

Productivity and Social Environment

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TO

MY WIFE

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Introduction

The economic development of any nation depends upon two distinct but related factors. One is the rate of industrialization. The establishment of a large number of new industries at a fairly rapid rate leads to increased employment on the one hand and the production of much-needed goods on the other. Planned properly, it provides for economic stability. The productivity of the country as a whole increases because of the useful employment provided to those who have been unemployed or under-employed. This is particularly so in a country like India, where mass unemployment is a serious problem. The only way of ever hoping to overcome this is by a policy of rapid industrialization.

But industrialization, while it provides employment, does not by itself ensure a rise in the standard of living for those who are already employed. It does not ensure either the efficiency and competitive capacity of the industry or the quality of the goods produced. These can only be achieved by introducing innovations and technological changes as soon as they become available, by making the best possible use of all the available resources such as equipment, materials and man-power, by the introduction of productivity services and by the establishment of good human relations. In other words, only a high level of productivity in existing as well as newly established industries ensures an improvement in the standard of living in the long run. This is the second factor of economic development.

It will generally be found that the higher the level of industrialization, the greater the productivity of industries as well as individuals working in industries. This is only to be expected since a high level of industrialization produces the necessary industrial climate, the necessary services such as education, training and research, and creates auxiliary industries as well as markets all of which become closely interlinked. Once full employment is achieved through industrialization, any further increase in the standard of living can only be achieved through increased productivity. In such a situation technological changes and innovations are easier to bring about and with less drastic effect on the people involved. Industrial practices, sense of values and standards of behaviour are accepted by community at large. An industrial society produces a sociological climate that is conducive to productivity increase.

Economic growth therefore is a function of both these factors, viz, industrialization of the country on the one hand and increase in productivity in industry on the other. The word 'productivity' in the title of this book is used to refer to both these aspects.

Since Independence, we in India have embarked on an extensive and planned programme of industrialization. While attempting to create a firm industrial base through development of heavy industries and basic industrial materials, we are at the same time diversifying industrial production in order to produce the essential consumer goods.

Attempts are also being made to raise agricultural productivity—both in yield per acre as well as in production per person employed. This is done through irrigation schemes, better use of fertilizers, distribution of better seeds, better farming methods, and so on. As a result of all these measures, it is hoped that productivity will increase on the one hand and potentialities of employment will increase on the other and the two together will lead to a higher standard of living for our vast and growing population. We are attempting to bridge the gap between ourselves and the advanced nations of the world with high productivity and a high level of industrialization -- to bridge the gap of centuries in matter of decades.

The fulfilment of such an ambitious programme demands a rapid increase of productivity in various fields and this can be achieved only under extremely favourable conditions. If all the necessary conditions do not exist, or are not present to the required degree, then the objectives that we have placed before ourselves will not be achieved to that extent or within the expected time.

What are the conditions under which a high rate of productivity increase can be obtained? A Knowledge of these conditions would enable us to create them where they do not exist and thus accelerate the rise in productivity. Or, if it is found that those conditions are unattainable for some reason, it would at least enable us to concentrate on those activities that are likely to yield maximum results.

Throughout history, certain societies or nations have shot suddenly into prominence by virtue of their attainments in the economic, artistic, political and military fields. After perhaps a few centuries, they have with equal suddenness sunk into obscurity and the world does not hear very much of them—except as a chapter in a history book or from a tourist guide. Even great civilizations of the past have been subject to this process of growth and decay, though a few of them seem to have rejuvenated themselves after a long period of hibernation.

The question naturally arises as to what were those factors which helped blossom forth certain people at a certain time. And, perhaps even more important, what caused their downfall? Or, what were the causes that prevented other people in similar situations from making their mark in history? A satisfactory answer to these general questions might be helpful in applying it to the situation in India today and making an assessment with regard to the possibilities to productivity increase. Historians and economists have attempted to answer these questions in terms of certain theories. They have tried to explain the phenomenon of growth in terms of climatic conditions, shifts in population, abundance of natural resources, technical or military innovations, and so on. But these explanations given in terms of any one situation fail if they are applied to a different instance. Climatic conditions and natural resources have not changed very much since the beginning of the world. Therefore, why should the ability to make use of them come only at a particular time and should cease after a certain period? Again, there are other regions with similar climatic conditions and natural resources have not changed very much since the beginning of the

world. Therefore, why should the ability to make use of them come only at a particular time and should cease after a certain period? Again, there are other regions with similar climatic conditions and resources, but they have failed to produce economic growth in that society. Or again, why should one group of people be able to produce technical or military innovations while others at a similar level of development fail to do so? Therefore, none of these theories offers a general explanation as to the growth and decay of nations as a whole. Of late, psychologists have entered the field and they have attempted to explain growth in terms of motivation of individuals and groups, the desire for achievement, and so on.

It is obvious therefore that the basic factor of economic growth is a subtle combination of a number of causes—physical, economic, sociological and psychological—the nature and extent of which have not yet been accurately determined. Our knowledge is still nebulous and, consequently, it is impossible to predict the rate of growth with any degree of accuracy in the present state of our knowledge. Nevertheless, that these factors have an influence, there can be no doubt.

This book is concerned with the problems of productivity in India in relation to one of these factors, namely social environment. Is the present social environment in India conducive to a rapid increase in productivity? If not, in what way does it influence it? What are the factors in our environment which have an adverse effect? The hypothesis – if it can be so called—put forward is this: that the present social environment is one of the limiting factors to productivity increase in India. Where productivity increase is the result of a number of factors, if one of them is adverse to productivity rise or if it does not change with the tempo that economic growth demands, then it becomes a limiting factor irrespective of how favourable the other factors might be. It is rather like the speed of a convoy being limited by the speed of the slowest boat.

Unlike other factors, social environment cannot be changed very quickly. Lack of capital resources can be made up to a certain extent by borrowing from outside. Lack of technical knowledge can be overcome by importing a large number of technicians from abroad. But social environment is something that is inherent and part of the social structure of a nation. It is made up of the sense of values a community holds, relationships between individuals and groups within the community, and habits, traditions and customs that are the result of history. These are internal to a society and cannot be supplemented or changed by a wholesale import of ideas as may be done in the case of machines. In fact, any attempt to do so beyond a natural process of assimilation and absorption might result in the development of resistance to such a move and make any changes more difficult. No doubt, external ideas do influence social environment, but as a rule, it is a subtle penetration rather than a quick change. A change in social environment has to come largely from within as a result of economic, social or philosophical forces that exist or are created within the society. Such a change is naturally slow -- particularly in a society that is not used to change.

Social change is not accepted by people merely because it is good for them. Logic has never been the basis of man's behaviour. If it had been, life would have been much more simple and much less interesting. Change involves giving up the old and the familiar and learning new habits, new ways of doing things and forming new relationships. Often it means changing one's sense of values, and beliefs. It necessarily means effort. We tend to look upon anything new with a certain amount of suspicion. We are afraid that a change might affect our position, status, income, etc., adversely. We do not know how we would fare in the new situation. Consequently, most people are reluctant to change. Therefore, if it is accepted that (a) the present social environment is not conducive to economic growth and (b) that any change in social environment is necessarily a slow process, it follows then that productivity increase is limited by this factor for some time to come. It means that our future prosperity and the standard of living are closely linked to the speed with which the environment can be changed. It implies that not only from a purely sociological point of view, but even from an economic point of view, it is necessary to accelerate the rate of social change. It also implies that in our economic planning, the sociological aspects should be given greater importance and they should be taken into consideration in evolving these plans.

Social reform has hitherto been considered as a desirable objective and an end in itself. It is also generally known that economic changes – such as industrialization – would bring about social changes in their wake. But that social environment exercises an influence on productivity and may accelerate or retard economic development depending upon whether it is conducive or not, is not generally realised.

The objective of this book is to focus attention on an aspect of India's development that has hitherto not received adequate consideration. It is hoped that this book will lead to a further investigation of this problem and perhaps to some re-thinking about the relationship between social and economic problems.

CHAPTER ONE

The Concept of Productivity

1

Not many years ago, the word 'productivity' was practically unknown. Yet, in recent years, it has become a key word in any discussion of industrial and economic problems. To the layman, it may appear that the productivity movement is a sudden growth of the post-war period. In fact it has a much longer history.

It was in the closing years of the last century that F.W. Taylor developed a technique of management which has come to be known as Scientific Management. When he was appointed as gang boss, he tried to increase output by exerting pressure on the workers. While he succeeded in doing so after a struggle, it left him with a feeling that such conflicts could be avoided and production increased if the management knew what constituted a full day's work. He experimented along these lines and the technique he developed had two major elements. One was to discover the best way of doing a job and measure the time taken to do it efficiently. This was achieved by breaking down the job into its various elements, eliminating all unnecessary movement and assessing the time taken to do this job with the help of a stop-watch. The second was to ensure that all workers engaged in the job were trained to do it in the best way. The introduction of such a method coupled with a piece-rate system would ensure high output, high wages for workers and low costs of production. Taylor believed that instead of management and workers fighting for a share of the profits, they should attempt to reduce costs so that there would be plenty to share.

The factories with which Taylor was concerned in introducing the system were small and there was no collective bargaining involved. While he was not against collective bargaining, he was of the view that the quantum of work and the best method of performing it should be a matter of scientific study and not a matter for negotiation. Taylor was the first person to look at work in an objective manner and attempted to increase efficiency by its measurement and better performance.

While the Scientific Management movement was making slow headway in American industry in the first quarter of this century, psychologists also entered the industrial field and began to study problems of work from another angle. Most of their earlier studies were concerned with problems of fatigue, monotony, working conditions, noise, etc. They were also engaged in measuring the aptitude of workers for different jobs and in developing aptitude and intelligence tests for the selection of right type of workers. Later they extended their studies to the fields of motivation and morale, individual and group behaviour, relationships and other organizational problems. These studies yielded extremely

interesting and sometimes unforeseen results. But their application to industry to any extent was not to come until after the Second World War.

During the past twenty-five years, a host of outsiders—scientists, economists, statisticians, social scientists, etc. – have been applying their various sciences to industrial problems and have been attempting to develop techniques for their solution. Periodically, managements of industrial enterprises have been told of a particular technique that would provide a solution to all their production problems. While many managements ignored them, a few intelligent ones were aware that even scientists behaved like salesmen when it came to selling their ideas and while all their claims might not be justified, there were, nevertheless, some problems that could be successfully solved by the application of a particular technique in its own limited sphere. Recent years have witnessed the development of some extremely sophisticated and advanced techniques such as Operations Research which make use of many branches of science at the same time. Such techniques are employed not only to solve day-to-day problems of productivity but are intended to aid management in their decisions on broad policy matters also.

A number of these techniques—work study, quality control, cost control, production planning, market research, etc. -- were being used by many managements in the United States and a few in Europe and Great Britain even in the pre-war period. But the thirties were not a particularly propitious period for the development of these techniques on a large scale. As an aftermath of the depression, production was being curtailed everywhere, unemployment was increasing and markets were more and more difficult to find. Consequently, many of these techniques remained at an academic rather than at factory level.

The attitude of workers and trade unions to many of these developments was one of active opposition. The bitter experience of indiscriminate and often unfair application of Time and Motion Study in factories had left American and British trade unions totally against it and the appearance of a man with a stop-watch in a department was often the signal for a strike. To them, it meant harder work and greater unemployment with no corresponding advantages. As far as the other techniques were concerned, trade unions were indifferent if not actually hostile.

But the situation that existed in the post-war period was very different. There was an increasing demand for all types of consumer goods throughout the world. It was a period of full employment and rising wages. The need was greater, and greater production and increase in productivity meant not only increased profits for the employer but higher emoluments for the workers also. The threat of unemployment that was the curse of the thirties had largely disappeared because of the economic measures taken by various countries as a result of past experience and as a result of generous welfare and unemployment benefit measures. The experience of the war—particularly in Great Britain and in the United States—when managements and trade unions co-operated whole-

heartedly to increase output of war materials was also extremely useful in the post-war period in increasing the production of much-needed consumer goods.

One of the important factors that emerged as a result of the experience of war was the importance of human factor in production. It was realised fully and for the first time since the industrial revolution that the man behind the machine was more important than the machine itself. However efficient the machine might be, unless the man operating it was efficient, properly trained and willing, productivity could not be increased. In fact, it was realised that as machines became more and more automatic and productive, they reduced human effort to a minimum, but they could not make the importance of man any less. Many social scientists working in this field in pre-war years had already perceived this, but war brought this to the notice of many of the managements in a forceful and dramatic manner.

The war also made the trade unions realise that responsive co-operation with managements in increasing productivity was to the ultimate benefit of workers and it was the only method by which workers could expect a progressively higher standard of living.

The situation was therefore very opportune for a big step forward in the productivity drive. But it was obvious that before such a drive was to be successful, certain basic conditions had to be fulfilled. These may be summarized as follows:

- (1) Instead of applying the various productivity techniques in a random fashion-often in competition with each other - there should be a coordinated application of these techniques to a given industrial situation, taking into consideration the limited nature and scope of these techniques. It involves a detailed study of the situation in a particular industrial unit and the taking of suitable corrective measures that are most likely to yield the best results.
- (2) The application of these techniques is no substitute for the adoption of technological changes. In a fast changing and highly competitive industrial situation, only the constant introduction of technical changes and scientific knowledge as and when they are available combined with the use of productivity techniques will result in increasing productivity.
- (3) For creating and maintaining high productivity, the active co-operation of workers and trade unions is vital. This is only possible if workers are assured that high productivity will not result in unemployment and that the gains of increased productivity would be shared between the workers, employers and the consumers. This necessarily means the active co-operation of labour on the shop floor and its active participation in any productivity movement on a national scale.

The growth of productivity movement in various countries can be related to the gradual crystallization of these ideas and to the development of a philosophy of productivity.

The first organized national attempt at increasing it was the formation of the Anglo-American Council of Productivity after the war and the publication of a number of team reports on productivity in British and American industries. Since then, the productivity movement—it has almost become a crusade in some countries—has spread to all countries of Western Europe and to many countries in Asia. Recently, an Asian productivity organisation has been set up with headquarters in Tokyo.

The impetus behind the movement has been largely American – American example on the one hand and American aid on the other. European countries whose economies were disrupted by the Second World War felt the urgent need of rehabilitating their industries. They were impressed by the American example in the industrial sphere and by the high standard of living achieved in that country. In re-building their industries, they naturally adopted many of the skills and techniques that had proved successful in the United States. It was not that these techniques were unknown in Europe. What was lacking was a systematic and scientific application of these techniques to industry. The International Cooperation Administration (ICA) of the United States Government came forward with help and assistance in setting up productivity centres in various countries, inviting teams to study American industry and loaning experts for specialized training.

Many Asian countries – particularly Japan – faced with acute problems of economic and industrial development have now set up their own productivity centres.

As far as India is concerned, two teams of productivity specialists from the ILO visited India in 1952 and 1954 respectively. They were able to demonstrate in selected industries how it was possible to increase productivity by the application of productivity techniques. As a result of these visits, a Productivity Centre was set up in Bombay with the object of training supervisors in industry in the use of productivity techniques and demonstrating these techniques in factories. The visit of these missions was also responsible for the establishment of the TWI Centre for training middle management in industry in the skills of supervision.

It was in 1956 that the Government of India sent a Productivity Delegation to Japan with two major terms of reference. They were:

1. To study the industrial policies and practices that have created a climate of high productivity in Japan, and

2. To study the working of the Japan Productivity Centre and to make suitable recommendations for the setting up of a similar organisation in India.

Japan was chosen in preference to a European country, possibly because of the similarity in the traditional culture patterns of the two countries and because the industrial conditions in Japan were nearer to Indian conditions than those of a more advanced country. Consequently, the problems of productivity were likely to be more similar.

On the basis of the recommendations of this Delegation, a conference of industrialists, trade unionists, engineers and technologists was called in New Delhi and it was resolved to establish the National Productivity Council. The Council has now been functioning for the last five years. A large number of local Productivity Councils have also been formed at various industrial centres in the country. Training in various productivity techniques has been conducted through these local productivity councils for the benefit of managements, technicians and trade unionists, partly through experts loaned by the Technical Cooperation Mission of the U.S. Government and partly through the staff of the National Productivity Council. A number of selected technicians have also been sent to Europe and America for training, and productivity teams have visited various countries and published reports.

In announcing their decision to establish the National Productivity Council, the Government of India accepted the following guiding principles as the basis of productivity movement:

- “1. In the productivity drive the objective should be to increase production and improve quality by improved techniques which aim at efficient and proper utilization of the available resources of men, machines, materials, power and capital, raise the standard of living of the people; and improve the working conditions and welfare of the labour, taking into account the social implications of these changes. The movement does not seek the intensification of labour’s burden through increased work-loads and speed up.
2. Increased productivity in a growing economy will ultimately help in increasing employment by stimulating the development of industry. The Government, Employers and the Labour should take specific measures to obviate the possibility of unemployment.
3. The benefits of productivity increase should be equitably distributed among capital, labour and consumers, and these should lead to the renewal and expansion of plant, machinery and equipment.

4. Productivity drive may eventually be launched in all spheres of nation's economy. It is of importance to achieve integrated improvement in productivity in all activities of the nation. In the field to industries it would cover the large-scale industries as well as the medium, small-scale and light industries in the public and the private sectors.
5. Increase of productivity cannot be achieved without the fullest co-operation between management and labour. In order to carry through the productivity programme effectively, it is necessary to create a climate for increased productivity through encouragement of joint consultations, participation of labour in management, and promotion of mutual understanding between management and labour, in each industry and in each individual enterprise."

The basic philosophy behind the productivity movement implicit in this statement is obvious.

In the context of India's developing economy, the importance of productivity increase cannot be overemphasized. Increased productivity in any one industrial unit would mean a lowering of cost which would in turn be reflected in increased profits, improved wages and a lowering of prices. Increased productivity on a national scale would mean that our meagre foreign exchange resources could be better conserved and the targets set in the Plans could be achieved at a lower cost. It would also mean that many of our exporting industries which are struggling to retain their precarious hold on foreign markets would be in a better position to compete and earn more foreign exchange. All these would be reflected in a quicker tempo of economic growth and an earlier achievement of our social and economic objectives. Increasing productivity has therefore become an inescapable necessity.

Productivity is usually defined as the ratio between the output of products or services and the input of resources in the form of man-power, machinery, materials, etc. If with the same input we are able to achieve a greater output, then there is an increase in productivity. Increased productivity should not be confused with increased production. It is possible to increase the input of man-power, materials, machinery and so on and thus increase production. But productivity may remain the same. It is only when increased production is attained through the employment of the same resources that productivity can be said to have registered an important. If we make the maximum use of all the available resources, then productivity can be maximized. Or, if by the employment of a few additional resources - such as the use of better materials—a high increase in productivity is achieved, then also the productivity increases. This is a useful definition because it leads us to the measurement of productivity.

Since various types of resources which are not inter-convertible are employed in achieving the production of goods, productivity can be measured in terms of any one of the resources. But it is more usual to measure it in terms of labour employed. This is so because it is labour productivity that ultimately determines the standard of living of a nation. Further, labour is least likely to change and is most sensitive to any change in the other factors. The concept that is normally used for the measurement of labour productivity is generally referred to as OHP, i.e. Operative Hours for Unit Production. The reason for the use of this concept in preference to production per man-hour is that it lends itself more easily to analysis. When the raw material has to pass through a number of processes before becoming a finished product, the OHP for each department can be separately assessed and the total of the separate OHP's will give the operative hours for the product itself. It is thus additive and enables us to locate the areas of low productivity of the different departments of an organisation from time to time. It also enables us to compare different units producing the same product and to study trends in productivity in industry.

While OHP is a useful measure of productivity for an individual factory, it is obviously not a suitable measure of a country as a whole. For measurement and comparison of national productivity, some other measure—such as the value of goods produced in a year in relation to the population—would have to be employed. In such a measure, due allowance will have to be made for any inflationary tendencies during the period of comparison since the value of the goods might have gone up without an increase in output.

The relative contribution of various factors—namely manpower, machines, materials, power, etc. — to total productivity is different in different industrial situations. It depends on a number of considerations such as the level of technological development, the relative cost of labour and equipment, the cheapness or otherwise of the various materials available, and so on. In countries with a high standard of living where wage levels are high, it is essential to economise to the maximum possible extent on manpower and introduce automation as far as possible. In such situations, labour productivity would be high, and greater use would be made of automatic equipment, power, etc. But the total cost of production would not be high. Where wage levels are fairly low and machinery is expensive or difficult to obtain, or where labour is not sufficiently well trained in the use of complicated and expensive equipment, the industry will naturally be labour intensive and, consequently, labour productivity will be low. But the cost of production need not necessarily be low, because, in spite of low wages, labour cost will be high and the advantages of mass production methods cannot be used. As wages begin to rise, it becomes more and more imperative that the input of labour should be reduced relative to the other factors. It means that, as far as possible, the machine is made to do the work of man to achieve greater and greater mechanization. This is even more important in the case of industries competing in international markets, for they have to be always on the alert to reduce the cost of production and improve quality so as to be in a position to retain their hold on their

markets. Unless there is full employment in the country or unless the industry is constantly expanding, mechanization would lead to retrenchment which the workers would understandably oppose.

But increased productivity does not mean merely the rationalization of labour. It means economy and efficiency in every aspect of the productive process. Labour cost is only a part—sometimes a minor part—of the cost of production. There are many other areas of industrial activity which can be controlled and coordinated. Better use of raw materials and stores, better machine utilization through proper maintenance and balancing of production, product standardization and market research are a few such areas through which economy is possible.

3

Very little statistical data on the level of productivity is available for many of the manufacturing industries in India. But anyone who has any knowledge of Indian industry in relation to those of other countries is aware that our productivity is very low indeed. The meagre statistical information that is available confirms this view.

Taking the textile industry as an example, productivity in Japan doubled itself during the period 1948-55. The operative hours required to produce one bale of cotton yarn converted to 20s count was reduced from 120.8 in 1948 to 64.8 in 1955. Though later figures are not available, we are told that this tendency is continuing at an accelerated pace. A similar study conducted in a group of about fifty mills in India between 1956 and 1960 has shown that the operative hours required to produce one bale of yarn converted to 20s count was 189.2 in 1956 and 172.9 in 1960. That is, there has been about 7 per cent increase in productivity during a period of five years. Another interesting fact revealed was the wide variation in productivity among the mills studied. The difference between the best mill and the worst mill was of the order of about 60 per cent. But when some of the new mills that have gone into production recently with the latest equipment are taken into consideration, this difference is much greater. In any country it is inevitable that there should be some difference in productivity between the most efficient and the least efficient units producing the same product. But in India, this difference is extremely high.

When we compare the proportion of labour cost for the value of output among the various textile producing countries, India, again, does not fare very well.

Table

	U.S.	Belgium	U.K.	Japan	India
Value per unit of output	100	100	100	100	100
Labour cost	29.2	24.0	24.0	16.1	26.6

Source: Gatt sectt (Pilot Study – 1959) and TXC’s office, economic branch.

It will be seen from the table that India comes next only to the United States in the labour cost for unit production; this is in spite of the fact that wage levels in most of these countries (except Japan) are many times higher than in India.

It may perhaps be suggested that the textile industry, being the oldest in India with a fairly large percentage of old and obsolete machinery, should not be taken as a criterion for comparison and that some of our more modern industries would fare better. But it should be remembered that the textile industry is the largest single industry in India. Secondly, productivity in the cotton textile industry in other countries also is lower when compared to other industries.

Thus, while productivity in the existing industries is low in India, the national productivity is one of the lowest in the world. This is partly due to the very low productivity in agriculture in which a considerable percentage of the population is employed and partly due to large-scale unemployment. This is revealed by the low per capita income and the general low standard of living of the mass of the people.

From the above discussion, three factors are obvious:

1. National productivity as well as productivity in individual industries is very low in India.
2. Productivity increase in India in the past ten years has not been as high as in other countries. That means, the gap in productivity between India and the other industrial countries is actually widening while our efforts have been directed towards bridging the gap.
3. There is considerable variation in productivity between units in the same industry. Therefore, if national productivity is to be increased, it is essential to concentrate on units where it is low at present.

Some people argue that these other countries have a long tradition of industrialization behind them. They have been operating in a set of conditions – political, economic and industrial – which did not exist in India until quite recently. Therefore it is not fair to compare productivity in India with these advanced countries and derive adverse conclusions. This is quite true. It would be unrealistic to expect productivity in India to be the same as or anywhere near those of advanced industrial nations. But on the other hand,

if we are ever to reach these levels of productivity, then it is essential that our rate of increase should be higher than that of others. In actual fact, however, it is very much less. Secondly, productivity is not an absolute measure. It is relative and is dependent on a number of considerations. Therefore, only by comparing ourselves with other industrialized nations can we know what is possible and what we should aim at achieving.

To anyone who is concerned with the rapid economic development of India, these factors pose a serious challenge. Unless they can be overcome, the economic and social objectives that have been placed before the country will not be fully achieved. From this point of view, an investigation into the causes of low productivity becomes a matter of primary importance. What are the causes of low productivity in India? Are they economic, sociological or technological? Or, are they a combination of all these? To put it in other words, what are the factors that have contributed to high productivity in other countries? What measures can be taken to achieve the same results in India?

4

A high rate of productivity is not an accident. It is the result of planned and effective utilization of resources; the result of the deliberate adoption of methods and processes most suitable in a given situation and the application of scientific knowledge to the problems of industry. Any failure to make full use of any one of these factors reduces productivity to that extent.

First, there are the internal problems of the individual factory, the level of mechanization, the technical and managerial skills available, proper use of materials and processes and the application of productivity techniques. The type of industrial relations existing in the factory also has an influence on productivity.

Then there are the external factors which contribute to productivity in a factory. A factory does not function in isolation. It sells goods or services to the community; it buys its supplies from the community. It employs people who are citizens and it contributes to the economic and social life of the area in which it is located. It is subject to rules and regulations imposed by the State and have to function within an orbit of economic and political sanctions. It is governed by the codes, practices and methods that have developed over a period of time within the organisation as well as certain traditions that have grown in the society in which it operates. These factors determine the environment in which the factory functions. If these external factors are un-favourable to productivity increase, then the mere application of productivity techniques will not necessarily result in raising the level of productivity. Even technological innovation is governed and conditioned by these factors. This should not be taken to mean that productivity techniques should not be used unless and until there is a favourable environment. But it does mean that used under

unfavourable circumstances, we cannot get the results that we normally expect from these techniques. Such results are also likely to be temporary and things are likely to slide back to the status quo when once the novelty has worn off or the external stimulus has been removed. Used indiscriminately with no regard to these factors, the techniques may sometimes yield no results at all and get the blame which should rightly be laid at other doors.

These environmental factors, besides influencing productivity in an individual unit, have also considerable effect on national productivity. They are partly economic and partly sociological. The availability of capital, raw materials, power, markets and the level of competition are some of the economic factors which have a bearing on national productivity. The policies followed by the Government can help in the manipulation of some of these factors and create favourable conditions. But these factors cannot be completely controlled even by Governments. Nevertheless, pursuit of certain economic policies suitable to a given situation would help in promoting productivity on a national scale.

While economic factors have a direct bearing on national productivity, the influence of sociological factors is less direct. The influence between these and productivity is less easily perceived because it depends not on measurable entities such as capital or markets or levels of taxation, but rather on beliefs, attitudes, modes of behaviour, etc. But their influence on productivity is none the less profound. And from a long-term point of view, they may be more important because they change more slowly. Resistance to change is a well known phenomenon. People are more at home with the familiar; change means that they have to get adjusted to a new environment, new methods of working or living. And they are always afraid that a change may not be for the better as far as they are concerned. Further, sociological factors cannot be manipulated in the same way as technical or economic factors.

Productivity in its broader aspects is not only an economic concept but also a sociological concept. It is an attitude of mind; it is not only a method of working in economic terms, but also a way of thinking and acting. The environment in which we live, our relationship to each other, as groups and as individuals has an influence on the effectiveness of our work.

The importance of the human factor in production has been increasingly realised in recent years. In fact, as technology progresses, the human factor becomes more important, not less. Because, as the productive capacity of the machine increases, the responsibility of the man behind the machine also increases as any carelessness, ignorance, or unwillingness on his part would have a considerable adverse effect on productivity. This realization has led towards the establishment of better human relations within the industry, to the

improvement in the working conditions inside factories as well as improved conditions of living and to the provision of psychological incentives in order to maximize productivity.

But man is, above all, a social being. He functions not only as an individual, but as a member of a group. In the same way, an organisation is not only an economic unit but also a sociological unit. People within the organisation are related to each other in various ways, both formally and informally. Each of them has his own desires, aspirations and anxieties. The degree of success of an organisation depends not only on the efficiency of its equipment but largely on the establishment and acceptance of objectives, standards of conduct and behaviour by all members of the organisation. What applies to one organisation applies equally to the nation as a whole. The effectiveness of our work and the rapidity of our progress depend upon the willing acceptance not only of common objectives, but common standards of behaviour, codes of conduct and relationships that are suited to the requirements of an industrial society. It depends on our ability to cooperate in groups and organisations for a common purpose, eliminate social tensions and make the best possible use of the human resources.

Further, the life of an individual is not divided into water-tight compartments of working and living, because a member of an organisation is also a member of the larger society outside. He is subject to its rules and regulations, conventions, ethics and social pressures. His own behaviour inside the organisation is conditioned by his environment. The effectiveness of his work – and consequently productivity – is largely influenced by these factors.

The social system in which we live also has a tremendous impact on productivity. The distinguishing features of a socio-economic system such as the division of labour, rewards and punishments, authority and prestige are some of the relevant factors. Are people in general satisfied with the existing system? Is the system successful in fulfilling to a reasonable extent, the economic, social and psychological aspirations? If the system is not completely successful, then the frustration and the discontent that is generated would necessarily affect productivity.

In India, an industrial society is growing out of a rigid, traditional, conservative social system—the caste system. Often an individual is a member of both these systems at the same time - one by tradition, background and family association and the other through education and economic necessity and personal interest. It means that a man spends his social and domestic life under one set of conventions and codes of behaviour and his working life in a different social system that has its own requirements. Frequently, these two roles are incompatible and the individual has to work out some sort of compromise. Such a compromise need not always be in favour of the more advanced system.

As industrialization progresses, millions of people are bound to be uprooted from their traditional homes from the villages and settle in new and unfamiliar surroundings. They will have to learn new methods of working, new disciplines and be subject to different codes of behaviour. This vast social change will create fears and anxieties in the minds of those affected and innumerable problems of social adjustment.

Productivity in its broader aspects depends also upon the objectives a nation sets before itself. These may be purely material or spiritual, vague and nebulous or precise and concrete. The enthusiasm we are able to generate for the fulfilment of these objectives and the single-mindedness with which they are pursued will determine the speed with which they can be achieved.

Finally, it should be remembered that just as social environment has a profound effect on productivity, productivity also influences social environment. As productivity increases, it changes the standard of living which will automatically influence the way of life. Opinions, ideas, tastes and relationships change and a new pattern of life emerges. In other words, productivity and social environment have a high degree of interaction.

The Economic Factors

1

Economic and social aspects are closely interrelated with productivity. Therefore, a brief consideration of economic factors that affect productivity will not be out of place.

Industrialization in India has been going on at a fairly rapid rate during the past decade. Certainly, the rate has been much faster than in pre-war years though perhaps not as rapid as one would like it to be. This has been made possible because of the momentum given and the enthusiasm generated by freedom for all constructive activity. It has been achieved partly because of the accumulation of sterling balances during the war which provided the bulk of the foreign exchange requirements in the early stages, and partly through loans, aid programmes, collaboration with foreign countries and investment of foreign capital in the later stages. Technical know-how and facilities for training abroad for Indian technicians have also been provided by many foreign governments.

