COTTAGE INDUSTRIES COMMITTEE

GOVERNMENT OF TRAVANCORE-COCHIN

INTERIM REPORT

TRIVANDRUM:

T THE SUPERINTENDENT, GOVERNMENT PRESS.

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COTTAGE INDUSTRIES COMMITTEE

Appointed by the Government of Travancore-Cochin under Government Proceedings No. I. 6-3774/50/DD dated the 8th March, 1950.

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INTERIM REPORT.

Introductory-

The Cottage Industries Committee was constituted by Government under proceedings dated the 8th March 1950, with directions "to study the existing and potential cottage industries in the State and submit proposals for their efficient working."

We have assumed that the term cottage industry is 'to be taken as including all small-scale industries, whether worked in cottages or not. It was also understood that coir yarn and coir mattings would be excluded, as special arrangements have been made directly under the Minister in charge, for the rehabilitation of that industry.

The term 'cottage industry' has sometimes been defined as industry that employs no hired labour and uses no mechanical power. We have taken this term in a broader sense. As has been shown by Pandit Jewaharlal Nehru, Chairman of the National Planning Committee, the use of mechanical power below 10 B. H. P. is within the purview of cottage industry, and this is also the accepted view in other countries.

The Committee was also instructed by Government "to supply the necessary information to the Regional Cottage Industries Committee set up by the Government of India and co-operate with its working." In spite of our earnest efforts, we have not come to know of any Regional Cottage Industries Committee, nor has any such body sought our aid. We have informed Government about this and we are still waiting for light on this matter.

Although the Committee first met on the 30th March and preliminary discussions were made at subsequent meetings, it was not possible to take up the work actively till the middle of June, when the Secretary was appointed. Although it has not been possible to appoint even now the minimum staff required, work has been going on more actively during the last four months. Discussions on important questions referred to the Committee have been carried out, and certain recommendations to Government on questions calling for urgent action have also been made (Appendix A).

This Committee has to report on the formulation of policy on a subject, which although not highly controversial, calls for careful judgment on matters requiring some expert knowledge, and in order to arrive at safe conclusions, a great deal of facts and statistics are necessary. The Committee soon found that although this subject must have engaged the attention of Government for long, the available data regarding the existing and potential industries of the State are scrappy and altogether inadequate, and that no substantial progress in our work would be possible till the essential data are collected. We therefore decided to conduct a survey of cottage and other small-scale industries in the State. in as short a time as possible, so that the final report of the Committee may not be delayed. It was hoped that this survey would be completed in two months and that after analysing the data thus gathered from the Taluks, the drafting of the report could be taken up seriously, so that within 4 months after the survey, the final report might be presented.

The necessary sanctions for the survey having been obtained, thirty Investigators were appointed in the middle of August to work for two months in the 36 Taluks of the State with the help of Non-Official Committees formed in each Pakuthi (Revenue Village). The survey has proceeded according to schedule. It is hoped that the reports for the various Taluks will be received by the middle of November (See Appendix A).

The survey has been warmly welcomed by many construc--tive workers in the State and has also attracted some public attention. That there is keen public interest in the development of cottage industries and an expectation that something will be done, is clear. But at the same time, there is also a fear lurking in the minds of some that this Committee, like many such committees in the past, would come to nothing, that this is also an attempt on the part of the Government to shelve the problem rather than to solve it. From the very beginning it was this Committee's intention to falsify such misgivings. We have placed before Government from time to time recommenda. tions on questions calling for immediate action. Hardly anything, however, has so far been said about the question of basic policy on the subject Therefore, although there is nothing in our terms of reference requiring us to submit an interim report, it may be well that we place before Government some of our main conclusions, so that action in urgent matters may start without delay.

There are special reasons why we have tried to make this interim report as complete as possible, without going into details. Our recommendations on basic policy are definite. As will be clear from what follows, there is a great deal of urgency in tackling the serious problem of chronic unemployment and under-employment facing this part of the country. It may be unwise, even dangerous, to defer action in this matter. We trust that this point will be clearly realised and that Government will take early decisions. We also recommend the early publication of this report, as it may help to crystallize public opinion, on this vital matter.

Acknowledgments.

We take this opportunity to thank the many generous persons who have placed useful information before us. Our thanks are also due to the Board of Revenue, without whose help it would not have been possible to carry out our industrial survey so expeditiously, to the many Heads of Departments who have readily answered our queries, and the numerous non-officials who assisted our investigators in their work. We trust that such help will be continuing, so that the Committee may complete its work before long and place before Government useful plans, on a matter affecting not only the economic welfare of our people but the social stability and political security of the country as a whole.

Our chief economic problem.

1. Unemployment resulting from a rapid growth of population, unaccompanied by increase of production, is the fundamental cause of the economic ills of Travancore-Cochin.

This is perhaps obvious and needs no elaboration. Yet we fear that the magnitude of the problem and the degree of urgency attaching to its solution have not been fully realised. In no part of India is the pressure of population on the soil so serious as in Travancore-Cochin. While the density per square mile in 1941 for all India was 232 persons, Travancore had a density of 792 persons and Cochin 953 persons. Pherhaps the position would become clearer if it is put another way. While in the Union territory as a whole, an acre of occupied land has to support only about one person, an acre in Travancore-Cochin has to support a little over 3 persons. On our western sea-board. double this number has to be supported according to the 1941 census figures: statistics show that it is among the most thickly populated areas, not only in India, but throughout the world. The U.S. A. has only a density of 43 persons per square mile. and Australia 2 persons; even the highly industrialised U. K. and Belgium have only 507 and 725 persons per square mile. respectively. On the western coast-strip of this State, density in some areas is as high as 3000 persons per square mile. (e. g. Cranganore Taluq). Seven Taluqs of Travancore have a population above or just below 2000 persons per square mile. These are all telling facts, to those who know. Parts of rural lapan, it may be, are even more thickly populated. But those depend very much less on agriculture than Travancore-Cochin. Only those who are conversant with other lands can realise the magnitude of the responsibility this places on the Travancore-Cochin State, and on the centre as well.

Such a large increase in population has brought about unemployment and under-employment; sub-human conditions have also resulted from this. In the thickly populated parts of our western coast strip, where coconut is the chief crop and coir yarn work the important industry, there is a large rural proletariat living under miserable conditions, and large numbers of people are nearly always under-employed or fully unemployed for long periods. In areas depending mainly on a single paddy ercp, unemployment is common for many months, for over half the year in many tracts. Even where two crops of paddy are raised in a year, or where diversified cropping prevails, large numbers of workers are normally under-employed. The census

figures give no indication of the duration and intensity of employment. We hope to obtain a fairly correct picture when our industrial survey reports from Taluqs are before us. But even without such accurate figures, the trends are clear enough, and action need not be delayed bacause of lack of exact statistics with correct decimal points.

Not only is there unemployment; large numbers of people have become unemployable by long periods of idleness, and they hang on their more industrious relations for maintaining them. Wherever one goes in Travancore-Cochin, there are large numbers idling, some because there is no proper work and many others because they are disinclined to work. Such a state of things does not obtain in any civilized country. How the standard of living of these idle people can be raised is a tough problem indeed.

An equally grave indication of the heavy pressure on land is the serious foodgrain deficit of Travancore-Cochin. World War I, these States had to import rice only occasionally, and small quantities of cheap Burma rice were enough. But the deficit has increased so much in recent years that today Travancore-Cochin depends on outside sources for at least half its rice requirements. The growth of this deficit is not all due to increase of mouths to feed; it is also due to much larger quantities of rice being consumed by classes of people formerly depending more on dry grains like varagu and tubers like The increase in purchasing power since 1942 has much to do with this large increase in rice requirements in the State. Whatever may be the causes, the fact has to be recognised that foodgrain scarcity has become a permanent feature and that our growing population cannot be maintained on reasonable standards of living without a substantial change in our economy. Agriculture, on which falls the brunt of the burden today, cannot bear it any longer. Ignoring this fact has brought about not only agrarian troubles but also social unrest of a serious type culminating in tragic incidents like the one at Vaylar a few years ago,

Industrialisation, the proper solution.

2. However equitably the available land may be distributed, agriculture will not solve the above problem, whatever encouragement you may give it. Only by industrialization can profitable employment be given and living standards be raised.

Where land area is limited, man has to meet his requirements from such crops as give the heaviest yields in calories, or

has got to buy food from outside in exchange for his manufactured goods. In thickly populated countries like China and Java, where also the pressure on land is almost as heavy, relief has been obtained by the adoption of intensive forms of agriculture, by mixed farming and by 'raising heavy-yielding foodcrops (like tapicca) and profitable money crops which could be sold at a profit. Similarly, the heavy yielding potato has saved many a European country like Ireland from starvation, and large portions of the land in those countries are even today being devoted to such crops. But nowhere has this kind of landutilization been pushed to such extremes as in China, where a large population ekes out a tolerable existence by tilling small. patches of land. In Travancore-Cochin too, the adoption of a diet chiefly of tapioca, dried fish and green vegetables could greatly reduce our expensive rice requirements, and this has been demonstrated in Talugs like Vilavancode. have large quantities of both tapioca they. where and fish. It is also clear from the figures of acreage and production under rice and tapioca, that the latter is already meeting the greater part of the calory needs of the common people. It is tapioca that saved Travancore from starvation in World War II: By raising better varieties of tapioca, by making more of fish and pulses available, and by devising and popularising a suitable diet combining these, the rice needs of this area can be further reduced. But sentiment is against the use of tapioca, and so long as purchasing power is maintained the demand for rice will be kept up.

The question therefore is, how should our large rice deficit be met? By raising it locally, or by bringing it from other parts of India in exchange for other commodities produced here? No doubt, rice-yields from the land now under paddy can, and must, be increased, and fresh lands can be brought under paddy by reclaiming swamps or by irrigation works. But it would be uneconomical to push this policy to extremes, because rice is an expensive crop needing special weather conditions and liable to frequent failures; it may be much more profitable, beyond a point, to obtain our rice supplies from other parts of India (where the natural factors are more favourable for rice) in exchange for our manufactured goods, which we could produce more economically here. That this is possible will be clear from what follows. India is now a unified State, and our economy will have to be on the basis of a carefully planned territorial division of labour, taking into account the potentialities of each region. Neglect of this is likely to retard economic progress in thickly populated parts of the country like Travancore-Cochin.

Our chief case for industrialization, however, is that many of the goods now imported into India can be produced in Travancore-Cochin at competitive prices. Some of them can also be sold at great profit in export markets and will bring valuable foreign exchange, which is today a very important consideration. Such effort is urgently needed here, because (1) we have a numerous unemployed population, because (2) our craftsmen are capable of rare technical skill, and not least because (3) the urge for higher living standards is stronger here than in most other By the rapid increase of literacy here in recent parts of India. years and the consequent expansion of the reading habit, and also by the growing resort to cinemas, higher living standards, involving the use of a varied diet, tidy clothes and clean houseroom, have become familiar to all classes, and there will be widespread dissatisfaction, if they are not helped to attain these higher living standards in the near future. This involves on the one hand larger and steadier incomes, and on the other increased production of a variety of goods. These are of course two sides of the same problem, and have to be tackled simultaneously.

This, then, is the proper solution for the tough unemployment problem in Travancore-Cochin. The common man's urge cannot be met by an equal distribution of all land. What he wants is not drudgery, but agreeable and profitable employment, and only industry can supply this. In China, large populations have been eking out a bare existence, on minute plots of land. They have to eat snakes, mice and birds' nests in order to keep body and soul together: But our people will not tolerate such sub-human conditions of life. An equal distribution of all land can be, has been, used as political clap-trap. But it will satisfy no one; on the other hand, it will greatly discourage production and may bring about economic ruin. It is for bread that the common man asks: let us not give him stone.

To those who fear that this stress on industrialization may weaken our agriculture, it may be said that we have reached a stage in our economic development, at which further progress in agriculture depends largely on more rapid industrial development. With a faster advance in industry, there will be growing demand, not only for raw materials of high value, but for those foodstuffs (good vegetables, fruits, tubers, fish, eggs, poultry etc.) which more prosperous industrialized cottagers will need in large quantities. More of our land can then be devoted to these more profitable crops, and much higher incomes will be possible from our small holdings, as in Western countries. The

importance of rice, both in consumption and in cropping, may then fall, and this is a consummation devoutly to be wished for.

Our occupational pattern must change.

3. A large number of those now depending on agriculture must be given full-time industrial employment and much larger numbers must be absorbed in other non-agricultural occupations. Our occupational pattern will have to change.

In most States of India, the supply of the staple food is fairly adequate and the urge for higher standards of living is not, at any rate in rural areas, anything so powerful as in Travancore-Cochin. In those States, industrialization is perhaps required chiefly to supplement agriculture, as a subsidiary occupation to the small cultivators. But as shown above, the position is materially different in Travancore-Cochin, with its teeming millions, its heavy foodgrain deficits, and its popular urge for higher living standards. Especially in the coastal tracts, where there is a large proletariat, we have to supply profitable full-time industrial employment to a large population now eking out a bare subsistence by predatory agricultural work and unsteady and unprofitable industrial employment. means giving more profitable labour for enabling them to carry on industry at a higher technical level. Not only have nonagricultural people to be equipped to do industrial work, but our traditional artisan classes have to be re-equipped for more To raise the technical efficiency of the producefficient work. tive process should be therefore our first concern. Only then can national income and the individual incomes of the workers be large enough to enable them to raise living standards to reasonable levels; only then can the level of production become adequate for supplying the manifold needs of higher living standards.

A considerable change in the occupational pattern will also be necessary as a consequence. Agriculture, if it is made more efficient, will need much fewer numbers to turn out a much larger output, and this will be possible even without using large machines. In Australia, 7 per cent of the workers are able to produce all the foodstuffs and raw materials necessary for local consumption and export. Similarly, the present numbers pursuing industry in Travancore-Cochin can turn out much more and better goods, if technically superior methods are adopted.

The question may immediately arise—will this not lead to unemployment? The answer is: with every rise in the standards of living, a larger proportion of workers will be required for trade, transport, house-furnishing, repairing, public administration, education, fine arts and other services, which are generally brought under the term 'tertiary' occupations. As the wellknown economist, Colin Clark, has shown, while with the rise in efficiency fewer numbers will be required in primary and secondary occupations (agriculture and industry), the proportions in many of the tertiary occupations have to increase, because in their case individual needs (or tastes) have to be met. Thus in many parts of America (e. g., California), more than 60 per cent of the total numbers of workers are employed in tertiary occupations and. only about 15 and 25 per cent respectively in primary and sec-A similar shift has already come about in ondary occupations. Japan too, and the change has been rather rapid. While in 1873, as many as 78 per cent of the workers were employed in agriculture, the proportion fell to 42 per cent in 1940; on the other hand the proportions in industry rose from 3.6 per cent in 1873 to 29.2 per cent in 1940. This rise in industrial employment was partly due to Japan's resorting to small-scale industry.

