particular district will be taken up in right earnest and suitable courses will be drawn up for the training of the Technical personnel in a particular branch of knowledge. The minimum number required in a particular trade or vocation will be given against which the total number available will be incorporated. Alternative schemes of training will be put forward. There will be more emphasis attached to the practical training than to the training of a theoretical nature. The question of the aptitude of the trainee will be duly taken into consideration before he is selected for a particular piece of work.

Before the plan is worked out in all its details it would be necessary to take a thorough geological

survey of India—the nature of its soils and sub-soils, its mineral wealth, water power resources and other natural conditions and facilities. The future development of industries will be worked out on the basis of rationalization in a particular locality and in a particular province and not on shifting grounds e. g. iron and steel industries will be located near the coal and iron-ore mines and not at long distances from these mines. Similarly the glass industry will take its birth at a place which is close to the sand and soda ash producing area. A detailed Economic and Social Survey industry and district-wise will greatly help us in evolving a comprehensive programme of Social and Industrial Development.

The present plan aims at reconciling the conflicting interests of the producers and consumers alike. At the same time, it provides for raising the standard of living of the peasants and workers and makes adequate provision for Insurance against unemployment and reduces to a minimum elements of chances, fluctuations, trade cycles and depressions in agriculture and industry. It should, therefore, be more acceptable by the Government and the people than any other plan. However, the draft memorandum welcomes constructive criticisms from all quarters so that its defects may be removed.



Price Rupees Two & Eight Annas