Village Industries at Wordba which has designed a policy's wheel with

## Improved or Appropriate Techniques

On the one hand, we have a labour force that is not only abundant but redundant, and our capital resources are scarce; on the other, like other under-developed countries, we are faced with a technology which increases output per worker through increase in capital investment, but saves labour. This technology suits developed countries which enjoy high incomes and, therefore, possess a high capacity to save. It is out of tune in industrially backward, but populous countries with a dense agrarian economy like India, with low incomes and low margins of domestic savings-in countries with plentiful labour and little capital. Our problem is to work out production methods or techniques which will economise on capital or require less capital per worker rather than those which economise on labour or require less labour per unit of investment. In our conditions, obviously, it will be more conducive to development to apply the available capital extensively to a larger fraction of the labour force than intensively to a smaller fraction. Just as in agriculture we have to maximise production not per worker but per acre, so in industry we have to maximise productivity not per worker employed, but per unit of capital invested.

Special attention will, therefore, have to be given to organising innovations or promoting technological improvements in cottage and labour-intensive enterprises dispersed over the countryside, so that the output per head is increased even while the capital used is not large.

This means that the champions of village industries should welcome rather than resist modern techniques and links with modern industry. The success of the handloom industry in using yarn produced in modern factories of cotton as well as synthetics, and weaving them into fabrics which compete in the world markets, has a lesson of much wider implication. Gobar gas plants can make a great contribution in providing village communities with organic fertilisers and a gas which can be used as a source of energy.

Those engaged in industrial research should, for their part, concen-

trate on evolving the type of technology which can develop new cottage industries. The watch industry in Switzerland offers an outstanding example of decentralised production. A more recent instance is offered by the electronics industry which can be developed as a cottage industry. Still another instance is provided by the Central Research Institute for Village Industries at Wardha which has designed a potter's wheel with ball-bearings, that has not only doubled the production but also halved the physical effort.

In fact, there are a whole range of ideas waiting to be explored. In building houses, for example, bamboo and brick can usefully replace cement and steel.

Mahatma Gandhi, the torch-bearer of village industries and handicrafts, had a clear mind on this question. He was not opposed to machines as such or to introduction of improved techniques. He once said: "What I object to, is the craze for machinery, and not machinery as such. If we could have electricity in every village home, I should not mind villagers plying their implements and tools with electricity." Fifteen years earlier, he had said: "I would favour the use of the most elaborate machinery if thereby India's idleness and resulting pauperism could be advoided."

Nor was Gandhiji opposed to the use of devices or contrivances placed by modern science and technology at the disposal of man which helped ease the drudgery or lighten the burden of physical labour. Indeed, a handloom worker's cottage of his conception could be equipped with a telephone which saved time and avoided waste of physical labour. For, while a substitute of the handloom that was available, viz., a textile mill, served to create unemployment, exploit the labour of workers employed and concentrate wealth in the hands of a few, there was no substitute of the telephone at all, except that a man wanting to seek or convey information, walked the distance or used a vehicle.

Once a friend had asked Gandhiji whether he proposed to replace the railways with bullock-carts and, if he did not, how he expected to replace mills with spinning wheels. He wrote:

"I told him that I did not propose to replace railways with carts because I could not do so even if I wished. Three hundred million carts could not destroy distance. But I would replace mills with wheels. For railways solved the question of speed. With mills it was a question of production in which the wheel could easily compete if there were enough hands as there were in India." (vide 'Young India', dated May 28, 1925)

To revert: the scientific study of production techniques, however, has till now been confined almost entirely to Western countries where the main goal in view has been the reduction of labour costs rather than capital costs—with the result that in our country, where most of the

equipment has been western-designed, and industrial engineers largely western-trained, improved techniques even in small-scale industry are based on a context of high wages and cheap capital. If, therefore, India has to make the best use of its resources, its engineers have to conduct researches into production techniques and equipment that are appropriate to our conditions of low wages and dear capital. They have to rely on local resources and skills, and not merely ape the West. Our engineers will not prove unequal to the task, provided they are set the task specifically only if the Government accorded first priority to the problem and laid down guidelines for research institutes and university science departments. Considering that we have the third or fourth largest number of scientists and technicians in the world, there is no reason why solutions cannot be found.

In a way, to repeat the situation that faces India which is rich in labour but poor in material resources, poses a new economic problem and demands new technical methods for its solution. More specifically, the problem is how to develop a new type of industry—radically different from the present cottage and handicraft industries as also from the present large-scale factory industries either—a type which, for the same amount of capital investment, can at the same time produce more goods per worker than the former and provide more employment than the latter.

What is required of science and technology are methods and equipment that are *cheap* enough, that are virtually accessible to everybody, and, therefore, suitable for small-scale application, so that we have production by the masses as against mass production, and are compatible with man's need for creativity.

Hitherto, it is technology which has largely determined the relationship between the size of plant and efficiency. Higher technology has meant a bigger plant with greater efficiency which means greater production per worker. But, in sheer theory, science and technology are not concerned primarily with size or appearance; nor can science be confused or equated with technology. Fortunately, as if to meet the challenge set by dense populations to economic growth, technological improvements today are tending to promote a smaller rather than a large scale of operations, which make possible a larger increase in output with only a small increase in capital or, correlatively, the same amount of output with a much smaller amount of capital.

Our scientists have to proceed with the conviction that if the nation is to survive, it cannot afford to follow the socio-economic pattern of the west. Also, that science or higher technology does not stand in their way. Only if they strive and persevere, they will certainly be able to discover a technology which will be appropriate to our socio-economic conditions—conditions where labour abounds, natural resources are scarce and certain traditions still persist, some of which, for example, the caste system, have to be shed, while others, that have stood us in good stead for centuries past, for example, the joint family system, have to be preserved.

So the new, improved or appropriate technology will have to satisfy as many of the following criteria as possible:

- (a) It should seek to minimise the use of capital per unit of output or, conversely, aim at maximising production from a given unit of investment;
- (b) It should also seek to maximise employment per unit of investment;
- (c) It should aim at making the maximum use of local talents, raw materials and other resources available in the country, region or village, specially of the *renewable* ones;
- (d) It should minimise energy consumption;
  - (e) It should minimise pollution of the environment and help in maintaining ecological balance in Nature.

Needless to add, the aim of the discovery or invention of new technology is to provide or help provide one or more of the basic necessities of mankind, such as food, drinking water, clothing, shelter, health/medical care and the like at a cost which can be within the reach of the common man—the man who is living below the poverty line today.

"The concept of appropriate technology in this context", as Shri N. P. Singh, Secretary to the Governor of Karnataka, wrote to the author in a letter dated 19 March, 1979, "need not be kept confined only to the industrial sector, but must be extended to cover agriculture, housing, health and sanitation and, in fact, all other facets of human life-style and activities. In view of our country's predominantly rural population, the identification of problems concerning the rural areas, specially those of the small and marginal farmers, rural artisans and craftsmen and the landless labourers, and efforts at finding their solutions through the application of science and technology would obviously deserve special attention and support in this connection. An illustrative list of the specific fields that could be covered for this purpose in India on a priority basis would include:

- (a) Small farm technology;
- (b) Agricultural implements and tools;
- (c) Water management systems (both for irrigation and drinking purposes);
- (d) Low cost, but improved seeds, fertilisers and pesticides for agricultural use;
- (e) Post-harvest technology (including grain storage and infestation problems);
- (f) Processing of cereals and pulses;
- (g) Dehydration and preservation of fruits and vegetables, etc.;
- (h) Improved animal husbandry, poultry and dairy-farming techniques;

- (i) Energy systems including solar energy, wind power and bio-gas plants (both community and family-sizes);
- (j) Transportation systems in villages (including bullock-cart improvements);
- (k) Low-cost housing techniques and materials;
  - (l) Improved sanitation systems in villages/towns;
    - (m) Inexpensive medical and health care (covering 'Ayurvedic', 'Unani', Homoeopathic as well as Allopathic systems). It would seem important to initiate a programme of research in various indigenous systems of medicine along modern scientific lines;
      - (n) Educational technology for removal of illiteracy and spread of functional literacy, etc. Special emphasis has to be laid on the development of needed technical skills and attitudes of self-help in the people;
    - (o) Textile technology (covering the problems of 'Khadi', hand-looms and sericulture);
    - (p) 'Gur', Khandsari' and sugar-making;
    - (q) Leather tannery, shoe-making, ceramics, pottery, carpentry and problems concerning other rural industries, arts and crafts;
    - (r) Miscellaneous agro-based and forest-based industries;
    - (s) Rural engineering workshops for repair of agricultural machinery, implements, etc.; and
    - (t) Recycling and utilisation of human, animal and vegetation wastes, etc."