Signs of a similar change in occupational pattern are already visible in the case of Travancore-Cochin, where the proportion of workers in agriculture was about 50 per cent in 1940 (as against 70 per cent in India), and the proportion in industries was about 20 per cent (as against 105 per cent in India). This trend must have strengthened in the decade just coming to a close, as the coming census may show. As in Japan, we must be able to employ larger proportions in industry, in spite of our adopting technically more efficient methods, because we have a large leeway to make up in the matter of industrial production. Nor can we expect such a large proportion of tertiary workers as in America, because we have no need to go into American excesses in the fineries of life.

Cottage Industry has become most efficient elsewhere.

4. Factory industries will not suit our nee is; we have to depend chiefly on small scale production as it can provide better employment without sacrificing efficiency.

In such a thickly populated country as India, industry has to be 'labour intensive' and not 'capital Intensive'. In other words, industry should provide for the employment of the maximum number of labourers without detriment to efficiency and without

raising production costs. That this is now possible has been amply demonstrated. Production has necessarily to be on the large-scale, in the case of certain basic industries requiring large capital equipment (c. g., minerals, chemicals, generation of hydroelectric power, etc.). But over a much wider field, in the manufacture of ordinary consumption goods, even in the processing for use of the basic products from factories (iron ore, aluminium ore etc.), production on the small scale can be economical, can even be more economical than in factories, specially if worked with electric power; it thus can absorb a very large number of workers on reasonable scales of remuneration, and not under conditions of sweating, as was formerly the case. Such industry has the additional social advantage that the labourers could live and work in their own homes in agreeable surroundings, that the serious problem of social unrest now worrying large-scale industry can be avoided thereby.

Decentralised industry has thus become possible, profitable and socially advantageous. Gandhian views on decentralised industry were novel, even revolutionary, when they were first propounded. But since then advances in production technique, coming into common use of electric power and its falling price. and the serious labour unrest among factory workers have given small-scale (even cottage) industry a great advantage, and it is significant that this has in recent years been admitted by such redoubtable captains of industry as Henry Ford in America and Sir Sri Ram in India. All this has been demonstrated in a large number of countries, not only in the West (e. g. Switzerland, Denmark and Ireland) but also in Asia (e. g., Japan). In these countries the bulk of industrial production is carried on in cottages equipped with the most efficient technique by independent workers who are able to earn reasonable incomes and maintain good standards of living. Even delicate work requiring high precision is being done in cottages in many countries, assembling or finishing alone being done in central factories. Thus in Switzerland, expensive watches requiring most delicate operations are made in cottages. Even in Japan, such articles as radios, cycles, cameras, binoculars and fountain pens are · made in homes, with provision for assembling and finishing in some cases. Thus cottage industry is no longer the making of crude pots and pans, of mats and baskets; it can rise to any level with a rise in the technical capacity of our people.

A change of great social possibilities is the migration of industry to rural areas, where a large population can live in spread out garden dwellings, in healthy surroundings not possible in any factory area. Agricultural work can also be done during

spare time in the little gardens attached. This comfortable outcome in privately owned industry has considerably unnerved the Soviets, who still have to deal with tens of millions of ill-paid wage-slaves living on starvation rations.

A not unimportant advantage of such decentralized industry is its comparative invulnerability to aerial bombing. Industrial co-operatives in China flourished in war time, but factory industries were wiped out by Japanese bombing. This cannot be a small advantage in these threatening times.

Cottage Industry can do likewise here.

5. The line of advance suited for Travancore-Cochin is unmistakably the same as that pursued by Denmark, . Switzerland and Japan.

As in those countries, we have large supplies of hydro electric power. Although the actual supply of electric power is still meagre, a large increase has been provided for, in the immediate future. Our potential supplies, from the Periyar source alone, are adequate to meet not only our own maximum needs but also the needs of all South India. In addition to this we have an abundance of labour power, which is now greatly going to waste, and a paucity of capital—conditions which make the use of electric power imperative. The advance of literacy among our working classes and their aptitude to technical training (disclosed during World War II) are also factors which may enable Travancore-Cochin to make a more rapid advance in industrialization than most other parts of India.

Our unique rural sociology is also suited to our moving in the same direction as Japan. We have no nucleated villages unlike the rest of India; the whole State from Shornur to Cape Comorin is one continuous town. Even the smallest houses have little garden patches attached to them; we have only to plant industry into them. Nor is complete divorce from agriculture necessary. The whole State will then be one continuous hive of industry, one spread-out garden city, all people having the amenities of civilized life and living peacefully together, as in the storied days of Mahabali.

Have we the rescurces?

6. The natural resources of this State are large, and of a highly varied character.

Our natural resources are of such magnitude as to provide profitable employment to our teeming millions and to maintain them in living standards not lower than those of similar workers anywhere in the world. These resources have not been assessed. not even properly explored. A quick survey of our resources is being carried out by the Committee, and the data will scon be before us. Even without waiting for these data, we are able to state that our natural resources are large and are much more abundant than those of most areas of India. Even taking this' wide world, there are few comparable areas with such a wealth of resources. True, we have no iron ore nor coal to speak of. But we have rare minerals like ilminite, zircon and thoriumbearing monazite, and many others of great industrial value. Many countries have become highly industrialised without an ounce of iron ore, or coal. Like some of these countries. we have an adequacy of white coal, as shown above, and this is more economical for most industrial purposes than black coal, on which Britain's industry is built. We have no mineral oils. but we have some substitutes in their place. It is also true, our supplies of cotton here are meagre; but there are other valuable fibres (like kaiwen) which can be substituted for cotton; we have also resources for manufacturing artificial silk, which is an effective substitute for cotton over a wide field.

The palm tree has long been the core of Kerala's industrial structure—cocoanut-palm in the coastal tracts and even midland hill-sides, and the palmyra in the southern areas. This traditional 'Kalpavriksha' has supplied not only nutritious food like sweet toddy (the neera strongly recommended by Gandhiji) and palm jaggery, but valuable industrial raw material for oil and soap, coir and coir-mattings, and cordage of many kinds. Its leaves are used for important industries employing many people; with its shell can be made buttons, even ornamental watch straps. Its wood too has many uses. The arecanut palm yields the supari so much valued by pan-users all over India and the dessication and perfuming of the tender arecanut can be a profitable little industry.

But our natural wealth is much more varied than that of many lands where palms thrive. We have in our fields and forests, in our ravines and backwaters, on our hills and dales and on the long and sandy coastal areas, a variety of raw material of which any country can be proud—valuable wood like teak, ebony and rosewood, a variety of edible grains, roots, fruits and berries, many fibres, screwpine suitable for ornamental work, valuable spices like pepper, ginger and cardamoms which can serve as dainty food and potent medicine and which have been prized all the world over for ages, canes and reeds

not seen elsewhere, bamboo, eetta and many grasses like cora suitable for utility goods and ornamental ware, and not least, articles of such exquisite beauty as ivory and sandalwood. The great bulk of India's rubber is the produce of this State, and rubber is a basic industry of the highest importance, whether in peace or war. We have also a rare variety of lemon grass suitable for an essential oil of great value, medicinal herbs not found elsewhere and a variety of other goods which can give rise to valuable chemical industries.

Thus our natural resources are ample for supplying all that is required under food, clothing and shelter for as high a living standard as we might like, with adornments and fineries which are not possible in most parts of India. It may be, ours is a deficit area in regard to foodgrains. But we have an abundance of other foodstuffs like bananas, pineapples, jack; we have also large quantities of high-yielding tubers like tapioca, arrowroot, yams of many kinds, all of which if properly processed and preserved, can reduce considerably our rice requirements, and add to the food variety badly needed in most parts of India. In fact fruits, berries and roots, now wasted during a short season, can supply us valuable supplementary food all the year round and the rest can contribute substantially to evolve a balanced diet for our fellow-countrymen in the Union. ing to an expert American, our vast supply of arrow-root alone, if processed suitably, may be adequate to secure for us much of the other food stuffs, which we lack. Not least of all is our vast marine wealth; our State is rich in prawns, sardines. mullets, crabs, and other varieties of marketable fish, which can not only help to balance the heavily starchy food of this country. but can also supply raw materials for many profitable industries and trades. Travancore has 20 per cent. of the shank fisheries of the world. Nor is it commonly known that our fish yield per unit length of coast line exceeds that of any other country on earth-although our fisher folk are steeped in poverty.

We have not only vast natural resources; we have also splendid human resources. Not only is our labour power large; there are also highly skilled blacksmiths, carpenters and other artisans, who can hold their own against such artisans anywhere in India; if only they can be given improved tools and be made to use them, they will have no equals in all India. Some of our blacksmiths have found lucrative employment in Bombay factories and they are doing highly skilled work there

Those working at home also have shown signs of great natural skill. The cutlery made by the Kattuvalli blacksmith is said to compare favourably with the best Sheffield work.

Resources not properly utilised.

7. These natural resources have not been properly utilised, owing to the low state of our industrial technique; our moral defects are also largely responsible for this. The result is persisting unemployment and grave social unrest.

It is clear from the above that our natural resources, both human and material, are more than adequate to give profitable employment to our teeming millions and to give all our people the material requisites for a fairly high standard of living. This State can also become the store-house for all India for the supply of many foodstuffs and other goods now imported with our scanty dollar resources. Our producing such goods here can help to balance not only the family budgets of our people but also the annual budgets of our Central Government But how far have our vast resources been utilised? The answer is that most of them lie unutilised or ill used, even wastefully used. And our people remain poor, unemployed, and underemployed, living a bare marginal existence.

The Resolution adopted by the Congress Planning Conference in May, 1950, depicts the state of cottage industries in India thus: "The cottage and small-scale industries, by and large, present a spectacle of low technical efficiency, antiquated methods of work and organisation, extreme exploitation by sowcars and unsatisfactory conditions of life and labour". While this is true in a general way of cottage industries in Travancore-Cochin, this is in some ways less true of this State than of many other parts of India. While low technical efficiency because of sticking to antiquated methods is true of our artisans, and other handicraftsmen too, exploitation by sowcars is not so common here as elsewhere. Conditions of life and labour are indeed unsatisfactory among handicraftsmen, especially the traditional artisans pursuing antiquated methods, and others with not even the heartless sowcar to finance them. If even those who have modernized their technique have not succeeded, it is largely because of moral failings, because little care is bestowed on quality, design and pattern, and because no attempt has been made to organise systematic marketing.

Like the rest of India, Travancore and Cochin States have had their arts and crafts from time immemorial, and some of the former—Aranmula mirrors, rare ivory works and the delicate screwpine mats of Tazhava—have had great reputation outside. Our brass-smiths make excellent lamps and other brassware. But most of these have come under severe competition from the cheaper substitutes, either imported or made elsewhere in India.

About the middle of the nineteenth century, organised industry made its appearance in Travancore-Cochin, as elsewhere in India. Chief among them in Travancore was coir yarn and mattings, which came to employ large numbers in our densely populated areas. But the employment given by all this was, and still is, small. World War I disclosed to the British the importance of our natural resources. Probably under their inspiration, Dr. S. G. Barker was appointed to assess these resources. He carried out a brief survey and started experiments in certain fibres and foodstuffs. Lacking encouragement from Government, be left the country and his work has not been continued at World War II brought a fresh opportunity and under its impetus the exploration of our hydro-electric resourcesplanned by a far-sighted Travancorean Diwan-was expedited. With the help of cheap electric power, several basic industriesaluminium, glass, fertilisers, heavy chemicals, ceramics, plywood, cement, electricals, rayon-were started, during or soon after the war, and have brought into use some of our natural resources. But the momentum has since slowed down. Indeed these factories have added substantially to India's industrial potential: but their advantages to the people of the State can be exaggerated. In any case, the common man has benefited least by them. as the employment provided has been meagre, and necessarily In other countries such industries have led to vast development of cottage and other small-scale industries, and this is possible in Travancore-Cochin also, around the aluminium, rayon. ceramic, electrical and other factories. But by lack of a proper plan and a go-ahead developmental policy, this has not so far materialised.

Enterprising individuals have in recent years started various small-scale industries—wood-works, soap-making, inks, rubber goods, pineapple canning cane and bentwood furniture etc. Fashionable wooden toys, luxurious drawing room settees, dyed cora grass mats, cocoanut-shell, watch straps, plywood suit cases with designs, and embroidered screwpine mats that could adorn even a royal dining table have been made, and have found markets. Nor has the difficult field for metals been left out.

Skilled blacksmiths in many parts of the country have made excellent cutlery, some of them not inferior in quality or temper to the best that Sheffield could make. A variety of metal goods like cycle parts and accessories, iron-safes, water pumps, water taps, and steel trunks have been made. By using simple lathes, excellent screws and nails, hinges, bolts and nuts etc., are being made by blacksmiths in many parts of the country. A visit to Mather Stores at Chowara, or other similar stores elsewhere, would show how rapid the progress in this respect has been.

Indeed some of these enterprising persons reaped large profits during war-time by making such goods as above. But with the resumption of imports, the demand has diminished substantially. The real cause, however, was not the imports, but the unbusinesslike habits, and questionable methods of those engaged in these businesses. Lack of punctuality, even of basic honesty, and wanton lowering of quality are the chief causes of the failure of many clever artisans and handicraftsmen. But many of the 'gentle-folk' who have lately taken to industry and business, and who manage Joint Stock Companies and Co-operative Societies, have not shown materially higher standards of punctuality or even honesty. Goods of high quality were often made and these captured markets for a time, in other parts of India as well as here. But subsequent consignments did not stick to quality. Shoddy wares were sent and our industries lost their name as well as their markets. Not only this: cutthroat competition between these petty manufacturers caused the greatest harm to themselves as well for this part of the country. In economically advanced countries, there are certain unwritten laws and conventions which prevent businessmen from resorting to anti-social practices, and statutory control of quality has also . prevented some of these methods and has brought about proper standardisation. But here, there is no such convention or written law, and therefore the law of the jungle prevails and each one tries to get behind the other. So long as such low moral standards continue, there is no salvation for cottage industry or any industry for that matter.'.

Equally serious has been the consequences of not having proper marketing agencies. This has specially affected the poorer and more backward cottage producers. An example familiar to many is the basket makers of Alwaye. These poor pariah workers have been making excellent baskets with bamboo, neat little tiffin boxes and fruit carriers, which could be sold at high prices in cities like Bombay or Madras. But they have to hawk their wares on roads and at the railway station entrances,

and as sale is urgent owing to empty stomachs at home, they have to dispose of their valuable goods at very uneconomic prices. Living from hand to mouth, they have lost the incentive to produce good work. This has been going on for decades, perhaps longer; the result on the worker and the work has been most devastating. Discouragement by society has brought despair to the worker and his art has deteriorated, quite naturally. How could cottage industry advance under such miserable conditions? Is there any wonder if such neglect by a callous society has led to social discontent and worse consequences, all too well known?

Result: Unemployment, Economic discontent.

8. Acute unemployment among some classes, widespread under-employment and growing economic discontent have been the consequences of the retarded industrial development of the country.