The rate of development is revealed by the increase in the index of production of certain agricultural commodities as well as industrial products. Between the years 1950 and 1959, there has been an overall increase of about 31 per cent in agricultural production. The major agricultural commodities have registered the following increases:

Foodgrains	28.2%
Cotton	78.3%
Jute	67.5%
Tea	20.1%
Coffee	122.9%
Sugarcane	40.6%

Source: Ministry of Food and Agriculture.

Similarly, in the sphere of industrial production, there has been an increase of about 51 percent for the same period. The increases in the major industries are as follows:

Iron and Steel	63.1%
General Engineering	182.6%
Electricity	148.5%
Cement	113.6%

Paper	122.9%
Chemicals	114.3%
Cotton Textiles	11.5%
Sugar	86.8%

Source: Directorate of Industrial Statistics, Calcutta.

It should be remembered that steel production has increased significantly since the commissioning of steel plants in 1960. Looked at in absolute terms, these figures indicate a significant advance during the past decade. But viewed in the light of India's requirements, it has to be admitted that the progress has not been adequate. This opinion is based on the following considerations.

In the first place, one of the objectives of industrialization is to divert the huge manpower that is at present only partly and uneconomically utilized in agriculture to more productive channels. This transfer of human resources from agriculture to industry would not only increase industrial production but at the same time reduce the burden on agricultural economy. But a look at the percentage of people employed in agriculture shows that there has not been a significant change during the past ten years. On the other hand, it may be that in some areas this percentage has actually increased due to an increase in population. The imbalance between agriculture and industry has not been altered in spite of the industrial growth in the past decade. Secondly, as already mentioned earlier, the net economic growth is only of the order of about half a per cent per year which is very low when compared to other countries. In spite of the fact that in high producing countries with a high standard of living and full employment the rate of growth is likely to taper off, it has been much higher in countries like West Germany, Japan, the United States and the Soviet Union. Thirdly, even the present rate of industrialization has been achieved as a result of a fairly high rate of borrowing. It is questionable whether the present rate of borrowing should or could be kept up for very long.

What are the major economic factors that govern productivity in an under-developed economy? As far as India is concerned, they are the inherent problems of under-development on the one hand, and government planning and control on the other.

India has a large and growing population. The rate of population growth has been estimated at about 2 per cent per year. A substantial part of this population is unemployed or under-employed, the precise extent of which has never been accurately assessed. A vast majority of people are still illiterate and they do not possess the skills that enable them to be employed in remunerative occupations. On the other hand, there are many occupations

in which there is a shortage of personnel. In particular there is an acute shortage of people with technical skills at various levels and with managerial talent.

The vast majority of people depend on agriculture for their livelihood. But agricultural productivity—just as industrial productivity—is very low partly because of the low yield per acre and partly because of the excessive number of people employed. While irrigation facilities have been expanding, agricultural production still depends to a large extent on the vagaries of the monsoon. One bad year of rainfall may make all the difference between self-sufficiency and acute shortage of agricultural production. Traditional crops and traditional methods of cultivation are still the practice; scientific methods of farming have not yet reached the average agriculturist. Natural calamities such as floods, droughts and soil erosion still take their annual toll. Fertilizers are still in short supply.

As a result of these factors, the level of employment is very low and this is a limiting factor as far as increasing productivity in the existing factories is concerned. In countries like the United Kingdom where there is full employment, losing one's job is a minor inconvenience. Other jobs equally remunerative are easily available. During the period of unemployment, the unemployment benefits paid are such that they not merely protect people from starvation but enable them to maintain more or less the same standard of living as when they were working. But in India, losing one's job for most people is a major disaster in one's life. The jobs available are few and there are literally hundreds of applicants for every vacancy.

Under these circumstances, retrenchment of workers is impossible. The utmost that is possible is the reduction in the total labour force due to old age, voluntary retirement, sickness, etc. Any worker rendered surplus as a result of improved techniques and processes would have to be absorbed for increasing the volume of production either on additional equipment or on additional shifts. But this is not always possible because of other factors such as shortage of power, materials, foreign exchange and so on. Therefore, increase in productivity is largely governed by the level of employment in the country as a whole. Until such time as the rate of industrialization catches up with the level of unemployment, this situation is likely to continue.

While there is unemployment on a large scale on the one hand, there is, on the other, a shortage of skilled workers, technicians and engineers. In spite of the increase in the number of technical colleges and other training institutions during the past decade, there is considerable shortage of personnel in many categories. Though provision has been made in the Third Five Year Plan for the training of skilled workers and artisans, their number will remain inadequate for some time.

This problem is further aggravated by the steady increase in population and the yearly increase in the number of people ready for employment. Assuming that one person out of every three will seek employment at any given time; it can be estimated that every year about 3 million people will be added to the total number of employable individuals in the country. This will be in addition to the backlog of the already existing unemployment. Another way in which the rising population affects productivity is by increasing the volume of consumption. The greater the number of people to be fed, clothed, provided with shelter, education and medical care, the larger the national expenditure on these items and, consequently, the less the net surplus that is available for investment and expansion. Viewed from this angle, the rapid rise in population is one of the critical factors in India's economic growth.

3

Because of the low per capita income, the net annual surplus that is available for economic investment is very small in relation to the requirements of the country. This surplus is made up of taxes of the Central Government and the various States which are used for financing irrigation and power generation projects and public sector industries, the loans that are floated annually by the governments and the capital formation in the private sector industries. So long as this surplus is low, it will have a limiting effect on economic growth and productivity.

In an under-developed country with a low per capita income, the vast majority of people are not in a position to save. Their income is hardly sufficient to maintain a minimum standard of living. Hence any savings and investment have to come more or less exclusively from the higher income groups. If all income were equally divided, there would be no savings at all. Therefore, inequalities in income are a necessary condition for saving and capital formation and even from the point of view of taxation. In the early stages of development, greater inequalities are inevitable.

One way of overcoming the shortage of internal capital resources is through borrowing from abroad. And this has been resorted to in a big way during the past few years in India. While this does help in increasing the pace of industrialization, it cannot be resorted to indefinitely or without any limitation.

Another method that has been adopted in overcoming the shortage of capital resources is to start industries in collaboration with foreign interests. Such collaboration also enables an underdeveloped country to acquire the necessary technical know-how for that industry. But such collaboration is likely to prove rather expensive. In such cases, not only imported equipment, but technical know-how of the process, blue prints and patent

rights have to be separately paid for. The experts who come to install and run the plants for the first few years are generally paid very high salaries (often free of income tax) as well as their local expenses. This leads to frustration among many of the local technicians who are working side by side with these foreign experts. The cost of training Indian technicians abroad in the parent company has also to be borne by the Indian company. The net result of all these factors is that the capital costs of such collaboration are very high and their products are in no way cheaper than similar imported goods. But until such time as our technicians are in a position to design and install Indian equipment and the economy reaches what is referred to as a self-generating stage, borrowing in one form or another is inevitable.

Equipment and machine tools for the various industries and even for some of the raw materials for certain industries have to be imported from abroad, and this needs foreign exchange. Foreign exchange is best acquired by exporting to the greatest possible extent. But as has already been pointed out, productivity in the existing industries is low and they are finding it increasingly difficult to compete in overseas markets with countries whose productivity is high and is rising rapidly. Another difficulty with regard to experts is the quality of Indian products. Traditionally the Indian craftsmen have been famous for the quality of their workmanship, but the modern manufacturer has generally been following a policy of producing goods down to a price rather than up to a standard quality. This has been necessitated partly at least by the low per capita income of the Indian consumer who has a tendency to prefer cheapness to quality. And manufacturers, technicians and workers find it difficult to adjust themselves to the higher quality standards required for export.

Another aspect of under-development is the more or less continuous shortage of essential raw materials, even of those produced within the country.

As a result of the partition of India in 1947, a considerable percentage of jute and cotton growing areas went to Pakistan while almost all the mills remained in India. In spite of the strenuous efforts made in increasing the production of these two commodities during the past decade, there have been periodic shortages. The cotton mills had to change their production programmes frequently on the basis of the cotton available. Even now, the government has to import large quantities of American cotton in order to ensure that the mills have adequate supplies. Recently, jute mills in Calcutta had to close down in rotation due to shortage of raw jute.

Shortage of food has been one of the most serious problems that India has had to face during the post-Independence period. In spite of the impressive record of increase in food production, even today one or two adverse monsoons might easily land the country in difficulties. Besides, there are more mouths to feed every year.

The effect of these shortages has been two-fold. First, they have tended to reduce productivity in agriculture-based industries through periodic closures, short working hours and frequent changes. Secondly, a portion of the meagre foreign exchange resources has to be diverted to acquiring these materials, thus reducing the total available for basic economic development.

The engineering industry also has suffered for want of adequate supplies of iron, coal and coke. In a recent survey undertaken by one of the local productivity councils, it was estimated that there was a loss of about 25 per cent of production in 1960-61 due to shortage of materials alone. We have been told by those in authority that these shortages are a sign of progress; that they are an indication of increased industrial activity in the country. This is no doubt true. But it is also true that had these shortages not occurred, industrial productivity would have been higher.

The problem of shortage has been further aggravated by the lack of adequate and quick transport. Improvements in transport facilities have not kept pace with increase in economic activity, with the result that even when materials are available at their source, there is a delay in their availability at the point of consumption.

Shortage of power is another factor that has been responsible for affecting productivity adversely. This has been so particularly in Madras State where most of the electricity is generated through hydro-electric power stations. Increase in demand combined with the failure of the monsoons have resulted in annual power cuts during the past ten years. Some other States in India have also been affected by the same problem though perhaps not to the same extent.

Faced with all these shortages and handicaps, there is a tendency on the part of managements, technicians and even workers to feel frustrated about the problem of productivity. Every time there is a discussion on the subject, the question is posed, "What is the point of introducing productivity techniques when we don't have enough materials and power?"

Because of the low purchasing power in the internal markets in India, a rapid expansion of consumer goods industries is not always possible. During the past decade, the textile industry, for example, has passed through cycles of over production and under production. Because of the extremely limited resources of the average Indian customer, even a slight increase in production or a minor change in the relative value of consumer goods upsets the economic stability of an industry. Therefore, many of the consumer industries have to maintain a precarious balance between surpluses and shortages.

These limiting factors to rapid economic growth are the result of economic and political conditions that have existed in India for the past many decades. By the very nature of the problem, they cannot be overcome either immediately or within a short period of time. Meanwhile, they will continue to determine the rate of increase in productivity.

If economic growth is to be smooth and sustained it is imperative that the basic requirements of industry and agriculture are adequately satisfied. These consist of power, coal and oil, iron and steel, cement, raw materials and machinery and spare parts for industry, and fertilizers, water, etc., for agriculture. It is always better for these to be in excess of anticipated requirements so that any unforeseen shortages do not affect economic progress. If, however, there are any mistakes either in planning or in the execution of planned projects, or if the plan is overambitious, an element of imbalance enters the economic structure and shortages tend to develop. As a result of the shortages, other industries cannot reach their full capacity and sometimes valuable equipment often bought with precious foreign exchange remains idle. Under such circumstances, it is perhaps better to slow down the tempo of expansion of such industries and concentrate on a quicker expansion of basic requirements and agricultural products.

5

The policies followed by the government in the economic sphere have considerable influence on the rate of industrialization and on productivity. Every government is motivated by certain fundamental economic objectives and its policy is designed to fulfil them. As far as the Indian government is concerned, these objectives may be defined as follows:

- (a) To ensure that there is ordered development on the basis of priorities.
- (b) To make the maximum use of available resources.
- (c) To achieve certain targets of production within a specified period.
- (d) To ensure a uniform development of the whole country.

A policy of planning and control has been consistently followed in order to achieve these objectives. Planning is done at the national level and targets of development are fixed for each plan period. An individual industrial unit has to be started and run within the ambit of the Plan. Establishment of new industries or the expansion of existing industries are controlled by the government through a system of licensing. Further controls are exercised through restrictions on the import of machinery, raw materials, etc. On the other hand, once an industry is allowed to come into being, every help is given for it to grow and develop. The assistance that is given is far more than could have been expected or even imagined possible by industrialists in the pre-Independence days. Long-term loans through investment corporations, direct capital participation, facilities for the import of equipment

and materials, provision of water and power supply, tax concessions in the first few years and tariff protection are some of the forms of assistance that is being rendered by the government today.

Another aspect of government policy is what is known as a 'mixed economy'. Some of the basic large-scale industries are established and run as public sector enterprises.

The policy of mixed economy on the one hand and control and direction of economic activity on the other has been criticized in some quarters. But in the situation in which India is placed this policy is perhaps an inescapable necessity. If some of the basic industries such as power generation, iron and steel which are essential for the development of an industrial economy had not been started by the government, it is extremely doubtful if they would have come into being at all. The private sector in India is not developed sufficiently to enable it to find the resources necessary for such projects. On the other hand, unplanned and uncontrolled economic growth would mean that capital would flow into those industries which yield quick profits rather than those that are essential for basic development. Competition would develop in those industries which over-produce, leading inevitably to the closure of some units with the resultant economic consequences. Shortages are likely to develop in other commodities. Therefore, while planning and direction in some form is inevitable, nevertheless from the point of view of productivity, controlled economy has created certain problems.

In planning industrial development for such a large country as India, regional considerations play a very important part. This is particularly so in a country where local and linguistic loyalties are strong and where nearly every area is in need of development. This is reflected in a tendency on the part of the various States to develop as many industries as possible within their borders and become economically independent of other States. Under these circumstances it is inevitable that often industries are located at some places not because they are most suitable but because some regional considerations have to be satisfied. Such industries as are sometimes located at places to which raw materials have to be transported, where stores and supplies are difficult to obtain, and where there is a high turn-over of supervisory staff, are naturally not highly productive. For example, there is a demand for the establishment of textile mills in every State, almost in every district, irrespective of whether cotton is available and whether climatic conditions are suitable.

There are certain advantages in locating industries producing the same or similar products fairly close together. This is important from the point of view of providing common services such as the availability of stores and raw materials, technical advice, research facilities and so on. Well qualified and trained technicians do not generally like to work in a place where job opportunities are blocked because of the lack of possible

alternative firms to work for, and where they cannot meet many of their colleagues in similar jobs. When regional or local considerations are applied to each industry individually, these advantages are lost.

In spite of the efforts of the government to bring about a uniform development of the country as a whole, there are still many areas and States which are backward. The major reason for this is to be found in the fact that in these areas there is not sufficient local capital or industrial enterprise to start new ventures in spite of inducements offered by the government. Industrialists from other parts do not always want to start industries there because of local and linguistic considerations. Therefore, the solution to these problems of uniform regional development consistent with a high rate of growth seems to lie in two directions:

1. Regional specialization of industries based on the suitability of each region for developing particular industries should be accepted. This would ensure the interdependence of various States, increase the flow of trade and commerce and bring about greater national integration.
2. There should be greater investment by public sector industries in the backward regions of the country.

One of the motivating factors for improving productivity—certainly in democratic countries with private sector industries functioning with a degree of freedom—is competition. Competition ensures alertness in every aspect of production on the part of managements and acts as an incentive to higher productivity. But in an economy of shortages as we have in India, production targets are fixed on the basis of allocating resources rather than on the basis of requirements. And since production targets are not always reached and the rise in population seems to be higher than the estimates, shortages have become a feature of Indian economy. The market is almost always a sellers' market and almost every industry—unless it is grossly mismanaged—makes a profit. Under these circumstances, the incentive for higher productivity is considerably reduced.

A corollary from the above situation is that within the same industry, highly inefficient units continue to exist side by side with highly productive units. In a free economy, or in an economy of plenty, these inefficient units would soon go out of production or would have to improve themselves so as to be competitive. This would lead to a certain amount of economic and social disorganization in workers losing their jobs and so on. But the resources in India are such that we cannot afford to lose whatever production these units may yield; nor can a situation be allowed to arise leading to a large number of workers losing their jobs. The only alternative, therefore, is that these inefficient units also should continue to operate. There have been cases where government help has been extended to such units to modernize themselves. In a few cases where the units had closed down, government has taken them over and run them in order to ensure employment to the

workers. This economic co-existence of inefficient and highly efficient units has resulted in lowering the average level of productivity.

When the available resources are limited, some form of control becomes necessary. Consequently, the system of import licences, quotas, allotment, etc. has become an integral part of Indian economy. There is usually a scramble for these permits and most industrialists and business men spend a large part of their time and energy in making out a case for their requirements of materials or equipment in short supply. Often, the profitability of an organisation is determined not by its efficiency, but by the allotment of materials it manages to get. The system of permits is often highly centralized and unduly cumbersome so that even for minor requirements, people have to travel long distances to Delhi or to one of the State capitals. Further, frequent changes in import policies and issue of licences have created considerable hardship to genuine manufacturers. All this has led to certain amount of corruption and a group of people have come into existence who thrive not by real manufacturing or distributing, but merely by their ability to get licences or by cornering commodities in short supply and make profits.

The successful operation of a vast system of controls and permits is an extremely difficult task and depends upon a number of factors. The level of integrity and sense of public duty, both among officials as well as the public, the degree of satisfaction that the average business man has with regard to its working, whether it is simple or unduly cumbersome in operation and whether it satisfies the essential requirements of the industry are some of the aspects on which their successful working depends. Many of these are intangible factors and difficult to measure. However, an objective assessment of these factors is impossible because controls have become the centre of political controversy.

In view of the fact that these shortages are likely to be a feature of Indian economy for some time to come, serious attention should be paid to streamlining them on the one hand and decentralizing them as far as possible on the other.

To sum up, the development of Indian economy during the past decade has been a series of compromises between increasing needs on the one hand and inadequate resources on the other.

CHAPTER THREE

Some Basic Considerations

1

Every society develops through history certain special characteristics by which it can be identified and which often has a cementing effect on its members. These characteristics are the result of social, cultural and religious traditions, of economic growth and development or stagnation, of wars, conquests or revolutions. They are also influenced by geographic limitations, climatic conditions or the extent and variety of natural resources. Thus we speak of Americans as materialist go-getters, of Germans as being militaristic and highly prone to discipline. We think of people living in fertile tropical lands as being indolent and hill dwellers as hardy. It does not of course mean that all members belonging to a particular group exhibit these traits or that even a majority of them do. It does mean, however, that a large percentage of people possess these characteristics in some degree or other and to the outsider, these seem to be the special features of that group. Of all these characteristics, perhaps the most important is the attitude of mind and the method of approach to problems that a group of people exhibit. These are fundamental to a nation and are based essentially on their philosophic and cultural traditions. Some of these basic attitudes will be considered in this chapter.

The greatest single influence on the Indian social system during the past two thousand years has been the contact with Europe—in particular, the British rule in India. India is what it is today, not only because of thousands of years of history but also because of the few centuries of British influence. Every major social and economic change that has taken place in India since the eighteenth century can be directly or indirectly attributed to the British connection. The various aspects of this contact will be dealt with in later parts of this book but a brief overall estimate of its effect will be useful at this stage.

All previous conquests and invasions of India were by people who were at the same level of social and economic development. In many cases they were culturally inferior to the Indians of the time. Consequently they were easily assimilated. But the new invaders from the West who came to India by sea were from a society that was homogeneous, better organized and disciplined and, as years went by, economically superior. They came from a new and aggressive civilization. They sailed the seven seas in their little boats and were eager for conquest, wealth and adventure. They were not moved by humanitarian or sentimental considerations.

The short-term effect of this influence—as in any imperialist connection—was disastrous as far as India was concerned. Indian economy was completely disrupted and instead of being an exporter of goods such as textiles, India became an importing country. A greater percentage of people had to depend on agriculture for their living and this factor combined with a rapid increase in population resulted in unemployment and economic distress. The self-sufficiency of the village communities was completely lost and the villager had to depend on the cities for most of his requirements. But from a long-term point of view, the influence was slow, almost imperceptible but nevertheless profound and far-reaching. In every aspect of our national life, whether it be politics, social reform, education or economic development, this influence has been felt.

In the first place, conquest by Great Britain brought the entire sub-continent together under one administration for the first time in many centuries. The Britishers were never assimilated and 'Indianised' in the same way as the previous invaders. They remained alien. This was the first time that India experienced economic and political imperialism. As a result of these factors and as a result of improvement in communication through the introduction of railways, in the place of a purely emotional and spiritual concept of India, a political and economic concept of nationhood began to emerge gradually. From such a concept to a desire for political freedom and economic progress was but a logical step. Political thinking in India has been largely conditioned by those elements in Britain, which were historically sympathetic to Indian aspirations. British institutions such as the parliamentary form of government have become an integral part of our social and political life. In hundreds of little things, Indians have acquired the British way of doing things.

Secondly, the introduction of a new system of secular education ensured that, at least in theory, knowledge was not confined to the fortunate few. Anyone could acquire it. This was a revolutionary change as far as the people of the lower strata of society were concerned and while its actual implementation took very much longer, it was nevertheless a beginning. Introduction of the English language meant that the new knowledge of science and technology was directly available to Indians, though in the early stages of English education, the professions of government service and law were the only ones that attracted ambitious young men. But such an education did mean that India was no longer a secluded backwater, but a part of the fast moving current of progress. Such an education also brought about a certain amount of cosmopolitanism and broad outlook which undermined traditional exclusiveness and conservatism.

Social contact with the foreigners—though restricted and infrequent—nevertheless has its own influence on Indian society. Many Indians had learnt English from English professors. Most of them who took to government services were working under British officials. Even others, such as lawyers and doctors, came across Europeans during their working time in some capacity or the other. It is usual for people of lower social status to imitate their superiors unconsciously and it was inevitable that educated Indians should

imitate their European masters, at least in those areas which did not offend their religious and social susceptibilities. It was also inevitable that once such a change commenced, it should extend to other areas also. The uneducated Indians gradually followed their more educated brothers in all these changes. Thus, we find that the tuft of hair knotted at the back, which was a prominent feature for most of our grandfathers in the nineteenth century, was discreetly hidden under a turban in the early part of the twentieth century and has now almost completely disappeared along with the turban. So has the caste-mark, except on religious occasions. The habit of wearing European clothes has been increasing steadily. In most wealthy and many middle class homes, eating on the floor has been replaced by tables. Crockery—or its equivalent stainless steel—is replacing plantain leaves because of economy, convenience and fashion. Other appurtenances of modern civilization such as electricity, radio and so on are restricted in their use not through resistance, but rather through lack of money.

Thirdly, contact with Britain was also responsible for the coming in of industrial revolution in India. Though the rulers of the day did not do anything to spread it except for their own convenience, the logical consequences of its introduction could not be prevented. Such industrialization and urbanization resulted in a movement of population from the villages to the cities. This necessarily meant a weakening of the authoritarian nature of the traditional family system and the hierarchical structure of the village society. It also influenced to a certain extent the nature of family relationships as well as relationships between groups. In place of the old system of social gradation based on caste, a new system based on wealth, status, power and education began to emerge.

The impact of European ideas on the traditional Indian values was quite violent in the beginning. Some people were overwhelmed by the material superiority of the West and became great admirers of everything Western. They began to imitate their rulers slavishly in dress, manners and customs, and tried to forget their past traditions and culture of which they were rather ashamed. On the other hand, others reacted quite differently. They would have nothing to do with those upstart conquerors or their ideas. They took pride in the ancient civilization of India and tried to revive its past glories as if the British conquest and the industrial revolution had never taken place. It took a long time to reconcile these two extreme attitudes and to make a true assessment of the influence of British rule in India and its role in India's development. In fact such assessment is still going on.

From a historical point of view, these changes are progressive, even revolutionary, in some respects. The gradual change in the methods of production, the spread of education, the breaking down of the exclusiveness of the caste system, have all contributed to productivity and to social change in India during the past two centuries. The physical environment in India, at least as far as the cities and towns are concerned, has changed beyond recognition. But the effect of this change on the minds of men is obviously not easy to determine. It depends on the education and background of the individual and the

environment in which he operates. By and large, the social environment—attitudes, relationships and modes of behaviour—has not changed to the same extent as the physical environment. The reasons for this are not far to seek. In the first place, there is generally a time-lag between a physical change and the social change that it may induce. Secondly, thousands of years of history and tradition are not easy to overcome. Thirdly, the Indian social system, in spite of its apparent rigidity, has shown itself extremely flexible and capable of adapting itself to circumstances, It has exhibited a remarkable capacity for survival. Another reason for this is that the British rulers did not take any action to induce social change. In fact, after the Indian Revolt in 1857, as far as religious and social matters were concerned, they were strictly neutral, which in effect meant supporting the status quo.

As a result, on many basic issues, decisions of individuals and groups continue to be based on traditional values and traditional environment continues to exercise its influence on men and events.

3

Increase in productivity depends largely up on improving the means of production. It depends upon the growth and development of technology and the ability to invent and apply new ideas and innovations. This again demands an attitude of reasoning both towards Nature and towards social relationships. It is the questioning mind that produces new ideas and consequently tends to be non-conformist. The mind that believes and accepts the established order without question tends to strengthen and stabilize the status quo. Therefore, in any society dominated by religion, the logical mind is suspect, partly because it might lead to scepticism and agnosticism and partly because it might be the beginning of a rebellion against authority. It is not that belief in reason is inconsistent with belief in God. But such an idea is generally accepted only in a mature, democratic society.

Anyhow, if we accept that a spirit of logical enquiry should be widely prevalent in order to bring about a large number of innovations, it follows then that in societies where such an attitude prevails, rapid productivity increase would be possible and if it does not exist, it would be retarded to that extent.

Early Indian philosophers—just as the early Greeks—had a very sobering conduct with the problems of every day life. They observed Nature and drew their deductions from what they saw. Early Hindu literature is full of minute observations of Nature and their comments are penetrating. They could never have developed the science of astronomy and mathematics to the extent that they did, if they had not been animated by a spirit of logical reasoning. But later philosophers developed a sophistication and intellectual arrogance which were unknown to their forbears. To them metaphysical exercise was what counted. If observation was inconsistent with metaphysics then it was considered that observation must be wrong, since metaphysics was indisputable and supreme knowledge. This

intellectual arrogance and exclusiveness was reinforced by the social system in which knowledge was considered to be the prerogative of the few; the vast multitude had no access to it. Knowledge was preserved in the language of the elite—Sanskrit—to which the ordinary people had no access and gradually it became a dead language. Even the learned were not encouraged to think for themselves in the later periods of Indian history. But for a few noble exceptions—such as Shankaracharya and Ramanuja—the rest were mere commentators and communicators of an ancient wisdom, rather than thinkers in their own right. Knowledge thus became fossilized. Philosophy lost its freshness and got itself entangled in a mass of ceremonials and observances as far as the common man was concerned. He had to accept and propitiate these things on the basis of a belief which was beyond question. It was not that the scientific method - the method of observation, experiment and deduction—was unknown in Hindu philosophy. It was known and applied to spiritual problems. It was turned inward to analyse one's soul and its relationship with the ultimate. It never concerned itself with the down-to-earth problems of everyday life. And the method of logical reasoning never permeated down to the common man.

A similar situation existed in Europe also. From the beginning of the Christian era till about the fifteenth century all knowledge and learning were confined to the monasteries. Access to knowledge was only through a study of Greek and Latin. But partly through the coming of the renaissance and partly through the spread of Protestantism, a new spirit began to pervade Europe. Copernicus, Galileo and Newton in the scientific field and Francis Bacon in the realm of philosophy brought back the scientific method of enquiry to the problems of everyday life. Francis Bacon was the first philosopher to point out the advantages of the scientific method. Since those early days, what began as a trickle of hesitant experimentation has gone on increasing until it has become a flood in the 20th century. The scientific method became so much a part of the culture of Europe that craftsmen who had followed traditional occupations such as spinning and weaving began to apply these methods to the improvement of their tools and brought about a whole lot of innovations that resulted in the industrial revolution. John Kay, the inventor of the flying shuttle, was a reed maker by profession. Samuel Crompton who developed the spinning mule was a farmer and a weaver. The locomotive was invented by George Stephenson who worked in a coal-mine. These people were not scientists or philosophers. They were only craftsmen who were profoundly influenced by the prevailing spirit and who constantly asked themselves 'Why', 'How' and 'Why not'. Thus the spirit of enquiry resulted in the growth of science on the one hand and the development of the means of production on the other, until they coalesced in the later half of the 19th century when science began to be increasingly used to the problems of industrial production. The spread of the method of observation, experiment and deduction is perhaps the major reason why the industrial revolution started in Europe and that continent was able to dominate the rest of the world during the past four centuries.

When a scientific approach is lacking and when men's minds are dominated by unreasoning belief, the critical faculty has no opportunity to develop. It is only the existence of a critical faculty that enables an individual or a group to undertake an objective evaluation of things, ideas and people, to accept those that are desirable and reject those that are useless. The lack of a well developed critical faculty leads to blind worship of ideas or people on the one hand or to equally unreasonable condemnation on the other. This again is not conducive to progress.

Even today, the spirit of logical enquiry is not widely prevalent in India. Even those who have received a scientific education have to carry the burden of a contradictory tradition. The social pressures around them make them act not always in accordance with logical reasoning but rather in response to some time-honoured beliefs. This conflict between what may be described as traditional or conventional values and scientific training is consistently going on in the minds of many people in India. Until such time as the spirit of logical enquiry becomes part and parcel of our mental make-up and we act according to it as a matter of habit, a large number of original innovations and ideas cannot be expected.

4

Another factor that has an influence on productivity is the attitude of a people towards asceticism. In the United States, for example, worldly success and ever-increasing material prosperity have been accepted as desirable social objectives individually as well as collectively. They have been following these objectives relentlessly and with no reservations. The dream of most American school boys has been to become another Henry Ford or Rockefeller when they grew up. Successful captains of industry are looked upon as heroes and social benefactors because they have contributed to the growth of national wealth and they have made it possible for every working man in America to have a better standard of life than the emperors of old.

In the communist countries also, material prosperity is the major goal. But because of the nature of the political system, it is collective well-being that is the objective and not individual prosperity. For the same reason, the methods adopted to achieve their goal are also different from that of the United States and other Western European countries. But it has been accepted that improved standard of living cannot be dissociated from increased prosperity. Mr. Krushchev has stated that by 1975 Russian productivity would surpass that of the United States.

The vital need for maintaining and enlarging their exports is universally recognised in Japan. It is a country with a large and growing population and inadequate natural resources. Raw materials for their industries such as iron, coal, cotton, etc. have to be improved. Their food production also is not sufficient for their requirements. The only way by which they can pay for these imports is by maintaining a high level of exports. Successful

competition in international markets demands a high standard of productivity. The unanimous acceptance of this inescapable economic fact has enabled Japan to achieve high levels of productivity and raise the standard of living in the post-war period.

From a brief consideration of the above situations, it is obvious that it is not so much the particular economic system that is responsible for the increase in productivity in these countries as the objectives that they had set before themselves and the unity of purpose with which these objectives were pursued. In the democratic countries, industrialization and increase in productivity have not been brought about through legislative enactments or fixation of targets, but by the creation of sociological and industrial climate where increase in productivity was accepted by all sections of the people as a natural prerequisite for a better standard of living. In the context of the Indian economic situation today, planning and direction from the government are inevitable in the economic development of the country. But the achievement of economic goals depends not only on the direction and legislative enactments of the government, but on the whole-hearted acceptance of these objectives by the people as a whole and also on such change in social behaviour as would hasten the transition from an agricultural to a technologically mature society. The present social environment in India contains many elements that tend to retard such a change.

The aims of the Third Plan have been stated as follows:

1. To secure an increase in the national income of about 5 per cent per annum.
2. To achieve self-sufficiency in food grains and other agricultural commodities.
3. To expand basic industries like steel, fuel and power.
4. To expand employment opportunities and make the fullest possible use of man-power resources.
5. To bring about a reduction in the inequalities of income.

These objectives have been accepted by almost all the political parties. The criticism, if any, has been that the objectives are so modest. But as a society and as individuals we have not accepted whole-heartedly large-scale industrialization, mass production and everything that it implies. Many of us have doubts and we do self questioning and intellectual soul-searching. The people with these doubts are, in many cases, leaders holding high positions, known for their integrity and commanding the respect and admiration of a large number of people in the country. Their influence on the country in general and on their followers in particular is very great. These inner hesitations with regard to the creation of an industrial society can be traced to three factors.