While it may be taken as established that science and technology can be harnessed to small machines which will require less capital, the question still remains whether they will also provide more employment, or, at least, not lead to unemployment or exploitation by the capitalist. However, if research is unable to make a break-through, we would prefer keeping our vast manpower employed with hand-powered tools rather than have a few capital-intensive automatic machines which may produce the required quantity of goods but will aggravate capitalism and render vast numbers unemployed.

In that case, that is, in the case of failure of research to find a way out, as already stated in previous pages, the country will do well to place or continue to place emphasis on (agriculture and) handicrafts and small-scale decentralised industries of low capital-intensity which will form the main pattern of the industrial economy. With increase in people's incomes there will be an increase in demand for industrial goods. If at this stage there are unemployed workers in the country, the State should ensure that the existing techniques remain unchanged, so that, in order to produce more or requisite quantity of goods, more persons may be put to

work. But if full employment has already been reached, then the State will allow replacement of existing techniques by improved techniques so that the existing number of workers may be enabled to produce more goods. And again, to repeat, as the incomes increase further and further, in other words, availability of capital outpaces the increase in the number of workers, so will the techniques go on improving further and further.

(n) Educational technicity for Jeneval of Hitteries and spicial of

consider engineers of legislation for the purpose of Supposing antiabecomes a free country converses ", said disadisticand/ducit Big 4946.0" of the consists will have in apportunity of hecomitis fratmary structedur.

## Trusteeship

Remains the question of ownership and management of large capital-intensive industries, howsoever few in number, which, in national interest, we will be obliged to have. Sheer justice demands that the owners of these industries do not get away with all the profits that will accrue to them from their undertakings. For, these profits are derived out of a combination of capital which, in the ultimate analysis, is the product of hard manual labour of the entire working-force of the country and of ever-advancing knowledge or science which, again, is the product of the entire brain-power of the country.

Since the days of Karl Marx, public ownership has been considered, and acted upon in various countries in varying degree as the only alternative to private ownership. The reader has, however, already seen in the previous pages how this alternative has worked out in practice in our country. As a way out, Gandhiji thought of a compromise between a minimum of State ownership existing, on the one hand, along with the rest of the capital-intensive economy to which the doctrine of trusteeship will be applicable, on the other.

Under the doctrine of trusteeship industrialists would be persuaded to give up ownership of their possessions, but retain their management. They were to use their talents to increase the wealth, not for their own sake but for the sake of the nation, and, therefore, without exploitation. The State would regulate the rate of commission which they would get, commensurate with the service rendered and its value to society. Their children would inherit the stewardship only if they proved their fitness for it.

The objective was a system of management and control of industry that would take account of the interest of labour, consumers, raw material suppliers, people living in the vicinity, and society in general, as well as that of shareholders. But this would be achieved without losing the expertise of the proprietors or managers, or the incentive to increase production.

Inasmuch, however, as in this matter-of-fact world it is not possible to persuade owners to give up effective control of industry merely out of benevolence and a sense of national duty, Gandhiji was prepared to consider enactment of legislation for the purpose. "Supposing India becomes a free country tomorrow", said Gandhiji on March 31, 1946, "all the capitalists will have an opportunity of becoming statutory trustees.... I would be very happy, indeed, if the people concerned behaved as trustees, but, if they failed, I believe we shall have to deprive them of their possession through the State with minimum exercise of violence. That is why I said at the Round Table Conference (1932) that every vested interest must be subject to scrutiny and confiscation ordered where necessary, with or without compensation as the case demanded."

According to a draft prepared by Prof. Dantwala and discussed between Kishori Lal Mashruwala, Narhari Parikh and Pyare Lal and approved by Gandhiji, the essentials of political Trusteeship can be summarised as follows in terms of a six-point formula:

- 1. Trusteeship provides a means of transforming the present capitalist order of society into an egalitarian one. It gives no quarter to capitalism, but gives the present owning class a chance of reforming itself. It is based on the faith that human nature is never beyond redemption;
- 2. It does not recognise any right of private ownership of property, except in so far as it may be permitted by society for its own welfare;
- 3. It does not exclude legislative regulation of ownership and use of wealth:
- 4. Under State-regulated Trusteeship, an individual will not be free to hold or use his wealth for selfish satisfaction or in disregard of the interests of society;
- 5. Just as it is proposed to fix a decent minimum living wage, a limit should also be fixed for the maximum income that would be allowed to any person in society. The difference between such minimum and maximum incomes should be reasonable and equitable and variable from time to time, so much so that the tendency would be towards obliteration of the difference eventually; and
- 6. Under the Gandhian economic order, the character of production will be determined by social necessity and not by personal whim or greed.<sup>1</sup>

The late Dr. Ram Manohar Lohia had drafted a Trusteeship Bill in 1964 to give legal shape to Gandhiji's ideas on the subject. The provisions of this Bill were applicable only to large companies, since

<sup>1.</sup> Gandhi, M.K., Trusteeship, Ahmedabad, Navjivan, 1960, p. 49.

TRUSTEESHIP 479

Gandhiji advocated State-ownership of industries employing a large number of workers. Medium and small-scale industries did not come under the purview of this Bill. On the other hand, the Bill offered financial assistance to individual entrepreneurs who would undertake to start a medium or small-scale business in the spirit of trusteeship. Each substantive clause of Dr. Lohia's Bill was based on relevant remarks made by Gandhiji during the course of his writings and speeches.

Dr. Lohia's Bill provided for the voluntary conversion of large companies owning industries, plantations, mines, trade, transport, etc. into trust corporations. It outlined a detailed scheme for the democratic management of the entire business of trust corporations. The existing managing agents would become the managing trustees, but they would be controlled by *Panchayats* representing the workers and the community. The Bill had provisions for the election and functions of the *Panchayat*, remuneration of the managing trustee, succession to the first managing trustee, salaries of supervisory staff, wages of workers, allocation of profits, payment of bonus, imposition of discipline, co-ordination with national plans, scrutiny of accounts and other matters. While fixing the remuneration of the first managing trustee, due consideration was to be given to the standard of life to which he was accustomed. The wages of urban workers had to be commensurate with the earnings of rural workers.

Although the Bill was optional and not obligatory, it did not leave the transformation of private ownership into trust ownership entirely to the sweet will of the capitalists. Clause 30 of the Bill enabled workers, through non-violent non-cooperation, to bring about such transformation and become owners of the concerns in which they were working. Such ownership saddled the workers with the responsibility of relating their wages to productivity.

The Janata Party which took over the Government of India in March, 1977 after the Congress Party's rule of thirty years, formally believed in the principle of trusteeship. "The Janata Party is dedicated to the task of building up a democratic, secular and socialist state in India on Gandhian principles", so said its constitution. The statement on economic policy, adopted by the Working Committee in November, 1977, declared that "the Janata Party will strive for the establishment of an economy which will ensure that even private property is used to subserve the common good in accordance with the trusteeship concept advocated by Gandhiji".