While our population was small, such a state of things was. at any rate, not dangerous. But population in Travancore-Cochin has been increasing by leaps and bounds in the last 50 The population of Travancore-Cochin was only 38 lakhs in the year 1901. It was 74 lakhs in 1941 and it must be near 90 lakhs today. But it is density of population that matters. In the decade ending 1901, the density of population in Cochin was 549; it was 953 in the decade ending 1941. Similar increase in density has taken place in Travancore also. Intensive agriculture and rapid industrialisation should have been resorted to, in order to provide for the growing numbers; but little was done; perhaps the seriousness of the situation was not realised. The results have been disastrous. Unemployment in the densely populated coastal areas has greatly increased, and under-employment, prevalent especially in paddy growing areas. has not diminished. A large landless proletariat has arisen and under-nutrition and social discontent have been a pronounced feature. The condition of housing can be seen from the fact that more than 85 per cent. of the houses are without tiled roofs. Hardly anywhere in the civilized world can such overcrowding be found in rural areas. The result is the prevalance of tuber. culosis, malaria and other wasting diseases, and frequent outbreaks of cholera and typhoid.

The position has become most serious in those parts of Travancore (coastal areas), where large numbers depend on industrial employment. The coir industry which has been giving the largest employment has failed (as shown by the Employment Enquiry Committee 1948-49) to give steady and full time employment to large numbers depending on it and "is in the same predicament as agriculture". Similarly, fishing which is the full time occupation of numerous people on the coast, is unable to give employment to people below 20 or 22 years of age, and much labour-power is thus wasted. Fishing can give rise to certain cottage industries connected with processing of fish, manufacture of nets, etc. But as little has been done in this line, unemployment has been chronic among fishermen also.

Unemployment is most serious among women folk. When early marriage prevailed, this did not matter much. But with late marriages among all classes, large numbers of young women are idling away their time. In most other countries, notably in Japan, suitable employment is provided to such persons in industry in or near their homes. Large numbers of young women in this State attend secondary schools and colleges. Far from solving the problem, it has given rise to serious evils, not the least of them being the sorry waste of time—time which in other countries is made capital use of in the national interest.

Such chronic unemployment is bound to have serious reactions on social peace and economic security. During the first years of war, unemployment and distress became serious in coirmanufacturing areas, and communist influences fanned the flame of social discontent not only among men, but among women also and set in motion a tendency to violence and terrorism. The result was the Vayalar tragedy (1946). That the tendency to communism is persisting is clear from the outbreaks of violence in many parts of the country. For the time being, it has been allayed or it has gone under-ground; but it is foolish to believe that the situation has improved. So long as such unemployment infests a depressed people living under proletariat conditions, and gets support from disgruntled intellectuals, communism is bound to be endemic.

The responsibility of educated classes.

19. Who is responsible? Have the educated classes played their proper part?

After the Industrial Revolution in Western Europe, ingenious persons in every country made it their aim to exploit their natural resources by employing the new production technique, and thus arose a class of engineers, who gave the lead to

industrial efforts. This not only increased production, but enabled the ordinary man to obtain profitable work. But in this country, such conditions did not arise, have not arisen. It was for those who received education of the western pattern to But unfortunately, the educated man's take up this matter. first concern had been to escape from the countryside and obtain some paid job elsewhere in India, preferably under Government. "Safety-first" has been his motto. This tradition started in John Company's days when clerks and factors at lower levels were required. The Universities, which started later, also turned out clerks and factors at a slightly higher level. Schools and colleges were used as a means of getting secure Government employment and thus escaping from the toil and tedium of village life. Thus, little contribution has been made by educated men to the economic improvement of the country.

Nowhere in India has this tendency been so pronounced as in Travancore-Cochin whose people, intellectually alert, have from the first resorted to English education as a means of securing Government employment. The Nairs and Syrian Christians took the lead; others followed later. Batches of these educated men found employment either here or in the other growing cities of India, at a time when people in most parts of India were not intellectually awake. But times have changed; today: our graduates have to take humble jobs elsewhere; the better jobs are for local people, and quite naturally so. Yet our educated persons have not turned their attention to the economic possibilities nearer home and are still crowding into Arts Colleges, goaded by the urge for the Government job, however small its pay. And our leaders in society vie with each other for starting college after college for training the flower of our youth to work almost as coolies in other parts of India. This is really the most flourishing of all our industries today—the college industry. We consider this a highly misdirected effort capable of producing the most serious economic, social and even political consequences. What we want today are not so many Arts Colleges, not even Engineering Colleges, but polytechnics which will give such vocational and technical training as is required for the large class of foremen and even more skilled workmen, so much needed to do the actual work of industry. In many other countries, education was the cure of unemployment: here it has been the chief cause of unemployment. The position is highly paradoxical. Our educated have no employment; yet industrial development is held up owing to lack of technical personnel. Is not this an intolerable state of things? Lately, however, disillusionment has come to our educated classes owing to closing of the channels for employment elsewhere, and the result of this among certain sections is a tendency to communism. Some of these disillusioned educated persons have given furtive aid for the communist outbreak in recent years. Thus not only have educated classes not given leadership for productive effort; some of them have lately turned to destructive efforts. A change in this state of things is highly necessary for our very security, as well as for energising productive activity in the country.

Education can play a different part.

10. Education has played different role in advanced Western countries: it must be made to discharge similar functions in India.

We fear that the dangers inherent in our present educational situation have not been widely realized. It is necessary for us to deal with this subject more fully, as the introduction of a proper system of technical and vocational education is the cornerstone on which alone we can build efficient cottage industries. In Western countries which have prospered economically, the great majority of youths of every generation are given vocational training side by side with cultural subjects, so that they may enter agriculture, industry or commerce at an early age and make their best contribution to wealth production. It is this that has enabled those countries to maintain employment, production and national income at high levels, and to provide themselves amply with the requisites needed for a reasonable standard of living. Thus, a very large proportion of the primary school pupils enter one of these occupations at the early age of 14 or 15, some after a short training in a vocational school, attending such school in the afternoons. Although they start work so early, they got ample opportunities for further training even in cultural subjects; many of them not only rise to superior positions in industry and business, but may even take up public careers and rise to responsible political positions. Those who go through a full course at a polytechnic have doubtless better chances in industry and trade; but even the others can get similar chances by utilising other opportunities for training available in those countries through evening courses, summer schools, and in Denmark and elsewhere through the admirable People's Colleges which give adult workers an opportunity to equip themselves in industry, in business, even in public life, in a way Universities are not able to.

Those who proceed to the usual Secondary Schools, or as in England to Public Schools and then to Oxford or Cambridge, generally take up the liberal professions (law, medicine, engineering, etc.), and may enter the higher ranks of the civil services. But such places not being many, only a few go to the Universities for the cultural degree courses. Nor are the prizes held out by them more attractive than those in industry and business. In the result, the People's Colleges have beaten the Universities; but this has not affected liberal education in any material way.

Thus it is the men who start working early, who begin at the bottom, contribute most to the economic life of those countries and through People's Colleges they may even ascend to high political positions and are much better equipped for the same than our First Class graduates in Arts and Law. No wonder that in really democratic countries like Denmark, most leaders of industry, leading writers, even large numbers of the members of Parliament, are from the People's Colleges and not from the Universities. Similarly, several of the competent ministers of the present British Cabinet are men who left school at 14, learnt their politics and economics in 'continuation classes' and evening courses; no wonder they have the advantage over the Oxford and Cambridge graduate in a democracy, at its present stage.

In India, on the other hand, there is a mad rush to the ordinary Secondary Schools and to the Arts College. Some of them have to run two, even three shifts, like cotton mills. as deplored by Sardar Patel lately. Parents, even those with small means, encumber what little property they have to satisfy this glamour for degrees of their sons and daughters. This is going on in spite of the growing difficulties for obtaining posts and the consequent disillusionment. College after college is being opened to satisfy this abnormal craving, and capital badly wanted in industry and food-growing is flowing into this college business. Nowhere in India is the position so serious in this respect, as in Travancore-Cochin. So far as we know, nowhere in the world is such a serious mistake being made. The present number of the college students from this area may not be less than 20,000; in the colleges affiliated to the Travancore University alone, there are nearly 14,000 students. Even in the U.K. where University degrees are more valued than elsewhere in Europe, there may not be so many students pursuing purely . academic courses in the Universities, although the population of that country is about five times that of Travancore-Cochin.

The contrast in this respect between the more prosperous Western countries and India is worth emphasizing. Most men in those countries enter a job before they attain the age of 16; but in a country, where man remains poor in spite of large resources, can be witnessed the pathetic sight of numerous adults struggling for degrees, some in spite of repeated failures, and wasting time which they should have devoted to more congenial economic occupations adding to the wealth and income of the country. Their tenacity of purpose is indeed creditable, but should society tolerate such sorry waste of energies any longer?

How this mad rush for the academic courses has resulted in unemployment and social unrest has already been explained. But what is the employment these graduates are fit for? To speak (not to the common man, but among themselves!), to write lengthy notes and essays, to argue; but few of them are equipped for doing a thing, for any creative work (in the real sense). In other countries the prime preoccupation of the educated man has been the exploitation of the natural resources of the country, and the leadership thus given to agriculture and industry has been of great practical use. This has not been the case in India, even in Travancore, where more educated men than elsewhere have taken to agriculture and business enterprises.

This has affected even our public life rather adversely. In other lands, politicians know enough of agriculture and industry to be able to legislate for them intelligently and to administer such laws sensibly. Here our public men, even our civil servants, become the laughing stock of our rustics, even when they launch ameliorative measures for those poor rustics. Nowhere in the world as in India is there such a gulf between the educated man and the common people, and this is deplored in a most valuable chapter of the recent University Education Commission Report (drafted apparently by one hailing from a land where education is for living, not for talking).

We have thus misused not only our natural resources, but our human resources also. It has set in motion a vicious spiral; if we must break this spiral, we have to take drastic steps. First of all, we must set up institutions where our youths can be educated to engage themselves in wealth-creating occupations, and have to give them sufficient incentive to enter them. Steps may have also to be taken to positively discourage the rush for University courses. We have certainly to create an environment wherein technological training will be

properly utilized. Only if the trainees have proper avenues open to them, or at least facilities with which they could set up their own little farms or home industries, could technical and vocational education lead to proper results. Otherwise worse unemployment may be the consequence. This was why early efforts at introducing technical education (e. g., Dr. Barker's proposals) failed. Therefore, any new scheme of technical training must form part of a larger plan of fostering cottage and other industries. This is what we are aiming at.

In most Western countries, it was not Government, but the people themselves that carried out many of the measures mentioned above; Industrial schools, even polytechnics have been set up by private organisations and public spirited individuals. Generous bequests have also been forthcoming for this purpose. The lack of such public effort, even in a State like our which has reached record levels of literacy in India, makes it imperative that Government should take the initiative. This is what the State of Mysore has done, not only in industrialization, but also in technical training. Bombay Government have also taken the lead lately, in carrying out valuable experiments and demonstration for the energisation of cottage production. Nor is Madras far behind; technological education has made much progress there lately.

Forward move in Mysore and Bombay States.

11. The way out: the first steps taken in Mysore and Bombay.

The progress lately made in Mysore in the matter of technological education is highly commendable. The apex of the system is the Vocational Institute at Bangalore, founded in 1943, where more than 1000 young men (mostly S S. L. C's) are engaged in studying such subjects as welding technology, instrument mechanics, metal work, electrical technology, ceramics and refractories; printing, plumbing and sanitary fittings, radio technology, draughtsmanships. Courses in as many as 26 subjects are offered. Diploma courses are generally for 3 years; certificate courses are for 2 years and the special courses for artisans are for a year. Four more such institutions are being opened in other parts of Mysore. These institutes are training a remarkable set of foremen and skilled craftsmen, and they have found ready employment throughout India; many of them have also started their own little businesses.

Provision has been made in Mysore for technological education at the lower level i. e., pre-S. S. L. C. Bombay has also moved in this matter, by starting several Technological High Schools.

But it is not sufficient to train technical personnel. It is also necessary to prepare the ground for them in the villages enabling the villagers to participate in industrial advance. A scheme for this purpose is being put through in two Districts of Mysore under a comprehensive popular training scheme, drawn up by Sir M. Wisveswaraiya. In selected groups of villages, Village Group Development Committees of seven persons are being constituted (by election). To guide them in starting and conducting cottage industries, more than 200 young men are being trained at Dodaballipur, in a dozen cottage industries, which may easily be introduced in village homes.

In the work of experimentation for cottage industries; progress has been greatest in Bombay State, where two competent agencies, one non-official and the other official, are co-operating actively to evolve improved methods of production and to demonstrate them to the village population at their very doors. The Village Industries Committee, consisting solely of non-officials, was constituted in 1946 with very large powers and with ample funds, for experimentation on approved schemes and for demonstration of the results thereof. It was Government's intention to endow this body with the widest possible powers, as can be seen from the Government resolution appointing this body. It says:

"Government considers that the encouragement and intensification of cottage industries cannot be satisfactorily undertaken by a purely Government departmental agency as the Government Technical Departments concerned lack to a certain extent the direct contact with rural workers in cottage industries. has also been the experience of Government that purely non-official organisations doing this work, without Government assistance, find it extremely difficult to make any headway as, while those non-official workers have the intimate rural contact required, they are not able to readily secure the assistance and guidance of various technical agencies and find it difficult to co-ordinate the various aspects of cottage industries in the general programme. Government has, therefore, come to a decision that the most effective means of co-ordinating the work of developing and intensifying cottage industries is to entrust the execution of approved plans to a committee of non-official persons interested in the work".

Although called a Committee, it is exercising the full powers of a Board, even to the extent that the Chairman is authorised, when and if necessary, to make proposals for changes in the personnel of the Committee for the approval of the Government." The Board is entrusted with considerable financial responsibilities. Schemes costing about Rs. 50 lakes have passed through the Committee's hands, and for the current year it has a grant of Rs. 10 lakes. The Committee places annually its audited reports before Government.

This Committee is composed of 9 members, two from Gujerat, two from Maharashtra and three from Carnataka. It works through regional organisers, each of the regions just named having one organiser. The members from each region carry out the work of the Committee in their respective regions, with assistance, paid and honorary.

The Committee has been largely concerned with the Gandhian economic programme and its work has been chiefly in the promotion and rehabilitation of the traditional handicrafts of the areas, with such modification in technique as is possible. It has not only helped khadi greatly but has also made successful experiments in oil-pressing and hand-made paper. Paper-making by hand is an old craft still surviving in certain villages there. The Committee's experiments have, however, enabled it to set up an up-to-date paper-making plant at Poona, which makes bond, blotting and filter paper of high quality from rag pulp. Some of the processes are carried on by machines propelled by electric power. Although beginning as a cottage industry, it is noteworthy that paper making has become a full-fledged medium-scale industry, requiring a capital investment of about Rs. 20000. Its cottage counterpart is also receiving attention.

Side by side with these activities of the Village Industries Committees, the Government of Bombay carries out a great deal of experimenting and demonstration in fields not covered by the Committee. There is a Village Industries Experimental Workshop maintained at Poena, where a great deal of useful research on industrial processes is being carried out, with a view to raising cottage production processes to highest levels of efficiency. Attached to it is also a Laboratory for chemical research, which deals with such problems as utilisation of ground-nut milk. There is a staff of 15 experts engaged in this work, There is also a large staff for demonstration and for conducting training classes at selected centres.