Firstly, the pursuit of material prosperity has never been considered a worthy motive in Indian thought and tradition. The saffron robe and the begging bowl have been

considered better symbols of man's worth than affluence and ostentation or even intellectual superiority. While this has been so in most religious societies, it has been a dominant feature of Indian philosophy. The streak of other-worldliness has persisted throughout the ages. The physical world is an illusion; life on the earth is transient, what matters is the life hereafter. The body is merely a temporary vehicle for the soul in its passage through eternity before ultimate salvation. These ideas have been predominant in India particularly in those periods of history when there were social, cultural and moral stagnation.

If life on this earth is an illusion, then it follows that how one lives is a matter of supreme indifference. Activity, whether public or private, individual or collective, does not matter. Since every thing is pre-ordained by fate, there is nothing one can do to change things. Misery, cruelty or injustice have to be tolerated however unwillingly. All that is possible is to make the best of a bad job and pray that one may be released from the cycle of births and deaths. It is a philosophy of despair. But, at the same time, it is an escape from the realities of existence; it is a consolation for disappointments and an excuse for inaction.

But it would be a mistake to presume that this philosophy dominated at all times. Sooner or later, some prophet came along to revise this trend and emphasize the importance of this world, if not as an end in itself, at least as a means of attaining the next in a worthy manner. Hindu mythology is full of men and women who defied their environment and circumstances and even fate in order to attain their ends. There is the story of Markhandaya who was destined to die at the tender age of sixteen. Through prayer and a blameless life, he not only escaped death but was granted life everlasting. Savitri, one of the heroines of Hindu mythology, argued with Yama, the God of Death, and got her husband back to the land of the living. But even in their case the emphasis was on the spiritual and not on material achievements, on prayer, meditation and a virtuous life rather than action. Even where action is undertaken, it should not be dictated by a desire for wealth, power or fame. It does not mean the mere satisfaction of one's own or other people's desires. It is detached, selfless action. It is the path of duty, dictated by the purest of motives and carried out with absolute indifference as to the ultimate result. It is the path of Dharma. The method adopted is more important than the result achieved.

The importance of the right means to attain a given objective has received a great impetus in this century through Gandhiji's philosophy of Satyagraha. The struggle for Independence was based, successfully, on this philosophy. Passive resistance was not a mere technique adopted to suit the circumstances of the moment. It was a creed that was a logical development of a progressive system of Hindu philosophy.

Both these attitudes-the philosophy of contemplation, meditation and resignation and the philosophy of selfless action – have existed side by side in India for ages past. They have

considerable influence on the minds of people even today. It does not mean, of course, that people work any less hard or that they have no materialistic ambitions whatever. But they do influence the motivating forces behind action and, consequently, the effectiveness of such action in many cases. The motivating force behind industrial development is essentially material in character, the hope of economic well-being. It demands the formulation of specific objectives and the attainment of these objectives within a specified time. While the right method is important even in achieving higher productivity, the emphasis is on achievement. When too great an emphasis is laid on the method, it may be that action is delayed and, often, it may be that no action is taken. The exclusive concern with the method also makes one lose sight of the objective itself.

These attitudes are reflected in the often good-humoured tolerance of evil conditions even while condemning them. They are reflected in the futile controversies over the private and public sectors of the industry and on whether co-operative or private farming is the better.

6

The second aspect of this inner hesitation is concerned with India's evaluation of the achievements of industrial civilization in western countries in terms of human happiness and progress. The industrial revolution in the 18th century led to the ruthless exploitation of the world by a few European countries. The skill and craftsmanship of the Indian workmen which were famous throughout the world for centuries were totally destroyed and replaced by cheap machine-made goods from the factories of Europe, especially Great Britain. India which had long been an exporter of goods to other countries became an importer. With an increasing population, and dominated by the political and economic imperialism of Britain, India was a helpless victim of poverty and degradation. Consequently, industrialization is associated—consciously or unconsciously—in many Indian minds with imperialism and foreign domination.

Even in European countries, the growth of the machine age was no unmixed blessing. These also the independent craftsmen lost their jobs and were forced to seek employment in newly started factories. Men, women and children were employed under appalling, unhygienic conditions for long hours with no consideration for human values. They were forced to live in vast slums with very poor wages and the periodic depressions left them with no alternative means of livelihood.

Many of these evils associated with industrialism have been largely overcome in recent years, particularly in the post-war period. But attitudes have a tendency to persist long after the reasons that gave rise to them have become obsolete.

In more recent times, the problems in an affluent society have also received a certain amount of publicity in India. Labour-saving, which is one of the aims of all productivity measures, is supposed to enable people to enjoy a greater amount of leisure which they could devote to cultural and spiritual activity. In fact, they seem to be more busy than those in less affluent and less industrialized societies. And, in spite of their high standards of living, they do not seem to have achieved either greater happiness or peace of mind. On the other hand, the restlessness in their social life and the sense of urgency and competition in their business life seem to produce repressions and nervous tensions leading to a neurotic condition of individuals as well as society. Most of the people in these societies spend their time chasing mere trivialities and lack the ultimate sense of purpose of mankind on this earth.

Since the Second World War, Man's continued existence on this planet has been seriously threatened by the invention of nuclear weapons. The atomic and hydrogen bombs are a direct result of scientific and industrial development and there is an unconscious feeling in the Indian mind that industrialization may yet lead to the total destruction of the human race.

These problems are also exercising the minds of social philosophers in Europe and America. The western society has reached a level of economic life unheard of in history. During its progress towards a technological society, these problems were largely ignored, more so by the average man. They concentrated on the immediate objective, untroubled by any intellectual misgivings as to its after-effects. The wearing of such intellectual blinkers is often a great help in achieving a limited objective. But in India, our minds are exercised over these problems even before they have arisen. The results of high productivity in other countries have opened our eyes. It may be that, in the long run, consideration of such problems would enable us to plan our society better. But its immediate effect is that our whole-hearted acceptance of industrialization has been tempered by these reflections.

The philosophy of Gandhism is intimately connected with the development of these attitudes industrialization. Viewed in a historical perspective, Gandhism is a logical development of the philosophy of selfless action, love and sacrifice, and its emphasis is on the basic concepts of service and spirituality. Its reaction to the inhumanities of the early industrial age was one of abhorrence. It is a powerful protest, in the Indian tradition, against greed, materialism and soul-destroying character of the industrial revolution just as Marx's communism was a protest in the European tradition. The difference in time may be attributed to the fact that industrialism came to India at a much later date. Based on his opposition to industrialization, Gandhiji developed a system of social philosophy which set spiritual and not economic objectives as the goal of life. If it had been merely a system of philosophy based on truth and non-violence, austerity and sacrifice, it would have remained confined to the realm of intellect. Its acceptance, however, not only as a system of thought,

but also as a method of action, a means of political and economic deliverance, showed its almost universal appeal in India in the twenties and thirties.

In economic terms, Gandhism visualizes a society of village communities based primarily on agriculture and handicrafts, and more or less self-sufficient. Though the use of power for cottage industries has not been altogether ruled out, Gandhism is fundamentally opposed to methods of mass production in which large numbers of people are employed under one roof and the work of an individual is reduced to a set of meaningless movements. The simple tools of the craftsmen are glorified while the automatic machine is condemned as soul-destroying. Thus, the spinning wheel is not thought of as a means to provide employment to those who are unemployed or under-employed in villages until such time as the tempo of industrialization catches up with unemployment. It is associated in the minds of most people as the unique symbol of a new philosophy and of freedom.

Those in charge of decision-making in India-people in their forties and above-are the products of the Gandhian age in Indian history. They have been considerably influenced by his philosophy. Even when they disagree, from a purely logical or intellectual standpoint, emotionally they are swayed by its powerful appeal, because it is basically a logical development of Indian thought and it is essentially ethical. It was also responsible for the freedom of India. And, above all, the powerful admiration and loyalty that Gandhiji evoked in most people have tended to cloud the issues and prevented their discussion at a purely intellectual level. Mr. Nehru's own attitude towards Gandhism is a case in point. Again and again he disagreed with Gandhiji on a purely intellectual basis. Many of Gandhiji's actions and ideas caused him acute mental agony during the struggle for Independence. Yet, he followed him and no leader could have had a better or truer follower.

Thus, these ideas on industrialism are strongly rooted in the minds of most people consciously or unconsciously and have an influence on the attitudes and decisions of individuals. While the influence of these attitudes on industrialization is obviously difficult to determine, its influence on some aspects government's policy can be easily perceived.

One of them is the official encouragement that has been given to hand spinning, particularly the Ambar charkha. Large sums of money have been spent in the manufacture of Ambar charkhas and in the establishment of training centres. A vast organisation has been built up for the distribution of cotton, collection of yarn and sale of handloom cloth. The cost of yarn manufactured by Ambar Charkha is about three times that of mill-made yarn of equivalent count, in spite of the fact that the Ambar charkha spinner earns only about 75 nP. per day of eight hours. The quality of yarn is also very inferior when compared to mill yarn and the cotton used is generally superior to what the mills use for the same count. Consequently, the cloth has to be marketed on a highly subsidized basis.

This highly uneconomic and unremunerative scheme has been undertaken to provide employment in the villages. That unemployment in the villages is a serious problem, there

can be no doubt. But why was this particular measure undertaken on a large scale in preference to others which might be more economic? An explanation is to be found in the sentiment that has grown round hand spinning during the last forty years. During this period, khadi became a symbol of India's struggle for Independence, of her economic self-reliance and cultural and social renaissance. It has been a symbol of the philosophy of Mahatma Gandhi, of simple living, of service and sacrifice. This association has created around hand spinning a halo of spiritual heritage. But symbols, when they become outdated, may become stumbling blocks to progress.

Mahatma Gandhi visualized a civilization based on cottage industries and handicrafts which would produce goods for the users themselves so that they may become self-sufficient and self-reliant and need not spend their hard-earned money on machine-made goods. They could at the most enter into some sort of a barter arrangement among themselves. He did not visualize a situation in which hand-made goods would have to compete with machine made articles. He knew that in such a situation, the hand-made goods would have no chance to survive. But this is actually what is happening today. India today is not creating a society as Mahatma Gandhi envisaged it; not is it possible. Steel plants, machine tool factories, aircraft factories, engineering workshops etc., are being established all over the country. But at the same time, certain uneconomic and potentially dangerous schemes are also being undertaken because of sentiment or, perhaps, as a consolation for our failure to live up to the standards of the Father of the Nation.

Wherever cottage industries have been successful, it is not because of the cheapness of their products or their functional utility, but the uniqueness of their design and special qualities of workmanship. One cannot imagine a Banaras sari or an ivory carving from Trivandrum being mass produced. If they were, they would certainly lose their value. On the other hand, when handicrafts attempt to compete with machines in areas in which machines are suitable, all that can happen is that the cottage industries will wage a losing battle and gradually fade out. Another area in which cottage industries can be fairly successful is where production is of such a nature that the individual components can be manufactured separately and then assembled in a central place. The watch manufacturing industry in Switzerland or the radio industry in Japan are good examples of this. Such decentralization is helpful in many ways, but it does involve the highest level of skill in those who are doing this work in their homes. Cottage industries can also be successful where the production units are such that they can be decentralized without loss of efficiency.

The danger of this policy of deliberately encouraging an uneconomic means of production while more efficient methods are available lies not only in the waste of resources at present, but even more in its repercussions in the future. As time goes on and the number of Ambar charkha spinners increases, the quantum of government subsidy will also have to increase. It would also increase because of the widening gap in cost between machine production and that of Ambar charkha. But an even greater danger lies in the

creation of a huge army of people who have a vested interest in an inefficient method of manufacture. To expect and demand government help for the perpetuation of their means of livelihood will become a matter of habit and to persuade them at a later stage to change their jobs-when such jobs are available – will be a difficult task. A group of people are being created who instead of being independent and self-reliant and proud of their skill or craftsmanship are coming to depend more and more on society to maintain them in their jobs. This is the exact opposite of what the Mahatma intended by the development of cottage industries. Human beings are creatures of habit and once they get used to a particular way of working and living, to change them at a later stage leads to grave social consequences.

It is not realised that such measures are merely a palliative during the period of under-development and are being undertaken to provide much-needed employment in the villages. The way a mystic cult is being developed round this sort of activity is in direct conflict with the larger economic development plans of the country. It is also helping to create an attitude of mind among the villagers that industrialization is bad for the country and that India's salvation lies only through the wholesale development of cottage industries. It is this attitude, even more than the waste of resources that is a potential danger to rural industrialization in the long run.

7

The third inner hesitation with regard to industrialization may be said to be political in nature. An industrialist in India today is looked upon with a certain amount of suspicion by the common man as well as at the policy-making levels of the government. This suspicion reinforced by the ideas of socialism and nationalization has penetrated the thinking of the twentieth century in many countries. It is in the air, so to speak. He is looked upon as one who profits at the expense of society. And the few business men who might have indulged in questionable activities to make money are cited as examples. When the common man thinks of industrialization, he does not think in terms of the public or private sector but only in terms of individual industrialists he might know or might have heard of. To him, industrialization means increasing the power and wealth of the capitalists. The industrialists' lack of patriotism and social awareness is very often taken for granted. The problems they have to face and the risks they have to run are not generally known to the public.

In such a political climate, the industrialists, though they may earn money, lack the psychological incentives necessary for high morale and efficient performance. Considerable emphasis has been laid in recent years by industrial psychologists on the need for psychological incentives in industry. As we go up the economic scale and the need for more money becomes less, psychological incentives play an even greater part. Thus they are very important for industrialists. The need to be appreciated, the desire to belong, the need to

be complimented on good work done is just as important for executives in office as it is for the workers on the shop floor. And just as it is important for workers to have job security, so the executives must feel secure in their positions of responsibility if they are to work efficiently. Frequent talk of nationalization of one industry or another has been responsible for a lot of worry and anxiety and lack of enthusiasm on the part of managements of private industries. The feeling of insecurity and the lack of appreciation of their efforts reveals itself sometimes in the form of an aggressive criticism of the public sector. Sometimes it also shows itself in an attitude of 'earn as much as you can while you can, for tomorrow we may be nationalized'. Thus, the expansion or modernization of industry is occasionally neglected because of this fear.

So long as the country is committed to a mixed economy, and so long as there is an important place for the private sector, some efforts must be made to provide these psychological incentives.

Chapter Four

Social Hierarchy

1

Throughout history, Indian society has had been authoritarian in attitude and hierarchical in structure.

Movement from one strata of society to another was always difficult and later it became impossible. Knowledge was restricted to a small group of people and never became wide-spread. In certain periods of history and under certain circumstances, not only was knowledge restricted, but those who aspired to acquire knowledge that was beyond their status in society were severely dealt with. Hindu epics are full of tragic examples of such restriction of knowledge. Ekalavya – in the Mahabharata – became a great master in the art of archery in spite of the fact that the royal teacher Drona did not give him any lessons. But when Arjuna complained about it, Drona asked Ekalavya to cut off his thumb as his ‘fees’ and thus made his skill and knowledge useless.

Nor was this restriction of knowledge confined only to the lower strata of society. Karna learnt from Parasurama mantras for the use of the weapon, Brahmastra. But when Parasurama discovered that Karna was not a Brahmin, but a Kshatriya by birth, he pronounced a curse that he would not be able to remember the mantras at the moment he needed them.

It is well known that ability is individual rather than communal. In every strata of society, there are a few persons who can come to the top if given the opportunity. A hierarchical society denies this self-evident truth and deprives society of the services of some of its most able members. Such a society suffers because of its refusal to utilize human resources in the most effective way. The potential talents of many are never exploited. Unless every one has freedom to grow, those with the qualities of leadership will have no opportunity of exercise them. And society must have leadership at various levels. When leadership is by tradition or succession, it is often ineffective.

This restriction of knowledge has ultimately led to the downfall of the very people who practiced such restriction. Ancient India was in the forefront of scientific knowledge. But Arabs, and in later years Europeans, have surpassed it. This is partly because knowledge was guarded as a trade secret and was passed on to the son or disciple only when the possessor thought he was about to die. But since death has a habit of coming unawares, such knowledge very often died with the individual concerned. Therefore instead of expanding, knowledge continued to contract. This reluctance to communicate knowledge or skill to others is still found in India today.

The traditional Indian family exhibits a very high degree of authoritarian attitude. The wife is not considered an equal of her husband but his subordinate. She is not supposed to sit down in his presence. On ceremonial occasions, she may worship him as a god. According to Chanakya, a woman is dependent on her father in her childhood, on her husband during her married life and on her sons if she is widowed. The oldest male member is always considered the head of the family. Sons are expected to obey the father even if he is senile and they are wise. Similarly younger brothers are supposed to obey older brothers even if the difference in age might be only a year or two. In many conventional families, the younger brother does not smoke in the presence of the older brother out of respect. Rama went to the forest instead of being crowned as emperor in order to fulfil his father's vow. His younger brother Baratha would not accept the kingdom that was offered to him and would only rule as his brother's representative. And he placed his brother's sandals on the throne as a sign of his own humility.

In an authoritarian society, obedience is the most important virtue. It does not encourage discussion. No questions should be asked, even in explanation. Consequently, it does not allow for the growth of critical faculty and makes leaders into demi-gods. It depends for its progress on the ability of the few rather than the intelligent participation of many. Once the leader goes and there is no one to succeed him, his handiwork falls to pieces. This has happened again and again in Indian history—after Asoka, after Vikramaditya and after Akbar. On many an Indian battlefield, even an army on the point of victory had been defeated because the commander-in-chief was wounded, captured or killed. Indian society, while it has produced just as many able and even great leaders as any other civilization in history, has not been able to maintain consistent progress because of its authoritarian nature on the one hand and restriction of knowledge on the other.

This twin combination leads to intellectual arrogance among the privileged few and timid passivity among the multitude. This social hierarchy has been one of the major causes of India's misfortunes in the past. Contact with Europe and the coming of industrialization has shattered the basis of social stratification and authoritarianism. But it has by no means been completely eliminated either from our society or from our social thinking. Though its intellectual basis has been destroyed, it still lurks in different forms partly as a matter of habit and partly as a vested interest. The hierarchical structure is represented by the caste system and the authoritarian attitude in the joint family.

The caste system has been a part of the social structure in India for many generations past and is firmly rooted in the Indian mind. Other religionists—whether they are immigrants into India or converts—have also been considerably influenced and have generally come to accept some aspects of the caste system. Recent advances in

industrialization and urbanization have struck at the very roots of this social system and there is no doubt that as industry develops, it will tend to disappear altogether in course of time. But the system has shown a remarkable power for adaptability and survival and, at present, it still plays a major role in social environment.

In sociological terms, caste system implies that each caste is a closed social group, admittance to which can only be gained by birth. It is not possible for anyone to leave that group because, irrespective of one's views or behaviour or profession, society considers him as belonging to that caste. At one time an individual could be ostracized from his caste for breaking some important rule such as marrying outside his caste, or for changing his religion. But thanks to the flexibility and the power of adjustment that the system has exhibited, such social ostracism is now a thing of the past and today even if a man marries outside his caste, he is still considered a member of the caste. This social solidarity of the caste is further reinforced by generations of inter-marriage, common habits and customs such as at wedding and funeral ceremonies, a common taste in food and mode of dress and, above all, a common group interest.

In economic terms, caste system means a rigid division of labour according to caste, the social status of a particular caste depending on the type of labour it performs. Thus, we have the Brahmins at the top of this social structure; they are the priests, philosophers and learned men. At the bottom are the untouchables who have to perform the most menial tasks such as scavenging. While there are many castes in the middle who perform more or less the same work—agriculture—the division of labour is more rigid in the higher and lower levels of the social scale. Even in the middle groups, there are subtle distinctions of social status and job specialization that are of great interest to social scientists. These distinctions have continued and prospered so far because of the unwritten, but none the less, binding dictates of the society and tradition, and because of the reluctance of the people of one caste to take to a profession of a caste lower than their own. On the other hand, they would not be allowed to take to a profession belonging to a higher caste. Generally speaking, people of one caste refuse to teach their profession to anyone other than their own members. There is thus a built-in mechanism of survival for each caste. The caste is at once a closed trade union and a social organism. It is this combination of hereditary job specialization and social exclusiveness that has made the caste system so stable and enables it to withstand the onslaughts of social reformers and economic changes.

With the gradual growth of towns and cities in the nineteenth century, one would have expected that at least among the urban population, where there is a certain amount of anonymity about a man's origin, the caste system would lose its hold, that people who had left their ancestral homes in the villages and moved into a new and strange environment would leave their caste distinctions behind. But this has not been so. The hold of the caste system over the minds of men is such that it has followed them into the cities. Even 'low caste' people do not like to marry out of their caste. One of the first questions a man is

asked is to which caste he belongs. Even if he tries to pass off as belonging to a higher caste-which he would not do generally – the habits and customs of a lifetime give him away. The only job he knows is that of his caste and that too gives him away. A man cannot say he has no caste; he must belong to some caste since he must have been born in one and that label, irrespective of what he may do afterwards, sticks to him.

Obviously, it would be impossible to practise the caste system in a city exactly as it was practiced in the village. It is not possible to provide transport separately for different castes. Nor is it possible to provide separate water supply for the various communities. Thus, people who insist on separate wells for untouchables in the villages collect their water supply from the common municipal tap and do not enquire too closely about the antecedents of their neighbours in the queue. In any case, the social legislation embodied in India' Constitution has made such distinction impossible.

Thus, while urbanization has tended to eliminate some of the rigidity of the caste system, the system itself has influenced urbanization in some peculiar ways. When a western form of education was first introduced into India, the Brahmins were the first to take advantage of it. Thus, during the nineteenth century and the early part of the twentieth, a majority of the jobs in the government as well as other professions like law, medicine, etc., were the monopoly of the Brahmins who formed only a small percentage of the total population. This led to a certain amount of resentment on the part of the others and resulted in the reservation for various communities of posts in the government, seats in educational institutions, and so on. When such reservations take place, the best people available are not always selected. Even assuming that all those selected on the basis of reservation satisfy the minimum requirements of the job, it does not mean that many others who are equally or even better qualified have been denied. This is not a satisfactory state of affairs for the morale of those who, in spite of their ability, have been left out because they happen to be born in a particular community. Nor is it good for the efficiency of a profession or service. On the other hand, if qualifications were the only criterion of selection, it would mean that those communities who were economically and socially backward would never have an opportunity to better their status. There is no escape from this dilemma until such time as there is full employment for all categories of people or the caste system itself becomes a thing of the past. In any case, it is obvious that in this respect at any rate, education and urbanization have tended to intensify caste differences rather than eliminate them.

There is another manner in which the caste system has perpetuated itself in towns and cities. All the sweepers employed by the municipalities are untouchables while most of the vegetarian hotels and restaurants are run by Brahmins – at least in the South. Anyone can eat in a Brahmin hotel, but if it were run by one belonging to the lower caste, the higher caste people would not go there. Though the restriction on eating between castes has largely disappeared, the monopoly of the Brahmins in vegetarian catering continues and

many restaurants in South India still display on the name boards 'Brahmin Coffee Club'. Sweepers are paid better wages than many other categories of manual workers, but the profession has not attracted people of other castes. It would not be surprising if there was resistance from the untouchables if anyone attempted intrusion into their professional monopoly. In spite of their cosmopolitan nature, the cities still have Brahmin extensions and sweepers' colonies as distinct entities.

The coming of industry has created a large number of new professions of various grades. The caste system has not provided for this development. Consequently, we find people of different castes working side by side on the same group of machines or in the same department in industrial undertakings. They draw the same wages, use the same canteens without any distinction and are members of the same trade unions. Thus, caste has largely disappeared as far as the work-spot is concerned. But it is generally found that those who have taken to industry are from the 'middle' caste groups; the proportion of 'low' caste groups is small in comparison with their total population. Entry into industry as a worker has generally been through personal contacts and the 'low' caste groups have fewer opportunities of such contacts. It is also found that once an individual enters industry, his relations and friends from the same caste have greater opportunities of becoming industrial workers than others. Thus it is not at all unusual to find people of a particular community predominantly in one department of an industrial unit.

On the other hand, people of the higher castes – say, the Brahmins – are rarely to be found in industrial occupations on the shop floor while they may predominate among the clerical and, some times, supervisory personnel. This is partly due to the higher educational level of these people and partly to the reluctance of higher caste groups to take to manual labour.

Differences in the social status carried by different occupations are to be found in almost any society. Even in highly industrialized communities, professional classes consider themselves socially superior to skilled craftsmen while they in turn consider themselves superior to unskilled workers. A professor at a university commands greater respect in society than a business man though he may earn very much less. Thus while status differences exist in almost all societies, in most other countries it is generally possible for an individual to rise in status through education, ability and hard work. The caste system does not provide any such avenues for individual aspirations. A man's profession was decided by his birth and there was nothing he could do to change it until recently. Even today when the Constitution of India assures freedom of opportunity for all, it is extremely difficult for a person of 'low' caste to rise to a high status in society.

This strict division of labour and talent into water-tight compartments over many generations has resulted not only in social stagnation, but it has been an obstacle to economic development also. When one caste or community is given the monopoly of a particular kind of work and they know that there is going to be no competition from anyone

else, and when they also know that they cannot turn to any other profession, there is very little incentive for them to improve. The element of competition which historically has been one of the prime factors of economic development is removed and whatever work is available is shared between the members of the community. A parallel to this situation is to be found in modern industry when a highly integrated group of workmen deliberately restrict output so that one of them may not be considered surplus; or when one trade union objects to members of another union performing certain jobs. It is well known that under those conditions, productivity tends to fall. But when a whole society has distributed all the jobs to be done to hereditary groups, the effect can easily be imagined.

Historically, this may be one of the reasons why Indian crafts men never attempted a quantitative increase in production. They rather concentrated on intricate patterns and complicated designs which tended to increase their skill and took a longer time to produce so that all the members of the caste could be fully employed. Thus while the caste system gave strength and stability to society during the long period before the industrial revolution when there were no changes in the methods of production, introduction of technological changes has found it totally inadequate to the changing social and economic needs.

Another manner in which the caste system has acted as a bar to economic development is by permanently destroying the ambition of whole groups of individuals. When the customs and taboos imposed by caste are strong, people dare not do what they want to do. This leads to a permanent lack of aspiration which limits their horizons. A combination of ignorance and force of circumstances tends to reduce their wants to the bare necessities of existence and even if others are available they do not desire them since they have not cultivated a taste for those things. For a man who cannot read, a book is of no use. One who has never learnt to appreciate music will not go to a concert even if admission is free. It is a vicious circle. Lack of opportunity limits aspirations and lack of aspiration limits wants and the limitation of wants leads to a lack of initiative.

People brought up to believe that being born into a particular caste they should follow a particular profession only, and when this idea has been ingrained into their minds for generations, will have no incentive left to aspire for anything else. Even when economic pressures force them into other professions, their aspirations continue to be limited in a large number of cases to those of their caste and not to those of the newly acquired profession. They do not attempt to earn more or to make use of the opportunities available to rise to a higher standard of living. This lack of aspiration is often revealed in the high rate of absenteeism among industrial workers – even in industries where the working conditions are good and the work is pleasant. It has also been found that, as the rate of wages goes up, the rate of absenteeism also increases. It means that workers are not interested in making money beyond a certain level. Though there may be other causes of absenteeism and it may not be wholly correct to make any generalization, this tendency cannot be overlooked.

In such a society men have rights and expectations that depend not on their ability, initiative or service but on their inherited status. Men of status are assured of it by birth while those without status cannot acquire it whatever they do. In either case it is a bar to initiative. The high do not need it and the low cannot use it even if they have it.

Ability and talent are not the monopoly of one particular caste or community. And yet, because of the caste system, the potential talent of whole communities has been completely suppressed for generations and has found no outlet in higher occupations. The selection of people for higher professions has been from a very small section of society. While other economic and sociological causes such as education might also be responsible for this state of affairs, there is no denying that the caste system is the major contributing factor.

Though there is considerable unemployment in India, certain occupations show an acute shortage of skilled workers. For example, there is a shortage of masons, stone workers and carpenters in most towns and villages. With the increase in the tempo of economic activity and in the amount of building work going on, this shortage has become quite serious in certain areas. But unemployed young men newly seeking work would never consider entering these professions. They would rather work as unskilled labourers at Rs. 1.50 per day than take to one these occupations which are comparatively well paid. To them, brick-laying, plastering and stone work is for the masons' caste and carpentry for the carpenters' caste.

It is not their fault entirely. A young man wanting to learn a craft other than that of his own caste would find it extremely difficult to get a tutor. A mason would not teach masonry to anyone outside his caste, and even within the caste he would first take his own kith and kin as apprentices. On the other hand, even if an individual has learnt the craft of another caste, it is doubtful if he would find employment, because people would say: "He can't be very good; he isn't after all a real mason." In the industrial training institutes that have been recently set up by the government for training craftsmen in various trades, carpentry classes are generally attended by carpenters' sons only, though the electrician's course may have pupils of different castes in it. It is not individuals but the social values of the entire community which are responsible for this state of affairs.

There are three ways in which the economic barriers of caste can be overcome. One is through mobility. This may take the form of individual migration from village to city and the consequent change from traditional to a new industrial occupation. Migration does not necessarily guarantee change; particularly for skilled craftsmen such as barbers, washermen and leather workers, but it does create possibilities of change. Mobility may also take place in the form of mass migration as was the case in Punjab after the partition of India. The Hindus and Sikhs came to India after untold suffering, and with no resources. Yet after only fifteen years, most of them are well established as thriving and prosperous communities. Whether in farming or in small-scale industries they seem to have excelled all others in

India. It should be remembered, however, that during the British days the people of Punjab were given preference in the matter of recruitment to the Indian army and almost every family had a soldier. This had the effect of widening the horizons of the community as a whole and made their adjustment to social and economic changes easy.

Starting of industries in rural areas has a similar effect in that some people change their occupation and the change has repercussions on the entire community. But this is not so effective as a means of social change. In the first place, the handicaps in starting industries in rural areas are many. Secondly, change from an agricultural to industrial occupation without a change in the environment does not produce a major difference in social habits.

Education is one of the most unfailing methods of breaking the economic barriers of the caste system. An educated young man rarely takes to the profession of his caste. The educated son of a barber rarely becomes a barber; nor does the son of a farmer take to farming except in rare cases. Even a priest's son does not become a priest if he has had some education. All educated young men desire white-collared jobs. One of the major objectives of education for most people in India is not only economic and social betterment, but also "freedom from the drudgery of manual labour". While this may not be an altogether welcome attitude, it does, nevertheless, help in breaking the economic barrier of caste.

It should be remembered however, that the removal of economic barriers does not mean the automatic removal of social barriers also. It is only the first step. For a sustained increase in productivity, a high degree of vertical mobility is essential. A closed upper class, entrance to which can be obtained only by birth, prevents such vertical mobility. In societies where there has been a rapid growth over a long period—as in the United States, for example – there has been a continuous upward mobility of people of merit, irrespective of their birth. Even if some families were the best when they acquired positions of responsibility and power, they could not continue to maintain their ability over generations. Sons of brilliant fathers are not necessarily brilliant. On the other hand, an upper class which allows its weaker members to fall into the lower strata of society and raises others with ability to come up from below is constantly renewing itself both biologically and culturally. When such vertical mobility is easy, increase in productivity can be rapid.

The family is an important social institution in any society, as it influences every aspect of human activity. In a primitive society the concept of family is very wide and includes a whole range of cousins. The average size of such a family is extremely large; perhaps it may be more proper to call it a clan. Land may be commonly owned and cultivated, and there is a degree of communism within such a family system. It is a tribal approach to the family, but

it means social security for its weak and old members; the larger the number within the family groups the more effective in the security.