But the Party did not genuinely believe in what it professed, and made no attempt at all to translate its profession into practice during its spell of 28 months: no experiment was ventured.

substructive characters [3x chooled highly was bosed on probabling consiste an add

# The Middle Path of Self-employment

Today our industrial economy is a mixed one: it consists of two sectors—one private, the other public. The private sector, representing capitalism, calls for a highly progressive system of taxation and direct transfer of tax receipts to the needy and for public spending on projects that benefit the poor more than the rich. Per capita income, however, being low and the aggregate national income distributed very unevenly, the tax base is extremely narrow. Direct taxes have, in consequence, to be severely progressive and large-scale resort to indirect taxes becomes necessary. But while a highly progressive tax system discourages enterprise and investment, thus retarding economic expansion, indirect taxes are regressive, that is, their incidence falls more heavily on the poor than on the rich and, applied extensively as they have been in India, raise the cost of production throughout the economy.

So far as the public sector representing (Marxian) socialism (or, shall we say, Communism) is concerned, as we have already seen, its performance is disappointing in the extreme. There is no question of taxation, but it offers little or no surplus that may be directly or indirectly transferred to the poor and the under-employed or may be invested in projects which will serve their needs. Nor can it otherwise serve as a model for India, for while Communist countries have done away with extreme inequalities, they have paid too heavy a price in terms of individual freedom and initiative.

History would tell us that freedom and equality are sworn and everlasting enemies: when one prevails, the other dies, or disappears almost altogether. Leave men free, and their natural inequalities will multiply almost geometrically—with the result that a point is reached where the strength of ability in the few rich is rivalled by the strength of numbers in the many poor. Then the unstable equilibrium generates a critical situation, which has been diversely met by maintaining freedom, redistributing wealth through legislation as also taxation, tariff and pricing policies as, for example, they have sought to do in the U.K. and the U.S.A. in the West and Japan in the East—or by making men equal

(they were not born equal), but by sacrificing freedom through revolution as they sought to do in the USSR in 1917 and China in 1949.

So that the objectives of equitable distribution and full employment are easy to achieve if freedom or democracy is given up, and the latter easy to maintain if the former are sacrificed. It is largely because egality, employment and democracy are extremely difficult to achieve together, that some people in our country are prepared to give up egalitarianism, and others democracy. But Indian economic policy would have to strive for all these objectives at the same time. The need, therefore, arises for India to develop an alternative to the two extreme forms—capitalistic democracy as it originally developed in the Western countries and democratic centralism as it is practised in the Communistic States.

Inasmuch as practical ability differs from person to person, inequality in acquisitions will continue, howsoever freedom may be repressed. The experience of the USSR has proved that the dream of absolute equality between man and man is unreal. Individuals who are unequal in intelligence or ability, cannot, even in the long run, possibly be made equals in power or wealth by any action of a Government. Man's qualities are partly innate, partly the result of environment or a learning process. The Socialists believed that if only the unfavourable environment in which a worker's children lived, could be changed, they would be able fully to develop their personality, both with regard to their capabilities and with regard to their tastes. But insofar as any variation in the intelligence quotient (I.O.) is at all attributable to genes—and nobody has said that genes do not count at all-difference in intelligence will also continue. That is, no amount of compensatory education or equalisation of the environmental factor will make the I.O. of everybody equal. The controversy, therefore, resolves itself into the question whether I.Q. is more attributable to heredity than to environment, or vice versa. The author is inclined in favour of the former view.

Mahatma Gandhi once said: "Children inherit the qualities of parents no less than their physical features. Environment does play an important part, but the original capital, on which a child starts its life, inherited from its ancestors." As a corollary, he said on another occasion: "My ideal is equal distribution, but as far as I can see, it is not to be realized. I, therefore, work for equitable distribution."

Consistent with individual freedom in regard to the choice or operation of one's economic life, therefore, all that we can and need do, is, first, to put a curb or a ceiling on economic power by imposition of physical limits, where feasible, both on existing possessions and future acquisitions, or through differential taxation on incomes, and through whatever other measures that are possible, so as to reduce these inequalities to the minimum; and, second, to regulate or demarcate the techniques or the mode and scale of economic operations, particularly in industrial

<sup>1.</sup> Mahatma Gandhi, Experiments with Truth, p. 381.

production, for the future, so that monopolies of wealth or gross inequalities in incomes, that prevail in our economy today, do not re-emerge. A technique of production not only generates certain income but also serves to distribute it in a particular manner.

Under the system advocated in these pages, which may be called Gandhian socialism or liberal capitalism informed by the Gandhian approach, it is simple labour-intensive techniques and small-scale decentralised production that will constitute the main-rather the overwhelming—pattern. Inasmuch as the initial distribution of the national income under this system favours the workers and, thus, circumscribes the scope for monopolies, there is little or no need or occasion for redistributing it through the agency of the State. For, it is the techniques which define the relative participation of different agents in the process of production and, hence, their shares in the incomes that arise. In labourintensive enterprises it is labour that gets the largest share; in capitalintensive units, the capitalist. Further, perhaps, everybody will agree that self-employment which simple labour-intensive techniques will ensure, is any day better than wage-employment or doles. A course, under which an overwhelming percentage of the people individualy earn their own living, that is, avail themselves of their own means of production and are not dependent on any one else for their livelihood, is decidedly a far better course than one under which wealth is first created by, and concentrated in, the hands of a few individuals, or for that matter, in the hands of the State itself, and then the profits or surplus value is transferred to, or distributed in various forms, amongst the deprived, through the agency of a bureaucracy.

equal. The controversy therefore resolves riself into the question.

# Concrete Measures for Decentralisation (and Employment)

It is economic policies, largely copied by us from the West, and followed over a course of more than three decades, that have resulted in deepening poverty, mounting unemployment and widening income disparities, in other words, increasing concentration of economic power in the hands of the Government and a few private citizens—with the bureaucrats and a few industrialists draining the countryside of the needed resources, with attendant evils. Obviously, unemployment is the most menacing and baffling problem out of the three. What is most disturbing about unemployment is that its burden falls on the young. Men at an age when they are at their most ambitious, most yearning, even most idealistic period of their lives, are subject to the humiliation of having failed. Nothing is more likely to sow the seeds of strife and discontent and, consequently, of political instability than unemployment.

Because of a high birth-rate operating on a very massive total and consequent dwindling of the size of land-holdings, increasing mechanisation of industrial production and services or substitution of mechanical power for human labour, and a stagnating economy, unemployment, open or disguised, is increasing fast. Therefore, more pertinent than the 'Garibi Hatao' slogan will be the 'Bekari Hatao' one. For, when employment has been found for all the workers in the country, poverty would stand eradicated automatically. So, the significance of employment, rather productive employment, cannot be over-stressed. In fact, just as the morale of an army depends first and foremost on the care it takes of its wounded, and the risks it runs in order not to abandon them, so will the quality of our economic policy or political leadership be judged by how it proposes to serve or uplift the underdog, the weak, the unemployed, the speechless—all those who are laid low, and are not sure of their next day's bread.

Unfortunately, it is not yet realised fully—even in political circles—that, unless the faulty economic policies that are responsible for the

present situation, are radically changed, there can be no redemption: any number of Government jobs or the rural works programmes or slum-clearance schemes, etc., will not provide a lasting or complete remedy of the cancer of unemployment that is eating into the vitals of the nation. The ultimate objective of national policy should, therefore, be not just to provide any kind of programme or jobs, but to provide work that is economically productive. Doles or Government jobs to unwanted hands would lead only to more and more inflation.