Financial assistance to cottage industries in Bombay covers a wide ground. The schemes now under operation include:

- (i) grant of loans and subsidies to co-operative societies and bona-fide craftsman for purchase of tools and equipment;
- (ii) grant of loans and subsidies to backward class artisans for purchase of tools and equipment; and
- (iii) assistance to educated unemployed persons to start cottage industries or to set up any business pertaining to them.

The success of such efforts in Bombay in recent years must be attributed to the enthusiasm and farsightedness of the large number of constructive workers of Congress, who have been serving on the various Committees and working under them, and in particular to the wise lead given by Sri Valkunt L. Mehta. Minister for Industries, who (fortunately for cottage industries) is also the Minister for Finance.

'More rapid move urgent in Travancore-Cochin.

12. A. On many important grounds such preparation for industrialisation is much more urgent in this State.

Thus both Mysore and Bombay (perhaps other States too) have stolen a march over us. They have taken a leap forward. in regard to the improvement of production processes and demonstration thereof, and have also made provision for technological training in a fair more generous way than anywhere in India. The need for such action, the Committee is convinced, is much more urgent in Travancore-Cochin, seeing that (as shown above) the pressure of population is far more serious there than in either of these States (953 persons per square mile in Cochin and 792 persons in Travancore as against 230 and 249 persons per square mile in Bombay and Mysore respectively). More important than this, neither of these States has the kind of rural proletariat or chronic unemployment, which menaces social peace and economic security in many parts of this State; the threat of communist violence has been far more serious here than in Bombay or Mysore. Moreover, those are not food grain deficit areas as Travancore Cochin seriously is, and they need cottage industry chiefly to provide subsidiary employment to agricultural workers. a large proportion of whom have economic holdings and are therefore not seriously unemployed.

The position is fundamentally different here; we have to provide full-time work to a numerous and rapidly increasing landless proletariat, as also to give subsidiary employment to

large numbers of under-employed peasants possessing very uneconomic holdings. A further reason for urgently increasing industrial production in Travancore-Cochin is that owing to a steady rise in literacy and the reading habit, the urge for higher standards of lying is much stronger here, as shown above. Even in out-of-the-way rural areas and among backward classes, this urge is now very strong. There may be serious trouble, if action is not taken immediately to raise the income through fuller employment and supply goods that could be purchased with them.

It is also pertinent to note in this connection that while our area is deficit in rice, we have in Travancore-Cochin products not found elsewhere in India in such quantity (e. g. rubber, essential oils like lemon-grass oil, rare plastic raw material like cashew shell oil, a very large variety of wood, valuable reeds like eetta and bamboo, canes of excellant quality, fibres not found elsewhere, many fruits like bananas, pineapples, jack, and not least a large quantity of fish which, if properly processed, can be of great value for raising dietary standards in other parts of India as well as here). Nature has apparently endowed Kerala so liberally in order that in spite of food-grain deficiency she may sustain a large and virile population. By keeping our ample resources idle, we are not only neglecting opportunities for employing our idle people but also denying to the rest of India the use of articles which in quantity is much more than required here; so much so that if those are not so processed they will be wasted. Therefore industrial utilisation of such natural resources is not merely in the narrow interest of this State, but is in the larger interest of the country as a whole.

More than all this, the problem of educated unemployment is much more serious in Travancore-Cochin, where (in some areas and among some sections of people) the sons and daughters of nearly every family go to the University for degree courses; the problem of giving suitable non-agricultural employment to educated persons now idle is much more serious. While this is only a passing problem in most other parts of India (Bengal perhaps excepted), it is here a serious menace to security and peace. We fear that the seriousness of this situation has not been fully realised here, nor attracted adequate attention of the Centre. If it is thought by any one that the communist out. breaks of recent years are a mere sporadic phenomenon and that such violence can be suppressed by police action, however terrorstriking, he is making a tragic mistake. We are really living on the dangerous crater of an active volcano and it is well that we realise this in good time, and take suitable action while we may.

The new production pattern.

13. Some decisions on policy have to be made before any plans of energising cottage production can be successfully carried out. Industry must be technically efficient; and must cater to the common man's needs.

If the seriousness of the problems raised above is admitted, it will have also to be conceded that mere palliatives will not suffice. More radical treatment is essential. And certainly, action has to be quick and energetic. Therefore, early decisions will have to be taken. But before dealing with the measures to be carried out, it is necessary to clarify the background further, as we fear that indecision and vacillation have resulted from a lack of proper understanding of the problems facing us.

In the first place, is it agreed that the growing overpopulation and the pressure on the soil is to be relieved by industrialisation, chiefly on the small scale? If so, we must take action immediately to divert as many workers as possible from agriculture to industry. As shown above, changes in land policy, however clever, however drastic, cannot do much in this matter. But, the deliberations of the Land Policy Committee (as reported in the press) make us doubt if public attention is not being misdirected, if false hopes are not being given to many unemployed persons.

Production Technique.

If it is decided that employment is to be given to a much larger number of persons than now in industry, the next question to be decided is, what kind of industry? What should be the nature of the technique? Already large numbers of potters, brass-smiths, much larger numbers of coir makers, even handloom weavers, are unable to earn a proper living by pursuing their industry. There is no use of pushing more people into such industry, to make matters worse for those already pursuing it.

Only by improving the production technique of our cottage and other small-scale industries can the economic condition of those pursuing them be improved. Many of them pursue the crude methods which their ancestors pursued a thousand years ago. Since then much scientific progress has been made in other parts of the world, and methods of production have been made much more efficient, thus enabling the worker to earn

larger incomes. Only by adopting such methods can we give profitable employment even to our present number of cottage workers. Only then can larger numbers of persons be given proper employment in cottage industries. The Indian National Congress which lately met at Nasik has therefore given the right lead in this matter by insisting, in its economic Policy Resolution, that our small-scale industries should be "pursued on the basis of the highest possible technical efficiency".

This directive of the Congress is of particular validity in the conditions of Travancore-Cochin, as the urge for higher living standards here is more powerful than elsewhere, and as the average worker has the capacity to pick up technically superior work. A further reason is that wages here, even agricultural wages, are at high levels, at higher levels than elsewhere in India (a fact not known widely). Unless such people are enabled to earn at least as much income in cottage industry, they will not take it up. And there will be serious trouble, if they are not given steady work. Thus it is imperative that we should give them technically efficient industry.

If this above purpose is to be properly carried out, our immediate effort must be to give proper technological training, so that the use of improved tools (machine tools as well as hand tools) may become widely known, so that not only our traditional artisans but others with taste for industrial work may be trained in productive methods of the highest technical efficiency, as enjoined in the Congress Resolution. Side by side, we have also to make experiments on the utilisation of our natural resources for the most profitable lines of production. In this way, articles suited for the market can be supplied, at the lowest possible prices. Considerable attention will have to be given to design and pattern. In the case of some articles, grading and standardisation are also very important.

Art or utility wares?

When speaking of cottage industry, the first thing that comes to many people's minds is art work. No doubt, there is scope for such work, and splendid scope especially in some export markets, especially America, for articles of adornment, personal or house; but the articles must suit current tastes and must be saleable at competitive prices.

Formerly our handicraftsmen tried to cater to the tastes of the well-to-do classes, by making dazzling bell-metal mirrors, enchanting ivory works, splendid brass lamps and ornamental

umbrellas fit for noblemen to hold. Improvements in production technique have beaten out some of them; changes in tastes and habits have ruined others. Fall of large incomes by heavy taxation has weakened the chance of all such luxury trades. said above, there is still scope for the use of art, especially in utility articles, if the work is pursued with skill and honesty, and adjusted to suit the changing tastes here and abroad. Exquisitely made lace and embroidery from Mulgumood Convent are still finding ready markets abroad, even at highly fancy prices. It is believed that even in Belgium, wherefrom this industry came, such fine work is no longer being done! The delicately embroidered screwpine tea-cosies and dinner mats designed by Mrs. Ure at Trivandrum have also been much appreciated and have found ready purchasers. The same is true of our first-rate ivory work. But the demand for such work is bound to be limited, and rare skill is required in design and execution. Such work can still be profitable, if well done. But it is not for the ordinary cottager to take up. Indifferent imitations of such work by amateurs may do harm; has done harm to our art industry.

But there is going to be large enough business in kinds of goods needed by the common people. In Kerala, at any rate, there is a strong urge for raising living standards among all classes, especially among those who formerly lived below the margin. If this urge is to be satisfied as it has to be, the scope for cottage production will greatly increase. An infinite variety of goods will be needed by the common people under food, clothing and house requirements and adornment. Articles that suit current tastes will have to be made at popular prices. Even in the case of these, proper attention will have to be given to design and pattern.

Face Realities.

We have also to bear in mind that the whole of India is now an economic unit, without any trade barriers. Our handicraft products have to compete, not only with factory products from here or abroad, but also with similar handicraft products from other parts of India. Our handloom industry in particular has specially to take note of this. When formerly our women preferred the peculiar kasavu kavanis and nariathus which are our handloom specialities, our weavers had almost a non-competitive field. But today with the growing vogue of plain white saries and dhotis on the one hand, and, on the other, of coloured,

flowered and checked saries, a large part of the market necessarily goes to the mills, and another part goes to the hand-weavers of Madura and elsewhere in Madras State, who have long excelled in such work. Our handloom industry, which is still attracting new entrants, has to take careful stock of the changing times and adjust the production equipment accordingly, if it is to survive and to employ even its present numbers.

Not that we are against giving help to certain classes of cottage-workers to equip themselves for better production at Not only sections of handloom weavers but our lower cost. unfortunate potters and brass smiths, who have fallen on evil days, have to be given succour to establish themselves not necessarily for producing their traditional wares but something with in their capacity. In some areas, it may be best for certain groups of workers to switch on to altogether new lines of production. There is large scope for this, in a land much of whose industrial resources lie unexploited. Profitable lines of production can be devised in respect of new fibres like kaiwan, fruit preservation, cora mattings, wood and cane work etc. Decisions will have to be made in each case, and some of these decisions are urgent. But it may be better if a more permanent body like a Board makes those decisions and also carry them out, on each question according to its urgency.

We have touched above on a point which might in future cause more serious difficulties. There is already some competition between cottage industry products from different parts of India. What should be our attitude in this matter? Should we restrict such competition in some way? India is today a Union and such measures may set in motion centrifugal forces. A certain degree of regional self-sufficiency in respect of staple food and clothing may be desirable. In respect of other goods, it may be best to plan our cottage industries in different areas on a complementary basis, so that ultimately something like a territorial division of labour in lines of industrial production may evolve, as in the U.S. A. and other large countries. We trust that this important problem is engaging the attention of the National Planning Commission.

What about Khadi?

14. What is to be the place of Khadi in a System of technically efficient Cottage production.

It has been emphasised above that cottage industries must adopt efficient methods of production so that they may compete

successfully with factory products. 'The Economic Policy Resolution of the Nasik Congress insisting on this has been referred to above. Are we then to discard hand spinning and khadi, hand pounding of rice, etc? It is perhaps well that we dilate on this topic here, seeing that there are considerable misgivings among older constructive workers of Congress regarding the paucity of Government patronage for khadi. Hand spinning and khadi have been recommended chiefly as a means of making good use of the wasted time of our men and women, especially in rural areas. The central idea is that as much of the cloth needed for family use as possible must be made at home by the members of the family using up their wasteditime. This not only supplements the meagre income of the numerous families with low income but it is also financially profitable to the country, seeing that to the extent that part of the cloth needs are met by khadi, mill yarn and mill cloth can be sold abroad and thus valuable exchange secured for the import of urgently required food grains and machinery. Viewed in this way. there is nothing uneconomical about khadi. No economist can legitimately inveigh against this. Even in England, where time is so precious and employment so full, home-spun is a favourite for personal clothing, even in noble families. But khadi has also certain moral and physical advantages emphasised by Gandhiji, and therefore, even 'sacrificial' spinning can be justi-. fied. Similarly, handpounding of rice is recommended not only because it gives employment to a large number of women who. have very little other employment and hardly any income of their own, but also because handpounded rice has greater food value than milled rice, as it retains some of the salts and vitamins which are generally worn away in the milling process, and because handpounding is a healthy physical exertion for women, which does away with many ills to which especially women of well-to do families are subject. Wasted time can also be used for making other articles in common use and most appropriately in raising kitchen vegetables. Such work too has great noral advantages. Therefore on moral as well as economic grounds. not only khadi and handpounding of rice, but other home production, deserve to be fostered. We go further: in our present condition, such home production deserves the utmost help from Government.

But we cannot have complete self-sufficiency even in a family which practises such home work. We have a money economy, not barter, to count with. Most of us desire a fairly good living standard, involving the use of a variety of foodstuffs, clothing and house requisites and various objects of adornment

and recreation. These have to be purchased in exchange for goods we produce; for such purpose, neither khadi nor handpounded rice will be of much avail. While making as much as possible for our own personal needs, we have to produce for the market goods of the proper quality at competitive prices, so that our goods may be in demand. For this, we have to carry on our production on the basis of the highest technical efficiency, as enjoined in the Congress Resolution, by using electric power and such tools and machines as could be worked efficiently at home. This is not against the Gandhian ideal. In fact Mahatmaji has blessed the use of electric power for cottage production. What we inveighed against was centralised industry crowding in congested factories, to the serious detriment of moral and social values. Gandhiji even welcomed the use of improved charkas which would reduce labour and increase output. Such experiments have been made with his knowledge, and have succeeded to some extent; we may soon have a small automatic spinning machine which may make home-spinning easier and more economical. Similarly various technical improvements have lately been made in hand-pounding of rice, and in oil pressing. The improved paddy husker, lately exhibited at the Congress Exhibition at Nasik, contains 3 simple appliances, costing about Rs. 350 in all. Three women and two men are required to keep the machine going and 25 maunds of paddy can be husked a day with it. The technique of oil pressing by ghani (chakku) has also been considerably improved, by the A. I. V. I. A., at Maganwadi.

(Incidentally it is for us to consider if this improved paddy husker would meet the needs of Travancore without restarting mills, which formerly took away employment and defrauded poor women of a valued means of supplementing their income and obtaining for their use valuable bran which their better-off employers did not want. It is clear that there is a clamour among the middle classes for the restoration of the mills. This demand was loudly made at some of the Taluk Conferences. We have to make a decision on this immediately, and the national interest must be given its due place in deciding on this matter, and not the financial interest of those whose mills lie idle).

Technological education.

15. A comprehensive system of technical training must be introduced.

If it is decided, as it must doubtless be, that our cottage and small-scale industries must be pursued on the basis of the highest technical efficiency, the first thing required is to train our

workers in improved technique. The use, not only of hand-tools but simple machine tools—lathes, drilling machines, shaping machines etc.—must become common even in our rural areas, and cottage producers must have workshops close by, where they can obtain the use of such tools for their work. making agricultural implements, numerous kinds of domestic utensils, and building accessories is only too clear. Even to can fruits or fish, we require containers and this could be made even in our backward areas, provided proper tools are available. With increased availability of electricity, motors can also be fitted up in cottage workshops. With such equipment in our villages, we can easily make not only tins and cans but also nuts and bolts, screws, hinges and all kinds of metal goods required for building houses and for various manufactures. Our handicraftsmen, even skilful blacksmiths and carpenters, are averse to the use of improved tools, even handtools. Not only they, but others with any natural inclination for such work must also be given training in the use of these tools. this way that Japan built up its marvellous home production. Only in this way can we make our cottage industries successful. In no other way can we replace the large quantities of imported goods being sold within the State, and supply such goods to other parts of India. Kerala can become a hive of industry, for all India in some lines. The natural resources of this country, as also the intelligence of its people, warrant such a development. But lack of training and organisation for it has prevented it, so far.