As this society advances and becomes richer in resources as well as skills, the concept of family becomes more and more narrow. At low levels of income, members of a family must rally round to help each other, but at higher levels individuals are better able to protect themselves against misfortune. There is also greater difference in the earning capacity of members of the same family because; at this level there is greater diversification of work and greater scope for planning and initiative. Those who get a large income are naturally reluctant to share it with their relatives. Thus, with economic progress, the community becomes larger but more diffuse. There is in it an absence of that strong public opinion or social pressure which exists in smaller societies and it becomes difficult for distant relations to put forward their claims for economic assistance and protection.

The large family system has many advantages in societies depending mainly on agriculture, but it acts as a drag on industrial development. Economic growth depends on initiative and initiative is likely to be stifled if the individual has to share the gains of his effort with a number of others. It also acts as a disincentive to individual effort, because it provides everyone with some form of protection or the other against want. A strong sense of family loyalty may also become a bar to progress in that the individual concerned may sacrifice his own chances of success and, consequently, his contribution to the general economic growth for the sake of other members of the family.

The joint family system in India, like the caste system, is very old. It has been a part of the Indian social set-up for many generations. It may even be older than the caste system since the family as a unit of society goes back to pre-historic times. Like the caste system, the joint family has been considerably weakened by industrialization, though by no means completely eliminated. Those who are in positions of responsibility today have been brought up under this system and its influence can be traced in their habits, behaviour patterns and attitudes.

Among the lower strata of society, economic pressure has driven the younger members of many families to seek employment in cities. In the case of the educated and professional classes, they have to live according to the exigencies of service, and the members may live as far apart as Madras, Calcutta or Delhi. Among the wealthy classes, the tax structure has had considerable influence in breaking up the joint family. Because of the high rate of taxation for higher incomes, property is often divided among the male members on the basis of the Hindu laws of inheritance even before the sons are old enough to manage. All these factors, combined with education, a desire for individual freedom and the general change in the social atmosphere have been responsible for the weakening of the joint family.

The characteristics of a joint family are easily summarized. The family consists of the father and mother, sons and daughters-in-law, daughters (if unmarried or widowed) and grand children. The family property as well as income is held in common and the expenditure of all the members is met out of the common pool. Major decisions are taken by the head of the family, mostly in dependently, but occasionally in consultation with the other senior members. Other members of the family are expected to abide by those decisions. The interests of the family as a group predominate over individual desires of interests. Each member of the family is expected to protect and help other members needing such help and protection, even if it means sacrificing long cherished personal ambitions. The elder brother may be asked to give up his studies – however brilliant he might be – and take up a job in order to provide an extra income, may be to educate the younger brothers, to meet some medical expenses, or to provide for a sister's dowry. An individual in a joint family is judged not by the brilliance of his personal achievements, but by the contribution he has made to the general welfare, status and prestige of the family as a whole. There is a sort of communism prevailing within the family group-each contributing according to his ability and receiving according to his needs. An individual is a member of the family group not because of his functional utility, but because of his bonds by birth and natural affection. It is this relationship that distinguishes the family from other social groups, and in a joint family it is broadened to include a number of other relations also. It is often found that poor distant relations or elderly servants who are no longer in a position to work are nevertheless retained within the family group. They are even treated as members of the family. Thus, while personal freedom and initiative is largely lacking in a joint family group, there is security against old age and want which is an important asset in a society devoid of social insurance of any kind. The feeling of loneliness in old age which is a feature of European and American society today is unknown in India. The children also do not suffer from want of affection of care; in fact there is always a host of relations to spoil them.

A child brought up in this atmosphere tends to develop attitudes and patterns of behaviour characteristic of the environmental situation within the family group. In the first place, there is a multiplicity of authority as far as the child is concerned. Rewards and sanctions, praise and punishment are administered not only by the parents but by a number of people such as aunts and uncles, older brothers and sisters, cousins and grandparents. In a fast changing society (and the society in India is changing fairly quickly) great differences are likely in the ideas of different people, particularly of different generations, regarding a child's upbringing. The orders, instructions and advice given by different members of the family are likely to be conflicting. Since a child's behaviour pattern is largely determined by a system of praise and criticism, in the absence of a rigid system a child's tendency is to so adapt himself that he may not be criticized or punished by any older member of the family. In most cases this is only possible by avoiding action altogether. It also enables the child to develop certain socio-political skills by which he gets round various members of the family without necessarily accepting their views. Thus, if he is criticized for a particular form of

behaviour by one senior member, instead of justifying if he usually approaches, for protection and consolation, another member of the family who is likely to be sympathetic to such behaviour. In such a situation, development of initiative is retarded; what is likely to develop highly is an innate ability to get round people and problems instead of facing them.

The development of these behaviour patterns is carried forward into adult life they are not conducive to an industrial work situation. Modern industry and administration demand initiative as well as co-operation with others in about equal measure. They demand formulation of definite policies and their consistent implementation over a period of time, as also the taking of responsibility for their outcome. Mere ability to get round them or to avoid them altogether is not an asset.

In a joint family, though authority is generally exercised by the head of the family, other members also take ad hoc decisions over many matters without reference to the head. The power to take such decisions depends upon the seniority and standing of the person concerned in the family hierarchy and his responsibility and contribution to the family welfare. Thus, a son having an independent income and contributing all or a portion of it to the family will have a greater say in family matters than another who may not be in such a position. But all the senior members take decisions over minor matters some time or another. There is no division of responsibility or clarity of roles.

This informality in decision-making as well as in relationships works successfully in a joint family because of the high degree of cohesion, loyalty and affection binding the members together. Individual interests are often subordinated to the family interests. But when such relationships are extended to the industrial sphere where organizational clarity, delegation and responsibility are of primary importance for efficient working as well as good relationships, inefficiency and frustration results. The members of an industrial organisation are not bound together by the same ties of affection as the members of a family. They tend to think of their rights and privileges as individuals more than the interests of the organisation as a whole. Because of this and because of the larger size of the industrial group, it is impossible to achieve the same degree of cohesion. Therefore, when organizational clarity is lacking in an industry, high efficiency is impossible to achieve.

Indian society is still largely rural. More than eighty per cent of its population still lives in the villages. In the pre-industrial age, each of these villages was a self-contained unit, socially and economically. Its wants were simple and these were met by the craftsmen of the village plying their different trades. Socially, each member of the village community had his status and he remained there. The import of cheap machine-made goods from Europe in the nineteenth century, and later, the coming of industrialization in India itself, destroyed the economic self-sufficiency of the village. But the village is still a compact social unit and

the relationships operating here are still those of the pre-industrial age. The various castes still live apart from each other and social mingling is largely decided by tradition. The social legislation that has been enacted in India during the past fifteen years and the spirit underlying such legislation has not had a great impression on the villages as yet. In such compact social units, changes are difficult to introduce and attitudes difficult to change. Anything new or unusual is looked upon with suspicion and anyone who is adventurous--especially if he comes from a lower caste -- is considered an upstart. In such a static society, the dangers of non-conformism are considerable and incentives for social progress non-existent.

This age-long tradition has made the attitudes and prejudices much stronger than in other countries. Other societies, particularly in Europe, have undergone a number of changes during the past two thousand years. Beginning with the Roman Empire, the spread of Christianity, the feudal system of land ownership, the organisation of skilled craftsmen into strong guilds, and finally, the industrial revolution--all have brought about great changes in the relationships between individuals and groups. Each one of these changes completely eliminated the previous society and replaced it by a new one. These changes meant a change in ideas, beliefs and attitudes of the people as a whole.

But because of the strength and stability of the caste system, social relationships between individuals and groups in India have remained static for the past two thousand years. Wars, conquests and revolutions might have laid waste the entire country, but they left its social system unimpaired and unchanged. Preachers, philosophers and religious reformers, whether from within or outside the Hindu fold, have not made much impression on the social relationships and patterns of behaviour of Indians. Many of the Hindu reformers were concerned more with metaphysics than with the problem of society. Even when new ideas with regard to social conduct were propagated, they did not have the effect of replacing older ideas, but rather of supplementing them, and they continued to exist side by side. This has been going on for so many generations that we find today the highest philosophic concepts existing side by side with primitive beliefs and taboos, and each man can take his pick of what he believes according to his understanding. Often we find the same individual holding conflicting ideas and ideals. This is often explained by saying that one is Kalacharam (the way of culture of philosophy) and the other, Desacharam (the way of the world), and it is possible to believe in both at the same time. Thus, though new philosophic concepts and ideas have been flowing into Hindu thought, the system of social organisation has remained unaltered, and ancient attitudes and behaviour patterns have continued down to the present day.

A tradition as old and as continuous as this is bound to be deeply entrenched in the minds of men and influences their everyday activity. Habits and beliefs which seem to many as superstitious cannot be eliminated merely by a process of logical reasoning. Logic is never

more ineffective than when it is applied to long-standing prejudices. One example of such a habit is the general faith in astrology and related customs.

Even in the poorest homes, when a child is born, the time of birth is accurately noted down and its horoscope is cast by the local astrologer. No major decisions in the family such as weddings or the starting of a new business would be taken without consulting the astrologer. Even after the decision is taken, any important activity must commence at an auspicious time and, for this also, an astrologer is consulted. In starting on a new journey, such as going to Europe, the traveller must leave his house at an auspicious time, and if it should not happen to coincide with the timing of the train or plane, then, he should spend the intervening period at a friend's house. Annual general meetings of many companies are fixed not only with reference to the Companies Act, but also with reference to the almanac. Even some public functions are arranged in this manner though the fact is not usually advertised. The recent excitement caused by the conjunction of eight planets is an example of the strength of belief in astrology in the country today. Such considerations are so much a part of the daily life in India that they go unnoticed even by people who do not believe in them.

It is true that the spread of modern education infused with scientific ideas and a humanistic and rational concept of life, and the failure of the 'old wisdom' when tested against modern needs have led to the weakening of such superstitions. But even educated people are unable to rid themselves wholly of these ideas; instead they find metaphysical arguments to reconcile their conflicting beliefs. Sometimes, men observe them even if they themselves do not believe in them; they do it for the sake of domestic peace and tranquility, for women on the whole are great believers in astrology and associated ceremonials and observances. It soon becomes a matter of habit and is passed on to the children. It is often due also to an irrational fear, that in spite of what their reason tells them there may be something in it; performing purification ceremonies and observing auspicious times, etc., are not the result of positive belief but a form of insurance against any possible evil effects. In a society where most people conform, it takes considerable amount of courage to defy convention. If something should go wrong by accident, others would point out and say it was because he failed to observe some ritual or ceremony. It is easier and perhaps 'wiser' to take the line of least resistance and conform to Desacharam.

Another attitude that has come down with this tradition is connected with the doctrine of 'Fate'. In an industrial society, in which man has learnt to control the forces of nature and to use them for his benefit, he is conscious of his powers and does not hesitate to take responsibility for success or failure. He also strives consciously and persistently to improve his own powers over nature. But in an agricultural society in which man is at the mercy of natural forces such as the vagaries of the monsoon, floods, droughts and soil erosion, and about which he is unable to do anything, he is likely to say, 'It's God's will' or 'It's fate' and leave it at that. That is his explanation as well as consolation. And when he has

been saying it for many years, he evolves a philosophy out of it. There have, of course, been many periods in Indian history when man has dared to defy nature, has aspired to great heights and often reached them. But during periods of stagnation, as during the past three hundred years, the doctrine of fate has been both his philosophy and his consolation.

The relationship between these attitudes and industrial progress is obviously not direct. But it is easy to see that when a community is dominated by the philosophy of fate, when everything is supposed to be pre-ordained, its material ambitions and aspirations are necessarily low. If man's efforts are not going to be rewarded and if what will happen irrespective of his striving, he cannot have much desire to strive.

The creation of a technologically mature society depends not only on changing the physical environment, but also on creating attitudes and patterns of behaviour that are in consonance with the knowledge and wisdom of the times. If industrial development is to be brought about rapidly, the decisions of individuals as well as groups should be based on a clear appraisal of facts and logical reasoning, and not on prejudices of one sort or another. There are many situations in industry when conflicts arise between traditional attitudes and industrial requirements. In such cases, it is quite likely that the line of least resistance would be taken – to fall in with traditional attitudes.

This conflict between traditional attitudes and scientific reasoning is going on in the mind of every individual in India today, and influencing all his decisions. Traditional wisdom often imposes itself on the quality of these decisions; and the effort involved in taking them on an objective basis is tremendous.

CHAPTER FIVE

Social values

1

It is social environment that determines the social values accepted and practiced by a community. There may be a few who rebel against their environment and its values; they are either social reformers who consider that society needs improving or criminals who find the rules of society too irksome. But, by and large, the vast majorities of people accept the values prescribed by the society and practise them without protest. These social values form a guide to the habits and behaviour patterns of the people as a whole.

2

To help needy members of one's family and relations has generally been considered a social virtue in India. A man who has done well for himself and has also given considerable help to his relations is often referred to in such words as 'a tower of strength to all his relations' and is considered a social benefactor. On the other hand, if he should fail to help his relations, he would be considered selfish. In giving such help, the economic utility of the receiver is never taken into consideration, since it is given as an act of social service rather than as an economic consideration. An agriculturist never thinks of employing outsiders on his farm if his sons, brothers or nephews are available. Only after all the members of his family have been absorbed does he look outside. Even then, he prefers the members of his own caste. The loyalties and obligations of society demand that, in economic matters as in everything else, he should help members of his own caste in preference to others. These obligations do not cease to exist just because a person starts a new industry or becomes a member of a government department or the principal of a college.

But when these values are extended to an industrial society, they become out of place and positively harmful. Fundamentally, employment in an industrial society is based on the economic and functional utility of the individual concerned. The individual also places his own economic well-being above those of others in the organisation and even above the organisation he serves. He is not bound by ties of loyalty, affection and blood relationship to the other members of the group as he is in a joint family. His motivations and aspirations are not those of an agricultural worker attached to his employer in the village. Even if they are so to start with, they soon change under the impact of industrial circumstances. He expects to be rewarded for good work and reprimanded for inefficiency. He resents preferences shown on the basis of social relationships, though he may not be averse to it if

they act in his favour! Efficiency and high morale in an industrial organisation demand that recruitment and promotion should be based on merit and on no other consideration.

All this should not be taken to mean that nepotism is confined only to the employer class. Employers and workers are both inheritors of the same tradition and their attitude to many of these problems is similar. It is just that the employers have greater opportunity. When first-line supervisors—who are themselves promoted from among workers—had the responsibility for recruitment in the early days of industrialization, many complaints were made that they had filled their departments with their relatives. When a wealthy agriculturist starts an industry, his tenants and farm workers expect, as a matter of course, to be taken into it.

Consideration of caste, community and blood relationship persists at all levels and in all spheres of activity, whether it be industry, public service or politics. Among the more sophisticated, it has become fashionable to decry any preference shown on the basis of caste, but it still makes its influence felt in various subtle and indirect ways.

The prevalence of nepotism affects an organisation in many ways. The presence of a relation of the boss in the lower rungs of the ladder is usually resented by the other employees. He is considered a spy who has direct access to the top and who is likely to carry tales. If, in addition to this, he happens to be inefficient, not only does he not contribute his share, but the others tend to feel that they need not be efficient. If he commits a mistake, it is often difficult for the boss to punish him because of extraneous considerations. On the other hand, if others are punished for similar faults, there is resentment against an obvious injustice. The net result is a lowering of morale and frustration in the organisation as a whole.

If, on the other hand, the top-most person in an organisation has acquired his position not by skill or efficiency but merely by virtue of his birth or influence, then things are even worse. This is particularly so in public organisations where the individual concerned has no financial stake involved. In the first place he is not capable of taking decisions. Delay in decision making is dangerous – for not making a decision is itself a decision, if a negative one—and is likely to have an influence on the march of events. In an emergency or crisis such a person loses his command over the situation. He is dependent on others for advice—usually his subordinates. Sometimes this may lead to corruption but it always leads to a lowering of efficiency. The subordinates give conflicting advice and compete for the position of being a ‘favourite’. Finally it leads to the impression among everyone concerned that the only way of getting ahead is not by acquiring training or skill but by influence and right connections. Naturally people follow the method that they think will yield results easily and quickly.

It is obvious therefore that the ethics of the caste system and the joint family are unsuitable for the industrial age. But yet, they persist because what was considered by society and is still considered to a large extent as a virtue cannot be treated as something

undesirable and given up overnight. The human mind does not change very fast and mere logic does not bring about social changes. Anyone who has had anything to do with recruitment, promotions, and admissions to colleges, etc., is only too well aware of the social pressures of different sorts to which he is subjected in order to persuade him to favour a particular candidate or group of candidates. There are many subtle ways in which these pressures operate and an individual must have a very high degree of detachment combined with a very strong will-power to be immune to them. If, however, one succeeds in achieving such impartiality, he soon becomes unpopular among his colleagues; but if he yields to such pressures, at least those of his colleagues to whom he has yielded will be his supporters and will certainly do him a good turn when they have an opportunity. Every community blames all the other communities for this state of affairs, but they have all inherited the same burden from the past.

There are of course a few cases where communal loyalties have been successfully transferred to an industrial situation, through consistent encouragement to a particular community. Because of these loyalties, such organisations have been highly efficient. But it should be realised that in the change pattern of India's sociological climate, such loyalties are on very unstable foundations and are likely to be upset by the slightest change in the social equilibrium.

3

Respect for seniority and age is a special feature of any hierarchical society and it is particularly so in India. It has also been reinforced by the joint family system in which generally power is concentrated in the oldest member of the family. They take major decisions in most families on domestic as well as business matters. Even when they are physically incapacitated and thus rendered inactive they still expect to be consulted and their views accepted. It is not done to contradict them or even to express mild disagreement. Years of unchallenged authority creates in their minds a sense of infallibility which is often cloaked in an attitude of mock humility. This traditional respect for age and seniority is often transferred to industrial situations and to business organisations. It is given considerable importance in the attitude of public administration also. Many Indian businesses are run by family groups and the head of the family is also the head of the business organisation. In actual fact he may not even be a member of the board of directors. The managing director or the chairman of the board may be his son, younger brother or nephew. But his is the power, if not the glory, for he remains behind the scenes and takes all the major and often even the minor decisions.

Even in other organisations which are not family concerns, respect for seniority and age persists because it is a part of the culture pattern of society. A senior engineer does not consult his junior on the usefulness of a new process (even though the younger man may be

better qualified and may be thoroughly familiar with that process while the senior might not) because he considers it beneath his dignity. Similarly, the junior engineer does not offer his views because he feels it may be resented (though in some cases it may not be) and he may be considered impertinent. He fears that it may affect his future chances of promotion. The result is that the decision to use or not to use the process is taken on insufficient information regarding its utility. The quality of the decision suffers as a result. The junior is conscious of this and is often frustrated as a result. There are hundreds of similar situations where respect for seniority and age stands in the way of progressive decision making.

Even in a stable society where technological and social changes are few and far between, the control of older people is bound to have a cramping effect on the younger generation. But in a society that is fast changing—as in India today—such control has a crippling effect on the young people. Often, the father is uneducated and narrow in his outlook on life. His horizons are necessarily limited and he does not realise the trend in which the world is moving. The son is educated, broad minded, more objective. The senior man in industry might have got there merely through experience, or age. But in a rapidly changing technological age, he is often ignorant of modern developments. And yet, in both cases, it is the senior people who take decisions which affect the younger generation and the organisation.

Another result of this respect for age is that promotions in India are almost always by seniority. This is particularly so in government service where promotions are governed by a complicated set of rules and seniority is difficult to ignore. Needless to say, such a system is frustrating to enthusiastic, brilliant and hard working young men. The quickness with which a young man attains maturity in a business or profession depends partly on his knowledge and ability and partly on the nature of the responsibility that is entrusted to him. If such responsibility is denied to him until such time as he himself is fairly well advanced in age, his knowledge often becomes rusty, his enthusiasm degenerates into mere routine and when at last he reaches a position of authority, he is reluctant to share it with his junior colleagues and so the process goes on.

Progress in the past might have depended upon experience and philosophic thought. While these still have a high place in modern business and industrial life, what is even more necessary today is daring, experimentation and innovation based on the latest additions to human knowledge. It is generally considered that scientists do their best work before they are thirty-five. This is probably true of many other professions also and the earlier the responsibility is placed on a man, the more fruitful his work is likely to be.

All this is not to suggest that there should be no respect for age; in any civilized society, there will always be respect for age and status. Nor does it mean that young people should be allowed to do just what they like! But it does mean that if economic progress is to be rapid, properly qualified young men should be entrusted with greater responsibilities; their advice should be sought before taking major decisions; that when once the

responsibilities are given, they should not be lightly interfered with; and they should be encouraged to take initiative. It means that the older people should reign rather than rule.

We thus have a combination of unquestioned respect for age and strong loyalty to one's caste and community in a modern industrial system which involves dealing with a large number of men and machines and which demands absolute impartiality. A man in charge of a job in industry should do what he thinks is right without having to consult his seniors. He must take the responsibility for his decisions. He should be in a position to express his opinions freely without fear of offending his superiors. His loyalty must be to the organisation as a whole and not to a few. We can see the contradiction between the modern executive eager for initiative, power of delegation, equality and impartiality, running headlong into a tradition which opposes all these attributes.

4

The status of women in any society also affects productivity. Women form half the total population and whether they contribute to growth and progress or whether they are a drag on society depends upon whether they are treated as equals or as subordinates to men. If women have equal rights in the domestic and social fields and if equal opportunities of education are provided they too can contribute by their skill and knowledge to productivity in various walks of life. On the other hand if they suffer from handicaps, their talents cannot be fully exploited for the benefit of society.

In Hindu mythology and Indian literary tradition women are represented as being pure and ethereal and more virtuous than men. Higher standards of morality and behaviour are expected of them. Heroines of mythology are treated as goddesses. There have also been many women in Indian history who have distinguished themselves in various walks of life which are generally considered to be the prerogative of men. But in daily life women have always held a subordinate position. According to tradition and custom, modesty carried to the point of timidity is considered to be their greatest virtue. A wife is expected to stand up if the husband comes into the room. She is supposed to eat only after her husband has finished his meal. Until recently she had no rights of inheritance, only the right to protection.

On the other hand, women of lower castes and the working classes generally have always had to work for their living. That means they have always contributed to productivity according to their ability and have enjoyed greater freedom. But women from the middle and upper classes have always considered it beneath their dignity to work outside the home. Men who did not hesitate to demand big dowries from their prospective fathers-in-law nevertheless considered it beneath their family honour if their wives and daughters worked for a living. Consequently until quite recently, women's contribution in the various professions has been very small. But thanks to the Independence movement which swept

the country and the excellent example set up by a few distinguished women, the spread of education and the removal of some of the social inequalities through legislation, more and more women are entering the professions and beginning to contribute their share in the creation of wealth.

However, at present and for some time to come, except in some specialized jobs such as nursing, teaching and medicine, the contribution of women towards increasing productivity can but be small. When millions of men are unemployed, if a woman gets a job it only means that she prevents a man from getting that job. It is also quite likely that the men who are unemployed would resent a large-scale intrusion into their professions by women. But in the later stages of industrialization, when male unemployment is reduced, a significant increase in productivity can be achieved if women are progressively employed in all types of jobs for which their talents and training fit them.

Nevertheless, it is they who can change social environment. The attitudes, beliefs and behaviour patterns of children are conditioned more by mothers than fathers and often women have a greater say in social matters in the home. Therefore their education and training assumes great importance.

5

Paternalism is another social attitude that is prevalent in Indian industry. Paternalism in industry can be described as the attitude of employers to their workers, similar to that of parents towards their children. It is an attempt to transfer the feudal relationships of an agricultural society to an industrial situation. In a village, the chief landowner is not only an employer of most people in the village, but also their friend, philosopher and guide. He looks after their social needs and they consult and obey him even in personal matters. It is his duty to care for them under all circumstances and in return, they never think of leaving him and going to work for someone else. Such an attitude in industry has been found in many countries in the early stages of industrialization.

Paternalism has two aspects. The first is benevolence; the employer makes himself responsible for the welfare of those working under him in the same way as a father is responsible for the welfare of his children. The second is despotism; he expects his workers to accept his orders without question and to obey him in the same way as he expects obedience from his children. This combination of authoritarianism and benevolence can be highly successful under certain conditions and stages of development. In some countries— notably in Japan – it has been particularly successful in bringing about a sense of loyalty between workers and managements and has been mainly responsible for high productivity. When a worker is recruited in Japan, the managements generally do not think of dispensing with his services except for very serious or extraordinary reasons. The worker, on the other hand, expects to spend the rest of his life working for that management. Even in a time of

economic depression, workers are rarely retrenched. The welfare of workers and their families is treated by the managements as an important part of their duties and no time, money or effort is spared for this purpose. One is impressed by the provision of dormitories, medical help, recreational and cultural activities arranged for the benefit of the workers and the way these facilities are being utilized by most of them. The methods of induction and training are such that the worker feels at home from the first day and learns to feel proud of the factory and the management for which he works. Because of this paternalistic character of Japan's industry, it was possible for that country to industrialise without much social disruption—a phenomenon that has followed industrialization in most other countries. For the same reason, in spite of the rapid growth of trade unions in post-war Japan, the nature of the relationship between managements and workers has not been seriously challenged.

But one should not lose sight of the authoritarian nature of paternalism. So long as the workers accept such authoritarian treatment willingly and so long as they do not question the bonafides of their employers, paternalism can be successful. But the moment the workers realise their rights and privileges and their strength in collective action, paternalism becomes extremely inefficient. The managements continue to be authoritarian in character. They are unable to understand the change that has come over their workers, who up till then had been quite happy and contented. They attribute the discontent and the indiscipline to a few 'agitators' and feel that when once they are removed, things will go back to the old relationship. The workers, on the other hand, with all the enthusiasm of a new found freedom and strength are aggressive and question every action of the managements, often, merely to assert their rights. The result of these two opposing attitudes is a large number of disputes, frequent stoppages of work, poor industrial relations and low productivity.

The welfare aspect of paternalism has never been strong in Indian industries except for a few notable exceptions, but managements have generally been authoritative and have been reluctant to give up many of their prerogatives. On the other hand, there has been considerable awakening on the part of the workers during the past fifteen years, followed by a rapid growth of the trade union movement and a rise in the level of expectations as a result of Independence. Managements who were, until then, used to taking unilateral decisions on all matters could not adjust themselves to the new situation. This resulted in an abnormal number of disputes during the fifties. But with the gradual evolution of a new equilibrium based on recent legislations, we may expect a reduction in the number of strikes and lockouts and the building up of sound industrial relations. Under these newly developing conditions which are essentially democratic in character, paternalism has no place; and welfare measures will be successful only if they are divorced from paternalistic attitudes.

Partly because of the paternalistic attitude which induces a sense of personal responsibility for the well-being of their relations and community people; and partly

because of a false sense of generosity, many managements of industries in pre-war years recruited people with no regard to the efficiency or numbers. This was particularly so during the war years when wages were low and profits were high and few additional workers or clerks did not affect the organisation very much since the total wage bill did not go up to any great extent. At the same time the managements felt that they were helping to provide jobs for poor and starving people. It was again the old feudal attitude of charity, of sharing what was available as wages among a large number of people, of not attaching importance to the functional utility of individuals.

But in the immediate post-war period, when minimum wages for all workers in various industries were fixed, these managements were in trouble as they had to pay these wages to all their workers irrespective of the number they employed. There was a demand for retrenchment from the managements which was opposed by the unions, thus creating a problem for everyone concerned. In some of the older industries like textiles, this problem of surplus workers recruited during or prior to the war years still persists in many areas.

6

Another social attitude that is of relevance to productivity is the reluctance exhibited by most educated and even uneducated people in India to any form of manual labour. Engineering graduates, when they enter industry, expect to spend most of their working time at a desk. Or, they walk round the departments and give oral instructions to those under them. But unless they have themselves worked on the machines, it is not possible for them to understand the problems that the workers have and their instructions remain at a theoretical rather than a realistic level. The diploma holders, who it was first thought might take to working on the shop floor, have developed an attitude similar to that of the graduates and expect a desk, though perhaps a smaller one. Manual work is important even for those who are later going to be employed in purely brain work, from the point of view of training in the co-ordination of the hand and the eye with the brain and secondly from the point of view of developing a proper attitude in the young people towards those who may be permanently employed in manual work. The ability to use tools and instruments of various kinds is important to a man in industry at whatever level he may be operating. Only such knowledge backed by sound theoretical education enables him to improve those tools, machines and techniques on the basis of personal experience.

The desire to avoid manual labour is not peculiar to India. Even in industrialized countries, until quite recently, the 'white collar' workers considered themselves socially a step above the 'blue collar' workers, though economically they might not always have been as well off. Manual labour generally means hard physical work, low pay, low social status and very little skill or initiative. Through industrialization and improvement in working conditions, the difference between the two types of work has been so far reduced in

advanced countries that now these distinctions have practically disappeared. In India manual labour still means, in a large number of cases, all those things such as physical effort, low pay, etc. And in the peculiar social philosophy existing in India in the past, all manual labour was performed by people of the lower castes who had no opportunities of upward social mobility. Consequently, people of the higher castes have developed the attitude that every type of manual labour is socially degrading. And the lower castes, who unconsciously tend to imitate their social superiors, try to give up manual labour at the earliest possible opportunity.

Further when labour is as cheap as it is in India and as plentiful, it is only natural that it should be looked down upon. A man drawing as low a wage as three hundred rupees a month can employ a servant for about twenty rupees a month. Naturally he is not only not used to any manual work in his home but thinks poorly of others who do it. Now that the wages of industrial workers are fairly high in comparison with others, there is less reluctance to take to factory work though other forms of manual work have not received a similar social upgrading.

This attitude takes different forms. Most jobs are passed down to the lowest possible level before they are performed. In factories, an engineer or a technician does not think of adjusting or setting a machine himself. Nor does he check it after it has been done by someone lower down. He considers that his job is to ask his subordinate to do it and in some cases explain to him how it is done. Even skilled workers demand assistants to be provided to do the unskilled part of the job. A man who has to climb the ladder to repair an electric wire wants another man to fetch the ladder for him. In vegetarian restaurants in South India there is usually one group of people to serve the food and different group to carry away the dirty dishes and clean the tables. Those who serve consider it beneath their professional status to remove the dirty dishes. In offices, this attitude is reflected in the existence of a large number of peons, carrying notes, files and glasses of water everywhere. If a piece of paper drops from the table, neither the boss, nor the typist who may be with him would think of picking it up; the bell has to be rung, the peon summoned and instructed to pick up the piece of paper. Often, it is the peon who carries the brief case from the car to the office of the executive. Even the junior-most officer expects to be provided with a peon as a matter of course. Their number has not been reduced in spite of the provision of the inter-communicating system. In small offices in western countries, it is usual for the typist or clerk to make tea for the boss. But stenographers in India would be horrified if they were told that making tea was part of their daily routine—even if they were capable of making it. Similarly, an executive or officer would be scandalized if it were suggested that he should have a cup of tea with his secretary! Thus a new caste system based on a new division of labour is beginning to take root in our factories and offices also.

Partly because of the force of economic circumstances and partly due to the propaganda of the last few years regarding the dignity of manual labour, there has been a

welcome change in this attitude. Educated young men are ashamed to admit that they do not like manual work. Training in the N.C.C. and the social service leagues of various schools and colleges has also been responsible for this change of attitude to a certain extent. In fact it is quite fashionable for students now to undertake some voluntary work during their holidays such as repairing a road in a village and get themselves photographed in the process. But to do voluntary work as a service during a short period is one thing; to do it for eight hours a day as a profession is another. And while open objection to manual labour has largely disappeared, it shows itself in more indirect and subtle forms. Nevertheless, some young men with education are entering factories as workmen today. And if this gradual trend continues, and if they are provided with adequate training facilities within the industry so that they have opportunities of rising to higher levels in their jobs, it is bound to lead to industrial efficiency. It will also provide a ladder for upward mobility for industrial workers through skill and craftsmanship so totally lacking at present.