According to a recent study on 'Population, Food and Land Inequality' by Ashok Mitra, Professor of Population Studies at Jawaharlal Nehru University, and Shekhar Mukherji, India has the capacity to produce as much grain as its estimated 950 million people will need in the year 2000. "On any showing", the study goes on to say, "the Indian cultivator looks competent enough to deliver the goods, provided the inputs are made available to him and the disabilities of the small producer are progressively removed."

However, "the nation has on its hands an extraordinary situation in which two-fifths of the population go without enough cereals and pulses, while both production and buffer stocks in the hands of Government go on increasing", the study observes.

Two good harvests, if not one, might as well result in a catastrophe with agricultural prices crashing, buffer stocks still further rising and rotting, crop acreage shrinking and yet with almost a constant proportion of the population going chronically hungry. So that the problem today is not so much or merely of production, as or equally, of demand or off-take. Off-take or consumption, in its turn, depends on the purchasing power of the people. Purchasing power will be derived from productive employment—employment that will produce some material wealth: unproductive employment, to repeat, will only add to inflation. Now, this requires a radical restructuring of the economy which the political leadership must be prepared to undertake without loss of time.

ILO Director-General, Mr. Francis Blanchard, told delegates to an ILO Asian regional meeting, which opened in Manila on December 2, 1980 that by 1987, 818 million Asians, excluding mainland Chinese, will be unable to meet even basic necessities, compared with 759 million destitute Asians six years ago.

Mr. Blanchard said a *lack of jobs was at the root of Asian poverty*, adding that at the beginning of 1980 unemployment and under-employment rates had hit a 'staggering' level of 40 per cent, or more than 200 million people.

He said the focus of the attack on poverty should be concentrated on the rural areas, where majority of the impoverished Asian masses lived. Looked at critically, it is the centralisation of industrial production that has led to concentration of economic power and unemployment, and it is unemployment that has led to poverty. That is why Mahatma Gandhi talked of decentralisation by which he meant dispersal of manufacturing industry—in fact, every other economic activity also—over the vast countryside of our land, investment of capital in small units or fractions in place of the huge investments that our large factories embody today and, of course, decentralisation of management where the worker is his own employee and manager of his enterprise. Production and distribution, he said, should be a simultaneous process which could only be done by adopting the basic principle of decentralisation in production. This not only secures dignity to the worker but is also suited to Indian conditions—to our factor endowment where labour itself is capital.

### AGRICULTURE

Although multiplication of non-agricultural resources is the ultimate solution of unemployment and under-employment, yet, if proper priority is accorded to agriculture and necessary investments made, agriculture itself can, in the short run, provide far greater employment than does manufacturing industry today.

While, according to the FAO Production Year Book (1970), India, a low-performance country in agriculture, carried 39 workers per 100 acres in 1970, the figure for high-performance countries like Japan, South Korea, Taiwan, and Egypt in 1965 stood at 87, 79, 75 and 71 respectively. These four countries are the world's models of small-farm labour-intensive agriculture. They have the developing world's highest yields per acre, the highest income levels for small farmers, and the lowest capital cost of agricultural advance.

Once we accept the concept of building from the bottom to the top as Gandhiji had pleaded, the centre of importance will shift from the city and the large factory to the village and the cottage industry. As Gandhiji used to say, India lives in the villages and, in spite of continuous exodus from the villages to the cities, the village still dominates, and will continue to dominate. In fact, in 1975 only 6.1 per cent of the population had been living in large cities (as compared to 7.1 in 1960) and the rest of the population lived in small towns or villages. Out of the total of 18.0 crore workers as per 1971 Census, 12.9 crores or 72.0 per cent were engaged directly in agriculture and allied occupations.

It is needless to do so here, yet it may be pointed out that peasant proprietorship where the peasant is proprietor of the land under his actual plough, and which has been recommended in Part I of this book is, next to a handicraft, the best form of decentralised economic activity from the points of view of location, capital investment and

management. A system of family farms which is another name for peasant proprietorship, or small-scale farming, not only produces more, but also employs more men per acre and creates conditions for promotion of a democratic behaviour than large-scale farming of whatever type does.

However, as irony would have it, land reforms carried out in India after the attainment of political independence have only served to greatly swell the number of the unemployed or under-employed. A very large number of tenants or sub-tenants who were summarily thrown out or allowed to be thrown out of their land-holdings by the landlords, had no alternative but to join the ranks of agricultural labourers and marginal or sub-marginal farmers.

If improvements in the existing techniques or technologies (other than mechanisation) are effected, then, experience shows that the demand for labour will increase. Employment is generated not only in activities like terracing, bunding, gully control. compost-making, land reclamation, soil conservation, afforestation, double and triple cropping, new techniques of sowing, weeding, pest control, etc., but also in post-harvest operations, including transport, warehousing and processing. Seen from this angle, it is clear that under-employment obtaining in villages today is, in a large measure, traceable to stagnant techniques.

Construction of irrigation works leading to higher production constitutes another virtual source of potential large-scale employment. This includes construction of wells, digging and repair of tanks, extension of irrigation channels, digging of ditches or execution of drainage works, and building of dams. The quantum of additional employment in agriculture has been estimated in the newly-irrigated areas at as high a figure as 60 per cent.

Construction of houses and roads also constitutes other sources of employment. In fact, there are unlimited possibilities for employment in the countryside itself. Yet, all-too-often, machine-oriented bureaucrats believe a bulldozer or earth-remover can do the job better. Lesotho, which has the worst soil erosion problem in the world together with an appallingly high outflow of its young men to the South African mines, had all its valleys contoured (as an anti-erosion device) by giant Australian machines. Yet the job could just as easily have been done by hand and as cheaply.

We must, therefore, understand that if the objective of employment is the dearest to our heart, no encouragement should be given administratively or financially, at least in areas and regions where agricultural labour is plentiful, either by way of subsidies, cheap and easy credit, hire-purchase facilities and price control, or even through extension services, to help extend the use of large machines in agriculture which serve to displace labour. Mechanisation helps a farmer in cultivating or

controlling a larger area of land, rather than in increasing per acre production (which is what has to be aimed at in India). The main policy rule could, therefore, be to emphasise those elements in modern technology which do not displace labour—seeds, fertilisers, and pesticides—and as has already been pointed out in the previous pages, those forms of capital formation which use a great deal of manpower, such as levelling and clearing land, extending irrigation and drainage, fencing, etc. If agriculture has to be mechanised, it should be mechanised, as Gandhiji pointed out, with machines that supplement human effort and ease or lighten its burden rather than supplant it—for example, the Japanese style of farm machinery.

The recommendation made in Part I that our people should increasingly take to non-agricultural occupations, should not cause any confusion. All that was intended was that, if our people remain content with agriculture, they will remain poor, not that existing labour in agriculture was fully utilised and, therefore, there was no scope for further employment in agriculture or that under-employed persons should not take to or remain in agriculture, even though non-agricultural occupations (for whatever reason) are not coming up speedily in our country today. That per capita non-agricultural incomes in almost all the countries are, on the average, higher than agricultural incomes, and that the standard of living of a people has increased and, in a country with a dense agrarian economy (or, where land-man ratio is very low) like India, will increase only if and when agricultural workers have shifted to non-agricultural occupations, are hard facts of economic life which cannot be disputed.

## MANUFACTURING INDUSTRY

In view of all that has been said in the previous pages, one might legitimately wonder, indeed, whether India ought ever to have set up in the past or to continue setting up even today (when things have worsened so greatly) capital-intensive enterprises with a view to increasing productivity per man before all the people without jobs had been fully absorbed into employment. A correct appreciation of our problems could not be expected from the Britisher, when capital-intensive industries began to be set up in our country. The regret, however, is that despite the frightening proportion which the unemployment problem has attained, an unthinking dedication to raising productivity per man (through big, automatic units) should still be so universal in our country. But if national interests have to be served, the policy followed hitherto in this regard will have to be drastically changed. Handicrafts and labour-intensive enterprises must come to occupy the economic scene of the country overwhelmingly.