If such is to be our aim, we have to make immediate provision for industrial (even technological) training being given to our A graduated system of industrial youths and also to adults. education must be introduced starting-from the village school. Even at an early age, boys must be shown the use of hand tools and simple lathes, and must be trained to make things like toys with wood and other materials. A suitable system of basic Those who show real aptitude education must be introduced. for any craft should be sent to technical schools, wherever necessary at public cost. Such schools must be established in every Taluq, and in towns, where today many High Schools are working, one of them should be converted into a technical school, where not only carpentry and smithy but other technical and vocational subjects needed for the area must be taught. The equipment would involve some cost, but is good investment and must be incurred.

Some Technological High Schools in Bombay State teach Arts subjects side by side with technology and prepare pupils for the S. S. L. C. It is for us to decide whether we follow this model or offer a more fully technological course, with variants,

According to the Travancore Industries Department Report, there were 153 industrial schools in 1949; of these, 83 received grants from Government. The great majority of them teach handloom weaving. There is evidently much waste of funds. These schools must either be reorganised to fulfil a more comprehensive aim, or they must be converted into Primary Schools. In Cochin such a policy started even before integration.

Above the technological school must be one or more polytechnics (occupational institutes as called in Mysore). Such polytechnics will draw a large number of the young men, now aimlessly going to Arts Colleges. Large numbers also crowd into Engineering Colleges for the degree course without the real aptitude for such; many of them could with a shorter training earn more by doing supervisory jobs. The enterprising ones among them could start their own little industries and must be provided with capital and marketing facilities for the same. As was reminded by the Grady Mission during last war, what the country needs most now are diploma and certificate holders with more practical training, for the foremen jobs and even as skilled workmen, and not so many graduates in Engineering. It is the former who have to do the actual work of conducting industrial production. Their work will bring generous rewards to themselves and to the country.

There are as many as 200 polytechnics in Japan, besides a Mysore has four polytechnics: dozen higher institutions. although its village population is much less equipped for technological studies, these polytechnics are meeting a real need. Our State will require at least 4 polytechnics in the near future. We have the beginnings of a polytechnic at Trichur. We have now to start a Central institution somewhere near the biggest industrial area. As emphasised by the Principal of the Trivandrum Engineering College in a note, this polytechnic should not be near an engineering college and must keep away from its academic influences. In our opinion, the right place for the central polytechnic will be Alwaye, or somewhere between Ernakulam and Alwaye, where a large number of important basic industries are working. The nearness to the projected Naval Base and the Navy Training school at Cochin will also be

a material advantage to both parties. We must start the Institute with at least 10 out of the 26 sections working in the institute at Bangalore. Provision need not be made for courses in the subjects now being taught at Trichur.

Even at the initial stage, it is necessary to equip the central polytechnic with facilities for experimental work. Some of its bright pupils must be put to work on problems in which we are keenly interested. In the coming years, large numbers of electric motors and hydraulic pumps will be required, and a vast quantity of agricultural machinery too. We cannot afford to import them all; we have to make them here utilising the equipment in the many workshops in this State. Our skilled craftsmen have to do this. Such work will have to be assigned to the bright pupils of our polytechnics. In Mysore, many such young men are doing this work splendidly; one of them at Harihar was found doing machining work, in his own house, for machine tools manufactured in Kirloskar's factory close by. Even to higher levels can cottage industry rise in this State, if the polytechnics do their work well.

The total capital expenditure of the Bangalore Occupational Institute has come to about Rs. 30 lakhs, spread over 8 years; but much of the equipment came from the War Disposals of the Government of India at exceedingly low prices. As such chances have now greatly diminished, our capital cost will be higher, but it may not exceed Rs. 35 lakhs spread over a period of 5 years; the current requirements need not be over a lakh for many years. This cannot be too large a financial outlay for such a basic institution, which is the necessary foundation for exploiting the large industrial potential of the state, for turning to capital account the energies; of our large working population.

Technical and vocational training at the certificate level is now being given to adult civilians under a Central Government training scheme, in four centres in the state. This scheme originally meant for ex-servicemen, is now extended to civilian adults. The S. S. L. C. is essential for some subjects, but not for all This course is intended for training skilled workmen for industries, and large numbers of them are needed, not only for the growing factory industries but also for the small industries. Technical courses of a year's duration are being provided in 8 subjects at the Engineering College, Trivandrum (including machinist, turners, welders, electricians etc.) and 3 vocational subjects at the School of Arts (including clay-modelling, wood-turning and lacquer work). Provisions now exist

for only 353 seats in the State, for all the four centres together. Stipends are given to half that number. In view of the urgent need for such skilled workers to man our growing industries, we recommend that the facilities for training be extended so as to train at least 500 persons a year.

As stated above, it is also necessary to spread the use of improved handtools and even some of the machine-tools among our blacksmiths and carpenters, so that their work may become efficient and their earnings larger. We are told that as they stick to their old crude tools, cost mounts up so high that a door frame with the doors made here is more costly than imported steel doors, in spite of the heavy duties and freight charges on them. Can industry make solid progress in such a country? It is suicidal to allow this state of things to continue. Schemes for the supply of proper tools, either free or on loan, are in operation in Madras and elsewhere. Such a scheme is most urgently needed for this State, where more efficient work by blacksmiths and carpenters is essential for a real advance in industrial production. Natural skill, however great, can only be ineffective in this machine age.

For drawing up details of a scheme for a central polytechnic, we recommend that a small expert committee be appointed, to report within two months. It may consist of the Chief Engineer, the Principal of the College of Engineering, two leading industrialists and two public men with experience in such matters.

Experiments and demonstration work.

16. For devising the most profitable lines of production, experiments have to be conducted on our fibres and foodstuffs and other raw materials which are waiting to be turned into consumable goods.

Technological education is indeed a valuable foundation for the industrial structure we have in view; but it is a long-term plan. Even without waiting for it, we are in a position to process our fruits and tubers, our reeds and fibres. What is needed is to carry out experiments whereby these raw materials can be converted into useful goods by adopting the most profitable lines of production. Even in the case of so well-established an industry as coir yarn and mattings, many improvements in technique and reductions in production costs are possible, if for retting and certain other processes improved methods can be devised. Similarly, we have valuable essential oils like lemon grass, fibres like kaiwan and rare resins like cashew-shell oil. waiting to be exploited. Perhaps, a discovery, even a slight change in production methods, may revolutionize whole sectors of our industry, both factory and cottage. Many of our fruits, not only the banana in all its varieties but jack, cashew, guava and a number of other fruits—abundant in too short seasons—are now going to waste or are causing sickness by over-eating. Valuable berries like nellikai (gooseberry?) are also in abundance. Experiments on their dehydration, or preservation in other ways, may not only enable large numbers here to be employed in new industries, but may also make it possible for the rest of India as well as ourselves to enjoy certain valuable food-stuffs and delicacies all the year round.

Similarly, we have valuable reeds and grasses like bamboo and cetta. It has been found that by treating bamboo with Ascu (a compound of arsenic and copper), a valuable material can be evolved for constructing neat little houses for our common people, at low cost. All this require some experimentation with bamboo and kinds of wood which now go to waste. The Japanese make as many as 1400 kinds of articles with bamboo, including buttons and knitting needles. We may begin with something more modest. A large number of our valuable forest and marine products are now going to waste. They must also be taken up for experimentation.

Research work in some lines has, no doubt, been carried out at the Central, Research Institute of the University, which was intended to function in close collaboration with the departments of Government (including Industries). But such research institutions generally concentrate on fundamental research and do not like to 'come down to the market'. Whatever we may think about such a luxury in a land whose prime preoccupation is with elemental needs like food and clothing, this has to be accepted as a fact, for the present at any rate. We have to make other provision for carrying out the kind of humble experiments which are needed for improving the lot of the common man. It would be best to set up a Cottage Industries Experimental Centre, with a chemical laboratory attached to it for tackling chemical problems. We may locate this at Trivandrum, so that it may work in close association with the Central Research Institute of the University, and may have the assistance of the Central P. W. D. Workshop in its work: We recommend the setting up of such an Experimental Centre at Trivandrum, at the earliest possible date. At this Centre must be kept the Japanese machines for small-scale production about whose purchase we have made a separate recommendation.

It is not proposed to elaborate here the functions of this Research Centre. The following headlines from a Japanese handbill will bring out some of its possibilities:—

"Ten-spindle charka.
Tiles from bamboo.
Bamboo plywood.
Rice Bran oil.
300 articles from hand-paper.
Ten industries from sweet potato."

We recommend that the handmade paper section, maintained by the Industries Department, be transferred to this Experimental Centre, when it begins to function. The possibilities of making special kinds of paper by hand processes are large, here even more than in Bombay, and efforts must be made to extend this line of experiment. Research in design and pattern, so urgently needed for the success of cottage industries, must also be undertaken at this centre, and every effort must be made to keep it up-to-date.

We are not yet in a position to give even a rough estimate of the cost of this Research Centre but we think that for making a modest beginning the initial cost cannot be much more than Rs. 10 lakhs.

Industrial exhibition :- In our State (more than most other parts of India) there are enterprising persons who have devised improved processes, have even set up new lines of production, in spheres however narrow. Some of them have had no University education; nor need they have it in order to be inventors. The Taluq Conferences undertaken in connection with the industrial survey disclosed ample evidence of inventive. work of some kind. A pocket charka made at Kottayam with scrap aluminium and weighing below a pound, was lately demonstrated at the Congress Industrial Exhibition at Nasik. and it attracted some attention. With slight adjustments, it may become a useful portable charka, and it also may be possible to start a sizeable industry to manufacture it in thousands. There may be, there are, many such experiments going on, in a humble way, in different parts of the State. It is necessary to bring them together, so that they may be examined by experts, so that encouragement may be given to those that deserve it. Perhaps such work can be best done by organising an Industrial Exhibition at some central place in the State, where all

these can be brought together and brought under expert examination side by side with similar work done elsewhere. This would also give us a great opportunity to assess our present position and to decide on the steps to be taken in accelerating industrial advance. In other countries, such exhibitions are a normal feature; some of them are also maintained as a permanent fixture. Mysore has already moved in this line. Whether a permanent exhibition of some type is required or not will have to be considered later. In the meantime, we strongly recommend that an industrial exhibition be held at a central place in the State, and that preparations for it do start immediately.

Demonstration:—Whatever experimental work we may do, however superior may be the improved methods evolved at our laboratories, those will not be utilised for actual production unless they are demonstrated at the very door of the cottage worker. No doubt an exhibition on the above lines may help in this. But the principal method for doing this is to conduct special classes at selected centres and to send out demonstration parties to the very centres of such cottage production. In Bombay, very large provision has been made for peripatetic parties, and training classes are being conducted in different parts of the country in such subjects as tanning and leather work, carpentry and smithy, lacquer work etc.

The Government of Travancore, we note, maintains an Itinerant Weaving Party to encourage weaving among backward communities. We hope that training in less crowded and more profitable occupations can be given to backward communities. But we feel that for such work, Government should equip its Department properly, for set up some other organisation for the same.

A Marketing Organisation.

17. An organisation for supplying capital and providing marketing facilities to cottage industries, and for quality control of their goods, is also urgently needed.

However excellent the technical training provided, and however successful the experiments carried out, production will not increase unless some satisfactory arrangement is made for supplying capital to cottage producers and providing facilities for the orderly sale of their products. The disastrous consequences of the lack of proper marketing agencies have been referred to earlier. The scarcity of capital and its high cost have prevented the expansion of cottage industries and have dulled the enthusiasm of many a talented producer. Special emphasis was laid

on the two points, at all the Taluk conferences. "It is also clear that the State Aid to Industries Act has not succeeded, owing to many causes.

No doubt the co-operative agency has done something in this matter and it must be our aim to strengthen this agency, to extend its work and make it more effective. A scheme for this has to be prepared. A co-operative commonwealth is the goal prescribed for us by the leaders of the nation, and in some western countries co-operation has played a commendable part in this kind of work. This has certainly helped to weaken the grip of the middleman, who had been throttling small business in the past. But the question here is to what extent a co-operative organisation is suited for serving as the apex. We have got a Central Cottage Industries Society functioning at Trivandrum, and another, the Cochin Cottage Industries Co-operative Marketing Society at Trichur, working with many branches in the Trichur District. Whether any of them separately, or the two amalgamated into one body, can be entrusted with this important function is for us to see after a proper scrutiny. we have not had opportunities for making any such an enquiry.

The All-India Cottage Industries Board has made it clear that any such organisation should be run on strictly commercial lines. Only by a powerful bedy working on strict business principles can the lefty functions of an apex body be properly fulfilled. It would be difficult for a directorate, elected periodically by the branch societies, to take up a thoroughly independent attitude in the affairs of this important body. Nor have cooperatives in India so far developed business capacity to any commendable extent. It is on some of these grounds that a growing opinion in India favours a statutory corporation to take up such work. The Fiscal Commission of the Government of India, which reported earlier this year, has recommended that each State of the Union should have such a statutory corporation to be in charge of the measures to be adopted for stimulating cottage and other small-scale industries.

There is also another important function which only a powerful statutory corporation could effectively discharge. As shown earlier in this report, indifference to standardisation and neglect of quality have been one of the chief causes which have impeded our small-scale production in the past, and quality control is of the utmost importance for the popularisation of products and for preventing cut-throat competition between small producers. No doubt, legislation is necessary both for establishing a public corporation and for authorising it (or any other body) to carry on quality control. This must be done.

Although we are clear that a statutory corporation is desirable for discharging the weighty functions mentioned above, we are not yet in a position to draw up a detailed scheme. Many problems will have to be tackled before a suitable plan can be made. But we are convinced that the establishment of some such organisation is of the utmost importance for energising industrial production and that no time should be lost in this matter

Industrial Museums.

18. Industrial Museums, Emporia and Showrooms must be maintained and tourist traffic must be encouraged.

Even if a proper organisation for supplying capital and providing marketing facilities to cottage industries is set up, Government will have to shoulder much of the burden of industrial development. The most familiar line of such Government action is to exhibit the products of cottage industries and to advertise them effectively.

In all advanced countries, industrial museums maintained in leading cities give a complete picture of the industrial production going on there. Smaller museums in every town exhibit the products of the industries around. Our effort in this line is very meagre. A visitor to this State is given little opportunity to see at some central place the products of our industries. An industrial museum at a central place like Ernakulam, where tourists come by sea and land, will be of great use, Well stocked emporta are also needed in our important towns for the exhibition (and sale) of our cottage industry products, and neat little showrooms at aerodromes, ports-of-call and railway stations. We understand that there is a Government Sales Deput, maintained at the back of the new public offices Its total sales (for 1123) came to Rs 8,400. There is urgent need for a proper emporium at Trivandrum, and it must be located on the main thoroughfare of the town.