7

In all group endeavours, there should be some sort of a common philosophy of understanding between the various people comprising the group. It does not matter whether the group is small –such as people working together in a factory –or large, such as a whole nation. Nor does it mean that every one should follow the same doctrine. But it is essential that each one professing a particular doctrine should practise it so that others would know what they may be expected to do in a given situation and may adjust themselves accordingly. Such an understanding is necessary for the success of any joint effort. It necessarily follows therefore that for any successful co-operative effort, there should be some compatibility between profession and practice.

It is of course idle to pretend that one's behaviour will be completely in consonance with one's beliefs under all circumstances. Only saints—and even then, rarely—are able to achieve such a feat. Our beliefs represent what we think is right conduct irrespective of the consequences; but our behaviour is governed not only by our ideals, but very largely by social pressures, obligations and loyalties, personal interests and past habits. There is therefore in most societies a gap between profession and practice. In stable societies where there is little change, this gap may be very small. But the gap is likely to be fairly large in societies which are in the process of change when new ideas are replacing old ones, but new habits have not been formed and the unconscious compulsion of old habits persists. In such a situation, all people do not change at the same time. Adjustment to a new culture pattern is always difficult and different people accept it at different rates of change depending upon their education, environment and so on. That means that not only is the gap large, but the extent of the gap varies with different people. Often, there is a desire to let someone else try the new ideas in practice while we ourselves stick to the old ones.

There is also the sneaking fear that the new ideas are perhaps not all that are made out to be. Hence, while paying lip service to new ideas, people tend to carry on as before.

So it is in India. In today's conventional society, considerable freedom of thought is permitted while absolute conformity in social matters is expected. A great deal of emotional pressure is brought to bear on the non-conformists and they are often rendered helpless. In many spheres of activity, old ideas and beliefs are giving place to new ones, but the change in the adoption of methods and behaviour based on the new ideas is much slower. The Constitution of India has laid down that no discrimination should be made in respect of any individual because of his caste, colour or creed. But in actual practice, most private activity and quite a bit of public activity are dominated by communal or religious considerations. Most people will honestly claim that they do not believe in the caste system, but will strenuously oppose attempts on the part of their sons and daughters to marry outside their caste. Similarly, there are many people who claim that they are not superstitious, but look for an auspicious date and time for a wedding or long journey. There have been instances of people condemning astrology in public while consulting astrologers in private. Even people with scientific training, who know all about astronomy, observe religious ceremonies associated with eclipses. Hundreds of such instances could be given to illustrate the wide gap that exists in India between ideas and action.

This difference between theory and practice applies just as much to the economic and industrial spheres. Managements who profess to believe in scientific methods of management often do not implement them in their own organisations. People who believe in selecting candidates by scientific methods often apply other criteria such as caste, relationship, etc., in actual selection. Most trade unionists profess to believe in a single union for each industry and yet, the multiplicity of unions has been increasing in the past few years. On the other hand, there have been cases where people have adopted their behaviour to suit their ideas and have been sorely disappointed because others failed to follow them. It is the essential unpredictability of the situation that often leads to misunderstanding and frustration, and exercises a subtle but potent effect on all productive group activity. It influences individual as well as group efficiency and retards the development of common loyalties and codes of behaviour. When such codes are evolved through external pressure, they are accepted without criticism, but rarely implemented whole-heartedly. Criticism could be fought and overcome; but acceptance without conviction is difficult to overcome, for it prevents mutual adjustments within a group in relation to its common objectives.

The reason for drawing attention to these aspects of behaviour is not to belittle the considerable amount of social progress that has been achieved but rather to point out the divergence that still exists between generally accepted ideas and behaviour. Nor does it mean that people in India are any more hypocritical than the rest of the world. But it does bring to light the important sociological fact that in a society in which ideas are changing

very fast, the gap between ideas and behaviour of ordinary people tends to increase and a common code of accepted behaviour is difficult to achieve. It shows the gap that exists between intellectual acceptance of ideas and emotional conviction.

Education and Training

1

In harnessing human effort for productive use, knowledge plays a very important part. It is man's awareness, skill, initiative and ingenuity which are responsible for overcoming obstacles and finding solutions to problems. This is particularly important in countries like India where other resources such as capital, are limited. Mobilizations of the human factor means, not only organisation and co-ordination, but basically, the development of the requisite skills and knowledge-which means education and training.

Education has a crucial role to play both in productivity and in social environment. It has already been pointed out that it is a way to cross the economic barrier of the caste system. Education may not enable a man to marry into a higher caste, but it does enable him to get a white collared job. It gives him knowledge of the external world; widens his horizons; brings him into contact with a whole new world of ideas, develops the power of logical thinking and reduces the hold of traditional prejudices and taboos. Consequently, education is a means of influencing and changing the social environment – usually for the better.

Economic growth and productivity are also related to the educational level of a society. It is much more difficult to train an illiterate worker in an industrial job. Inability to read simple instructions regarding safety, maintenance, rules and regulations, etc., is a handicap, both to the worker and to the industry in which he works. Inability to understand even simple calculations means that he does not understand the methods of wage payment and consequently, is not in a position to appreciate incentive schemes. Communication with such workers has to be by word of mouth and not by the written word. The worker has to store up a considerable amount of information regarding his job and has to depend entirely on memory which is likely to play false at times and there is no means of checking it. Often, he is unable to understand the meaning of what he does, how it affects subsequent processes and so on with the result that he is unable to take an interest in what he does. If, in spite of these handicaps, he becomes a skilled worker (as many do) he has no opportunities of promotion because of his illiteracy. Many extremely skilled engineering workers do not get promoted because they cannot read blue prints.

According to the latest census (1960-61) only about 15 percent of the total population of India is literate. In this context, literacy does not necessarily mean education since the criterion is a person's ability to sign his name in any one of the Indian languages. If a higher

criterion were employed, the percentage would be even less. In spite of the efforts made in spreading primary education in India, it will be many decades before illiteracy is totally abolished. If education is one of the governing factors in economic development (as it undoubtedly is), then it follows that until the entire population has received at least primary education, rapid increase in productivity is not possible.

The history of the Industrial Revolution in England is an example of how rapid economic development is based on primary and secondary education. The men who invented the machines of the industrial revolution in the 18th and early 19th centuries were not university graduates. They were essentially craftsmen who attempted to use their resources in a more efficient manner. So, they invented new machines when they found that the old ones were unequal to the task. The steam engine, the spinning mule, the power loom etc., were innovations of this nature. This trickle of inventions became a flood in the 19th century when England witnessed the most phenomenal economic development. This was possible because of the rapid development of primary education followed by the establishment of mechanical engineering institutes. It is primary education that releases the latent powers of individuals and technological education that harnesses it to industrial development.

The universities in the United Kingdom in the 18th and 19th centuries were teaching the arts, the classics and perhaps a little physics and chemistry. These sciences had not got to the stage of playing a crucial role in the development of technology as yet. And the universities were not teaching any engineering or technology. Until the First World War, it was rare to find a university graduate with engineering qualifications so that the entire industrial growth of the 19th century can be attributed to craftsmen who had had primary education with some sort of engineering training. But with the growth of industrial development, industry became more complicated and science was applied to industry in an increasing measure. It therefore became necessary for the universities to train engineers and technologists with a scientific background. Thus, two streams of young men began to flow into industry – one from the technical schools with a high degree of craftsmanship or as apprentice trainees and the other from the universities with a high degree of engineering knowledge and a scientific approach. This combination is found to be extremely effective in producing the various types of men required in industry.

Therefore, in any society which desires an efficient economy with high productivity, it is essential that there should be a solid, universal primary education, a good technical education combined with an apprenticeship scheme and a first class university education – primary education for craftsmen, a sandwich course for technicians and a university system for graduate engineers. Any weakness in this chain is likely to result in weakening the entire industrial fabric. But it should be remembered that primary education is the base of this pyramid of technical education.

In applying this to Indian conditions, it should be remembered that India is still largely an agricultural country and Indian economy is likely to be dominated by agricultural production for a long time to come. Therefore, any educational system should help not only in bringing about rapid industrial expansion, but also in increasing agricultural productivity. It is from both these points of view that the educational system in India should be viewed.

2

The western type of education was introduced into India in the first half of the 19th century.

The people who availed themselves of these opportunities were generally from the higher castes who had had a tradition of learning – particularly the Brahmins. They became junior civil servants and it gave them an importance and status—sometimes out of proportion to the jobs they held. They were the intermediaries between the ruler and the mass of the people. They shone in the reflected glory of their foreign rulers, and government service acquired high prestige and glamour in the eyes of the common man. It also provided job security in an age when there were practically no jobs and a pension at the end of a working life. Knowledge of the English language was synonymous with the highest wisdom and lack of it was considered a misfortune in a young man. In those communities where the dowry system was prevalent, the amount of the dowry depended on whether the bridegroom was a Bachelor or a Master of Arts. Passing the I.C.S. examination was the aim of every young student in life. Those who could not aspire to such heights became lawyers and the considerable amount of litigation in the villages kept them in employment. Or, they became junior civil servants in the government. But in the Indian society of the 19th century, they all had a place of honour because of the magic word – English.

As time went on, schools and colleges began to turn out an increasing number of B.A.s and M.A.s. The other communities who felt they had been left behind in this race for government jobs also began to take to education in a serious manner. There was a demand that there should be a reservation of posts in government service on a communal basis. The profession of law was also soon saturated and a new class of people known as the ‘educated unemployed’ came on to the scene.

Since Independence, educational facilities have been steadily increasing. Many high schools have been started in rural areas so that it is now possible for the children in villages to acquire a high school education without leaving their homes and at very little cost. The rush into educational institutions has also continued to increase so that there are always more pupils than places available. This is a good thing from a long-term point of view and the economic and social consequences of this type of education are bound to be far-reaching. But in some respects at any rate, the effects have been rather unfortunate.

It should be remembered that when a poor peasant in India decides to send his son to school, his motives are very different from those of a wealthy parent or even from a working class parent in an advanced country. He does so mainly for two reasons: one, to enable his son to achieve a better economic status and earn more money and second, to get away from the 'indignity and the drudgery' of manual labour. In order to achieve this ambition, he is prepared to sacrifice himself. He does not expect his son to come back to his ancestral profession. The difference between the life of a peasant and the life of the boy when he enters school is so great that there is a radical change in the social values, customs and attitudes of the younger generation.

In the first place, the boy begins to think any type of manual labour beneath his dignity as an educated and cultured young man. In this attitude, he is encouraged by the attitude of his parents. His father may be a farmer, a carpenter or a weaver, but such work is not for him. The moment he goes to a high school, his object in life is to get a desk job. Secondly, he acquires a way of life very different from that of his parents. He wants to wear a shirt instead of just a dhoti and a towel. He wants to go to the cinema in the evening. He gets used to eating rice instead of millets and drinking coffee or tea instead of just water or butter milk. He acquires other symbols of modernism and sophistication such as a wrist watch, bicycle, sun goggles, etc., to all of which his father is a stranger. He prefers to read a newspaper in the evening, or to discuss the private lives of his favourite film stars rather than discuss the price of crops. Not used to working with his hands, they become soft and unfit for anything other than holding a pen. The education he has acquired has given him tastes beyond his economic capacity, but has failed to provide him with the means of earning an adequate living. There is thus a gulf between the educated son and the uneducated father and the lower the social level of the family, the greater this gulf becomes.

The consequences of this change in the social values of educated young men have been disastrous as far as agriculture is concerned. One of the bottlenecks in raising agricultural productivity has been the difficulty of introducing scientific methods of farming. The average agriculturist is illiterate and conservative. He is often unable to understand or appreciate the use of better methods and looks at the agricultural scientists who may come to help him with considerable suspicion. His attitude is typified in the old Tamil saying 'School education is of no practical use'. But his educated son who may be expected to understand and apply the methods is just not interested in agriculture. If he is the son of an agricultural worker, he is only too glad to get out and do something else. But if he happens to be the son of a land owner, he lets his father run the farm for as long as possible and when at last he has to take over, he leases it out to someone else. He usually has a job in town or is at least looking for one and becomes an 'absentee landlord'. But because of the tenancy act in some areas, he may occasionally cultivate it himself by employing a local villager as 'his manager'. In any case, he is not interested in agriculture as a profession. The

love of land and the passion for agriculture that existed in his family for generations is lost after a few years of schooling.

Every educated man leaves the village in search of a job in the city and to enjoy—if he can afford it – the comparative amenities and pleasures that the city provides. They are followed by other young men, not educated perhaps, but enterprising and discontented with the poor wages and the pathetically simple life of the village. It may be that they would fare no better in town, but there is always the anticipation that something might turn up; and then there are the electric lights and the cinema posters. The spirit of vague discontent, changes of a factory job, desire to get away from the traditions and limitations of a joint family, the desire for adventure—these forces drive the young men from the villages into the cities. From the point of view of industrial development, it is perhaps a good thing. But agriculture, the most important economic activity in the country, continues to be in the hands of illiterate, unenterprising and elderly peasants.

It is to overcome this major deficiency in the educational system that basic education was evolved by Gandhiji. During the past decade or so, a large number of basic schools have been started in various states. According to this system, all education is imparted through a basic craft that is useful such as spinning, weaving, carpentry, etc. The pupil learns not only the three 'R's but also a craft which will enable him to earn his livelihood in later life. He learns to co-ordinate the movement of his hands and eyes with his brain; he learns that manual labour is dignified. He learns all this in theory. But basic education has so far failed to create that joy one gets through physical endeavour among its pupils. Further the objective that most people set before themselves in educating their children is to get away from manual work, so that the objectives of the parents are diametrically opposed to that of the educational system. In actual practice, therefore, the pupils from basic education schools have not shown any greater love of manual work than others. They as well as their parents consider that the time spent in learning a craft is a waste of time which could be better utilized in learning some other subject. These schools have not also been successful in creating a favourable attitude in the pupils towards manual work and the crafts that have been taught are not such as would enable ambitious young men to earn a decent living through it. The craft that is taught most often is hand spinning which is normally the work of women when it is practiced as a profession and not at all remunerative. Even some of the enthusiasts of basic education are getting frustrated over its ineffectiveness in achieving its objectives.

This apparent incompatibility between education and manual labour—particularly agriculture—is to be traced, not so much to any defect in the educational system, but rather to the social values of the community as a whole. It may be that the present system of education is too bookish and does not attempt to train children in the use of hands. Far too much emphasis is laid on passing of examinations. But a mere reform of the educational system without a change in the social values of the community will not be of much help.

And so the young men who study up to the Secondary School Leaving stage – often they do not pass their examinations—and who have no other training, apply for any type of desk job that is available and to any type of organisation. Sometimes, they manage to land some sort of a clerical post, often with the recommendation of an influential relative or friend. Otherwise they walk from one office door to another getting more and more frustrated each time and adding to the number of unemployed in the country.

3

If this is the state of general education, the problems of technical education are even more difficult and complicated. For example, according to one estimate, the number of engineers in India per hundred thousand of population is about 20 to 25, as against 130 in the United Kingdom, 320 in the United States and 360 in Soviet Russia. While on the basis of population India may seem backward, in absolute numbers, India must have about the same number of engineers as the United Kingdom. And yet, in terms of total production, level of technical development, or in terms of productivity, India is far behind England. Why should this be so? It cannot be due to the poor quality of our engineers, because quite a few of them have won national and international recognition. The reasons are to be sought elsewhere. Here again, social environment has a profound influence on the quality of education.

In advanced countries, products of Science and Technology are a matter of everyday knowledge and experience to children. Every house has electric cookers, water heaters, washing machines, radio and television, etc. Most families have motor cars and the children become familiar not only with their use but also with the principles of their operation. They often watch and even help their fathers in repairing or adjusting these gadgets and learn to do it themselves. They have their own bicycles at a very young age and jobs like mending a puncture are a matter of routine for them. Their parents usually have some education and are generally in a position to satisfy the children's curiosity over a wide range of topics. Most of them are also sufficiently well-to-do to be able to buy interesting books of knowledge for their children which, while satisfying their curiosity, also create a thirst for further knowledge. The schools are also much better equipped than in India and science museums, art galleries and libraries are easily accessible. The toys that are given to children are not only things to play with, but also educational. All these facilities enable the children to acquire a vast amount of general knowledge, to become familiar with the subjects they are going to study later and to develop any special talents that they may have. Above all, they kindle in them the spark of curiosity that is so essential for learning.

In India on the other hand, most parents of schools going children are illiterate and cannot satisfy their children's curiosity about anything except the most immediate surroundings and the simple things around them. Nor are schools better in this respect.

Most schools are poorly equipped and the teachers so badly paid that in many cases they take to subsidiary occupations in order to augment their income; the classes are overcrowded and the emphasis is always on passing examinations rather than on acquiring knowledge. Very little time is spent either in satisfying the natural interest of children in external things or to develop their powers of thinking. Except in big cities, there are no museums or art galleries which the children can visit. Set lessons have to be learnt and reproduced in the examinations. There is no attempt to create an understanding, appreciation or liking for any particular subject that is taught. Only rarely does a boy or girl develop a passion for a particular subject in his or her school days.

Consequently, the education that the average child receives has an air of unreality about it as far as he is concerned. It is in no way related to his social background or to his limited experience of the external world. This is particularly so with regard to subjects like physics or chemistry; a boy learns these subjects not as something familiar that is related to everyday life, but as something strange and unreal that has to be mastered merely for the sake of getting through the examinations and then mercifully forgotten.

The result of all this is that when a boy is ready to leave high school at the age of about fifteen or sixteen, he is less intellectually mature than his counter-part in more advanced countries. His general knowledge is also poor. He has not had an opportunity to develop special interests in any field of activity that would enable him to make an intelligent decision on the choice of a career. That decision is taken not by himself, but by his parents.

Such decision is based on one important consideration which is that the spectre of unemployment haunts every young man from a middle class or a working class family in India. Hence if the parents of the boy can afford to educate him further, it is in those fields in which employment is easy to find. Since Independence, because of the rapid industrialization of the country, the demand for engineers has been increasing at a much faster rate than the supply. Consequently, the rush into engineering colleges has been phenomenal. Young men who walked proudly into the portals of law colleges about thirty or forty years ago are now even more eager for their sons and grandsons to get into the engineering colleges irrespective of the interest or aptitude of the boys.

Boys in advanced countries study engineering primarily because of their interest in the subject and with full knowledge of what engineering as a profession means. In some countries—such as West Germany and the Soviet Union—boys who desire to enter an engineering degree course have to put in at least a year's practical work as ordinary workers in a workshop before they are given admission. Many of the boys in India enter Engineering colleges without any conception or even interest in the profession that is going to be their life's work. They are unfamiliar with even some of the simple tools and equipment used in workshops. Therefore, they naturally take longer to get acclimatized to an engineering atmosphere. A deep and abiding interest in the subject can only come much later.

There are also other handicaps that beset a student of engineering or technology in India. Industry and technological institutions seem to live poles apart. The one does not know what the other is doing. In advanced countries, professors and lecturers from educational institutions are in constant touch with industry, advising them, solving their technical problems, conducting research on their behalf and recommending suitable people for jobs. Similarly, industries are always in touch with the colleges. Specialists in industry are invited to talk to the students and staff on technological problems with which they are engaged. They often visit the colleges for discussions, for any testing work of a special nature and so on. There is a constant flow of information between industries on the one hand and technical colleges on the other which brings a sense of realism into education and makes the students understand that they are studying the various subjects not merely to pass examinations, but essentially for absorption in industries. At the same time, such communications keeps industry abreast of the latest scientific developments.

Facilities for practical training either during holidays or after graduation are few in India and there are no organized apprenticeship courses except in a few large industries. In recent years, the demand for engineers has been so great that everyone has been able to find employment. Even those who have failed in their examination have sometimes managed to land an engineer's job though at a slightly lower salary. Consequently, the incentive for training and for improving their practical knowledge and relating it to their academic training has been absent. There has also been a very rapid expansion of technological education in the country. This has inevitably meant a shortage of equipment as well as trained staff in colleges.

Another obstacle to the practical training of engineering graduates is the social barrier that exists between the engineer and the workmen on the shop floor. The workmen are often highly skilled craftsmen who know their job thoroughly from a practical point of view, though perhaps in a very narrow sense. The graduate from an engineering college knows the theory behind the functioning of various types of machines, but does not know the potentialities and limitations of any of them in detail. Only a close association between these two would enable them to understand, appreciate and absorb the knowledge that the other possesses. But because of the gulf in the social background, such interaction does not generally take place. The young engineer—rather proud of his newly acquired degree or diploma—considers himself superior to the workmen. Their lack of education, a family background, lack of social opportunities outside the factory, etc. – all this creates a barrier to such understanding between the two. The engineer feels it beneath his dignity to learn from a subordinate whose social standing is very much lower than his. And the skilled worker allows his superior to continue in his ignorance.

What is true of engineering graduates is also largely true of science graduates and diploma holders in engineering.

It has already been mentioned that for high productivity in industry, three groups of people-skilled craftsmen, technicians and technologists-should be available in adequate numbers. Of these, skilled craftsmen form the basis of any industrial system while technicians and the engineers may be necessary for design, maintenance, administration and research. But it is the skilled craftsmen who actually operate the machines and turn out production quantitatively as well as qualitatively. Without them, any number of engineers—however skilled they might be – could not increase productivity.

But during the past fifteen years, while considerable efforts have been made to develop technological education at the university and diploma levels, comparatively little has been done to train an adequate number of craftsmen. Until recently, there have been practically no facilities available even in the larger cities for craftsmanship training in the different industries. There are no evening classes or part-time classes in colleges and polytechnics for the benefit of workers who want to increase their skill. There have been no training institutes for the training of young apprentices either by local authorities, or by the industries. Except in some cases, industries in general have shown no enthusiasm for the training of their own workers. In some cases where such training has been attempted, various factors such as the timing of the classes, distance between workspot, residence and the place of training, transport, payment during training, etc., have combined to discourage workers from utilizing the opportunities provided. And it has been too easily concluded that the workers are not really interested in being trained. Where, however, such training has been organized with due consideration to the above mentioned factors, it has been generally found that the workers are enthusiastic.

Thus, while the training of craftsmen has been lacking, industries have continued to expand at a fairly rapid rate. A few large industries, with great foresight, have introduced apprenticeship schemes and have been successful in training the required number of skilled workers. In such cases, it has been found that their efficiency has generally been of a high order when compared to their sister concerns where no such training has been introduced. It has also been the experience of these industries that many of their trained staff is often lured away by others by the temptation of higher salaries. But in most industrial concerns, workers have been recruited and assigned to jobs about which they do not have even a rudimentary knowledge. They are expected to pick up their jobs from other, more experienced workers. In industry – as in life – if there is no proper direction, bad habits and short cuts are easier to pick up rather than good ones with the consequence that standards of craftsmanship, safety and efficiency, tend to deteriorate. This is perhaps one of the reasons for the poor quality of some Indian products.

Lack of such training facilities leads to another lacuna in the educational system; failure to cater to the needs of the more able and ambitious workers. Every educational system should provide a ladder by which young men with intelligence and ambition can

reach the top of their profession even if they do not have the opportunity of attending a university. Many extremely competent and brilliant engineers in advanced countries have never been to a university. Many of them started work as apprentices and by attending evening classes and taking professional examinations, became qualified engineers. In India at present, a worker, however brilliant and hard working he may be, can aspire at the most to become a first line supervisor; he can go no further, except in rare cases.

A number of industrial training institutes have been started during the past few years and many more are included in the third plan. These institutes train young men with secondary school education in some of the basic industrial skills: fitters, turners, radio mechanics, electricians, and so on. The apprenticeship bill, contemplated by the Ministry of Labour, would also be helpful in training inside the industry itself. But it should be remembered that in training, as in many other things, compulsion by itself will achieve little if it is at the same time not accompanied by a realization of the need for such training among all concerned. While these institutes will go a long way in providing new entrants into industry with some basic training, from the point of view of any immediate improvement, it is essential that the existing workers should also be trained. The young men who have entered industry in the past ten years are likely to continue in industry for another twenty-five years and unless they are also trained to do their jobs better, productivity will continue to be low. This naturally depends on the enthusiasm of the employers to provide such training.

5

No discussion of education in India will be complete unless some consideration is given to the medium of instruction. There have been two major schools of thought regarding this problem.

One school of thought has been insistent that the medium of instruction in all schools and colleges should be in the mother tongue or the regional language. This has been accepted in principle in many states and they have started to implement it in some measure or other, though technological education is still through the medium of the English language. The protagonists of this view argue that: knowledge to be realistic and meaningful should be acquired through the medium of the mother tongue; to be forced to master a foreign language before one can acquire knowledge of any sort is a monumental waste of time and effort; it creates a cultural barrier between those who know English and those who do not; universal education can never be a reality unless and until knowledge is acquired through one's own language; the continued imposition of the English language will prevent the development of Indian languages; and so on.

On the other hand, the supporters of English point out that: Indian languages are not sufficiently well developed to express modern scientific ideas; there are at present no

equivalents in the Indian languages for most of the scientific and technical expressions; there are no text books in any of the Indian languages and even if some were translated, the growth of knowledge is so fast that they would be out of date before they were very old. They point out that English is the most important international language today and almost all scientific and technological literature is either published or translated into the English language. And India having had a tradition of English learning for the past hundred and fifty years should not deliberately lose that advantage.

There are many other arguments in this controversy from political as well as cultural points of view, but we are only concerned with it from the point of view of technical education in relation to productivity. From this point of view; it is obvious that it is impossible to create a technological society in India if it can be done only through the medium of English. In a society in which the vast majority of the people cannot even read and write their mother tongue, instruction through a foreign language is meaningless. It is imperative that whatever is taught at the lower levels of the educational system has to be done in the regional language, whether it be history or science or engineering. But at the same time a change of medium at the university level would mean the lowering of standards, loss of contact with the latest developments in other countries, inability to understand and discuss problems even with engineers from other parts of India, and confusion with regard to technical terms and definitions. In fact, these problems are being felt in technical colleges today, because the medium of instruction in most high schools is now through the regional language and students find it difficult to adapt themselves to the change particularly as the standard of their English is poor. As a result of this some state governments have been forced to up-grade their syllabus in the schools. In any case, English has been made a compulsory subject in high schools and is likely to be so for a long time to come. Therefore no additional effort is needed in continuing it as the medium of instruction.

But this is not so with regard to the vast number of people who are either illiterate or who can only read and write one of the Indian languages. If these people are to be fitted into industrial jobs and given opportunities of promotion, then English as a medium is not of any use.

The only escape from this dilemma seems to be to have more technological education as it is at present and introduce the regional language as the medium of instruction in industrial training institutes. It will soon be found that the technicians and craftsmen have developed their own technical terminology suitable to Indian languages and convenient to use. It would also mean that these people need not waste their time mastering English. Introduction of the regional language as medium of instruction should be postponed to a very much later stage as far as technological education is concerned.

Top Management

1

We have so far considered the effect of social environment on productivity in general terms. In this and the next two chapters, the problem will be considered with reference to specific groups of people connected with productivity, namely managements, supervisory staff and workers.

Whether it is in a particular factory or in the country as a whole, initiative for productivity increase has to come from the management or administrative class. It is not that the other groups are less important from the point of view of productivity. An individual worker may work extremely well, or an engineer may be brilliant; but the maximum utilization of their talents depends on the manner in which managements plan their objectives, muster the necessary resources, implement plans and co-ordinate the activities of the various people in the organisation. Whether it is in the private sector or in the public sector, the full utilization of available resources is essentially a management responsibility.

Further, as industrialization proceeds, industrial units as well as organisations tend to become larger because of the progress of science and technology and because of attempts to rationalize, economise and to mass-produce. Consequently, the problems of organisation and administration become more complicated and co-ordination becomes more difficult. Productivity increase depends more and more on the efficiency of organisation than on any other single factor. The needs of such industrial organisations have resulted in the growth of management science. While many basic principles of management may be learnt partly through study and partly through experience, its effective utilization largely depends on the mental attitude of the individual and the environment in which he has to operate. It depends on the ability to understand and appreciate the social, economic, and political climate in which industry and commerce have to function and to adjust one's policies and programmes with due consideration to the prevailing climate. It also depends on the motivations and personality factors of individuals and groups and on the qualities of leadership exhibited by the management group.

Economic growth at any given point therefore depends on the calibre of men who are in charge of industrial and commercial organisations. In an expanding economy, such men should become available in increasing numbers.

Till about twenty years ago, the political and economic climate in India was not particularly conducive to the rapid growth of industries. Though railways were introduced in India as early as the middle of the nineteenth century and the first textile mill was started at about the same time, the growth of industries was extremely slow; textile and jute industries grew to a certain extent, but the industrial base was extremely narrow. If an individual were to start an industry with the co-operation of his friends and relatives, whether he made a success of it or whether he ended up in an insolvency court was largely a matter of luck. Many of them did go into liquidation because of forces beyond their control and often beyond their understanding. Under these conditions, if they made profits at all, they wanted to make quick profits. Long-term planning, plant expansion and modernization, building customer's goodwill, etc., were unknown to them and even if they were known, they would not have cared to practise them, because their existence as industrialists was essentially a matter of chance. The greater the element of risk, the greater was the attraction of quick profits. Consequently, the responsibility of the management was considered to be that of making the largest possible profit in the shortest possible time. Their aspirations were essentially short-term. Unfortunately, this tradition, born out of the trials and tribulations of an earlier period, still persists in certain sections of Indian industry.

Except for this element of risk and the unpredictability of the future of a business, managements were their own masters. They were not questioned or criticized for their policies by anyone. The government did not interfere with their business activity - except to collect taxes. The requests and submissions of the business community were often ignored by the government. Within the factory, the management's word was law. The trade union movement was not very well developed and even genuine trade unionists had very little protection under the law. If a business collapsed, it was just bad luck, and if it made exorbitant profits, no one said it was not right or ethical.

But during the past twenty years, there has been a complete social and political transformation. A new concept has developed in public life that can be roughly described as social justice. According to this concept, industry exists primarily for the production of goods required by the community and to sustain the national economy by providing employment to a section of the people. It means, industry must first of all be stable, efficient and forward looking instead of being opportunist. It must provide quality goods at reasonable prices, and good working conditions and wages to its employees. Profit is recognised as a legitimate reward for the efforts of the owners of an industry, but only when the above requirements are also fulfilled. This attitude towards industry is reflected in the large amount of social legislation that has been undertaken by the government during the past fifteen years.

The second major change that has taken place during the past fifteen years is the government control on industry. The control is exercised primarily to ensure a smooth, orderly and rapid growth of industry, to ensure that capital flows into channels that are essential for further development rather than into channels that are most easy or profitable, to ensure an equitable distribution of scarce resources and also to ensure that no excessive profits are made. Besides these controls, measures have also been taken to assist industries in their growth. These take the form of loans from government sources, procurement of technical know-how and collaboration with foreign industries, priority in the allocation of foreign exchange and scarce raw materials and tariff protection from imports. Thus, while industries have to accept certain controls on their activities as inevitable, they also stand to gain a considerable amount of governmental help which they never received before.

The third major change that has taken place is the growth of trade unions. Partly because of the political awakening in the country and partly because of the help and encouragement given by government, the growth of trade unionism has been very rapid since Independence. Today they are challenging management even in areas which were once considered to be the exclusive prerogatives of the employer. There has been a lot of discussion on labour participation in management. Therefore, the maintenance of good industrial relations has become one of the major responsibilities of management.

By any criteria, these changes when taken together are fundamental and have become part of the new social and economic set-up. There can be no going back on them. It is vital to know how far the managements have been able to appreciate the importance of these changes and adapt themselves successfully to them. Apart from other factors, the contribution of managements to increasing productivity depends largely on this adjustment.

3

About twenty-five years ago, the managerial or executive talent available in India was considered to be extremely small. In the administrative and defence services of the country, most of the senior posts were held by non-Indians. Indian industry was not highly developed and foreign business in India did not employ Indians for executive posts. Yet, there has been a managerial revolution in India during the past fifteen years and there has been a considerable increase in the number of executives in the country. This would not have been possible, had there not been a large number of people ready to take up managerial responsibilities. The causes responsible for this are three-fold:

1. Complete Indianisation of the administrative and defence services in the country;
2. Gradual Indianisation of foreign industries in India; and
3. Expansion of Indian industry.