Wrote Dr. Kumarappa: "The solution to widespread poverty does

not lie in large-scale production which, under a system based on private enterprise, accumulates wealth in the hands of a few, but in spreading production among as many units as possible, each of which will produce wealth for itself. Wealth will then be automatically more evenly distributed. Instead of there being a few millionaires, on the one hand, and the starving millions on the other, we shall, if we replace large-scale manufacture by cottage production, have no millionaires, and what would otherwise have gone to fill their pockets will have made thousands of villagers more prosperous. The best charity towards the poor is not to distribute wealth, which is demoralising both to the one who gives and to the one who receives, but to provide work which will bring life, hope and joy in addition to feeding the starved body."

It is baffling, indeed, to find that while, on the one hand, hundreds of millions of people in our country are going without work, on the other, we suffer from lack of goods and services (because people are not being put to work). The total output of a country can be raised in two ways: either by raising productivity (output per person employed) or by increasing the number of persons employed. In an economy where everyone is employed, it is only the first way which is open, that is, every effort has to be made to increase productivity, whether by capital investment, by better training or organisation of the labour force or by developing new techniques of production. In a country, like India, however, where unemployment is widespread—where land and capital are limited and manpower virtually unlimited—it is the second way which applies. It is economically more worthwhile in such a country to raise output by increasing employment, with productivity (that is, output per worker) constant, than by increasing production per unit of fixed capital investment, with employment constant. In our circumstances the one rule of thumb has to be to substitute, wherever possible, capital and labour for land in agriculture, and labour for capital in industry.

Richard D. Gregg, an exponent of Gandhian economics, has, in his book, A Philosophy of Indian Economic Development, 1958, published by the Navjivan Publishing House, Ahmedabad, discussed in an admirable manner how millions of engines in India, in the form of unemployed and under-employed persons, are lying idle, how easily and cheaply the machines or devices, for example, spinning wheels and handlooms, on the one hand, and the raw materials (cotton and timber) on the other, are available, and yet it does not occur to us that the engines can be attached to the machines and, thus, our poverty eradicated in a large measure. It will be suicidal for India, Mr. Gregg argues, if the solar power stored in the hands and feet of hundreds of millions of her inhabitants is allowed to run to waste in the impossible attempt to replace it with steam, electric energy or such other power for the purpose of sustaining physical existence.

<sup>1.</sup> Capitalism, Socialism and Villagism, p. 122.

The reader has already seen that most of the cottage industries or handicrafts have gone out of existence, throwing millions of workers out of work—and those which survive, are on the way to disappearance—because, in a free market, benefits of decentralised, labour-intensive types are insufficient to offset, at least financially, the superior technology of the capital-intensive modern industry. So, if we want to revive the labour-intensive enterprises or to ensure that the few which still exist, survive, we will have to take steps to protect them against competition by the large, automatic industries.

As a solution, many of those who have genuine sympathy for the small man, have contended that, inasmuch as the fiscal policy in India—particularly, the system of direct taxation with its investment allowance and tax holiday related to the size of capital employed—provided a bias in favour of capital-intensive undertakings and has led to a decline in the intensity of labour in our industrial enterprises, we should so orient or re-orient our fiscal policy that it will promote employment. Many a suggestion has been put forward with a view to removing the existing policy bias in favour of capital-intensive industries. Among the measures often suggested for promoting employment, the notable ones are the (i) grant of a tax rebate for labour-intensive industries; (ii) withdrawal of all fiscal incentives related to capital employed; and (iii) disallowance of interest as expenditure for tax purposes.

Sponsors of the proposals proceed with the presumption that modern industry will remain, and will keep on growing: only, that acceptance of these proposals would provide more employment than it is doing. They forget that unemployment or under-employment, as the reader has seen in earlier chapters, is a direct consequence of modern technology. In other words, a modern mechanised industry requires more capital than labour for its establishment and operation. In view of this hard fact, which lies at the root of the question, it would be unreasonable to expect that the implementation of employment incentives (even if they are honestly and successfully administered), would engineer any worthwhile shift in favour of labour-intensive methods of production and that this by itself would solve the unemployment problem. In most industries, technology is so powerful a factor that cheapening of labour through incentives would not induce entrepreneurs to use inferior or labour-intensive methods of production.

Given the freedom of choice and necessary capital, most entrepreneurs would prefer to deploy costlier machines than employ more workers (i.e., prefer capital-intensive processes to more labour-intensive ones), not only for reasons of profitability (in a distorted factor-price situation) but also because (i) machine management appears to be inherently simpler than labour management and (ii) the problem of labour management seems to grow more and more acute with the increase in the number of workers employed under one roof.

So, the scope for using the tax system with a view to influencing the

factor-mix in modern industry—in other words, to promote employment at the cost of capital—is limited, very limited indeed. The tax incentives will, at best, prove mere palliatives, and not cure the disease of unemployment.

After reviewing the tax incentives for industrial employment allowed in a number of countries, George Lent had come to the following conclusion:

"The experience of developing countries provides little support for the belief that tax incentive can be an effective instrument for the creation of employment in industry. Taxation is greatly overshadowed by other economic and political considerations in the attraction of new industry, and, at best, tax incentives only marginally influence the investment decision. Tax benefits would have even less leverage in inducing the substitution of labour for capital in many industries where factor proportions are fixed by technology."<sup>2</sup>

The following excerpt from the 'Statesman', New Delhi, dated July 28, 1980 typifies yet another solution of the unemployment problem usually advocated by some of our politicians: they want to save or establish small or cottage industry without restraining the monster of big, mechanised industry:

"A large-scale rural development programme is being launched by the U.P. Government. Rupees 50 crore will be invested this year in schemes to generate job opportunities in rural areas, according to the Minister for Planning and Cooperation, Mr. Brahma Dutt.

Speaking to a delegation of the Appropriate Technology Development Association, Mr. Dutt underlined the need to evolve an effective technology to help in optimum use of the vast manpower in rural areas and increase the individual's productivity to enable him to augment his income.

Asking the ATDA to prepare specific projects for employment generation in the rural areas, he said, projects for cotton yarn spinning, sugar and cement manufacturing units could be taken up by organising cooperatives of the rural unemployed in different parts of the State."

It is forgotten that the 'projects for cotton yarn spinning, sugar and cement manufacturing' cannot possibly compete with large, mechanised units already in the field unless the latter are curbed or the former are

<sup>2.</sup> Tax Incentives for Industrial Employment by George Lent, IMF Stall Papers, 1971, p. 399.

subsidised by the State—which cannot be a permanent strategy and will make no dent on the vast problem that we face.

With no immediate prospect of jobs catching up with the jobless, a number of States have already introduced some kind of unemployment allowance scheme. The Central Government for its part has no plans to introduce any unemployment allowance scheme on a national scale, and rightly. Given the number of unemployed people, viz., 16.9 million in the age group 15 to 59 according to the 32nd round of the Survey, an allowance of Rs. 100 a month, as per national minimum wage of Rs. 4 a day suggested by the Bhoothalingam report, would mean an expenditure of Rs. 2,028 crores a year excluding the cost of administering the scheme. This is simply impracticable. Moreover, in our country, the attitudes of the people being what they are, once the scheme is introduced the number of the unemployed or allowance-seekers will soar up unconceivably.