Tourist Trassic. Often businessmen, connoisseurs and representatives of governmental and other agencies visit the State to see our cottage industry products, and they must be given every facility to see our best products. Tourists not only make purchases profitable for us; their visits may also lead to the establishment of even more profitable trade connections with foreign lands. This is how many trade connections have been built up in the past. Tourist traffic therefore deserves the utmost assistance from Government, and we trust that a plan will soon be carried out.

We therefore recommend that—

(i) A well-equipped industrial museum of cottage industry products and processess be set up at Ernakulam, (ii) emporla for the exhibition and sale of cottage industry products be opened in our leading towns, as also in the principal cities of India, (iii) small ornamental show-rooms be maintained at our accordance, railway station platforms and parts-et sall, and (iv) that Unvernment give all possible patronage to the tourist industry and insist on showrooms of our cottage products being maintained at tourist centres.

The maintenance of emporia and show rooms in other centres in India may be entrusted to the statutory corporation recommended in the last section. In the case of foreign countries, we will have to depend on arrangements to be made by the Central Government. But this State must see that in the emporia maintained in the leading cities of America and elsewhere our special goods must be stocked and salesmen conversant with our industries should be available. A good part of the responsibility for all this may devolve on the statutory corporation, if it is properly controlled and run. But Government will have to be vigilant always.

Government Purchases.

19. It would be desirable to purchase as much of the Government stores as possible from cottage and small-scale industries.

Such purchase should include also collage handlerest products like khadi. On this whole question, recommendations will be made later.

Periodical Census:

20. It is also Government's duly to take a complete census of cottage and other small scale industries and this must be maintained up-to-date.

This is necessary not only for making plans for industrial development, but also for watching from time to time the progress of the work in this line.

We understand that a reference has come to Government on this subject from the Government of India, and that some action is being taken. In fact, the data collected by our investigators contain much of the material required for a census. But as the Committee has not been informed of the action taken by Government, we defer for the present our views on this matter,

An Immediate Programme of Production.

21. An immediate plan for starting cottage industries in suitable centres must be launched, either independently or as complementary to large-scale industries.

Establishment of polytechnics and research centres is indeed splendid. No doubt those are essential foundations for a solid industrial structure. But people are looking for something of more immediate usefulness. Before coming to power, the Congress had held out expectations of plans being launched for a more rapid advance in industry and increase of living standards. Can't something be done, immediately?

No doubt, there are expectations. But the arrears of ages cannot be cleared up in a day. Stable advance in this line must be planned carefully and must be carried out cautiously. Until the results of our Taluq surveys are analysed it is not possible for us to draw up any detailed scheme. Further, an organisation for orderly marketing and for quality control has to function before any comprehensive production plan can be launched.

In the meantime, all that we can do is to make some very provisional suggestions for making a beginning in respect of a few fairly well established lines of production, rather as an indication of what might be possible when the full mechanism is in working order.

Assured market is a sine qua non for any production plan to be a success. Similarly, the industry must be one in which efficient methods of production have already been introduced so that the commodity may be marketable at competitive prices. The most secure case is cottage industry carrying out some work distributed by a factory to be returned there for assembling or finishing. The cottager has only to do a particular job, and will be paid for it promptly. The burden of marketing will be on the factory giving out the work.

Around Factories: We have looked into the possibilities for planting new cottage industries around factory industries in complementary relationship with them. The Electricals and Allied Industries Ltd., Kundara, is prepared to distribute their assembly lines (ceiling roses, cut-outs, bell-pushes, switches etc.) to cottages close by and may thus be able to give work to as many as 500 homes, provided some suitable agency (e. g. a co-operative society) will be responsible for the return of the articles. But a certain amount of skill in working with tools and little machines is needed before this work is taken up by cottages. Similarly, the Ceramic Factory, Kundara, may be

able to distribute crockery and other porcelain-ware to many cottages for being enamelled or for decoration work, provided breakages can be avoided and the cottages are kept fairly clean. Unfortunately, in the conditions of Kundara, these two conditions are now difficult for fulfilment. It may be easier to adopt in more suitable centres a system in which the cottager can take up pottery manufacture on improved lines, in conjunction with small central factories. Thereby the production costs can be reduced and profits can be enhanced. The demand for pottery of all kinds is large and the earliest opportunity should be taken for improving this industry pursued hereditarily by a large number of people, now in doldrums.

Although not complementary as above, cottage industries can be planted around other factory industries also, to work on the products of those factories. Thus, glass bangles and beads can be made around the Ogale Glass Works, Alwaye, and several saleable wooden articles like toys and picture frames can be made with the plywood waste of the Travancore Plywood Industries, Punaloor. Such cottage industries need not be so near the factory, as their products need not go to the factory for being finished.

We can go further; the fertilizers produced at Alwaye can be mixed in every taluk, even pakuthi, by a Co-operative Society or other agency, with other manures to suit the requirements of the crops and the soils there, 'provided proper technical advice for this is given by the Agricultural Department. This will not only give our farmers the right kind of manures (and thus increase our much needed food supply), but will also give profitable employment to large numbers of people in all parts of the country.

Another possible development is to take up rayon weaving. In the only rayon factory in all India, at Perumbavur, artificial silk is just being made and soon large quantitles of it will be available. This will now have to be woven, either on the handloom or on the powerloom, into sarees, shirtings and other kinds of cloth for human wear and for furnishings. This may be done most economically around that factory itself, especially if the weavers are brought into some complementary relationship with the factory, to their mutual advantage. Around the factory, on both the sides of the Periyar river, live a people who were once very prosperous, but far from so now. Would it not be good, if these people are helped to take up this manufacture and give themselves profitable employment? Prosperous garden villages may then rise around the factory, and there would be happiness and contentment all round,

Before a proper marketing organisation is set up, we have indeed to go slow with any plan for energising production. But there are certain lines of well-established business, in the case of which neither marketing deficiencies nor backwardness in research need be a serious drawback.

Food Industries. There is, for instance, the large field of food industries. In a land with so many hungry mouths, even indifferent food will be taken up if properly presented. But we can make excellent food stuffs, nutritious and tasty. Our bananas have been esteemed everywhere for long, and preserved in some form, they should find markets outside and employment here. Similarly our sour mangoes (whether mature and tender), our plentiful jack, our nellikal land the satavari root, have supplied many a dainty pickle or preserve in the past and can now serve the wider Indian market, if they are processed according to prevailing tastes. But little has yet been done.

Lately some pioneering work in the food line has been done at Punalur, by the United State Packers and Canners Ltd. They have sold, through a British firm in India, large quantities of sliced pineapples, pineapple juice, and pineapple jam, and have done rather good business. It has enabled pineapple growers around Punalur to realise quite good prices for this fruit and the acreage under this crop has increased. by community canning centres working in the area, this firm is running a decentralized cottage industry. Similar work should now be done in respect of bananas of many varieties, mangoes, guavas and jack, much of which is going to waste. Guavas can be had for the mere collection, at Peermade; fine and large tomatoes are selling at 2 annas a pound there. Oranges are also plentiful and cheap at Kumali, on the leeward side of the Sahyadri hills. These should all be collected and made into jams or jellies or squash, and would fetch quite good profit. Some experimental work would be required, but not of a difficult But little is being done, and there is serious unemployment. But one thing has to be attended to, if we must succeed in this line. If our canned food must sell, there must be ample assurance of it being wholesome and clean. this, our homes must become cleaner and our clothes more tidy. (see next section.)

The immense industrial possibilities of tapioca, and other tubers like arrow-root, are known. The processes for converting tapioca into sago and starch for sizing are all well-known. In

war-time something was done in this line, but the fear of foodshortage prevented the development of a first-rate cottage
industry. Thanks to this misdirected policy here, a neighbouring district of Madras State has almost secured a menopoly
for sago manufacture, and the industry has now obtained tariff
protection. Similarly, our chances for manufacturing starch for
textile sizing are also fast disappearing. In our opinion, the
fear that the industrial use of tapioca will affect the food position is overdone. This important question has not been given
the attention it deserves, and we fear that this will greatly
handicap the chances of rapid industrialization here. Arrowroot (channa) which is now wasted, or wastefully used, can give
rise to a profitable industry here, as well as supply a valued
starch to people outside

Dainty little food items, eminently suitable for afternoon entertainments (including cockail-parties common in Delhi and elsewhere), can be manufactured at little cost, but to great profit, not only from tapioca (in the form of crisp protein-covered shreds, fried and sugar coated) and also from raw jack fruit, bananas, pappad etc. These may look small, but they can become large lines of business, if the articles are tastily made, properly presented and effectively advertised. The possibilities have already been shown, and some individuals have reaped large profits.

Our palmyra jaggery with its large glucose content has great economic potentialities, and if improved methods of preparation are adopted, it can be a valuable source of income and employment in the densely populated areas of South Travancore. The preparation and sale of akani (sweet toddy) will not only supply a modish drink, but will also sustain employment in areas under prohibition. It is hoped that the efforts of our Central Research Institute to invent a process for preserving sweet toddy will soon be crowned with success, so that especially our young people máy drink something more healthy than tea and coffee.

Fish Curing. We have speken long about fish-canning. The processes are fairly well known, but little progress has been made. Clever men have made money by selling prawn pulp outside, even by hawking the fish locally, but our poor fishermen have not benefited by it. Fish sold by the fisher men on the coast at Rs. 10 may fetch as much as Rs. 50 to the cyclist who takes it ten miles away. A society which permits such exploitation cannot be called civilized. Fish-curing and canning will lead to the starting of many small industries, in particular

manufacture of containers. Fishing trade would greatly benefit if cold storages can be maintained in the chief fishing centres.

Rattan Work.—A well-established line of production with great possibilities is rattan work. Our canes are the best in India, and our rattan work is popular everywhere. Individuals have taken up the work and have made profits; yet there has not been any effort to organise this industry on proper lines and to make the best out of it in the country. In Bombay, a great deal of experiment has been carried out on rattan work. We may benefit by this work and may supplement it. This is a clear case of neglect to foster an industry which can almost be a monopoly for Travancore-Cochin. Nor is this the only case.

In no part of India, perhaps in no part of the world, are umbrellas so commonly used. The cadjan umbrella has gone, and the velan has lost his trade; all now must have the textile variety. It cannot be a serious problem for our P. W. D workshop here to make the metal ribs, and our forests contain most suitable wood and bamboo. All that is needed is enterprise, to go out of the beaten track. Assembling is not enough.

Good printing ink has been made and this could become a paying industry. We have in our forests a number of articles with which profitable industries can be started. Rare wood, valuable resins, bees'wax, and scarce medicinal herbs, among others, can be so utilized. But there has been no organised effort.

Many of these above lines of production have been carried out by clever individuals and quite large profits have been made. For many reasons, exact information is not available regarding them. We cannot any longer maintain a laissez faire attitude in this matter, because some exploitation has been going on, and because the country's fair name has been sullied by the dishonest methods of producers and salesmen. A scrutiny of all such lines of production is necessary before they can be put on a proper basis, so as to serve the public interest. This should not wait.

In the case of many industries, especially metal work, it is not lack of markets that stands in the way of increased production, but difficulty to obtain steel or some other controlled item. There is great scope here for sheet metal work. All kinds of metal utensils can be made, have been made; but the proper raw material is not available in quantity. Resorting to black market purchases of scrap iron has affected the quality of work. Blacksmiths at Parur use their great skill for making screws with

poor scrap iron bought at high prices, and make little in the bargain. In other cases, it is unfair competition between producers that ban expansion of production. All these have to be looked into by a competent authority.

Art Work. Last, but by no means least, come the art industries. Our art work is indeed excellent, but it has suffered greatly by the uncontrolled intrusion of mischievous amateurs, who want to get rich quick. Art work can still have a market outside, even abroad, if we guard the quality, if we devote attention to design and pattern. Art on utility wares will surely pay. The irkal chicks designed by the Maharani of Travancore made a great impression; an article going to waste was given great utility and ornamental value. Our delicate screwpine and cora mattings can be worked up into excellent articles of house or table adornment and will sell, especially in America, at quite good prices. Elegant little articles like greetings cards with cadian leaf and fancy envelopes can be made, even by our school children. These little industries will employ many people, especially women and girls, and will bring us valued dollar exchange. An influential Committee in Delhi, under the chairmanship of Mrs. John Matthai, is trying to popularize such work in America with the help of a Committee there, led by Mrs. B. K. Nehru. We may get large orders, but unless we have here an organisation to see to the points above noted, we shall not be able to execute those orders to the satisfaction of customers abroad. It is not lack of skill, but lack of basic honesty that stands in the way of our success, especially in this line.

Work with a Plan. Production must start on a planned basis. Ultimately, every Pakuthi (Revenue Village) must have its industries, giving full-time and part-time work to those around. We must start with one or two centres in every Taluk. through co-operatives, as far as possible. Having selected the Pakuthi, a small local Committee should be set up there, pre-This Committee with the help of experts, ferably by election. and in co-operation with a State-wide organisation, will select the industries and start production. At first, goods for which there is a ready demand here may be produced; when a proper marketing organisation comes to function, bolder ventures may be taken up. The Pakuthi Committee should work in close liaison with the Panchayat to be set up, and should be its economic counterpart. Where the co-operatives are functioning well. their executives must be on the Committee. The whole plan must be prepared and carried out by the authority to be set up at the Capital (of which see Section 23).

Cleaner houses and better living conditions.

22. Cleaner houses and better living conditions are essential for the development of cottage industries on efficient lines.

It is quite clear from what has been said above that unless our cottages are made cleaner, our cottage industry has little chance of taking up many important lines of production. This is the secret of Japan's success. Whether it be food processing or crockery decoration, an unclean home is the most serious impediment to the progress of cottage industry. No doubt, our cottages, even our huts, are cleaner than those in many other parts of India. But even these have to be improved further, if we must advance economically (or improve our health substantially).

It is in the case of food industries that the above point is most material. There is vast scope for food canning, and it is easy to start, as it does not require any large capital equipment. But, unless the consumer is fully satisfied, that the canned food is clean, at least as clean as canned food from outside, he or she is sure to give the go by to the home-made article and buy the imported stuff. It is easy to castigate this habit as unpatriotic, but this is not often the real truth. It is the fear of endangering health. Therefore, we have to see that all processing of food is carried out in thoroughly clean places by people, who are themselves physically clean. It is also necessary to have the work done under proper medical inspection. But all this is possible, only if there is some competent organisation, which would supervise the work from start to finish and give its guarantee to the article.

Clean houses are not enough; it is also necessary to have good roads. This is particularly true of industries like ceramics, where a complementary relationship is possible between factories and cottage industries.

Therefore, when any new production venture is planned, around a factory or otherwise, the first thing to do is to clean up the houses and provide ample water, both for the houses and for the householders. The right thing would be the planning of villages, with houses built with something like treated bamboo (as shown earlier) with clean, well laid-out roads, and arrangements for power supply. This is a matter that should engage our attention immediately. We understand that there is a Town and Country Planning Act in operation in this State. It may be well to use the powers under this Act, wherever any planned industrial production is to be established.

A Cottage Industries Board.