Expansion in these three areas has naturally meant the development of three groups of people in the management cadre. Occasionally, a retired official might join the private sector of industry; otherwise there is very little mobility between these three groups. While the basic problems of management may be the same, nevertheless, the background, experience and personal work involvement of these groups are different. They should therefore be considered separately.

From the industrial point of view, the civil servant has become very important in recent years. Even before Independence, some of the largest industrial organisations such as the railways, hydroelectric undertakings, the Public Works Department, etc., were directly under government and managed by government officials. But with the expansion of the public sector and with the declared policy of the government to locate all basic industries directly under its control, the type of men who are going to run these industries, their powers and responsibilities, the controls that are to be exercised, the training that is to be given to them, are all very important from the point of view of productivity. Further, now that the control of private industry has become a matter of established policy and practice, the officials who exercise these controls will determine to a large extent the growth and development of private industries also. In the past, it has been the policy of the government to appoint civil servants with some scientific or industrial background to the boards of the public sector industries and also as managing directors.

The managing directors or senior executives in the public sector enterprises are generally well qualified people with high academic distinction. They have generally passed through a difficult competitive examination or have been selected by a high power committee such as the Union Public Service Commission. Besides, they usually have experience of administration in various capacities in some ministry or other. Consequently, they bring to bear on their job a type of knowledge and experience that is valuable.

However, the problems and motivations of an executive in a public sector industry are very different from those in the private sector. In the first place, he has no profit motive. Even his promotions and increments in salary are dependent on a complicated set of rules and regulations, and rarely on how well he does in his new assignment. If he does extremely well and the factory earns a good name, the credit is likely to be shared by a whole number of people who have had something to do with the running of the factory. On the other hand, if there should be inefficiency, the executive in a public sector industry has a better opportunity to 'pass the buck'. Therefore, he has neither a hope of high monetary reward nor full recognition of his ability and hard work. Often, he is seconded to the industry from some government department and he is not there on a permanent basis. He is quite likely to be transferred after some time to a totally different kind of job either because of the exigencies of the department, or because he is due for promotion. If he finds the work uncongenial, he may request a transfer or take long leave that may be due

to him and thus get transferred. Consequently, his interest and his aspirations are not wholly associated with the enterprise in which he happens to be working and his personal involvement is very small. If he is motivated at all, it is for achieving a certain amount of self-satisfaction for having done a good job and because of a spirit of public service.

Again, the executive in the public sector industry has no worries about finance, in the same way that the industrialist in the private sector has. He is not bothered about collecting the required capital from the public through the stock brokers or through other sources. Nor does he risk any of his own money which the private industrialist often has to do. Finance is provided by parliament out of public funds. Because of the source of his capital, he is responsible to parliament through the respective ministry. Most of the members of the board of directors are also officials appointed by the ministry. The relationships between the members of the board are not those of equals interested in a common objective with freedom of opinion and a choice of decision. They act largely on the basis of rules and regulations laid down and on the basis of the instructions of their seniors in the respective departments. The relationship between the chief executive and the board is also largely impersonal. Many procedures are laid down for the control of expenditure, appointment of senior staff, methods of purchase, etc. Although the reasons for these procedures may be sound, nevertheless they have the effect of restricting the freedom of action, and consequently, the initiative of the executive. In taking decisions, he is concerned not only with the effect of those decisions on the industry he runs, but also with their effect on the audit department and on the type of questions that may be asked in parliament. Any serious error or judgement on his part is likely to receive the glare of publicity in parliament and in the press and, by the rules of conduct under which he is operating; he will not be able to defend himself. The concept of public accountability communicates itself to the board as well as to the chief executive and there is a tendency to play safe, avoid risk taking and follow procedures laid down in the letter of the law.

The civil servant, by virtue of his training, is usually extremely competent in administration, but his knowledge of the type of problems to be encountered in manufacturing industries is at best secondhand. The results of administrative decisions in government departments may take months or even years before they are available and often the person who was responsible for taking the decision might have been transferred in the meantime. But the effects of some of the decisions in a manufacturing industry may be seen even within a few hours—the dismissal of a worker, for example. Further, the civil servant brings to bear on his job what may be described as a ‘law and order’ mentality though this attitude is largely on the wane today. But where it exists, it cannot be very helpful in dealing with human relations problems inside a factory.

Most of the public sector enterprises are also monopolies which fear no competition. The prices of their products are fixed, not in relation to the price and quality of its

competitors, but purely on the basis of cost. Under these circumstances it is difficult to assess the productivity of these factories. Any inefficiency will not result in a loss to the company since a loss can always be made up by an upward revision of the selling price. One of the incentives that any industry has is competition and the satisfaction of being more efficient than one's competitor. But the efficiency or otherwise of a public sector industry is completely masked and the executive himself has no opportunity of knowing how well he is doing and how much scope there is for improving productivity. Consequently, it ceases to act as an incentive for further improvement.

4

The Indian executive working for a foreign firm in India is, in many respects, in a similar position to his counterpart in the civil service. They have both inherited a common tradition from the days of the East India Company. In the eighteenth century, the activities of the company were part commercial and part political and its employees in India had to play the dual role of merchants as well as civil servants. It is only later that a separation of these functions took place.

But apart from this common origin, there are many other similarities. They are both professional managers in the sense that the capital for the industry they run is provided by outside agencies. They are both well qualified from an academic point of view. They are selected after exhaustive interviews in which an individual's personality, background, adaptability, etc. have been carefully considered. They are selected solely on merit and not on communal, personal or other considerations (though the government procedure in this is slightly different, in that some weightage is given to backward classes for certain posts). They receive in different departments before being promoted to senior positions. They have an opportunity of acquiring gradually, the background, traditions and attitudes of the organisations for which they work. Generally speaking, they are highly westernized not only in dress, manners and mode of living, but also in thinking because of their close association with their European counterparts (though the civil servant has tended to Indianise himself in recent years). They are also likely to be transferred from one branch to another and from one part of India to another. Rarely do they work in their home town. Consequently, they acquire a cosmopolitan attitude and are not influenced to the same extent by considerations of caste, community and language as those who have their roots in one corner of India.

With regard to the sources of finance also, they are in a similar position to that of the public sector executive. The capital is largely foreign and, consequently, ownership and control are exercised from outside—usually a long distance away. The executive is therefore governed by a set of rules and regulations guiding his various activities. But unlike public sector industries, he does have fairly wide discretionary powers so that quick decisions need not be delayed in times of emergency.

The executives in foreign enterprises in India represent perhaps the longest tradition of professional management, for the early British civil servants and commercial agents and factors came to India as representatives of a commercial organisation. They were the managers on the spot who had to take decisions on behalf of the owners. And because of the distance involved and the difficulty of communication in those days, considerable powers of action had to be delegated to them by the governors of the East India Company. Thus, the Indian executive in a foreign firm in India has a long tradition of professional management behind him. This has lent a certain similarity in practices and procedures between the older firms—especially British.

Before the Second World War, most of these firms were extremely conservative and authoritarian. Their senior executives, long used to Indian environment, were unaware of the changes that were taking place in their own countries in the realm of industrial relations, productivity, and so on. Since Independence, however, these firms have had to operate in a totally different political and social atmosphere and many of them have attempted to adopt progressive policies with regard to both these aspects. This change-over has also been aided by the emergence of a new type of executive in these firms and by the gradual introduction of Indians into senior positions.

The number of senior Indian executives in foreign firms is still very small. With the passage of time and greater industrial growth, the importance of foreign firms will become less and less. But their influence on industry is quite large as many Indian firms still adopt methods and policies similar to those of foreign firms.

The role of Indian management in the private sector is perhaps the most important in relation to productivity. Not only is it the largest sector at present, but in the context of future expansion, is likely to remain so for a long time to come. In spite of major basic industries being located in the public sector, literally thousands of medium and small-scale industries producing consumer goods are likely to spring up all over the country. It is also an area which is more influenced and shaped by social environment than any other.

The first origins of Indian management in the modern sense of the word are to be traced to the association of Indians with the East India Company—first as middle men or brokers and later as independent importers and exporters. Since most of the trade was by sea, the growth of the Indian commercial community was also confined to ports in the earlier stages. This was particularly so in Bombay. The Parsees and one or two castes in Gujarat were the first to enter the business field. The Parsees in particular had a great advantage in this respect. Being the latest immigrants and a minority community confined

to one city, they had to be more adventurous than their neighbours if they were to flourish. Not belonging to the Hindu fold, they were not bound by restrictions of caste in their choice of a profession. They were not averse to mixing with the white men for business or social purposes; nor were they prevented by traditions of caste from travelling to England or Europe. These helped them to make many contacts with the European community in Bombay and they were among the first leading merchants—and later—the first industrialists of Bombay. From traditional occupations to the practice of commerce is a big step and from commerce to industry is only a corollary. Thus the first Indian industrialists were from among the merchants of Bombay.

The second group of people to enter industry was from the land-owning class. Agriculturists are by nature conservative and their entry into commercial and industrial fields has been rather late. In the pre-industrial age, a land owner, if he had saved up money, bought more land so that when it came to be divided among his sons, each one would have as much as he had inherited from his father. But as time went on, there was less and less land to buy. Litigation about land and disputes between owners of contiguous plots increased and returns from landed property decreased. Land owners looked at the successful industrialists with a certain amount of envy (those who lost money in commerce or industry were soon forgotten) and began to think in terms of commercial and industrial investment. Such industrialists, with their origins in agriculture, are generally to be found in inland towns. They bring to industry the same attitudes that they had as agriculturists and try to establish in industry the same relationships that they had in the villages. They bring with them an inherent honesty of purpose, conservatism, pride and stability. When they enter industry, they are attached to it in the same manner as they were to agriculture once and make it their life's work. They are no mere financiers who shift their capital from one business to another according to the profits they can make. Paternalism in industries run by ex-agriculturists is stronger than in those run by others. Just as they have moved into industry, they also give jobs to their old retainers from the villages, sons of their tenants, etc., and treat them just as if they were still in the village. That is, they are employed, not for their economic utility, but primarily because of tradition and sentiment.

The third group of people to come into industry is the money lending class. Money lending has always been considered an extremely profitable business and, consequently, money-lenders were rather late-comers to industry. The Marwaris of Rajasthan and Chettiers of Madras are examples of money-lenders becoming industrialists. But, because of their ability and enterprise, they occupy a significant place in Indian industry today.

From the above it will be noticed that the development of management in India has been on the basis of communities rather than homogeneity. Many of the cities have different Chambers of Commerce based on communal loyalties. In a society invariably dominated by religion and caste this development has been inevitable.

When an individual starts a new venture, he does so as a member of the joint family. Other family members and relations help him and, should the business flourish, he in turn has to help them either by giving jobs that are within his power or in setting up a business if they decide to start one. Those who get jobs in this manner serve their master with loyalty not only because of the salary they receive but also because of family ties. In a country where commercial and industrial know-how is very limited, a person who has some experience of business is a great asset to all his relations. It is also an encouragement to them if they want to enter business; they have reasonable chance of succeeding with his example and assistance. These businesses start with mutual assistance among the members of a community, and relations sustain each other in times of difficulty and come to each others' aid in emergencies. Consequently, industry in India has tended to develop among certain communities just as in the old and rigid days of caste system; communities were confined to certain professions. This has happened, not as the result of any social prohibition, but merely as the logical corollary to the caste system.

By a similar corollary, if the foreign enterprises in India are run by professional managers, Indian companies are, generally speaking, family-managed. The reason for this is to be found not only in the social environment in which Indian business has developed but also in the distinctive system of management that has been prevalent in India during the past hundred years or so, namely the managing agency system. In view of the considerable amount of criticism that has been levelled against the managing agency system in recent years, its role in the context of India's industrialization should be examined in some detail.

From a legal point of view, a managing agency is an individual or a firm, who for a percentage of the profits, manages the company on behalf of the shareholders. When in the nineteenth century British capital was first invested in India in railways, coalmines, jute, etc., this system was developed as a convenient form of running the industries whose owners were permanently in England. Naturally, the managing agents had far more powers and control over the business than they would have had if the owners were here and could exercise their prerogatives of ownership. In actual fact, however, managing agents were the entrepreneurs who had the responsibility of finding the capital and often investing it out of their own resources. They virtually controlled the business (even when the shareholders were not so far off as in England) by virtue of their holdings. Often, the same managing agency firm managed a number of diverse businesses such as textiles, sugar, engineering and cement.

Soon, this form of management was adopted by Indian entrepreneurs who entered the industrial field, finding it extremely suitable under the conditions then prevailing. In fact, the managing agency system may be said to be an extension of the joint family system into industrial field. To start an industry in India in the second half of the nineteenth century was risky. An individual had to depend on imported machines and technicians,

even for a rudimentary knowledge of the process. The government of the day was extremely unhelpful if not actually antagonistic. No statistics regarding supply and demand, imports, exports and prices were readily available. There was no protection for local manufacturers, and foreign goods—especially British—were freely allowed to be imported. Capital was scarce and what little was available was used in commerce or in money lending rather than in manufacturing industries. They were days when people would rather hoard their money underground than invest it in a bank. They might leave it with some of their richer and more powerful relations for safe keeping, but would certainly not invest it with strangers.

Under these conditions, if an individual with enterprise wanted to start an industry, he naturally had to depend on the various branches of his family for capital requirements. He had also to ensure that profits were sufficiently large when compared to other kinds of investment because of the additional risk involved, both for himself and his relatives who had trusted him. The managing agency system satisfied both these requirements, because the entrepreneurs got a share of the profits as well as a dividend on their investments. In the very early stages of industrialization, when capital was scarce, entrepreneurs few, and the risk involved great, only the provision of such a high rate of remuneration could tempt people to start industry.

Managing agents generally considered themselves as owners of the business, and the reputation of the business was synonymous with personal reputation. There have been occasions when in times of stress or depression the managing agents had to mortgage their personal property in order to save the company. The joint family system also ensured that other members of the family would almost always come to the aid of the company in an emergency. In times of instability, hereditary management has meant continuity and stability to industries at a time when they were none too certain of their future prospects. To be known as a 'managing agent' became a sort of status symbol. It placed an individual or family among a particular group or class of people having certain responsibilities and enjoying certain privileges and powers. In a society that was largely agricultural, to be classed as an industrialist in however small a manner had its own glamour. In wedding invitations and greeting cards, to give a list of companies of which the person was a managing agent, added to his dignity and prestige. This glamour besides the monetary advantages also acted as an incentive to some people to take the plunge into the industrial field. Another incentive was a sort of friendly rivalry among closely allied families. If one of them happened to be the managing agents of a company, the others also aspired to the same position. It was a matter of 'Keeping up with the Joneses' in the industrial sphere.

In the early days of industrialization, it is always a few talented families which play a big part in a country's development. The Zaibatsu families in pre-war Japan provide an excellent example. Such examples are not wanting in India. The managing agency system

enabled these families to start a number of industries of different types. Whatever may be its weaknesses and shortcomings today, historically, the managing agency system has played a useful role in laying the foundations of industrialization.

The period of the Second World War was perhaps the heyday of managing agency. It was a time of high prestige and power and even higher profits. But the moment of their glory was also the beginning of their downfall. Some at least among them fell victims to the temptation of easy money and earned for themselves and their colleagues a bad name. Their good business reputations, which they were so particular to defend in the days of depression only a decade previously even at the risk of their personal properties, were lost in the scramble for exorbitant profits. This happened to coincide with a period of great social awakening in India and the coming of Independence. The result is that much of the value of the managing agency system as a status symbol has been lost at least as far as the public mind is concerned. And because of drastic changes in the company law, the remuneration of the managing agents has been considerably reduced and their powers with regard to sales and purchase and appointment of their relatives have been severely curtailed.

6

Recently, there has been a large amount of criticism of family or hereditary management. Often, family management is equated with inefficient management and it is assumed that professional management must necessarily be better than the family one. The type of management that comes into being is, however, the result of economic and social factors over a long period and, in a democratic society, will change only when those factors change.

The nature of control and management of any organisation depends on the sources from which it derives its finance. If it is family financed, then it is the family that runs it. So long as the managing agents have the control of shares in a company, the directors become more or less their nominees and there will be no serious challenge to their powers of operation because they are sure of a majority in any shareholders' meeting. Even if the managing agency system is abolished, the present managing agents can get elected as managing directors and there will be no basic change in the management of the company. In fact, it is already happening in some companies. That change can only come about if there is a greater dispersion of shares among various people and communities who are not bound by loyalties of tradition and sentiment and no individual or family owns more than a very small percentage of shares in any company. Such a change was brought about in post-war Japan when the military government made it illegal for anyone to own more than a certain percentage of shares in a company. Thus the monopolistic tendencies in Japanese industry were abolished overnight and led in many cases to the replacement of family

management by professional management. In spite of that, the old family relationships have not been entirely severed because of mutual directorships in sister concerns. In any case it is doubtful if such an extreme step would be conducive to the progress of Indian industry. But until such time as there is a dispersion of shares, the hold of the managing agents will continue in some form or another.

Secondly, the nature of control depends on the size of the organisation. The larger the organisation, the more difficult it becomes for the owners to exercise direct control and the powers of management have to be delegated to a certain extent—assuming of course that suitable people are available for such delegation. It should be remembered that, until quite recently, managerial talent was not in abundance in India, particularly as the cream of academic talent was absorbed by the various services of the government. A larger organisation also means that share control by a few individuals becomes more difficult.

Thirdly, the nature of control depends on the type of society in which the organisation functions. The organisation has to adjust itself to society. Where confidence and trust in financial matters are confined to members of one's family, and in any case does not go beyond one's community, strangers, whatever their abilities otherwise, will not be placed in positions of trust. These places are naturally filled with one's relations, not by virtue of their ability, but because of the confidence they command. Further, it has already been pointed out that according to the traditional ideas of virtue, a man in power is supposed to help the members of his community rather than outsiders. Therefore, by appointing his relations to positions of confidence, an industrialist is killing two birds with one shot – ensuring that the business is run by people whom he can trust and, secondly, fulfilling his duties as a member of his caste and community. Further, the types of financial controls which operate in a modern organisation were not known to Indian industrialists until recently.

Family management leads necessarily to hereditary management. Since shares are inherited from father to son, it is inevitable that the powers and responsibilities associated with it are also passed on. But the weakness of family management lies in the fact that the son of a brilliant and hard-working father need not be equally clever or hard-working; he may often be quite useless as a competent head of an industrial organisation. It also means that when the son succeeds the father, he generally does not work his way up through the organisation. He does not rise through ability or hard work; even if he has these virtues, they go unrecognized. Another handicap of family management is that often, a young man who may be potentially brilliant as a scientist or economist is forced to enter the family business and spend his time in an intellectually unrewarding job, much against his inclination. Not does the business thrive particularly well under his supervision.

Family management has all the strength and weaknesses of the joint family. The relationships within the family are reflected in the organisation and vice-versa. If there is a high degree of cohesion among the family members and they all pull together, then the management is strong, united and efficient. But if there are dissensions within the family, then the management is weak with no unified policies. Even the staff members often range themselves on the basis of their loyalties and the entire organisation is split from top to bottom. If the joint family breaks up, or if there are disputes over succession, or if one member of the family by virtue of his position, ability or initiative tries to get ahead of the other members financially, again there is trouble. Often, what happens in a family business is that one member is put in charge. Because of family affection, loyalty and trust, the others do not bother to exercise any checks or controls over his activities. When minor disagreements come to light, they are not immediately discussed and set right, because family relationship is considered far more important than a difference of opinion over a minor decision in business. And it is felt that open discussion of such small things would not be conducive to family solidarity. But these minor incidents keep mounting up over a period of months and years and gradually affection and loyalty turn to bitterness and suspicion until one day, there is a major conflict.

In another type of family business, more than one family member attends to the business in their capacity as the managing agents. The areas of responsibility between the various managing agents are not clearly defined; nor is there anyone above them to coordinate their activities. This informality at the top may work reasonably well if there is frequent discussion and thorough understanding between the people concerned; if not, it leads to trouble. Further, this informality at the top is reflected in a fairly loose organizational structure. Delegation of authority and responsibility is not clearly defined for the various levels lower down and everyone is expected to do more or less everything and they are all simultaneously responsible for all the managing agents. Such a situation offers ample opportunities for people in the organisation to shirk unpleasant duties and to play off one managing agent against the other, either accidentally or deliberately, by inaccurate reporting.

In a family-managed organisation, authority tends to be centralized with very little delegation even to the senior members of the staff. Often, authority is delegated—if at all—not on the basis of seniority or ability, but on the basis of personal relationship to the managing agent or on the basis of the confidence he has in his various subordinates. It is not unusual to come across cases where an office clerk or a departmental supervisor has the ear of the managing agent and decisions are taken on the basis of unofficial conversations with these junior functionaries rather than on the reports and views of senior officers.

On the other hand, the best types of family-managed organisations are very efficient because of the close involvement of the family members in the business. To run the business well is for them a matter of family honour and the reputation of the business is synonymous with their personal reputations. A professional executive—however conscientious he might be—could never be so closely involved in his job. Such organisations are also efficient because of the sense of loyalty among the various members of the organisation.

In spite of the drawbacks in family management, management talent in India today is not abundant and the demands, on whatever talent there is, are great. Further, so long as there is a private sector, family management cannot be wholly abolished, particularly in the smaller organisations. Even in highly advanced countries like the United States a substantial percentage of smaller businesses are family-managed, because they provide for individual initiative and risk taking. We may expect that in India also, family management will continue for a long time though its importance may become progressively less in the larger organisations. Therefore the problem should be considered not from the point of view of whether a management is family or professional, but whether it is competent and serves the economic and social needs of the country effectively.

Competency in management is achieved through the selection of right types of people and adequate training in management not only in the academic sense of the word, but also in the various departments and levels of an organisation. It is achieved by enabling people who have qualities of leadership to rise to the top. Even in family-managed organisations it should be possible to select those members of the family who have ability and train them from the lowest rung of the management ladder and in the various departments of the organisation so that by the time they get to the top, they would have adequate first hand knowledge of the problems they would have to face. This is what happens in family-managed organisations in advanced countries. Finally, managements - in whatever sector they may operate—can contribute significantly to productivity only if they bring to bear on it the qualities of leadership, objectivity and a thorough knowledge of their job.

To sum up, the number of executives in India is still small. But their influence and responsibility - present as well as potential - is very great from the point of view of economic development.

Management in India has been developing along traditional patterns and conventional lines. The type of family management that has been in vogue in India is suitable to the conditions that existed in the early stages of industrialization but its use is bound to be

restricted as industrialization proceeds. Qualifications for top management undergo a subtle change as the level of industrialization advances. What is more important in the early stage is a desire for adventure and risk taking, a little bit of the gambler's spirit. But in their later stages, while entrepreneurship is important, ability to co-operate and co-ordinate the activities of various groups of people, ability to take objective decisions and a thorough knowledge of the job they have to do assume greater importance.

While the private sector is more influenced by the social hierarchy, the public sector is perhaps more subject to the administrative hierarchy. But the social environment makes itself felt in both cases. As time goes by, it is likely that even in the private sector the importance of the professional manager will increase. It is therefore necessary to create a competent and well trained managerial class of people suitable for both sectors. As industrialization develops, the public and private sector industries would become more and more inter-dependent and co-operation between these two would be essential from the point of view of national economy and efficiency. Therefore a group of people trained on a common basis with a common understanding of problems will be essential for such co-operation. The authority and responsibility and the types of controls that are to be exercised in both sectors should also be similar so that the entire industry in the country may reach a uniform high level of efficiency.

The executive of the future should therefore be in a position to rise above hierarchical limitations. He should be prepared to act according to his knowledge and judgement and be prepared to take responsibilities for such action. His loyalties should not be to his family, caste or region, but to the organisation and to society at large. A new concept of social responsibility should develop in the attitudes and behaviour of all executives.

Middle Management

1

In the management hierarchy, the functions of top management are essentially the laying down of policies and taking major decisions with regard to the affairs of an organisation. They are concerned with long-term problems of development, finance, and so on. The execution of these policies and the taking of minor decisions which flow from these policies are the responsibility of the middle management. As we go down the managerial levels, the policy content of work gets reduced and the execution of other people's decisions increases until we get to the worker on the machine who actually executes an individual job. The various levels of management have to take decisions based on the policy laid down at the higher levels. If these decisions are to be correct and in accordance with management objectives, then every member of the supervisory team should understand, appreciate and be in sympathy with the policy that has been laid down as far as the work of his department or section is concerned. There should be constant communication between the top and the lower levels in order to achieve this.

At the same time, the top management has to base its policy decisions on information supplied by the supervisory staff. Conditions regarding equipment, problems of maintenance, feelings and attitudes of the workers, problems of productivity, reasons for rising costs, etc., have to be obtained through the heads of various departments. If the information supplied by them is inadequate or inaccurate, then the decisions based on such information are bound to be wrong.

Often, the supervisor is called upon to explain management policies to the workers convey management decisions to them and justify them. To the worker, the supervisor represents the management. Minor rewards or punishments are given through him. Even the major decisions with regard to a worker--such as promotion and dismissal – are quite often influenced by the opinion of the supervisor about the particular worker. The worker's opinion of the management therefore is based on how the supervisor treats him. He may not know anything about management policies, but he knows how his supervisor treats him. The resentment that the worker may have against the management is often directed against the supervisor and vice-versa.

Thus, the role of the supervisor not only in departmental productivity, in the maintenance of machines, discipline, etc., but also as a vital link in a process of two-way

communication is obvious. The strength of the managerial chain of command depends on the understanding, and co-ordination achieved between the different levels of management. In modern management practice, therefore, the supervisory staff are considered as part of the management team. Good communication and co-ordination is established through various formal committees as well as through informal discussions in the course of the execution of work. In order to emphasise the role of the supervisory staff, they are always referred to as the middle management.

But does a supervisor in India feel that he is part of the management team? Does he identify himself with the aims and objectives of his superiors in the organisation? The answer to these two questions depends on whether there is a big distance separating the middle management from the top management, whether the chances of his reaching the position now occupied by his superiors are fairly bright, and whether he is in general sympathy with what the management is trying to do. It depends also on the extent of confidence that the top management has in their supervisory staff.

2

There is, generally speaking, in Indian industry a very wide gap between one level of management and another. In view of the fact that recruitment to higher levels of management is quite often restricted to people belonging to the same community as the top management and to relations, one would have expected that there would be no such gap. But in Indian society, great respect is accorded to even small differences in status between individuals. A consequence of this is that people of different levels are not free and easy with each other even if they happen to be relatives. They are on their best behaviour to each other and tend to be formal. Then there are other differences due to social background, education, cultural interests, and so on. The top management people generally have expensive tastes, tend to value everything in terms of money and are, generally speaking, not as well educated as middle management people. On the other hand, they have a certain sophistication, confidence and cosmopolitanism acquired as a result of wider travel and meeting a greater variety of people. The lower levels of management, on the other hand, tend to have simple, perhaps more cultured, tastes but rather narrow in their outlook.

This gap is also partly due to differences in earnings between one level and another. The top management in India who are also generally the owners of the business have much higher incomes than the next level which may be referred to as the senior management. These differences are continued down to the worker. Though these differences have been reduced in recent years partly due to an increase in salaries and wages at the lower levels and partly due to a higher rate of taxation at the higher levels, nevertheless, they are still

higher than in some of the advanced countries. It must also be pointed out that these are not as much due to the higher earnings of the top management as due to lower rates of wages to the supervisory staff.

Vertical mobility is one of the factors that tend to abolish these differences between one level and another. But in India there is practically no vertical mobility between middle management which is essentially professional and top management which at present is based mainly on ownership.

As a result of these social, cultural and economic differences, there is not much contact between top and middle managements except from a business point of view. In most advanced countries, people in adjacent levels of management—such as a managing director and manager—are generally quite friendly and are usually what the Americans call on a first name basis. There is a lot of vertical mobility and their positions might often be equal or even reversed by the exigencies of promotion and organizational set up. They will offer cigarettes to each other in their offices and will also be on social terms in their domestic lives. In India, promotions are almost always by seniority so that if two people start with a small difference in status, that difference is likely to continue throughout their working life—unless they happened to change their jobs. These minor personal attitudes that are so helpful in breaking down social barriers have not yet found their way into Indian industrial life. In India, the managing director except in rare cases will not think of offering a cigarette to his immediate subordinate and the subordinate would not generally smoke in the presence of his boss. Relationship under these circumstances becomes a matter of carrying out orders rather than discussions and joint decisions.

These distinctions are confined not only to the higher levels of management but are present at all levels. They affect the degree of confidence one level has in another and influences communication as well as delegation of authority at different levels. Consequently, the links in the management chain are not very strong. Authority tends to be centralized and all management personnel, irrespective of the level, look for orders from the top.

All this does not mean that there is no loyalty or understanding between one level and another in the management hierarchy in India. There is, very often, a strong bond of loyalty between the boss and his subordinate. But it is not the loyalty of colleagues working together for a common organisation and for a common objective. It is rather a reflection of gratefulness on the part of a junior for the kindness, consideration, promotion or other privileges that may have been extended to him by his boss. Thus many employees might be grateful to their employer for giving them a job—especially if they had had any past association with him. It is personal in character rather than organizational. And the loyalty exists only as long as the junior works under the same boss though the loyalty might be

transferred to his son or nominee sometimes. But if he were to change his boss or if his senior were to leave the organisation, such loyalty is not transferred to the person.

These personal loyalties affect the industry in two ways. First, if a senior man were to leave an organisation to join another, he would often take away some of the juniors with him to his new job. Even if this does not happen, the juniors do not give their new supervisor the same loyalty that they gave to their old boss. This often creates friction, particularly when their old senior has not left the organisation, but been transferred to another department. Secondly, if there should be any friction between the senior executives, the juniors also tend to take sides on the basis of their personal loyalties. In family-managed concerns where such loyalties are to be found in plenty, friction between the different members of the family is reflected in the business. Under these conditions, the entire organisation is split from top to bottom. And when ultimately, one member of the family comes out successful in the struggle for power, all those who supported the defeated party are likely to lose their jobs.

3

These sociological differences that separate people of one level from the next are perhaps the highest at the lowest level of management, namely, between the junior-most supervisor who enters an industry straight from a technical school or college and the skilled worker or maistry who has to work under him. This is a very critical situation as far as productivity is concerned and extremely sensitive with regard to social relationships. Therefore, it must be explored in some detail.

The junior supervisor is essentially a middle class product. He has generally had at least a high school education followed by some technical training of some three years duration. Often, he has been to a university. His parents are also very often professional people so that he has an educated background; or they are people of some means. Otherwise, it would not have been possible for them to educate their son to the extent they have. That means, he comes from a family with a tradition that is unused to manual work of any sort and tends to look down upon it. Placed as he is, in a country in which ninety per cent of the people cannot read and write, he tends to consider himself as quite a superior person. He is also proud of his diploma or degree. His theoretical knowledge of the subject may be quite sound, but his practical knowledge of machines and processes in a factory is extremely limited, as generally he has had no opportunities of undergoing a thorough practical training. Even where he has undergone some training, it is often limited to watching rather than doing. While he may be familiar with the principles behind the operation of machines, he is often unfamiliar with the machines themselves.

The people who work under him—skilled workers and maistries (first line supervisors who have been promoted from among workers)--are all from the working class, often illiterate. They have never done any kind of work other than manual, and are quite proud of their craftsmanship. They have often spent a lifetime on the same group of machines and understand all their weaknesses as well as their capacity. On the other hand, they do not understand the theoretical principles behind the working of the machines and processes of which they are in charge. They know that certain jobs have to be done and how to do them, but they do not know why they have to be done. The mathematical equations or the chemical formulae connected with the process mean nothing to them. They cannot even read the blue prints of the machines that they understand so well. And if a new machine with slight modifications were to be installed, they are often completely lost. They do their work by virtue of their long experience and innate skill, rather than through understanding.