The youths belonging to the All-India Students' Federation and the All-India Youth Federation courted arrest for five days, November 23 to November 28, 1980 in New Delhi with the slogan of 'jobs or jails' on their lips. Similarly there has been a big rally in Liverpool (United Kingdom), on December 1, 1980 against unemployment which was addressed by leaders of the Labour Party. The unemployment figure in UK today stood at 21,75,000. Rallies, strikes, demonstrations or other kinds of protests or civil disobedience movements might serve the purpose in United Kingdom or Australia, but not in India. When we talk of the problem of unemployment in our country, we must remember that we are not talking about a few thousands or a few millions but rather more than three hundred millions of people who are unemployed or under-employed. The size of our problem puts it beyond any kind of little acceleration, any little reform, improvement or inducement, and makes it a matter of basic political or economic philosophy. Whether India will be able to bring about the necessary transformation and solve the problem, depends upon whether its leadership can summon the necessary political courage.

The unemployment problem is largely a creation of modern technology, and will be solved only by a radical change or reform in technology or techniques of production in large spheres of the economy. Mere demarcation of the sphere of small-scale (not cottage) industry by administrative orders, as the ruling Congress Party has been doing all along, or the Janata Party did for two years or so, will solve no problems. The then Prime Minister, Shri Morarji Desai, in his speech during the budget session in 1977 dwelt for half an hour on cottage industry as being the only cure of unemployment but did not tell the Parliament a word as to how it could be established or survive against the competition of the modern machine. Big companies already working in fields which labour-intensive enterprises once occupied, or which they

can occupy today, will not allow new decentralised units to grow and prosper. Any reservation in favour of cottage or small-scale industry has a meaning or will be effective only if it is backed by legislative measures which were recommanded long back by the Official Bhat Committee and whose recommendations were torpedoed by the money bags of big business.

The election manifesto of the Janata Party had declared, as long ago as in February, 1977, that "measures will have to be taken to demarcate areas of differential technology and to provide for statutory reservation of spheres of production for small-scale and cottage industries". This declaration was re-inforced by way of a resolution on economic policy adopted by the National Working Committee of the Janata Party in July, 1977 in the following words: "What can be produced by cottage industry shall not be produced by the small-scale and large-scale sectors and what can be produced by the small-scale sector shall not be open for large-scale industry."

The ultimate solution of the economic problem not only of agricultural labourers but also of tens of millions of marginal farmers and of the other poor or unemployed and under-employed persons in the country will depend, by and large, on development of non-agricultural resourceson cottage industry or other labour-intensive enterprises—which will, in turn, depend mainly on increased agricultural production, curbs on modern industry and a change in the mental attitudes of our people or a transformation of the national psychology. Obsession with land re-distribution which could at best, buy some time, should not, therefore, be allowed to distract our attention from the real cure of the ailment any more: not that the law relating to imposition of ceilings on land possessions should not be simultaneously amended and made more radical and effective, but that devotion of time, energy and resources of the nation or the Government to any scheme whatsoever other than revival and reestablishment of cottage and other labour-intensive enterprises will only aggravate the problem.

If we mean business, therefore, a strict law demarcating the spheres of various industries will have to be placed on the statute book to the effect that no medium or large-scale enterprise shall be allowed to come into existence in future which will produce goods or services that cottage or small-scale enterprises can produce. As a corollary, existing mills or factories that are manufacturing goods, for example, textiles, which can be produced on a small or cottage scale, will not be allowed to sell their products within the country, but will have to export them. This directive may be implemented not all at once, but in phases. Government will do all that it can to help such industries compete in foreign markets. If they cannot so compete, they may well close down, but the internal market in such goods henceforward shall remain the exclusive preserve of small or cottage industry.

There is no logic behind Jawaharlal Nehru's opinion expressed in

a letter to Mahatma Gandhi dated October 9, 1945 that "if two types of economy exist in the country, there would be either conflict between the two or one will overwhelm the other". The art or object of Government, however, consists in holding a balance between conflicting interests: otherwise, we need not have a Government at all.

Once the two decisions suggested above, viz., regarding statutory demarcation of spheres of production of the various kinds of industries and export of goods of most of the existing large-scale industries to foreign markets—are taken, and taken firmly—the Frankenstein of unemployment will have been laid to rest without the Government having to lose a moment's sleep over it, and without the problem of capital, electric energy and technical know-how having to plague the Government or the entrepreneur.

Today, the country finds itself thrown into a predicament of misinvestments, which have, as time has passed, led to further and furthermore misallocation of more and still more real resources in the name of continued growth and employment. For instance, we went ahead and set up factories for luxury goods and services and created a vested interest among the fortunate members of the working class in those industries. Plan after Plan, we were compelled to allocate financial resources, including foreign exchange, for the maintenance of those units, for we thought and still think that, if we now turned back, thousands of workers would be thrown out of jobs. Time has arrived, however, when the political leadership of the country took courage into both of its hands and took the above two steps; otherwise nothing can prevent the country from going down the drain.

The above approach reconciles the dictates of social justice (and employment) with the need for increases in GNP. Just as in the case of agriculture, there is normally no conflict in the field of manufacturing industry either, between maximising production and maximising employment. Further, to reduce unemployment is to raise consumption levels, especially of those who most need increased consumption (and, incidentally, also to meet the argument of those who want to strengthen the country's economic independence with a view to reducing its political vulnerability).

To the critics of this course one may point out that even sophisticated industries like steel, sugar, jute and cement are able to go on because of the protection they get against foreign competition through the tariff policies of the Government. The aluminium industry may get cheap power at the rate of 2 to 4 paise per unit while the poor peasant has to pay 5 to 6 times as much. The State Industrial Development Boards seek to entice industries to their respective States by offering facilities like free land, cheap credit, tax rebates, cheap power, roads and railway sidings, schools and health facilities and what not. Crores and crores of rupees are being sunk annually on the sick textile mills. Other examples of hidden and open subsidies to the large-scale sector, allegedly

in the interest of the 'masses', can be multiplied endlessly.

In a way, to revert: the real choice in our country is not so much between large and small-scale industry, as between power-driven industry (large or small), on the one hand, and cottage industry operated by hand, on the other. Only the latter can provide gainful employment to the millions in the villages who are busy during the sowing and harvesting seasons, but remain idle for the rest of the year. The 'colonial' relationship, which has developed between towns and villages, will disappear only when consumer goods, ranging from soap to cloth, are both produced and sold in villages.

A demarcating line will, therefore, have to be drawn between cottage and small-scale industries, too, the latter being curbed or regulated in the interest of the former. Although small-scale industry provides more employment (and in most cases, also produces more) per unit of fixed investment than large-scale industry, it provides far less employment (and produces less) than cottage industry in every case. Small-scale industries can be no substitute for cottage industries as employment-generators, since their capital-intensive nature is similar to that of large-scale industries. But they have to be sponsored against large-scale industries not only because they are somewhat more labourintensive than the latter, but also because they offer a method of ensuring a more equitable method of distribution of the national income and facilitate an effective mobilisation of resources of capital and skilled workers which might otherwise remain unutilised. They should not, however, be confused with cottage industries which are operated by hand, whereas small industries are operated by power, and the annual turnover of many a small unit today exceeds a crore of rupees.

In future, therefore, no large-scale enterprise should be allowed to come into existence which will produce goods or services that cottage or small-scale enterprises can produce and, in its turn, no small-scale industry shall be allowed to come into existence which will produce goods or services that cottage enterprises can produce. So that, while the small-scale industry will have to be protected against large-scale industry, cottage industry will have to be protected against both. Then and then alone will we be able to achieve what Mahatma Gandhi had dreamed of, more than half a century ago, viz., "to return to the villages what has so cruelly and thoughtlessly been snatched away from them by city-dwellers".

Although cottage and small-scale industry will be protected from outside competition, their units will be free to compete amongst themselves within their own sector. At the same time, new units of small-scale industry will not be allowed to be established within the limits of a city which had a population of, say, more than one lakh in the preceding census. Nor will a cottage or small-scale industry be allowed to expand its scale of production or change over to sophisticated techniques until, of course, in the estimation of the Government, everybody in the country

had been provided with work and the change-over would not lead to unemployment.