A Cottage Industries Board with adequate powers may be entrusted with the work of energising production (as stated in Section 21) and for carrying out experiments (as shown in Section 16.)

The conclusion forced on us by the last few sections is that, if any planning of cottage production is to be carried out immediately, a proper authority for making plans and carrying it out energetically is essential. Any haphazard work in this line might do harm.

While the responsibility for conducting polytechnics and maintaining museums and emporia must rest on Government's shoulders, the Committee fears that the work of energising production on the above lines cannot properly be undertaken by Government, and must be entrusted to an energetic non-official body, armed with adequate powers.

Many of the measures recommended in the last few sections were proposed as early as 1917 by Dr. Barker. But, little has been done. There have been able Directors of Industries, but they were not able to do much. Nor was it their fault; it was the fault of the system under which they were working. The inherent defects of governmental organisation make it unsuitable for doing pioneering work of this kind, or work requiring business acumen. The whole secretariat procedure and tradition, even in a country like Britain, which has a highly efficient civil service, militates against quick and energetic transaction of business by official agencies. The experience of this Committee during the short period of its existence confirms that things are no better here. Nor can a Committee of this kind, tied to Government for such detailed sauctions, do effective work. It must be on these grounds that in many countries and in other States of India, Boards mostly non-official, have been set up, with adequate powers for doing this kind of (The grounds are cogently explained in the Bombay Government Resolution, quoted above in Section 11).

In Japan, a "Board of Small Industries" is the bulwark of its plan for energising cottage production. That Board gathers, analyses and discriminates all information of use to small producers, examines into the affairs of small enterprises (when required by them), consults research institutions on problems of production technique (they have numerous well-equipped research institutions, both Government and private), holds exhibitions and advises Government on all matters connected with small industries. All functions of the Board are carried out through its own personnel.

The Executive Committee of the All-India Cottage Industries Board is going to be a statutory body and it is expected that legislation therefor will soon be introduced in Parliament. At its August meeting, it was decided to call upon State Governments to set up similar Cottage Industries Boards, to cooperate with it in this work and to carry out quick surveys of cottage industries.

On this above ground also, the setting up of a Board of Cottage Industries has become necessary. The Board should have an official Secretary. It may be desirable to appoint a Director of Cottage Industries, at a fairly high level, and

make him Secretary of the Board.

The Board may need in this work the assistance of certain advisory committees. One of them should be a committee of women and others conversant with consumers' tastes and market trends. After all, not less than 70 per cent. of the purchases are made by women and, whether it be art work or canned fruit or decorated crockery, women's tastes and preferences have to be consulted. This has to be done before we launch on plans of production, and certainly also when the product is ready to be marketed. Similarly, when production work is taken up in any locality, local Committees, as shown above, should be constituted to carry on work under the directors of the Board. Careful supervision is essential if the quality of production is to be maintained, and competent persons will have to be trained for such work, as is being done in Mysore.

After the statutory corporation (recommended in Section 17) comes to operate, some of the above functions may in time be so transferred to it. Perhaps all the functions may be so transferred after a time, and the Board may close down. But it may take some time before the corporation comes into working order, and in the meantime, some of its urgent functions, like quality control, will have to be taken up by some body like the Board. Hence our recommendation that the Board should come first,

and that it should be set up without any delay.

Funds from the Centre

24. The capital cost of the above programme must be met from public bequests, from the State funds and from contributions from the Centre.

The cost of establishing polytechnics and research centres is necessarily heavy. In other countries, a large part of the funds for such purposes come from generous bequests by the public. The Massachusetts Institute of Technology, which is today the citadel of American industrial prosperity, was built up with the help of 163 endowments made by generous private individuals. Similarly institutions have also been built up and

are being maintained with funds supplied by certain groups of industries. Such noble gifts are not unknown in this country too. The Occupational Institute of Bangalore was started with a sum of Rs. 2 lakus presented by Sir M. Visweswaraiya, and the Madras Institute of Technology owes its establishment to a gift of Rs. 5 lakus by Sri C. Rajam.

In this country too, there are many wealthy persons who could make such contributions. This would be a noble gesture and would perpetuate the memory of such benefactors. In spite of large increases in direct taxation, there are considerable accumulations of wealth in this State, some of them hoarded and thus escaping taxation, and in these uncertain times, when there is a serious threat of expropriatory legislation, such generous bequests would be most wise and timely;

In any case, a much larger burden than now has to fall on the State exchequer. The accumulated arrears for many years have now to be made up. The serious economic situation should have been firmly tackled long ago by far-reaching measures of rural industrialisation and by directing youth away from the Arts Colleges. But very little has been done in either line as is clear from the meagre allotments in the State budget for the Industries Department and the liberal outlay on Arts courses at State cost. While the grant for industrial (including commercial) education is about Rs. 11 lakhs, (and this too not judiciously spent), University education receives a grant of Rs. 21 lakhs (in spite of recent reductions). While we consider the expenditure on post-graduate teaching and research amply justified, we very much doubt if public funds should any longer be speut on undergraduate teaching, When private enterprise was lacking in this field, Government had indeed to step in. Now that private agency is active in this line, Government may safely withdraw from the field, at least from undergraduate work, and concentrate on the technical field of education by which alone can misguided youth be weaned away from the persistent temptation or wasting time for academic degrees. Other possible avenues for economy must also be found. A large increase in wealth production is our prime essential today; without it living standards cannot rise and the talk of a welfare state will be nothing but empty.

The Committee feels that there is every justification for a large part of the cost of this programme being met by the Central Government. As we have emphasised repeatedly in this Report, the serious economic situation in this area holds out a menace, not only for this State, but for the rest of India. Only by tackling unemployment and producing the wherewithal for raising the living standards of the common people can this grave

menace be kept under check. It is both sound finance and wise policy to concentrate on the more needy parts of the Union, to devote more attention to areas where economic developments of grave portent are taking place, and Travancore-Cochin is certainly one of them, if not the one calling for the greatest attention.

Even apart from political or tactical reasons, there may be solid positive advantage to the country, if certain economic programmes are tried in advance in parts of the country ready for such a programme. Lately, the Deputy Prime Minister of India spoke strongly of the serious consequences of our boys continuing to crowd into Arts Colleges. Nowhere in India, nowhere in Asia, is such overcrowding greater or raising a more serious menace than in Travancore-Cochin. Safety lies in our attracting as many of these misdirected youths to the industrial and agricultural field, and well-equipped polytechnics are essential Again, if experiments are to be conducted in launching schemes of production in selected areas on a plan, for starting cottage industries in a complementary, relationship with large factories, there is perhaps no area better suited for this than Travancore Cochin, where there are ample supplies of electric energy, some competent technical personnel, and a large educated public that could co-operate in this work. With the experience thus accumulated, similar work may then be done more effectively elsewhere.

On the above grounds, we recommend that the Government of India be requested to locate in this State, one of the four higher technical institutions recommended by the N. R. Sarker Committee in 1946, and approved by the All-India Council for Technical Education in April-May 1946. Bangalore and Madras have their well-equipped technological institutions. In no other area in South India do economic conditions hold out such a political menace; and in no other place are there conditions so ripe for the full utilization of such a superior technological institute.

There is also another important ground why the urgently needed industrialization programme for Travancore Cochin should become largely a Central responsibility. From time immemorial, this area has been depending on a flourishing foreign trade especially in pepper, and this trade brought much customs revenue into the coffers of the Travancore and Cochin Sarkars. By the financial integration of these States with the Indian Union, Travancore Cochin has lost a large slice of revenue, as is well known. Such losses are inevitable when a politically advantageous step is taken; but the economic interests of this thickly populated area at this critical stage should not suffer by such transfer of revenues.

Lately the steady rise in the price of pepper to higher levels never reached before has enabled the Government of India to raise a large revenue (perhaps 4 or 5 crores) by the imposition of an export duty. For centuries, the control of the pepper trade supplied a large part of the State revenue of Travancore; the management of the pepper monopoly was a most important function of the Travancore administration in former days, and the "Pepper Store Controller" then controlled all Revenue, Trade and Production matters. Jute never figured in Bengal finances so much as pepper did in Travancore finances in the past; yet a large part of the revenue under jute export duty will go to Bengal for at least ten years. Following this precedent, and having regard to the urgent financial needs of Travancore-Cochin, and its security value for India, we recommend that a claim should be made for the transfer to this State of at least half the revenue collections from the pepper export duty, and that this amount be earmarked as a fund for the financing of the programme set forth above.

But any such subvention to this State, we feel certain, need be only temporary. If our plan of industrialization is properly carried out, it is bound to build up national income and taxable capacity. The financial benefits from this will go both to the Centre and to the State. State revenue will then expand and the financial concession from the Centre will become unnecessary. In these circumstances, the financial outlay on any industrial programme in Travancore-Cochin would be merely rendering justice to a hard-pressed people. Nay, more, it would be an insurance against economic and political dangers, and even sound investment.

Finally, we hope that if any subventions are received by India under President Truman's Point Four Programme, the highest priority will be given to this State, in their distribution. In fact, the strongest case for such subvention is the parlous economic condition of our coastal areas, which makes communism endemic there. There is a very strong case for a large subvention for India, and we hope that the centre will make the utmost use of this.

Centre's plans and States' needs.

25. The peculiar economic problems of Travancore Cochin have to be taken into account in the formulation of any All-India economic plan and in its execution. Neglect of this may mean dislocation, even impoverishment, of the economy of this thickly populated area.

We have shown above how the peculiar economic position of Travancore-Cochin—greater dependence on external trade and much larger foodgrain deficits than in any other area

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in India-calls for special consideration being given to the needs of this area in the formulation and execution of all India plans. There may be grave consequences if we ignore this in our all-India food and agricultural policy. The same can equally be true of all-India plans made by the National Planning Commission, even by the Central Cottage Industries Board, unless effective timely action is taken by this State. This sub-continent presents wide diversities. In most parts of India, there is a more or less self-sufficient rural economy; agriculture predominates and the pressure of population is nothing so serious as it is in Travancore-Cochin. Cottage industry is required in some of those areas, chiefly to give some supplementary occupation to agriculturists, and is mostly concerned with processing of agricultural produce. By the wide divergences in conditions emphasised earlier, the importance of cottage industries is necessarily far greater for Travancore-Cochin, and only by transferring large numbers to full-time industrial occupations and by working such industries on high levels of technical efficiency can we give the much-needed balance to our economic structure and give adequate employment and income to a people whose eagerness to raise living standards and readiness to work for them are far greater than in any other area in India. There is ample evidence that the peculiar features of the pressing economic situation of this-State have not always been properly understood by those who direct affairs at the Centre. This has already done harm in many ways, and may do more harm in future. It is therefore necessary that our special problems must be brought to the notice of the National Planning Commission and to the Indian States Ministry, from time to time. But in order to he able to do so effectively, we have ourselves to be vigilant and do some active planning ourselves. Further, an area which has such grave and peculiar problems as ours cannot afford to wait till an all-India body makes plans. In regard to cottage industries in particular, such planning, is altogether delayed. They are still talking of a survey of cottage industries. We have already carried out our survey, and have to take urgent action to energise cottage production. We have to set up our Board urgently and must start work.

It is also our conviction that a proper Planning Board in this State should scrutinize our special economic problems as a whole and co-ordinate the plans in regard to different subjects. It can also advise the Cabinet, on our economic policy and on the bearings of all-India plans and policies on this State's economy. Not to do this may seriously dislocate our economy, may even

impoverish it, and this may have grave repercussions, not only on our social peace but on the political security of the country as a whole.

A moral drive-Our most urgent need.

26. How to raise business standards and do away with dishonest practices; build up a strong public opinion.

We may impart technical training, may start many cottage industries and devise by experimentation various profitable lines of production. But unless more correct business methods are adopted by our people, unless greater basic honesty is shown in dealings between them, unless the quality is strictly maintained, industrialization cannot be energised, nor can the standard of living of the common man be raised to higher levels.

Some people are filled with despair regarding this matter. We do not share this view. The looseness of moral standards is due chiefly to imperfect understanding by people of their own interest. Indeed a moral regeneration, as strongly desired by Gandhiji, is our greatest need today. But even enlightened self-interest will greatly discourage such practices, and a strong public opinion in the country will keep them under check.

Man cannot be made moral by statute. Especially in this country, the cleverest law against a dishonest practice will be circumvented by the fertile brain which nature has implanted in our people. Nevertheless, we have to make use of legislation. In particular, legislation for quality control and the setting up of a competent authority which will strictly enforce standards will go a great way to improve the quality of our goods and to recapture the markets we have lost by our dishonest practices and by cut-throat competition. Hence our recommendation that a suitable authority for this e. g., a statutory corporation be, set up immediately. It is hoped that the recent amendment of the co-operation law will help in raising the moral level of our co-operatives.

It is a great pity that in regard to the formation of a strong public opinion, much progress has not been made even in Travancore-Cochin, in spite of its high literacy and the wider prevalence of the reading habit than anywhere else in India. Newspapers, especially dailies, have a heavy responsibility in this matter, but one notes that this has not been properly realised by many of the numerous newspapers being published in this country. In particular, the active support that some of them are giving to narrow communalism should cause sorrow and disappointment to all. In no civilised country now will this be

tolerated, and we hope that leaders of society will give their best attention to this. Has the Father of the Nation laid down his life in vain?

Our real enemies are not our fellow-men of a different creed, but poverty, idleness and mutual distrust. There are also mischievous forces that work for violence and bloodshed. Only by a powerful concerted action by people of all creeds and communities can these dangerous enemies be successfully fought. While the wolf is at the door, the children of the family are quarrelling about little things which could be easily adjusted, and some mischievous people are sowing discord among them. It is a shame that such things should continue in this enlightened land.

We have to use all possible agencies for the dissemination of correct ideas on all these matters. The public must know where the country stands; it is dangerous to keep unemployed a large proletariat conscious of their rights. The true positions must be explained to them. All must be told that only by correct business standards and more honest dealings between man and man can our production be increased and living standards be raised. When this understanding dawns on the people, there will be greater co-operation with Government in carrying out measures for raising the level of business honesty, for controlling the quality of our goods, and for effecting a proper standardisation of our products.

These ideas must be broadcast through our schools, through our textbooks, through the radio and every available agency for the dissemination of ideas. One fears that such agencies are not now being adequately used for these laudable purposes. More of our text-books should deal with these matters. Our popular story writers are neglecting a great opportunity to do creative work, at this critical time in this country's history.

It is useful for us to know that many countries which are today prosperous, had formerly similar failings as India. Denmark was formerly a penurious land; the adoption of a cooperative way of life and the will to improve worked out a radical change in the Danish character. Similarly, fifty years ago, Japanese goods were found suspect in world markets. Like our people today, the Japs then tried to get rich quick. But when they came to know the full consequences of such foolish behaviour, the Japs made up their minds to raise their business standards. And they succeeded admirably.

Thus many other countries have brought about a lasting prosperity for their people. Their living standards

have risen to high levels, and today they put to shame Soviet Russia, which believes that only by destruction and bloodshed could the long-expected new order be ushered in. While in Soviet Russia such bloodshed has only brought misery and starvation to millions of people, the many heroic countries around her—Finland, Norway, Sweden, Switzerland—have under freedom and without bloodshed evolved a social order in which there is neither poverty nor wealth, in which all are free, and all get their chance.