Thus we have two groups of people who have two halves of the same basic knowledge – one purely theoretical and the other purely practical--and who work together in close proximity. The efficiency and success of the one largely depends on the other. And yet, they are separated by a wide gulf of social background, interests, education and training. The camaraderie that exists between these two groups, the back slapping, the leg pulling, drinking tea together, working together and learning from each other in an atmosphere of easy informality which is an essential feature of the relationships between a fresh college graduate and an experienced workman in other advanced countries, does not exist in India. The junior supervisors demand separate canteens from the workmen and if this is not possible, they want at least separate tables in the canteen reserved for them. In Indian factories, each of these groups tends to stand on its dignity. The college graduate feels that he knows quite a lot about the process that he is supposed to supervise and is rather disgusted at the ignorance of the maistry. But at the same time he is only too painfully aware that the maistry can repair, adjust and set the machine far better and quicker than he can and is afraid to match his skill against his subordinates. If there is a mechanism in a machine that he does not understand, he is afraid to ask his own superiors lest they think he is no good; and he is ashamed to ask his subordinate since he considers himself superior to him socially and culturally. He is also afraid of being snubbed or laughed at by subordinates for his ignorance of practical work. Since he is always on the alert to see that his ignorance is never exposed, he never learns.

The maistry takes the attitude that these educated supervisors are arrogant and that their education is useless, because he is so much better than them at actually doing a job. And he takes pleasure in 'having them on' much to his own satisfaction and that of his colleagues and often misleads them.

Under these circumstances, the supervisor never acquires that confidence in his job that is necessary to be a leader of his men. Nor can he inspire any confidence in them. Often enough, he has to depend on the maistry's advice in taking decisions on practical problems regarding the machines under his control and operation. He often gets promoted to higher levels, but this initial deficiency follows him throughout his working life. The maistry, on the other hand, does not get the advantage of constant contact with his superior. He does not pick up bits of theoretical knowledge regarding machines and processes over which he is engaged, regarding new development and regarding the effect of his work on subsequent processes. This is a crucial area in industrial productivity and sociological differences come in the way of ensuring co-operation and unity of objective between people whose work is highly interdependent.

There are of course supervisors in industry who are extremely competent not only from the point of view of technical knowledge, but also in respect of practical work on the shop floor. They are usually the people who were able to rise above their environment because of their interests and enthusiasm for the job. They have been able to overcome social barriers and learnt to work alongside workmen and maistries without social inhibitions and snobberies. The maistries soon learn to accept and to respect such men because of their superior technical knowledge. There are also the supervisors who are able to establish good relations with their subordinates. Working together without inhibitions enables them to understand and appreciate the problems of their workers and to try and find solutions for them. But many of our engineers and technicians suffer from this handicap of inadequate practical knowledge and training of the problems of the shop floor and a lack of ability and confidence to tackle them.

It is only natural for a supervisor to feel that he does not want to learn from a subordinate, especially when he is supposed to supervise his work. Most people would feel that way. This feeling is further intensified because of the social gulf in India. One way of overcoming this is to have an intensive course of practical training for all technical graduates and diploma holders to supplement their technical training in colleges before they find employment. When such training was given in a planned and systematic manner, the supervisors turned out to be fully competent. But firms organizing such training are still very few. Though the importance of such training has been realised by many managements, organized attempts are still lacking.

As a result of the lack of training facilities and failure of the supervisor in his junior position to understand the problems of the shop floor, his development is naturally slow and top management is finding it extremely difficult to get suitable people to fill senior management positions.

During the past fifteen years or so, morale of the middle management has been at very low ebb. 'We are like the drum; we get beaten on both sides', is a statement that is often heard from supervisory personal in industry. They refer to the fact that they are in the embarrassing position of a buffer between management on the one hand and workers on the other.

Before the advent of trade unionism, the supervisor's word was law in his department. He maintained his machines to the best of his ability and threatened, bullied and cajoled the workers into working hard. He had the confidence of the management and there was very little criticism of his work, because there was no one to assess his performance in an objective manner and pass judgement. But with the growth of trade unionism, he suddenly discovered that his word was no longer law in his department. Every order that he gave was questioned and criticized by the workers and he was not used to it—particularly from his own subordinates. He had to justify his actions not only to his superiors, but to the workers also. The only method of convincing the workers and making them work that he knew was to bully and threaten and when those methods did not work, he did not know what to do. He expected the workers to obey him implicitly and not to question his orders. Those workers would or could question their employers or disagree with them had never been dreamt of in the past.

In the early stages of the trade union movement, there is a strong element of aggressiveness in its growth. The managements' reaction to it is one of strong opposition to any form of union activity. The result is acts of insubordination, resistance to orders, frequent stoppages of work and so on, increasing the resentment of the workers and bitterness on the part of managements. In such situations, the supervisors, as representatives of the managements were the focal point of all this tension. They were the people to award punishments—warnings, suspensions and dismissals—in their attempts to maintain discipline. The workers who were already aggressive because of their new-found strength in collective action retaliated by 'go slow' tactics, negligence and so on. Occasionally, they even retaliated by resorting to violence against the supervisory staff. There have been many cases of such assaults in almost all industrial centres in India. This has created in the minds of the supervisory staff, a feeling of suspicion and mistrust against workers.

There has also been a spate of labour legislation during the past fifteen years which has been designed to protect and promote the rights and interests of the workers and to define the relations that should exist between employers and workers. However sound the objectives of these enactments might have been, their immediate effect was to create a certain amount of confusion in the minds of the supervisory staff, particularly as there

were no efforts to explain the various provisions of these acts to either them or to the workers. They only felt that their powers and status were threatened. There was a sudden demand for lawyers from many managements and the problem of 'handling labour' was transferred from the supervisory staff to these new officers. This only added to the insecurity already felt by them.

The managements – the majority of them – did not fully realise the implications of the change in the mood and temper of the workers. They attributed the increasing number of problems in industrial relations to a few 'trouble makers' in the various departments and to the inability of their staff to handle the situation. Consequently, even many of the day to day problems were dealt with at higher levels. Some supervisors at any rate accepted this state of affairs and passed on even very simple problems to the higher management for solution. The workers who soon realised that their supervisors had no powers to take decisions, lost respect for them and went direct to the higher authorities. Thus authority became more centralized and the senior members of the management were so busy solving routine problems that they could find neither the time nor the energy for long-term problems such as planning, expansion, modernization, etc.

Managements blamed their supervisory staff for this state of affairs by saying that their supervisors were afraid to take responsibility; and the supervisors complained that they could not take up responsibility that was not delegated to them. In the result, they lost the confidence of the management on the one hand and the loyalty and respect of the workers on the other. The supervisor became a weak neutral trying to play safe and avoid trouble in this struggle between the two strong forces of labour and capital, instead of being a powerful unifying force to bring them together. Such a state of affairs could not build the morale of efficiency of the middle management.

Change from the master-servant relationship to employer-employee relationship is a painful one. And nowhere has it been more acute than at the supervisory level.

There have also been other factors that have been responsible in recent years for the low morale of the supervisory staff in industry. In the past, our engineers and technicians were mainly called upon to undertake jobs of an operational nature. Most of the equipment was imported from abroad and the job of the technician was to operate and maintain it in good working order. But in the context of Indian industrialization today, a large number of industries have been started to manufacture not only consumer goods like textiles and sugar, but equipment for these consumer industries also. Basic industries such as iron and steel, chemicals, and so on, have also been started. If the base of industrialization is to be broadened and strengthened, such industries will have to be multiplied in the future. Our engineers obviously do not have the necessary knowledge or experience to man all these industries without external help.

Therefore, broadening of the industrial base has meant collaboration with foreign countries on a large scale. These countries undertake not only to supply the necessary equipment, but also send their own technicians to install and maintain them for a period-until such time as Indian technicians can run the factories independently. This naturally involves Indian and foreign technicians working side by side. The Indian technician, not unnaturally, compares himself with his foreign counterpart with regard to conditions of service; scales of pay, treatment accorded, and so on, and has found to his disappointment that these are vastly different. Often, the foreign engineer is paid about four to five times the salary of the Indian and, in addition, is given special facilities regarding housing, overseas leave, etc. In pre-Independence days, any partiality shown towards a foreigner was attributed to the alien government. But it can no longer be done. Given the same facilities for training and experience, Indian technicians have proved to be as good as anyone else.

It has also been often found that the suggestions of Indian technicians are ignored by the top management while the same suggestions coming from a foreign expert are promptly carried out. Very often, even after an Indian counterpart is fully trained and able to undertake the work independently, the foreign expert is retained from fear that something might go wrong. These attitudes apply perhaps more to the public sector industries than to the private sector, because, the board of directors who are responsible for public money from the exchequer are reluctant to take risks while in the private sector, managements are generally keen on economizing and a foreign technician means more money.

It may be that in the present circumstances of India's developmental needs, such a situation is inevitable. It is also true that wage levels in advanced countries are vastly different and the engineers from those countries have to be paid according to those levels. But these things do not prevent the Indian technician from being frustrated.

The recent introduction of productivity services has resulted in another blow to the morale of the technician. In the past, the technician had always considered himself as an expert as far as his work was concerned. There were bits of information regarding equipment and processing which were generally not found in text books and which had to be acquired by experience. He was most reluctant to pass on such information to others and felt rather proud of the fact that he was perhaps the only one to possess it. But the application of new techniques such as quality control, work study, man-power and machine utilization, and so on, have resulted in exposing the weaknesses of many of the methods used in the past. They have also revealed that the methods used by many technicians and closely guarded by them as something unique were not really so efficient after all. While this has led some managements to conclude that their supervisory staff is inefficient, the

technicians have felt the introduction of these experts in productivity as an unwarranted interference into their legitimate sphere of activity.

As a result of all these factors, the supervisory staffs in many industries feel frustrated. Such a feeling among key men in industry is not conducive to increasing productivity.

5

A foreign visitor, commenting on Indian industry remarked recently, 'you have good generals and soldiers but rather weak at the sergeants' level'. He was referring to the first line supervisor or maistry as he is known in India.

The first line supervisor has almost all the problems of the supervisory staff but in a more intense manner because; he is in the lowest rung of the ladder in the managerial hierarchy. In addition, he has some problems of his own.

In the first place, he comes from the working class. He has been a worker himself for many years before promotion as a maistry. It is quite likely that he has a number of friends and relatives working in the department in which he is called upon to act as a supervisor. To exercise even a small amount of authority over people who have been colleagues for many years is a difficult problem and can lead to a number of embarrassing situations at any level. But at the lowest level, it is particularly so. If he is very strict and impartial, his friends will say that promotion had gone to his head and his social relationships both inside and outside the factory suffer. If, on the other hand, he is easy and free with his old colleagues, they might take advantage of it and he is likely to be accused of favouritism by other workers. Educationally, he is often illiterate. Consequently, his social background and emotional identification is with the workers rather than with the management. And yet, the moment he is promoted as a maistry, he is expected to become a member of the management team and more or less sever the old loyalties and friendships that have been built up over a long period of his working life. This is a difficult feat to achieve. No training of any sort exists at present to enable the maistry to adjust himself to the change smoothly. Consequently, he usually suffers from a sense of divided loyalties.

This was not such a difficult problem before the advent of unionism when the basic criterion for promotion was loyalty to the management. And so long as he was reasonably competent in his work, he was promoted. But trade unions insist that promotions from among workers should be entirely by seniority. Though skill is supposed to be considered, no objective standards of skill exist for many of the occupations at present and if the management were to promote a person who is not the senior-most, the unions almost always say that it is favouritism. Therefore, promotions in recent years have all been on the

basis of seniority. This has resulted in two things. First, the maistries are no longer management men, loyal to the management, as they were in the past. Second, the incentive for learning about machinery and equipment is lacking in the workers, for they know that it will in no way help them to get promoted. In the absence of any technical training for the maistries, the standard of their technical efficiency, if any, has been deteriorating in recent years.

Lack of education also means that the maistry has no means of furthering his knowledge through study. He does not understand the principles behind the machines and processes. When new and more modern equipment is installed, he does not understand its working as a logical improvement from the past. Though he has reached the status of a supervisor, he has no means of knowing about the relevant portions of the factories act, industrial disputes act, the standing orders of his company, etc. Often, workers who are younger and better educated know them and the maistries have an inferiority complex in dealing with them. They do not understand the need, much less the basic principles behind the new productivity techniques such as cost control, quality control, work study, and so on, and it is often difficult to get their co-operation in applying them at the worker level. The result of all these handicaps is not only that the first line supervisor acts as a bottleneck in increasing productivity, but he cannot rise any higher in his professional status. He has risen as far as it is possible for him to go. Hence, he has no further aspirations at all as far as his work is concerned; or if he has any, they lie in directions other than his work. This again is not conducive to efficiency.

In the early stages of the advent of unionism, the maistry was treated by the workers as more or less a traitor to their cause. He was considered a stooge of the management and most of their minor complaints were attributed to him. Their resentment against him was all the greater because he was one of them, who had gone over to the opposite camp. And in the wave of indiscipline and occasional violence that followed, the maistry was singled out as a target even more than the supervisor. Also he was more vulnerable because he lived among the workers and went to and from work along with them. And the maistry who was already paralysed by divided loyalties and who had a sneaking sympathy for the workers in any case became completely powerless--a mere spectator standing uncomfortably in the 'no man's land' of the industrial struggle.

The management lost confidence in the maistries even more than in the case of the supervisory staff. In the days when industries were small and technically qualified people few and far between, the maistries in many industries were a direct link between the workers and the senior management. Employments of a fairly large number of technically qualified people on the one hand and the unionization of workers on the other have reduced the powers of the maistries as well as their status and prestige very considerably. At one time, recruitment of workers was done mainly through the maistries since it was

their job to control the workers. But because of complaints from unions about favouritism and corruption, recruitment is now in the hands of higher authorities. The old loyalties that bound them to the management have gone and there are no new ones to replace them.

Managements also treat the maistries just as they treat the workers. For example, in many factories, the maistries use the workers' canteen and not the staff canteen. The staff would probably object if the maistries were permitted to use their canteen! While the staff sign an attendance register to mark their presence, the maistries have to carry a card just like the workers. Thus, the management's treatment of them also makes them identify themselves with the workers rather than with the supervisory staff. This, in addition to the other handicaps they have, has made it difficult to make them into efficient supervisors and integrate them into the management team.

Because of the inadequacies of the first line supervisor, some managements have attempted to eliminate him from the industry altogether. Instead of promoting workers to a supervisory level, they have recruited diploma holders to these posts. While this may help productivity from a short-term point of view, from a long-term point of view and in the interests of the nation as a whole, this is a retrograde step. Even as it is, intelligent and enterprising workers have no opportunities of satisfying their aspirations for betterment beyond the level of maistries and if even these posts are to be filled by diploma holders, there is then no avenue of promotion open to the workers. However brilliant and hard-working a worker might be, he would have to start and retire as a worker. On the other hand, it is essential that greater opportunities must be provided for workers to rise to higher levels. This can be achieved by providing training facilities to maistries and to senior workers who are likely to be promoted in the near future. Such training should include a basic knowledge of machines and processes, human and administrative problems of supervision and the importance of quality and cost. Such training would also help the new supervisor in problems of adjustment in his new role. And if new supervisors were to be selected from among the trained people with seniority as the criterion, the standard of supervision would certainly improve and contribute to higher productivity in factories.

If the morale and the efficiency of the supervisory staff in India is to be improved, it is necessary to establish a new social equilibrium in our industrial enterprises and the continuing importance of the supervisory staff should be recognised. While there has been a considerable amount of discussion on labour participation in management, no one seems to have considered the participation of the middle management in decisions that effect their work and productivity. It is surprising how often decisions of a technical nature are

taken without reference to engineers or technicians, but the implementation of these decisions is left to them.

In a new social equilibrium in the factory, there should be consultation at every level beginning from the top management. What the top management does would naturally be copied and followed at the other levels. Such consultation places a special responsibility on the staff to carry out the resultant decisions. Authority and responsibility should be freely delegated to the various levels of middle management. While productivity services should be fully utilized, they should not be used to check the efficiency of the middle management but rather as new tools in the hands of the members of the staff for improved efficiency. The co-operation and loyalty that the workers show to their supervisors depends not only on the attitude of the supervisor towards his workers but also on the confidence that the management has in the supervisor. Such confidence must be built up through delegation and clearly defined at various levels. And when once delegated, there should be no interference with the powers of the supervisor except in cases of grave emergency. There should be a free flow of communication from the top management regarding policies and procedures so that the lower levels are left in no doubt as to the objectives and intentions of the organisation. The middle managements should also be encouraged to discuss their problems freely with their immediate superiors and to pass on any information that they think might be useful to the top management in taking their decisions. Reticence in passing on information through respect or fear would mean that the top management will not be in possession of all the facts in taking decisions. Loyalty of the middle management should be not so much to the individuals in the top management, but rather to the organisation as a whole and its broad objectives. There should be a spirit of co-operation among the various members of the organisation. Training of the middle management personnel should be directed along these lines. But only the top management can initiate and bring about these changes.

CHAPTER NINE

Workers

1

The major sociological factor about the Indian worker is that he has an agricultural background. It is true that in some of the traditional industries in India such as jute or textiles, there may be workers from an urban or industrial background. But even in these industries where one might expect to find a second or third generation of workers, a large number still have their roots in the villages. For the new and expanding industries, however, workers are drawn very largely from the neighbouring and occasionally from distant villages. There is thus a gradual migration of workers from the villages into the cities. As time goes on and as industrialization becomes more rapid, this migration is likely to become a flood. This is one of the major sociological phenomena of modern India and must be taken into account in any study of labour problems.

There have of course been attempts to prevent this movement from rural to urban areas. These measures have been in two directions. One is by raising the economic level of the villager by providing him with a subsidiary occupation in addition to agriculture—such as hand spinning—and improving the general economic and social conditions in the villages through community development. The other is through a decentralization of industries, by locating them in rural areas as far as possible.

The effect of the first is perhaps too early to be assessed yet. But decentralization of industries brings its own problems in its wake. If a large industry is located in a rural area, it attracts other smaller subsidiary industries to the same locality. It also attracts labour from all the surrounding villages and soon becomes urbanized. The environment that is created is that of a small town so that as far as the social environment of the workers is concerned, the result is the same as if they had migrated to a town.

The agricultural background of the worker imposes its own limitations on his attitudes, his productivity and his adjustment to the new industrial environment.

One aspect of this background is the strong sense of social security that an individual has in a village. He generally belongs to a large family and is surrounded by brothers, uncles, cousins, etc., who live either in the same house or in adjacent houses. He belongs to a particular caste the members of which usually live in a group of houses in the same locality. He often has a profession that is reserved for him and members of his caste. In any dispute with the outside world, he is confident that he will be supported by the members of his caste. Mutual loyalties in a village are very strong within the group. As a member of

such a group, he is expected to abide by a code of conduct which has been cherished for generations and which is understood by everybody. And he knows that others will also abide by such a code and so long as he sticks to it, nothing can go wrong. Generations of living together has brought about mutual adjustment and understanding between the various castes in a village community. However low he may be in the social hierarchy, he has a sense of belonging. He has his roots deep in the village soil.

It is true that economic pressures have destroyed, to a large extent, the social and economic security that the village once provided every individual. The spread of democracy and progressive ideas has created a sense of restlessness and an impatience for the removal of social barriers. In some of the villages at any rate this has led to social tensions between the higher and the lower castes. But there is still a sense of psychological security that pervades the atmosphere of most villages and the sense of belonging has not been lost.

The method of payment in the villages traditionally has been in kind and the quantum of payment is often not related to the services rendered. Agricultural workers on farms are still paid in many areas in bags of grain. Other workers such as carpenters, blacksmiths, etc., whose services the agriculturist may require occasionally are paid a fixed amount of grain on an annual basis irrespective of the amount of work done. Similarly washermen, barbers and others who perform services to the whole family are also paid in kind annually. The quantum of payment for any of these workers has no relationship to the work done, but a rich land owner would be expected to pay more than an ordinary farmer with a few acres of land. If there should be a bumper harvest, they may be paid more than the usual amount. This is not for any additional services rendered, but everyone expects to share in the general prosperity of the community. The principle of payment is not the economic utility of the individual concerned--as in the case of joint family system--but rather of social cohesion and security for the village as a whole. For people used to such modes of payment, principles of job evaluation and incentives are rather difficult to appreciate.

2

We might ask ourselves the question, why does an individual leave the security of the village and migrate to a town with all its uncertainties?

First, there is the economic pressure. During the past century, the population has been steadily increasing, but cultivable land has not increased appreciably; nor has the production per acre gone up very much. More and more people have come to depend on agriculture for a living. This has been one of the major economic problems facing India for many years now. Even in a prosperous agricultural economy, work is intermittent, periods

of hard work during agricultural operations alternating with periods of idleness at other times. But with the increase in population, the level of employment becomes less and less. Further, according to the Hindu system of inheritance, the land from the father is divided equally among all the sons. This division and sub-division of land has gone on for generations and the holdings have become smaller and smaller until many of them cannot provide enough work or livelihood for even one family.

This economic pressure has certainly weakened the traditional ties and loyalties existing in the village communities. In a very few cases, it has led to competition, antagonism and bitterness. It has also made people lose their faith in the traditional values. And when ties are weakened, a slow disintegration of the traditional social system is inevitable. The caste system limits a man's ambition by making him practise only the profession of his caste and nothing else. But when the ancestral profession does not provide him with a living, the mere desire for survival drives him to do something else. In that process, his ambitions and aspirations are released. Since these cannot be met in the village, he tries to get away to the city.

Industrial wage levels in India – while they may be low in comparison with advanced countries—are very high when compared with agricultural wages. The few people who have left the villages and got jobs in factories return periodically to visit their friends and relatives because of the attachment they still have for their homes. These workers often show off to their friends with their bicycles, wrist watches, and new clothes which are far beyond anything that an agricultural worker can afford. Their sophisticated ways and care-free attitude to life are the envy of the village youth and a great temptation to imitate.

Further, there is a desire among many young men in villages today to get away from the family and to have a certain amount of personal freedom. The old ties that provided them with security seem to them like chains shackling their bodies and minds. They do not want to be tied down to their fathers' occupations; they do not want to be polite to people merely because of their status in the village. They do not want to observe the traditions and the subtle social distinctions that exist in a small hierarchical society. There is a desire to try something new, to experiment with their lives and to make something of it. In the town, they will be anonymous, will make their own friends, will lead their own life and apart from working hours, will be their own masters. There is no question of standing up when elders come into the room, of not smoking in the presence of older people, of being talked about by everyone even for the slightest slip and having to receive everybody's advice on what to do and what not to do. It may be that the young men do not feel all these things consciously, but there is a vague sense of discontent in the air they breathe and a feeling of restlessness that is disturbing the placidity of India's villages. This is reflected in the desire to get away and do something.

Then, the city has its own glamour, the electric lights, picture houses, coffee clubs, blaring music from the loud-speakers, the periodical 'All India' exhibitions and the general feeling that something is always happening, while in the village, there is a feeling of immobility, of standing in the same place while others are moving ahead.

The adventure-seeking but unsophisticated village youth does not know the economic as well as the social and emotional trials and tribulations he may have to go through before he becomes a settled urban dweller. If he did, he might never take the decision to move at all. But the city looks attractive from a distance and he decides to go there, if not to make a fortune, at least to better himself.

3

Of the workers who migrate from a village to an urban area in search of jobs, only a very small percentage manage to get permanent industrial jobs. Others move from one odd job to another for months and even years before they get a permanent job. And yet others never manage it all throughout their life time. Under these circumstances, they do not take their families with them in the first instance. A family means some sort of a fixed accommodation and it costs money. But an individual can find for himself somehow—sleeping and eating in odd places and at odd hours. The first effect of such a migration therefore is the disruption of family life.

It has also been generally observed that when workers from a settled and permanent way of life are removed from their traditional environment, there is a tendency for deterioration in their moral values. The social restrictions imposed by a stable society are removed when they do not have a settled home and permanent neighbours. The situation is further aggravated by the fact that their own families are left behind. Since no permanent housing is available in many of the industrial areas, they tend to lead an unsettled life moving from place to place. They have no opportunity of becoming stable members of a community and acquiring new social and moral values. The sense of values which they cherished in the village no longer sustains them emotionally and they do not have the opportunity of acquiring a new set of values.

Though they have migrated to the cities in the physical sense of the word, emotionally they are still attached to the village. This is so even when the entire family has made the move. Their friends and relations are still left behind. It may be that the family owns a plot of land in the village. However uneconomic it might be to cultivate, they are still attached to it. During the rainy season, they wonder if their field has received any rain, and if their uncle or cousin whom they had left in charge has sown anything. Living in a slum under crowded and unhygienic conditions, they think of their small house in the village as a haven

of peace, since even the poorest villagers have their own houses. Consequently, they like to return to the village at every opportunity—festivals, births, deaths and wedding among their relatives. It takes them a long time to become a part of the new industrial community. A permanent job, good housing conditions and new friends in the new environment would hasten such integration, but in the absence of such factors, it is a long, slow and painful process.

The new migrants bring with them to the town, their beliefs and traditions, customs and methods of working. Some of these are quite contrary to the habits and conditions of their new environment. For example, a new worker from the village is often grateful to the management for giving him a job, for he thinks of it, not in industrial terms, but as a favour conferred on him. And he shows his gratefulness by an excess of humility and loyalty, while the older and more experienced worker is likely to exhibit a certain independence of spirit. He is also quite willing to do any jobs that might be assigned to him and work hard at those jobs. Occasionally such workers are also used to undermine the demands of other workers. But experienced workers have their own ideas of what is due to the management and they tend to look down on these new recruits. Similarly, their domestic life in an industrial area is different from that in a village in many respects and not all the migrants are able to adjust themselves easily to the new social situation. Here again, it takes some time before they are accepted by the older industrial workers. In fact, in some areas, there is quite a social distinction between the older workers and the new—the former occupying a definitely higher status.

The new entrants from agriculture to industry are used to working by the sun rather than by the clock. They are used to long periods of hard work interspersed by periods of indolence. They are used to working in the open air and relaxing when they feel like it. The tempo of working is their own and is not dictated by anyone else, least of all a machine. When they come into a factory, they have to work within the four walls of room—often under artificial conditions of temperature, humidity and lighting. They are called upon to work shifts which they had never experienced before in their lives. They have to carry out to them—certain meaningless jobs at fixed intervals and the tempo of their working is determined either by a machine or by their colleagues. In agricultural work—though it might have been skilled in some respects—they have never handled any equipment more complicated than a wooden plough. But in the factory, though the work itself is unskilled, the machines they are called upon to handle cost thousands of rupees.

Thus, their working environment is completely strange to them. It demands a new way of working and a totally new discipline. In most factories in India, when a new worker is recruited, he is rarely given any training. He is merely told to watch other workers and pick up his job. No attempt is made to make him feel welcome in his new environment. He does what the other workers do without interest and without understanding or enthusiasm. He

does not understand the effect of what he does. Often, he learns from others the short cuts and inefficient working methods. Consequently, his performance is poor; his method of working defective and it takes a long time before he becomes even a reasonably good worker. Even then, his standards leave much to be desired, except in certain rare cases.

After he enters the factory, no one is concerned with him except perhaps the first line supervisor. The only time he comes across anyone of a higher status is when he has made a mistake in his work or failed to abide by the standing orders. He is then brought to the office for enquiry and possible punishment. His knowledge of the organisation for which he works is gathered through gossip among his co-workers. No attempt is made to create a sense of pride in him and build his loyalty to the company for which he works. And yet, the managements are surprised when their workers entertain totally wrong ideas about the objectives and problems of the concern. He has no sense of belonging until the union takes an interest in him and he starts taking an interest in the union.

As a result of all these factors, adjustment to the industrial environment takes a fairly long time—often a whole generation. And the longer the time taken for such adjustment, the slower will be the improvement in productivity.

But when once such an adjustment is made, there is a definite change in the social and economic life of the workers. Their standard of living is much higher than it was before. They dress better, own bicycles, go to the cinema with their families and educate their children at least up to the High School standard. Some of them have also been able to save money and buy their own houses, etc. These stable conditions and aspirations lead to still higher aspirations and they are prepared to produce more, provided they get a share in the gains of higher productivity.

As the workers get adjusted to the industrial way of life, there is also a change in their social outlook. In the place of traditional loyalties there emerge a fierce democratic spirit and independence of outlook which gradually mellow into tolerance and good humour based on confidence in themselves and their group. Caste and social distinctions disappear at least as far as their working and public life is concerned and the inequalities between men and women get considerably reduced. It is not at all uncommon now-a-days in some of the industrial areas to see the wife riding as a passenger on her husband's bicycle. Even a few years ago this would have been frowned upon as indecent. In a village it would not happen even today. Where good housing and recreational facilities have been provided, the workers develop a new community spirit which they lost when they left their villages.

Very little is known at present of the social conditions in industrial areas and how the influx of new workers adjust themselves to their new environment and how long it takes

for such adjustment. Considerable investigation is necessary before even the problems could be located, particularly as they are likely to vary from one area to another and one geographical region to another. Nevertheless, such investigations would be worthwhile, not only from the point of view of improving those conditions and making adjustment easier, but it would also help to locate the social causes of the lack of aspiration, absenteeism, low productivity and so on. Better recruitment policies on the part of managements, introduction of induction and training schemes which enable the new worker to feel that he is not a mere economic factor in production, but an individual who is needed and in whom others take an interest would also help in bringing about a quicker adjustment to his new environment.

4

One of the factors that affect the productivity of the worker is his level of aspiration. What are his objectives in life? Are those objectives long-term, short-term, or merely of immediate necessity? Are they realizable under the circumstances in which he is placed? If they are, he is likely to make the necessary effort, work hard and finally reach his objective. But if his objectives are confined to immediate necessities, then he is likely to stop working or at least take it easy the moment his immediate wants are realised. It has been found in a recent study that highly absent-prone workers have very little long-term ambitions or their ambitions are such that they cannot be realised.

One of the major results of independence has been that people's aspirations have risen. They expected that freedom would automatically bring with it prosperity and a higher standard of living. The ordinary people, at least, did not realise that Independence was only an opportunity to shape their future according to their desires that a good deal of hard work had to be put in before a higher standard of living could be achieved. They knew vaguely that science and technology had advanced to such an extent that poverty could be easily abolished. But they did not realise that many complex problems would have to be faced and solved in order to industrialise the country. Therefore, when Independence did not automatically bring with it improved standards of living, a certain amount of frustration and disappointment was inevitable. This feeling of frustration showed itself in the first few years of Independence in an increase in the number of industrial strikes, disputes, irresponsible and unreasonable demands and a feeling of general restlessness in the country as a whole. Even after fifteen years of Independence, such frustration is still to be noticed among certain people and it is not conducive to an increase in productivity. For high productivity, aspiration should always keep just ahead of achievement, but not so far ahead as to cause disappointment.

But while unfulfilled aspirations act as an obstacle to productivity in the case of some people, lack of aspiration acts as an obstacle in the case of certain others. This may seem contradictory, but the effect of the caste system is such that the levels of aspiration of different castes are essentially different. This has also been further enhanced by the difference in the social environment between towns and villages. Most of the lower castes have been severely restricted for generations with regard to their ambitions and many of them have not yet been able to overcome them. Even when they make an effort to improve their economic status—say, by getting a job in a factory—they do not aspire any higher and relax after that. They want to be slightly better than the other members of their caste, but not so much better that they would have to exclude themselves from their social group. Because, if they are forced to leave that group for economic reasons, they have no other group with whom they could mix. Further, they are not used to comparing themselves with anyone other than members of their caste. The problem of ‘keeping up with the Joneses’ is often restricted in India to the Joneses of their own caste. In an attempt to keep up with them, they do not want to get away from them altogether.