In laying emphasis, rather insisting, on the need for demarcating techniques, we have the authority of an eminent economist, Prof. Dudley Seers of the University of Sussex. In sectors outside agriculture, he recommends policies which "can affect employment, first, by influencing what products are made, and, second, by influencing how they are made".

The Professor believes it is possible to influence techniques of production in favour of labour-intensive methods by ensuring that the relative cost of labour and capital reflects accurately their availability. But developing countries (like India), with a few exceptions like Taiwan, Egypt, Korea and Yugoslavia, have chosen the capital-intensive and labour-saving pattern of development and, therefore, often follow policies that make labour expensive and capital cheap when in fact labour is in abundance and capital scarce.

Once the techniques are controlled, that is, once we ensure how goods are made and how, as a consequence, incomes are distributed amongst the largest number of our people, we need not bother what kind of goods, whether goods of class consumption or goods of mass consumption, are made. Everything else will take care of itself. For, necessarily, that is, because of limitation of technique, these (labour-intensive) industries will be producing, with rare exceptions, only such goods that the mass of the people with low incomes, residing in villages or towns in the neighbourhood of their locations, will be needing.

Discussing industrialisation policies of the South Asian countries, the eminent Swedish economist and social scientist, Gunnar Myrdal, also stressed the need of the modern sector and the traditional sector existing side by side in these countries, in the following words:

"The preservation and promotion of cottage industry in the villages implies that the underdeveloped countries of South Asia will have two distinct economic sectors: a small, but gradually growing, fully modernised sector of large-scale and small-scale manufacturing enterprises and a vastly large sector that will use labour-intensive techniques not too different from the traditional ones and continue to give work to most of the rapidly increasing labour force. And as the modernised sector will economise on labour and will not create much employment for a long time to come, while the labour force will grow rapidly until the end of the century, this pattern cannot be merely a transitional one; it will have to be accepted as the pattern that will prevail for many decades."

Below is given a question which Anil Agrawal put to Prof. Gunnar Myrdal and the reply that the latter gave, during the course of an interview held in January, 1973:

#### INDUSTRIAL PROGRESS

A.: Coming to the industrial sector, I find that you pay little attention to industrial development in your books. It is also interesting to read an economist in the late sixties, talking of the extreme relevance of Gandhi's ideas of cottage, village consumption-oriented industries.

But when you underplay the importance of industrialisation and say countries like India must concentrate more on agriculture, are you not playing into the same kind of trap that all economists from industrialised countries have played into while trying to study under-industrialised countries?

M.: Let me first say that I am all for industrialisation. Modern industry should be driven forward as rapidly as you can because at the end of century if India does not have a much larger proportion of its workers in industry I do not see even the possibility, with the present state of population growth, of keeping your masses even at their present miserable standard of living.

> "But I think we should remember that industrialisation does not mean more employment. It might mean even less employment if it turns out craft and traditional industry. And meanwhile it is not the sole solution. Now, agriculture is a big thing you should work on to raise your yields which are tremendously low,"

So that, after all, Mahatma Gandhi was not so 'reactionary' or 'anachronistic' as our 'progressives' would love to describe him. He was. at least, two generations ahead of modern economists. Given massive and increasing unemployment and under-employment and comparative lack of capital, Gandhiji's ideas are still relevant. It is now for the Central Government which seemingly swears by his hallowed memory, to come forward and enact a demarcating legislation as also take other necessary steps in order to make his dream come true in the interest of those very hundreds of millions on whose backs it has literally ridden to power. Nothing less will do. Economic concentration in the form of heavy or large-scale, capital-intensive undertakings, due to rapid advances in modern technology and new industrial patterns, is an inevitable process, unless checked by law, that is, by the countervailing power of the State. Left to the mercy of the market or economic forces, the future of small business is dark, galloping increase in unemployment is certain and, as a consequence, take-over by communism is sure to happen.

Once the 'Hindustan Times', New Delhi, was pleased to remark as follows in its editorial columns in 1974:

Gandhi had the right idea. He was a revolutionary, and the New Society he conceived, was a total concept. His was an integrated philosophy and not just a series of ad hoc adjustments. He was an immensely practical man who operated at the grass-roots. No wonder he appeared faintly amusing and something of a faddist to the elite Western transplants in Indian society. Far from being old-fashioned, the Mahatma was ahead of his time. He anticipated contemporary concerns such as pollution, the environment, ecology, recycling.

Surely, it was not for nothing that Gunnar Myrdal referred to Gandhiji as the only economist "from the bunch in New Delhi" who made sense to him.

#### ROADS, TRANSPORT AND CONSTRUCTION

As amongst sub-sectors of the non-agricultural sector, next to manufacturing, roads, transport and construction provide the largest employment. A much larger contribution than at present could, however, be obtained from these sources provided, of course, a decision was taken not to use machinery in the work of construction. Next to food and raiment, house or shelter is the basic necessity of man. But millions of people in our country are going without a roof over their heads. Similarly, while roads (along with transport) are vital for economic growth, their mileage, say, per one lakh of persons, is much less in India than in many a country of the world.

The construction of a new road in developing regions opens up gainful opportunities for exploitation of resources available in such regions. It influences the cropping pattern, facilitates the supply of inputs, enlarges the size of the market and marketable surplus, fetches a better price to the producer, promotes labour mobility, and provides a fillip to the development of industries that can come up by using the locally available raw materials, which would otherwise go unutilised if the products could not be transported to areas where there is a demand for them.

Says D. M. Nanjundappa:

"In the assessment of economic benefits of roads, their employment effect has not been properly recognised. Roads generate direct and indirect employment opportunities. Direct employment relates to technical personnel needed for planning and construction as well as the semi-skilled labour employed on the road work including maintenance."4

According to the 1961-81 Road Plan, an annual expenditure of Rs. 19 crores on construction and Rs. 50 lakhs on maintenance, creates job opportunities for the following technical personnel every year:

TABLE 144

Job Opportunities for Technical Personnel

Category of technical personnel	For construction and planning	For maintenance
Graduates	360	18 18
Diploma holders	1080	53
Other technical staff	1125	62

"From the norm 'construction' employment for different heads of development, roads seem to have the highest employment potential. The norm 'construction' employment on roads for one crore rupees of expenditure is about 10,450 as against 5,200 for agricultural production, 8,000 for forest and soil conservation, 5,000 for housing, 7,000 for major and medium irrigation and 1,700 for large and medium industries. The 'continuing' employment for the same amount of expenditure is, however, less on roads. It is about 1,000 as against 1,250 for agricultural production, 3,200 for minor irrigation, 1,270 for large and medium industries, 3,000 for village and small industries, 300 for housing and 2,500 for road transport."<sup>5</sup>

As regards indirect employment, the rise in industrial and agricultural production which follows the completion of a road, creates new employment opportunities. For example, with the completion of the Ramnad-Mandapam Road in Tamil Nadu, industrial employment increased by 19 per cent in the mats and fancy goods manufacture and by 94 per cent in jaggery-making in its catchment areas.

The mere construction of a bridge on the Cauvery in Tamil Nadu has caused the number of power-looms in a nearby village to increase from 100 to 2,500 and handlooms from 1,000 to 3,000, creating 15,000 extra jobs in the course of a few years.

Bus and truck operations appear on the scene immediately a road is constructed. Except where the road runs parallel to a railway track, the demand for passenger and goods vehicles, which would have otherwise remained dormant, manifests itself immediately, resulting in pressing into operation a fleet of buses and trucks. The rise in traffic is a net increase, not a diversion.