For us in India, therefore, there is no cause for despair. What the Irish and the Finns and the Japs did, we certainly could do. Especially in Travancore Cochin, this cannot be so tall an order. In intelligence, our people are not inferior to any of them. We have only to make up our minds to use our intelligence in the best interests of ourselves and our fellowmen. In fact these two sets of interests are identical, not divergent, as people often wrongly think. A correct understanding of this, and the regulation of our actions accordingly, will solve, not only the problem of cottage industries but our economic problem as a whole.

Conclusion.

27. A six-point programme is recommended.

We therefore recommend a six-point programme, consisting of:—

(a) a complete system of technological education to be established, with a central polytechnic near Ernakulam, as the apex;

(b) research in production methods of interest to cottage industries, to be started at an experimental centre in Trivandrum:

(c) a marketing organisation, to be in charge also of capital supply and quality control;

(d) a production drive in selected areas, to be carried out by a Cottage Industries Board, assisted by local committees:

(e) Planned industrial villages, with clean houses, in those areas; and, not least;

(f) a moral drive for tightening up business laxities.

If this programme can be implemented early, employment and income will increase, the standard of living of the common man can rise, agrarian trouble will ease, and this State will be

of greater use to the Union in supplying goods which will, earn as well as save Dollar. If such a plan is not carried out unemployment and economic discontent may grow, subversive forces may again lift their head and create trouble, and the security, not only of the State, but of the Union, may be seriously disturbed.

It is for the country to choose.

8th November 1950.

P. J. THOMAS.

T. K. KUNJAIYAPPAN.

R. VAIDYALINGOM PILLAI.

K. NARAYANA MENON.

P. K. NAYAR.

Summary of

CONCLUSIONS AND RECOMMENDATIONS.

- 1. Unemployment resulting from a large growth of population, unaccompanied by adequate increase in production, is the fundamental cause of the economic ills of Travancore-Cochin. In no part of India, in few parts of the world, has this problem assumed such serious preportions.
- 2. However equitably the available land may be distributed, agriculture will not solve the above problem, whatever encouragement we may give it. Only by industrialisation can profitable employment be given and standards of living be raised. The growing pressure on land, the increasing foodgrain deficits, and the powerful urge for higher living standards make this imperative.
- 3. A large number of those now depending on agriculture must be given full-time industrial employment and much larger numbers must be absorbed in other non-agricultural occupations. Our occupational pattern will have to change, as in the case of all advanced countries.
- 4. Improvements in production technique and the availability of cheap electric power have made it possible for cottage industries to attain the highest level of technical efficiency, as has been demonstrated in countries like Switzerland, Denmark and Japan.
- 5. The availability of electric power here in adequate quantities at low cost and the natural aptitude of our people to technically efficient labour (as also our rural sociology) make this line of advance possible for Travancore-Cochin.
- 6. The natural resources of this State are extensive, and are sufficient to keep a large population on reasonable standards of comfort. Few comparable areas in India can claim such a wealth of resources.
- 7. These natural resources have not been properly utilised, owing to the low state of our production technique; our serious moral defects are also largely responsible for this. Thus in spite of the vast resources of this land, the people remain poor.

8. Serious consequences have resulted from such a state of things. Unemployment is acute in some areas, underemployment prevalent over wide areas, and there is

widespread economic discontent.

- 9. Educated classes have not played their part in exploiting our natural resources; they have been trying for safe jobs under Government.
- 10. Education has played a different role in advanced Western countries; Educated people have led the van of industrial and agricultural development there. Steps have to be taken here for drawing a large majority of our young men to such wealth-producing activities.
- 11. The Governments of Mysore and Bombay have taken a forward move in the matter of fostering cottage industries and imparting vocational and technical education.
- 12. On many important grounds, such preparation for industrialisation is much more urgent in this State, and it is the duty of the Government and society to work for it, without any loss of time.
- 13. Some decisions on fundamental policy have to be made before any large plans for energising cottage production can
 be successfully carried out. In particular, we must decide
 that our cottage industries should be "pursued on the basis
 of the highest technical efficiency", as enjoined in the
 Nasik Congress Resolution.
- 14. In our proposed system, khadi and hand-pounding of rice can have an honoured place, and must be fostered.
- 15. A comprehensive system of technical training must be introduced. A Central Polytechnic should be started immediately, to be followed by others soon. The Central Polytechnic must also make provision for research by talented students.
- 16. For devising the most profitable lines of production, experiments have to be conducted on our foodstuffs, fibres and other raw materials, which are waiting to be turned into consumable goods. Demonstration of improved methods, at the door of the artisan, and training classes at convenient centres, are also necessary. An industrial exhibition should be conducted immediately.
- 17. An organisation for supplying capital and providing marketing facilities to cottage industries, and for the quality control of their goods, is urgently needed. A statutory corporation may do the work.
- 18. Industrial museums, emporia and show-rooms must be maintained and tourist traffic must be encouraged.
 - 19. Government will have to purchase as much of its stores as possible from cottage and other small-scale industries.
- 20. It is also Government's duty to make a complete census of cottage and other small-scale industries, and this must be maintained up-to-date from time to time.

- 21. An immediate plan for starting cottage industries in suitable centres must be launched, either independently or as complementary to factory industries. There are many lines of production which can be profitably pursued immediately. Production schemes may be launched in certain centres in every Taluk, with the help of Local Committees, on a settled plan.
- , 22. Cleaner homes and better living conditions are essential for the development of cottage industries on profitable lines. This is specially necessary in the case of food industries and where cottage production is to be planned as complementary to factory industries.
 - 23. A Cottage Industries Board, with adequate powers, may be entrusted with the work of energising production (as sketched in Section 21), and for carrying out experiments (as shown in Section 16). The Board must be given ample funds and must have the assistance of advisory committees.
 - 24. The capital cost of the above programme must be met from public bequests, from the State funds, and from contributions from the Centre. There is a very strong case for a large grant from the Centre. If any subventions are received by India under President Truman's Point Four Programme, this State must have high priority in their distribution.
 - 25. The peculiar economic problems of Travancore-Cochin have to be taken into account in the formulation of any All-India economic plans and in their execution. Neglect of this may mean dislocation, even impoverishment, of the economy of this thickly populated area. A proper Planning Board in this State is also necessary.
 - 26. Only by raising business standards and by doing away with dishonest practices can industrialization be accelerated. We have to build up a strong public opinion in this matter.
- 27. The six point programme, recommended here, should be implemented immediately. Not to do this may cause serious harm.

APPENDIX A.

SURVEY OF COTTAGE INDUSTRIES.

At a very early stage of the Committee's deliberations, it was realised that the available data are quite inadequate for making any proposals for either the reorganisation of the existing cottage industries or for the establishment of new industries. A report of industries in Travancore was published about 23 years ago, but this has become entirely out of date. During the intervening period, especially during World War II, not only large-scale industries but many small-scale and cottage industries have sprung up in many parts of the State. But hardly any information is available regarding them. The Committee therefore thought that its first duty was to carry out, within as short a time as possible, a survey of the cottage industries in the State and made recommendations to Government on this matter.

Investigators. The original plan of the committee was to have this survey conducted through the Inspectors of the Co-operation Department, but owing to their heavy preoccupation with audit work this proposal had to be dropped and Government's sanction was obtained for the appointment of 30 Investigators for the 36 Taluks in the State.

The Investigators were appointed on the 16th August, 1950. Information is being collected by them in respect of each Taluk (and each pakuthy or revenue village) on the basis of the points raised in the annexed Memorandum, which relate to

- (i) geographical features,
- (ii) natural resources.
- (ili) human resources.
- (iv) condition of existing industries.
- (v) possibilities for new industries, and
- (vi) economic statistics

(See Annexure)

Pakuthi Committees. Under directions from Government, the Revenue authorities in every Taluk—Tahsildars and their subordinates—are assisting the Investigator in this work. In each Pakuthi (or Revenue Village), a Committee of three to seven leading non-officials has been appointed with the local Proverthicar as Convener, to help the Investigator in collecting facts and figures.

of the Pakuthi Committees in each Taluk was held soon after the work started. At most of these conferences, either the Chairman or the Secretary was present; in some of them a member of the Committee was also present. These conferences were primarily meant for explaining the scope of the survey, but opportunity was

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taken to explain to, those present, the need for active public co-operation, if correct information is to be gathered, or any useful industrial programme is to be put through by Government. The Investigators have received help not only from officers but from members of the public. The survey has evoked considerable public attention.

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Analysis of data: It is the Committee's intention to analyse the data gathered from the taluks, and to use them for the formulation of detalied plans for the development of cottage industries. A detailed report of the survey will also be prepared, so as to serve as a record for future reference.

Annexure to Appendix A.

MEMORANDUM FOR THE USE OF INVESTIGATORS.

(Information must be collected regarding each Pakuthi or Revenue Village separately, as far as possible).

I. Geographical.

1. Boundaries of the Taluq.

2. Rivers, backwaters, waterways.

3. Nearness to Railway, bus routes, sea-port etc.

4. Towns, with population and economic importance.

5. Roads and transport agencies.

- 6. Pakuthies (Revenue Villages) with the following details:—
- (a) Area, (b) wet land, (c) dry land, (d) population, (e) nature of the land.

II. Natural Resources.

1. Agricultural and horticultural; crops, with crop acreages and approximate production figures;

2. Cattle wealth: fish: poultry.

3. Forest resources (timber, bamboo, cane, reeds, boney, fibres, lac, resin, wax, etc.).

- 4.- Minerals, if any.

III. Human Resources.

Number of artisans (carpenters, smiths, masons etc.)
Their present condition, competition from imported goods.
Other skilled workmen.

Number of scheduled castes under various heads; their condition, state of employment among them.

Other agricultural classes, employment among them; time wasted (months in the year, days with week).

Educated unemployed persons (men, women; number condition).

IV. Existing Industries.

(Only cottage and small-scale industries need be surveyed in detail but any complementary relationship between these and large-scale industries may be noted).

Details required about each industry under the following heads:—

1. Brief history

- 2. Nature and value of the machinery or tools used.
- 3. Number of persons employed (with grades).

4. Nature of the products.

5. Total production (quantity and approximate value).

6. Where and how marketed.

7. How working capital is drawn—the function of the lender in marketing.

8. Wages or and earnings of those employed.

9. Is the industry growing or declining? Why?

- 10. Prospects, suggestions for improvement, assistance required.
- 11. Possibility of the use of power; its availability nearby.
- 12. Names and addresses of persons who could supply further details.

V. Possible New Industries.

In respect of each such industry, give details of the raw materials available, their approximate quantities, how they are now used; nature of the manufacturing process; whether use of electric power desirable; suitability for being worked on the co-operative basis; where markets may be found etc. Give also names and addresses of persons, who may be able to give further details regarding such industries.

VI. Economic Statistics.

- 1. Wages in agriculture and among the artisans (various classes).
- 2. Cost of living (rough idea, if exact figures not available).

3. Number of shops and merchants.

- 4. 'Co-operative Societies, details regarding them and their working.
 - Joint Stock Companies—paid-up capital, nature of operations.

VII. Any other matter pertaining to the subject on hand.

APPENDIX B.

INTERIM RECOMMENDATIONS.

The Committee has hitherto sent up several interim recommendations to Government on matter requiring urgent action.

- 1. Marketing. At the very outset, the Committee realised that one of the serious problems confronting the cottage industries is the lack of proper marketing facilities. Immediate steps have therefore to be taken to tackle the problem. Accordingly the following recommendations were made to Government.
- (i) Proposal for the opening of a Co-operative Emporium and Sales Depoi in Bombay for better marketing of the handloom products of the State. The handloom weaving industry of the State has suffered very much owing to lack of markets for their products. In order to overcome the stiff competition from outside the State, and also, to relieve the congestion in the market, particularly in Kerala specialities like the thorthu, towels, neriathu, etc., it was considered necessary to seek markets elsewhere, especially in places like Bombay, Calcutta and Madras, where Malayalis reside in large numbers and where therefore there may be a large demand for such products. As a first step in this direction, the Committee has recommended the opening of a Co-operative Sales Depot in Bombay. utilising the grant of Rs. 20,000 from the Handloom Development Fund offered by the Government of India (vide the Committee · Chairman's letter No. I. 6-8774/50/DD dated the 20th May, 1950). Orders of Government are awaited on this proposal.
 - (ii) Proposal for the Export of Cottage Industry Products to Foreign Countries. (Vide the Committee Chairman's Note forwarded along with the Convener's letter No. 2255/50 dated the 15th May, 1950). The Committee having come to know that in foreign countries like the U. S. A., Indonesia, Malaya Indo-China, Siam etc. there may be a large market for the cottage industry products of the State, e.g., the different varieties of artware including ivory and horn, screwpine mats and other byproducts from screwpine, grass mats and kora mats, special varieties of handloom products etc., it was recommended that Indian emporia be opened in foreign countries for exhibiting all classes of these goods and that competent salesmen from this State be appointed to study the markets there and to assist the Trade Commissioners of those countries. These proposals are pending consideration of Government.
- (iii) Proposal for the Participation of this State in an Organisation to be set up on an All India Basis for the Export of Cottage Industry Products to the U.S. A. (Vide the Committee Secretary's letter No. 391 dated the 28th July 1950). Sri Goda Ram Channon of San Francisco had called attention to the possibilities of an extensive market for our cottage industries products; in America. The

Committee found it particularly welcome so far as the State products are concerned and therefore recommended to Government that this State should participate in any organisation to be set up on an All-India basis for the export of cottage industry products to the U.S.A.

2. Production Methods. Next to marketing, the methods of production of cottage industries have to be considerably improved by the adoption of modern and up-to-date technique a point which has since been emphasised prominently in the Economic Policy Resolution of the Nasik Congress. This can be possible only by imparting proper training. Japan had made rapid progress in this matter, and a study of Japanese machinery and production methods is essential.

Deputation to Arab-ki-Sarai. The Committee therefore recommended to Government that two mechanical engineers be deputed to the Training Centre at Arab-ki-Sarai, near New Delhi, to study the Japanese machines exhibited there and to report on their suitability for adoption or adaptation in this State. The Government has implemented this resolution (vide G. P. No. I. 6-11363/49/DD dated the 5th August, 1950) by sanctioning the deputation of two Engineers from the P. W. D. Workshop to the Training Centre at Arab-ki-Sarai. These two Engineers have returned and have submitted a report to the Committee regarding the purchase of some of the machines suited to the industrial needs here. The Committee has re ommended that all the machines be purchased.

Khadi Development Scheme. Soon after it began work, the Committee submitted to Government a scheme for developing hand-spinning and khadi wearing industries in the State (vide the Committee Convener's letter No. G. 3019/50 dated the 20th May, 1950). The Committee had, before it the recommendation of the Hand spinning and Khadi Weaving Sub-Committee of the Government of India. It was suggested that 16 centres be organised in the State with an initial investment of Rs. 2 lakhs for all the centres together and a recurring annual expenditure of Rs. 2,400 for each centre for the first three years after which the centres were expected to become self-supporting.

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