Another reason for this lack of ambition is the extreme poverty of large sections of the Indian people. When a man does not know whether he will be employed the next day or not, when he does not know where his next meal is coming from, he cannot have any long-term aspirations. He does not very much care how he lives, does not worry about what his friends think of him, for he has no friends, only acquaintances who come from the same level of society as himself. He is not bothered about saving money, to buy a house or to educate his children. He lives for the present, snatches what pleasure he can out of life and less tomorrow take care of itself. If he has some money in his pocket, he does not bother to work. Any effort he makes is related to his requirements of the moment.

When such a person is given a permanent and secure job, he cannot suddenly forget the habits of a lifetime and settle down as the member of a community planning his future and budgeting his expenditure. He cannot change his methods of living and working and acquire immediately, new hopes and ambitions. He tends to absent himself frequently, works by fits and starts, resents supervision and even trade union interference and is generally very uncomfortable in his new job. Often he may even lose it. It takes a long period of time before he can adjust himself to his new environment, acquire new habits and have long-term aspirations.

This lack of long-term aspirations has been noticed among many workers in Indian factories. When production bonus is paid, it is found that weekly payments have a better effect on production than monthly payments. Since the quantum of payment is the same in both cases, it means that the worker is interested in getting immediate cash in his hands to spend. It is also the common experience in many factories that the greatest percentage in absenteeism is on the day after pay day. In some factories, where it is the custom to issue

tokens to workers every month for getting things from the factory canteen or co-operative stores, it is often found that they are exchanged for cash which can be spent outside. All these factors indicate that many workers have not yet developed long-term aspirations. Their past life has been concerned so much with the immediate problems of survival that they have not had the opportunity to develop them. And until such time as they acquire these ambitions and begin to plan their life on that basis, incentives to higher productivity will not have much effect.

There has been a suggestion recently that if a five-day working week were to be introduced in Indian factories, the high rate of absenteeism could be reduced. This suggestion does not take into account the major cause of absenteeism which is the lack of long-term ambition among many workers. During the past fifteen years, wages of most industrial workers have increased substantially. During the same period, the rate of absenteeism has also been increasing steadily, indicating thereby that there is no desire on the part of the workers—at least among many of them—to earn beyond a certain point. Therefore, as long as the worker is not motivated to earn more, absenteeism will continue to increase and the granting of an additional holiday would only mean that there would be a drop in productivity and expensive equipment would be kept idle for two days in a week instead of one.

The five-day week introduced in some of the advanced countries is the result of a high degree of mechanization—even automation—and high productivity. To adopt it at the present stage of India's development would not be conducive to a rapid economic growth.

Nowhere is this lack of aspiration seen more poignantly than among the peasants in India's villages. To them agriculture is a way of life. It is not a profession. It is not learnt; it is absorbed from their environment. Consequently, their methods of farming are more difficult to change and their reluctance to adopt better methods goes much deeper than merely lack of faith in the new methods.

To the small farmer in the village, farming is a highly speculative venture. He has seen too many floods and droughts to think of agriculture as an economic and consistently rewarding profession. Consequently he is afraid to invest money in fertilizers, better seeds and so on. In most cases he has not got the money to invest. Therefore he is more interested in reducing his cost of cultivation per acre rather than in increasing the net profit per acre. The idea of increasing his wealth and saving it for a rainy day—or a rainless day—just does not occur to him because he has never found it possible to do so in the past. Consequently, he does not want to venture beyond what may be described as subsistence farming. When once he has attained subsistence level, his wants are satisfied and he does not see the need to undertake additional responsibilities and risks over and above his needs. Therefore until such time as the peasants and farmers in the villages acquire

aspirations and a desire for advancement, a large increase in production per acre is difficult to achieve.

5

The role of trade unions in raising the level of productivity is obvious. In any industrial democracy, they have a vital role to play. It is their responsibility, not only to protect the interests of the workers and raise their standards of living, but at the same time offer responsive co-operation of living, but at the same time offer responsive co-operation to managements in their attempts to raise productivity. Just as managements have a social responsibility to the consumer to supply goods and services as economically as possible, so have the unions. Maintenance of good industrial relations is a vital factor in raising productivity and such relations cannot be maintained without the co-operation of the unions and their active participation. This was amply demonstrated during the Second World War when productivity in British and American industries reached very high levels because of the active co-operation of the unions concerned. Ultimately, the standard of living of any nation or group of people depends on their collective productive efficiency and it is in the interests of the unions themselves that productivity should increase. Only a full realization of this fact would enable unions to play their part in any productivity increase. They only can create the necessary enthusiasm among workers for measures to increase productivity.

In countries with a long history of the trade union movement, unions were originally formed to redress the economic grievances of the workers long before they were politically conscious. By the time the workers became politically conscious, the unions were already strong, independent bodies, devoted solely to the interests of their members and were able to exercise their influence for the benefit of their members. The relationship between the Trade Union Congress and the Labour Party in the United Kingdom is a good example of this. In India, however, political consciousness came before the advent of unionism and before there was any industry to speak of. It was therefore the political parties that took the initiative in the formation of unions and it was politicians who became office-bearers of trade unions. A political leader cannot wholly rid himself of his political personality when he enters the trade union movement. It was therefore inevitable that unions should have a political colouring from the very beginning. It was also inevitable that any splits, ideological conflicts or differences in policy in the political field should be reflected in the trade union movement also.

When once the political affiliation of unions is accepted as a fact, then external leadership of the unions follows as a corollary. If there should be a conflict of interests between the political party and the union, it becomes difficult for one who is a leader of

both, to decide always in the interests of the union and against the interests of his party—particularly when there are other parties and unions ready to exploit the situation. In circumstances like this, it is only natural that the charge of exploiting the unions for political purposes should be levelled against trade unionists.

A direct result of such political affiliation is a multiplicity of unions in every industry, in every factory and sometimes, even in every department. There is no doubt that in the past some managements, unable to adjust themselves to the changed conditions created by the formation of a union, or because they wanted to undermine what they considered to be unreasonable demands, encouraged the formation of rival unions. The existence of multiple unions also gives managements an opportunity to play off one against another. Recruiting workers known to belong to other unions in order to reduce the strength of the existing union, concluding agreements with a minority union and enforcing them on the majority, showing partiality in promotion and leave facilities to members of a particular union, refusing to negotiate with a majority union are some of the ways in which some managements indirectly interfere and aggravate the situation. Thus while managements might have aggravated the situation, the situation itself was created by the desire of political parties to have their own unions in order to strengthen themselves in industrial areas.

The existence of these multiple unions has been one of the major difficulties standing in the way of their contribution to higher productivity. The individual worker, if he is a non-union worker or if he has no strong political attachments, is often bewildered and confused by the conflicting policies of the various unions. He is more interested in his own personal safety than in feeling one with the workers of his department or factory. In times of industrial crisis, he feels insecure and this is reflected in the high rate of absenteeism just before a strike called by one union, but opposed by another. He often pays subscription to more than one union to avoid conflicting with any one of them. On the other hand, if he is a union member, then his attachment and his loyalties are to his union and its members only. He does not feel one with his co-workers if they are not members of the same union. His attitude towards them is one of indifference, if not actual antagonism.

When any industrial dispute arises over which the two unions take different attitudes, the work relationship in the factory tends to deteriorate between the members of the two unions. This is particularly so where the work of one worker depends and is controlled by the work of another belonging to a different union. Not only is productivity affected, but if the workers are piece-rated, their earnings suffer and this adds to the bitterness of the already strained relations.

Under these circumstances, it is impossible to integrate the workers into a single working group. Though they may join together occasionally for putting forward a common

demand, emotionally they remain apart. They have no common objectives or common enthusiasms or common loyalties and they remain rather as isolated groups thrown together by force of circumstances. In these conditions, it is difficult either to develop or to maintain good relations inside the factory.

The managements on the other hand spend considerably more time on the purely negative aspect of industrial relations, namely solving disputes. The existence of more than one union leads to a larger number of disputes. Even a minor dispute has a habit of developing into a major one if two unions happen to take two different attitudes towards it. They take a longer time to be solved and they have to be solved at a higher level. Managements which do not like the existence of unions in any case, thus get an opportunity to blame the unions for all their industrial relations problems and postpone decisions with regard to workers' demands on the ground that what is accepted by one union will be rejected by the other. In any dispute arising in a factory, the management naturally agrees with the union which comes nearest to their own stand on the problem. The other union immediately accuses the management of favouring one against the other; so that the actions of the management—even when they are impartial—are always suspected by one or the other of the unions.

In formulating their policies and procedures, the unions keep an eye on what their rivals are doing. Therefore, their own activities are directed towards gaining a tactical advantage over the others. Their demands are separate and often unrealistic and are designed for platform propaganda rather than for serious negotiations. In times of industrial crisis, more time is spent in mutual recriminations between the unions than in finding solutions to problems. The unions generally are reluctant to enter into agreements with the managements even when an advantageous agreement is possible, because they will lay themselves open to an attack by the other unions of having surrendered to the managements. Therefore, they resort to tribunals and adjudication so that they will not be called upon to take the responsibility for a possible adverse decision. There have also been occasions when a union has signed an agreement that is not in the interests of the workers merely in order to get a foothold in that factory with the management aid. They are also forced to support a worker even when he is wrong; otherwise, they might lose his membership to a rival union.

Because of the lack of unity among workers and different attitudes by the different unions, the strength of the workers is divided and their bargaining capacity is weakened. This weakness is revealed in the use of strong and violent language, in 'mass' demonstration in order to show their strength to others and in other undesirable tactics. Therefore, the unions remain at an agitational level and have no opportunity to attain maturity and interest themselves in those aspects which will make a more positive contribution to productivity and the welfare of the workers.

One of the by-products of external leadership is the coming into existence of the large industry-wise unions, consisting of office bearers who have had no experience of the industry. In widely spread industries such as textiles, jute or plantations, though there may be units (more popularly known as sub-committees) in each factory, the source of power is the central, regional union, having a membership of fifty to a hundred thousand workers. These are the registered unions, recognised for the purpose of negotiations and settlement of disputes and the office-bearers of these unions have considerable powers. Because of the lack of education of a majority of the workers and because of their inability to understand written agreements, even minor disputes have to be referred to these office-bearers for decision. These men, however, are busy people and their membership is spread over a wide area comprising many units and it is not always possible for them to be available for discussion of minor matters. The result is, there is a growing accumulation of unsolved matters leading to frustration on the part of workers and hasty action on the part of managements. Just as authority is centralized on the side of management, so power is centralized on the union side. Decentralization in both cases would help in a quicker solution of disputes.

When minor disputes are solved at such a high level, the criterion that is applied in their solution is not so much the grievance of the particular worker or group of workers, but rather its effect on the industry as a whole and immediately, the problem becomes complicated. Further, the union leader who is responsible for thousands of workers would quite often be prepared to sacrifice a few for an advantage somewhere else and consequently the problem is not likely to be dealt with on its merits alone.

Another result of external leadership in unions is the lack of technical knowledge regarding the industry whose workers they represent. Most of the present-day union leaders have not worked in an industry in any capacity. Consequently, in negotiations of a highly technical nature—such as workloads or standards of efficiency, etc—they have to depend on the opinion of the workers which is very subjective or on the technical information provided by the management. Therefore, the stand taken by the union leaders in these matters is often unreasonable and unrealistic. This again is not conducive to arriving at agreements which are fair to both parties.

Most unions in India are financially weak. Subscriptions are collected in a very sporadic manner and because of the existence of multiple unions, collections are difficult. Consequently, they do not have a strong secretariat; have no statistical information regarding some of the major problems of the workers and no proper means of keeping up continuous communication with their members.

Under the circumstances, the worker does not look upon the union as an organisation which belongs to him and which is established to protect his interests. If he is attached to

the unions at all on a permanent footing, it is a political rather than an economic association. His payment of subscription is sporadic and he treats the union as a sort of commission agent to get more concessions from the employer. When more than one union is competing for his loyalties, he does not hesitate to change his allegiance if it suits his short-term interests.

6

While a majority of the unions still remain at an agitations level, many managements have found it difficult to adjust themselves to the change of circumstances created by the establishment of trade unions. In every country managements have traditionally been authoritarian and the challenge of the unions has found them quite unprepared to meet the situation. Authority was exercised in the past purely through fear of dismissal or other punishment coupled with a certain amount of paternalistic benevolence. But in the new situation created these do not work with the result that the relationship tended to deteriorate and the number of strikes, lockouts, etc., began to increase in the post-Independence period. While there is every reason to believe the initial period of resistance to good relations has been overcome, we are still a long way from achieving good industrial relations in the country as a whole.

Good industrial relations in a democracy can exist only if the two parties—labour and management—are assured of independence and self-respect; if they accept and implement a common code of behaviour towards each other and have a degree of mutual confidence and understanding; if there is a realistic knowledge and appreciation of each others' problems and difficulties and the limitations within the area in which both have to operate. There should be a consistency in the basic policies of managements and unions and there should be no attempt at exploiting each others' weaknesses or difficulties. Only a consistent policy leads to a common understanding and confidence. There should be frequent discussions and consultations and sincere attempts should be made to settle grievances and disputes and settle them as quickly as possible by direct negotiations.

In recent years industrial relations in India have tended to become purely legalistic. Resorting to labour courts and tribunals has become a matter of habit both for managements and trade unions. They have tended to think in terms of precedents and legal rights rather than in terms of human relations. Conciliations and negotiations are often undertaken, not with a view to arriving at a settlement but merely to satisfy some provisions of the Act, before the dispute can be referred to a tribunal. During these negotiations neither party is willing to concede anything from the stand they have originally taken. Because they are afraid that any concession on their part at that stage would mean a weakening of their case before the tribunal.

Because of the spate of legislation in order to protect the rights of the workers and to introduce some sort of order into the confusion that existed in the early days of Independence, this legalistic approach has perhaps been inevitable. Nevertheless, as time goes on and as both unions and managements attain a level of maturity and a feeling of confidence in each other, it should be possible to have less and less recourse to labour courts and tribunals and more and more to direct negotiations and settlement. This is essentially an evolutionary process but efforts should be made to hasten its progress.

7

To sum up, the vast majority of workers in India come from an agricultural background. Industrial working methods and industrial discipline are strange to them and there is no provision in many of the industries to initiate and integrate them into an efficient working group. Nor are there any facilities for training them in the basic skills of their jobs. In-plant training apprentice schemes and trade schools are to be found only in a few large scale industries.

Because of the agricultural background of the average worker, the social change involved in making him an industrial worker is great. Such a change involves the conversion of an essentially rural, agricultural and hierarchical society into an industrial and democratic one. It means a change in the methods of living, thinking and working for millions of people throughout the country. And this change has to take place—not gradually as in other nations—but rapidly because of our desire to industrialise fast. This is likely to be one of the greatest social transformations in the history of India and unless it is carried out with due regard to the social and human factors involved it will impose a strain on the social fabric and will certainly stand in the way of a rapid rise in productivity.

If the workers have to contribute their full share to economic growth, it is vital that they should understand and accept not only the national objectives but the objectives of their own organisations. This is only possible if, (a) the unions are in a position to offer co-operation to the managements in all problems of productivity and (b) the managements consult their workers in formulating plans and objectives so that the workers will have a sense of participation and feel responsible for the achievement of those plans. From compulsion and coercion to co-operation and discussion is a big step. Nevertheless it has to be taken. Feelings of fear, anxiety and insecurity should be replaced by a feeling of belonging and pride in one's work. Only then can industrial efficiency improve.

CHAPTER TEN

Summing up

1

This book commenced with a definition of the concept of productivity and a brief description of the productivity movement in various countries. This movement represents a stage in the economic and industrial development in those countries as well as in their social thinking. If full benefit is to be derived from such a movement, then that stage should be reached not only in the industrial sense but also in the sociological sense.

During the past few years, hundreds of people have been trained in the various productivity techniques in almost all the industrial centres in India. Most of them have been drawn from various levels of managements in industry as well as from trade unions and they have gone back to their respective industries after a period of training. But if an evaluation were made today, it would be found that very few of them are applying these new techniques in their jobs. Not has productivity shown an appreciable increase in factories from which these trainees have been drawn. Training in productivity techniques is not like general education. Such training is given with the object of achieving a specific purpose. It is like a tool in the hands of an engineer. It is an asset only if it is used. Otherwise it is likely to go rusty and may become a liability. All these people who have been trained will gradually forget what they learnt during their period of training if it is not used. The result is that—as in many other cases—the achievements of the movement will not be commensurate with the efforts put in.

The fault, of course, does not lie with the productivity movement. If the sociological climate in a factory is not conducive to the introduction of productivity techniques, then the training of one or two supervisors in these techniques is not going to change the climate. Therefore, if the productivity movement is to make effective use of its limited resources, it should concentrate on staff training and implement the techniques only in those factories where the climate is suitable. Intensive application in selected factories would yield quicker results in terms of actual increase in productivity. People are more easily convinced and converted by a small demonstration than by months of training and propaganda and these factories can be used as example and centres for the diffusion of productivity knowledge and attitudes. A lump of sugar can be used to sweeten a cup of tea. But to use it to sweeten water in a well would be a waste of resources. Other measures are necessary for that purpose.

The productivity movement is only a stage in the industrial development of a nation. It does not and obviously cannot deal with the broader, long-term problems of economic growth, which are—apart from economic factors—a change in the beliefs, attitudes and relationships of people.

2

It may now be asked, are there not factors in our social environment that are conducive to productivity increase? There are, and these are briefly mentioned here.

One is the enthusiasm that has been generated in the country for all types of constructive and progressive activity. People feel that they are their own masters that their future and the future of their country is in their own hands. They have a sense of participation in a new and exciting adventure. Things are no longer at a stand-still and one can feel the climate of progress in the atmosphere. People have a pride in the various projects that have been undertaken and completed. Such enthusiasm and a feeling of confidence in the nation's future is a good asset and no planned development is possible without it.

The second is the desire to progress. This is noticeable particularly in urban areas and in those rural areas where there has already been a certain amount of progress. In these areas people are often impatient at the slowness of some of the schemes and projects and demand quicker action. Thus, while in villages for which nothing has been done very little criticism is heard, in those villages where there has been some improvement; there has been a vociferous demand for more. For example, in a village where a new well for drinking water has been dug, there is a demand that a pump-set should be installed so that the women do not have to draw water from the well. When a pump-set is installed there is a demand that there should be tap connections in the various streets so that they do not have to walk to the well. Such demands are an indication that at least in those areas where they have tasted the results of progress their levels of aspirations are rising.

The third is, what may be referred to as the human potential. The people of India are second to none in intelligence and hard work. They have a quick grasp of problems and an ability to learn both intellectual and practical skills quickly and thoroughly. They have inherited a long tradition of craftsmanship as well as learning. That a large number of workers in India, who, in spite of the handicaps of lack of education and training facilities, have become highly skilled mechanics and fitters is a tribute to their innate skill. Given the same opportunities, the average Indian can do a job as well as anyone else and better than many.

These are invaluable assets for any nation to possess. They are the fundamental requirements—the foundation—on which all economic and social progress is based. If these assets are to be fully exploited, all that is necessary is to provide suitable economic and social conditions.

It is not the intention of this book either to criticize or to ignore the undoubtedly substantial economic and social progress that has been achieved in India during the past fifteen years. Nor is it suggested that under the present social environment there will be no productivity increase. In fact, the industrial base in India has undoubtedly been broadened by the starting of basic industries such as iron and steel, machine tools and chemical factories and by the expansion of power facilities. Agricultural production and the consumer goods industries have also expanded. There are many factories in India today whose productivity compares favorably with similar factories in advanced countries. There are efficient managements running these factories. Some of the engineers, technologists and scientists have won considerable reputation for themselves in the international sphere. There are a number of trade unions which are well organized, efficiently run and fully representative of the workers. But the very fact that these organisations and people stand out among the rest and are so few in number is a commentary on the rest.

Similarly, there has been a great deal of social legislation since Independence. The Constitution of India lays down the principles of a secular democracy—equality of opportunity irrespective of caste or creed and certain fundamental rights. A number of Acts such as the Reform of the Hindu Code have provided the framework of social progress. But that progress itself is still to come in any significant measure. While from a legal point of view and on public platforms these changes are accepted enthusiastically, they are still to permeate the thinking, attitudes and behaviours of the people at large. Therefore, while progressive legislation is good and necessary, it must at the same time be accompanied by the creation of a sociological climate whereby such legislation becomes part of a nation's culture pattern. This has to be done not so much by the government but by social reformers and leaders of thought.

Further, there is a tendency in India to feel that things are progressing well since Independence. This feeling of complacency has been strengthened by the fact that India has undoubtedly done better than most of the newly independent countries of Asia and Africa and that many of these countries look to India for guidance and inspiration in their plans of social and economic development. Such complacency has been further strengthened by the tributes that have been paid to India's progress by the large number of distinguished visitors from abroad. In the pre-Independence days, foreigners came to India for many reasons—to rule the country as soldiers and administrators, to shoot tigers, to see if India was fit for self-government, and so on. They looked upon us as a subject people and our weaknesses were very glaring even to those who tried to be objective and

we were often offended that they should see only our faults and exaggerate them. But now, foreigners who come to India for whatever reasons, come as the guests of a free and independent people. Often they come at the invitation of the Government of India or are guided by them. They see the dams, power stations, steel plants and the community projects and are duly impressed. And the tendency of attaching undue importance to the views of foreigners still persists in India.

Any public criticism that exists in India is political rather than social and is based largely on the political philosophy of particular groups and individuals. One comes across objective social criticism only rarely. Often social progress is taken as inevitable because the moral basis behind conventional social values has been largely eliminated. Except the Prime Minister and a few others, leaders of thought do not as a rule bother about social change.

Therefore, the objective of this book is not to belittle the progress so far achieved, but to emphasise the need for social change as a pre-requisite for accelerated economic progress.

The major proposition put forward in this book has been that there are a number of factors in India that inhibit increase of productivity and, of these factors, social environment is one of the most important in the long run. If this contention is accepted, it follows that a deliberate attempt to change social environment will have its own contribution to make in increasing productivity. Looked at in the context, social change takes on a new and significant meaning.

All economic planning in India has been based on the assumption that the rural population of India has the same desire and the drive for material advancement as others. That is not always true. In fact, in a majority of cases, such desire is absent. This is also true of some sections of the urban and industrial population. Why is this so? What can be done to create in them a desire for a higher standard of living? What inducements—social or economic—are necessary to motivate them? Some of the possible answers to these questions have been discussed earlier. But a complete answer is still not known.

Similarly there are a number of socio-economic problems about which we are still in the dark. What are the problems of urbanization and the migration of agricultural workers into industry? How long does it take before peasants become industrial workers? How does this social transformation affect productivity in the new industries? A phenomenon that is very marked in the Indian economic scene is the resistance to all types of changes,

particularly technological changes. While such resistance is understandable when they lead to large scale unemployment, they are often resisted even when they are to the advantage of the people concerned. Nor is such resistance confined to workers alone. What can be done to minimize such resistance? Only the existence of a critical faculty with ability to analyse problems objectively leads to the development of new ideas and innovations. How can this faculty be developed in our educational system as well as in the community at large? And finally, what can be done to change some of the social values and attitudes that stand in the way of increased productivity?

These are some of the questions to which answers are still lacking. Only a large volume of sociological research will enable us to answer them. It may be considered by some that for a poor nation struggling in the process of economic development money spent on sociological research is a luxury. But it is only when we satisfactorily answer these questions that our planning will be more effective and our efforts more fruitful.

Training is another aspect of changing the social environment and increasing productivity. Training of an academic nature has necessarily to be provided by educational and technological institutions. But training on the job is an important aspect of productivity that has received very little attention in India so far. This aspect is particularly important in a country where the educational levels are low and no other opportunities of influencing people exist except mass propaganda. In fact, if there is one single aspect that is more important than all others from the point of view of an immediate increase in productivity, it is the systematic training of people at all levels of an organisation. In a country where most people who enter industry have an agricultural background and are unused to industrial work, such training alone provides an opportunity of industrial efficiency as well as social transformation.

The type and duration of training will naturally depend on the kind of job and the level of entrance of the individual concerned. But it should take into account orientation, induction and on-the-job training. It is such training that gives the workers and the staff a feeling of belonging, a spirit of enthusiasm and a sense of common purpose. It welds odd individuals who have been thrown together accidentally into a team co-operating for common objectives. It reduces the social distance that at present separates the staff and the workers in most factories and it develops the critical faculty which otherwise will remain dormant for ever. It develops common practices and habits and leads ultimately to a common understanding. With such training, problems of communication and co-ordination could be reduced to a minimum.

Even in sweeping the floor there is a good and bad way of doing it and even a sweeper would sweep better if he thought that he was contributing something to the organizational objectives instead of feeling that his was the lowest job in the factory. He would also be

more enthusiastic about his work if he had an assurance that he would not remain a sweeper for ever, but would be promoted to higher levels provided he showed efficiency, skill, energy and interest. One of the major reasons for the high productivity of Japanese industry is this importance attached to training at all levels from the top management down to the lowest paid worker. They are so well trained that to 'go slow' would be an effort for them while working efficiently would be a matter of habit.

It is generally found that while most people are agreed about the needs of training, they are also convinced that it is other people who need it and not themselves. It is therefore necessary that training should begin preferably from the top and right down to the bottom.

4

In the nineteenth and early twentieth century, a number of eminent Indians, imbued with a spirit of social service and highly conscious of the weakness of the Indian social system, devoted their lives to social reform. Beginning with Raja Ram Mohan Roy a host of men and women faced social ostracism and ridicule from their countrymen because they not only preached reform but exemplified it in their own lives and behaviour. Many societies were started for the re-generation of Indian society and these men and societies played an important role in laying the foundations of new ethical and social values. But they could not go very far because the resources at their disposal were extremely limited and the Government of the day was either in-different or even hostile to their efforts. In the ultimate analysis political power is necessary to enforce any social reform and gradually the emphasis shifted to politics. It was realised that political freedom was a basic requirement before significant progress in other fields could be made. In the twentieth century this realization drew the most eminent Indians into the political arena to the exclusion of other types of public activity. Thus, Gandhiji who was essentially a moral philosopher became the leader of the most intense political activity the country had ever witnessed. The result was that social reform and social problems received less attention in spite of Gandhiji insistence. To most public men it was just an adjunct to political work.

But even after Independence, the temptations of political power have kept many people from turning their attention to social problems. There is also a feeling that now that an elected Government is in power they will do everything that is necessary in all spheres of activity and all that the public need to do is to vote for them every five years. While the moral and ethical basis of the traditional society has been largely destroyed, nevertheless the attitudes and behaviors' still conform to the traditional pattern and have not adjusted themselves to the modern requirements. Therefore, if the social environment is to change

rapidly, leaders of thought in the country should devote greater attention to these problems and some at least among them should make it their life's work.

Social reform in this context has to start with beliefs and customs and attitudes of people. Only a change in these areas brings about lasting changes in society and social development.

From primitive times, man's allegiance and loyalties have gradually expanded from his clan or family to the village, caste, region and ultimately to the nation. In fact a person's cultural maturity can be judged by the number of people to whom he can extend his sympathies and with whom he feels as one. There are in India today a host of conflicting allegiances and loyalties. These groups are based on caste, religion, language, region, etc. Most people consider themselves members of such groups rather than as citizens of a nation. Loyalty and sympathy to such groups necessarily involves hostility to other groups formed on a similar basis and having the same characteristics. Often an individual is subject at the same time to more than one loyalty and consequently he does not know how to act. He is confused and consequently becomes ineffective. Or, the time and energies of people which could be used in constructive activity are wasted in fruitless controversies over trivial and meaningless problems.

If we are to create a homogeneous society with common loyalties, it is necessary that these conflicting allegiances should be reconciled where possible and altogether eliminated in case where such harmonizing is not possible. Some allegiances can be reconciled provided they operate in their proper sphere and do not interfere in areas that are really outside their scope. For example, religion defines essentially man's relationship to God. From a socio-ethical point of view there is no significant difference between one religion and another and it should be possible to harmonise religion with national allegiance. On the other hand the caste system is something that can never be reconciled to national requirements. So long as it exists, the loyalties of many people are bound to be divided. Contradictory demands are made on their sympathies as between caste and society at large. Industrialization has to some extent destroyed the economic basis of the caste system but the social basis is still largely intact and in fact influences industrialization. Inter-caste marriages are sufficiently rare enough to be talked about and even reported in the press. And yet, no leader of eminence has come forward to propagate the idea that inter-caste marriages should be deliberately, consciously and consistently encouraged. There is no other manner by which the social basis of the caste system can be eliminated, and unless and until that happens it will continue to exercise its influence on society and on productivity.

Rapid progress in the modern world depends largely on group activity and efficiency in organisation rather than on individual effort. As technology develops and organisations

become larger this becomes a vital factor. Therefore efficiency depends more and more on understanding and co-operation between various people in the organisation, on the confidence they have in each other and on the common loyalties they possess. But where people with multiple interests form members of such organisations, all these are lacking. So, a nation planning and preparing for economic progress is rather like a team at tug of war. Everyone must pull at the same time. If some do not or if some pull in the opposite direction, the result can easily be imagined. Therefore, if groups with conflicting interests have to co-operate for common purposes the only way of achieving that purpose successfully is to eliminate the smaller groups and to weld them all into one large group. That is to produce a homogeneous society from a heterogeneous one.

Then there are other groups with cultural and intellectual differentiation. The executive in a big firm in one of the cities of India, the scientist working in a laboratory or a university professor have very little cultural affinities with the farmer or the peasant in the village. Though emotionally they may have a feeling of kinship, the social and cultural affinities between them are extremely wide. Even within a factory the difference between the various levels of management and the workers is vast. Socially, linguistically and sartorially, they remain poles apart. Such differences exist in any nation between different layers of society but in India it is almost unbridgeable. The extremes of wealth and poverty existing side by side have been noticed and commented upon by many people. It is obvious even to the casual observer. But the extremes in cultural and social attitudes, the gap between intellectual sophistication of some and the traditional beliefs of many, these too stand in the way of integration and evolving a philosophy of common understanding which is so essential in any co-operative endeavour.

India is a vast country. One of the interesting things about it is the manner in which the natural resources are spread throughout the land: lignite in Madras, coal and iron in Bihar and Orissa, water power in the Western Ghats and oil in Assam and Gujarat. There is no self-sufficiency in any part of India and the harnessing of natural resources has to be on a national basis rather than in terms of narrow inefficiency and uneconomic regionalism. Similarly the regional characteristics of the people are complementary. The South Indian is calm, cool and intelligent, while the Bengali is sensitive; the Gujarati has acute business sense while the Punjabi is eminently practical. In the growth of a nation, all these traits are useful and necessary. In creating an all India type, a fusion of all these characteristics is essential. Therefore, social reform in the context of productivity should be directed towards the creation of an all India type of personality. An individual should think, not in terms of caste, community or religion, but in terms of the country. In fact it is already happening in the armed forces of the country. They cannot be recognised as belonging to any particular part of India. It is vital that such types should emerge also in the other services as well as in business and industry. There should be a synthesis of a new culture which will be distinctly Indian and still cannot be associated with any particular region or

language. It should have broad sympathies and a liberal outlook. It is not suggested that traditional values should be discredited altogether but where they interfere with economic and social progress they should certainly be changed. In fact, the genius of a nation consists in being able to incorporate new ideas into ancient wisdom and thus ensure a continuity of progress.

The Chinese aggression on our borders is not only a military threat; it is spiritual and a social challenge. Our ability to meet it depends on our realization of the common purpose as being supreme. The response in the country to this challenge has been great. But if this response is to be translated into effective action, the emotional unity that has been achieved should be translated into a social and cultural unity leading to a vast co-operative effort. Common sacrifice and suffering would help to weld such bonds. But social change is just as important in this effort as economic progress—perhaps more important because of the urgency involved. The dignity of hard work whether physical or intellectual, recognition and reward for merit instead of tradition, opportunity for all to rise to the limit of their ability, these should be recognized, not only on paper but should become a part of everyday life. The spirit of logical enquiry and of co-operative enterprise and a philosophy of common understanding should be developed. But such a change has to take root in the minds of men.