- 4. Government of India, Report of the Chief Engineer on Road Development Plan for India (1961-81), New Delhi, 1958, pp. 78-79.
- 5. Towards Socialist Transformation of India's Economy, edited by Ashok V. Bhuleshkar, Popular Prakashan, Bombay, 1972, p. 285.

So far as employment is concerned, it has been estimated that for every crore of rupees invested in road transport 10,435 jobs are created as against 200 in railways.

Further, in terms of financial return, the road transport industry has repaid every investment in road development manyfold—although the amount increased from 61.3 crores in 1952 to Rs. 552.3 crores in 1960.

As regards construction of houses or buildings, the Government of India was, until recently, pushing ahead with plans to set up a number of pre-fabricated housing factories on the lines of the Hindustan Housing Factory in Delhi. The State Government of Uttar Pradesh decided to construct 5,000 basic school buildings in the countryside in the year, 1973-74, each costing Rs. 10,000 with pre-fabricated material. Leaving aside the question of employment which will necessarily shrink, all this was being done in spite of clear evidence that pre-fabricated housing was more expensive than conventional construction. Mechanical brick-laying was also being encouraged. Sample the following press report:

New Delhi, May 12, 1973 (UNI, PTI)—Minister of State for Works and Housing, Om Mehta, today inaugurated the second shift of the Government mechanised brick plant, near here, which claims to produce brick three times more durable than conventional bricks and which can save building costs up to seven per cent.

The plant was set up in a 57-acre plot in Sultanpur village, about 20 km from here, by the National Building Construction Corporation (NBCC) of the Works and Housing Ministry in 1966. It was built at a cost of about Rs. 40 lakhs with Rumanian know-how and machinery. Six mechanised brick plants manufactured indigenously will be delivered during 1973-74 to Industrial Development Corporations in Kashmir, Punjab, Haryana and Maharashtra.

Perhaps, fortunately, these dreams of the Minister did not materialise. According to a report published in the 'Hindustan Times', dated 12-2-1981 the Government has instructed the NBCC to shut down its plant for manufacturing mechanised bricks, which had been set up in the village of Gautani near Chhatarpur. The plant had run into accumulative losses of Rs. 2 crores. This loss was in addition to the capital investment of nearly Rs. 60 lakhs.

Lack of foresight and planning seems to have been the bane of the plant—right from its inception. The idea was that through "economy of scale" and mass production, the Corporation would be able to meet the higher cost of manufacturing mechanised bricks.

However, by 1973, the clay reserves around the plant had started

running out and the clay had to be brought from outside. Increased coal prices added to the losses.

Similarly, pre-fabricated bridges were being put up while thousands of our people in the immediate neighbourhood of the site might be rotting away in enforced idleness, who could with equal efficiency construct these bridges with their hands.

Apart from roads and buildings there are works like railway tracks and irrigation or hydro-electric reservoirs and dams which need to be, and are being constructed. All these works could be constructed with the use of manual labour and other labour-intensive methods yielding immediate and high dividends in the form of millions of jobs. No machinery should, therefore, be used or continue to be used in construction of houses, railway tracks or public works of any kind. If man in ancient Egypt could build the pyramids and, in medieval India, the Taj Mahal, or, if more recently, during Second World War years, he could build air-fields and roads in China and Burma, entirely by manual labour, there is no reason why he cannot construct almost all kinds of public works without the aid of machines.

In view of our huge man-power available, the use of giant earth excavators and earth-movers is unnecessary; rather it serves to create unemployment. After all, roads, bridges, buildings and dams or reservoirs do not have to compete in world markets so that mechanisation of their construction may be necessary. But our Government has a craze for machines. So, a new plant for manufacture of Earth-Moving Equipment which cost Rs. 515 crores, was formally inaugurated on February 16, 1973, by Mr. C. Subramaniam, the Union Minister for Industrial Development at Trivellore in Tamil Nadu. The Plant received the blessings of the President and the Planning Minister of the Union also.

Below we reproduce an article from the 'Times of India', New Delhi, dated March 9, 1975 written by J.S. Gupta making a plea for revival of our ancient art of architecture, which will provide more employment and economise on steel and cement:

#### BRING BACK BRICKS AND LIME

With the advent of independent India and the curtailment of the powers and resources of the princes, musicians, artists and craftsmen lost their princely patronage. The hardships caused to musicians and artists have been somewhat alleviated by the help provided by public institutions and private patrons. But one valuable Indian heritage, that of the craft of building, has found no such support since Independence and is now fast dying away—unwept and unmourned.

As is well known, Indian architecture reached its zenith under the Grand Moghuls, but it continued to show vigour and vitality even in the 18th and 19th centuries in spite of the turmoil and unrest in large parts of the country, though the venue of its activity shifted from the recognised seats of political power. Structures put up in Varanasi, Brindaban and certain parts of Rajasthan in the second half of the 19th century bear testimony to the continued virility of the Indian building tradition.

It is an irony that with the establishment of the (British) Raj in the sub-continent, the Indian building tradition started languishing. The setting up of public works departments did not help matters. Technical institutions like Roorkee College, where the curricula as well as the methods of instruction in building were completely divorced from the Indian tradition, catered primarily for the military and administrative needs of the colonial power. Western scientific techniques were used to produce a hybrid type of Anglo-Indian buildings, exemplified in numerous cantonments, railway stations, etc.

Susprisingly, while Indians have neglected and continue to neglect this ancient art, it was given to certain eminent Britishers to make a plea, albeit abortive, on behalf of our master builders and craftsmen. In February, 1913, when plans for the city of New Delhi were yet in the embroynic stage, a 'humble petition' was presented to the Marquis of Crew, the Secretary of State for India, praying that the building of the City of New Delhi be entrusted to Indian craftsmen and pointing out that "in India there are still master builders and craftsmen and an unbroken building tradition of more than 2000 years...".

The petitioners submitted that the question to be discussed was not in what style but by what method the new city should be built and suggested that only that method could be followed which "gave us Westminster Abbey, Saint Sofia, Saint Peter's, Rome and in India the Taj, the palaces of Akbar and Shahjahan and the great public works of former times—that of the master builder with his craftsmen working in accustomed materials upon the site from simple instruction...".

The petitioners further stated that "it is for the general good, artistically and morally not only of the United Kingdom and India but of the world at large that living craftsmanship should be saved from extinction by a right method of employment". The signatories to the petition included G.B.S. Alfred Austin, the poet-laureate, Dr. Ananda Coomaraswamy, many MP's and public personalities,

numbering about 180 in all. Indian building craftsmen never had such eloquent champions.

A similar petition to the authorities responsible for post-Independence building activities in places like Chandigarh, Gandhidham and Bhuvaneswar would have been most opportune. But the lead given by eminent Englishmen in the case of New Delhi has not been followed by a single Indian.

The whole world marvels at the engineering skill of the builders of Bijapur and Golconda and the architectural expertise exhibited at Fatehpur Sikri and Agra. Those who built the Imambaras in Lucknow (in the later half of the 18th century) displayed a boldness and a high degree of structural awareness, which has stood the test of time. We have it on the authority of that eminent historian couple, Will and Ariel Durant, that "the temples of Madras, Madurai and Trichinopoly are among the most impressive structures on earth". (vide The Lessons of History)

The art of constructing large domes with indigenous materials without the use of modern materials like steel and cement is all but dead. It will be a tragedy if for want of patronage the art were to be lost for ever. Perhaps Gujarat, which has such a brilliant architectural heritage that Ahmedabad in the early 16th century was said to be not only the handsomest city in Hindustan but probably in the whole world, will give an opportunity to Indian craftsmen to show their skill in the State's new capital under construction.

Modern architecture, of which Chandigarh is an outstanding expression, is essentially the product of an industrial as well as an affluent society. It is neither necessary nor feasible to foist modern architecture of so-called modern construction media on the country.

The advent of reinforced cement concrete has had an unfortunate effect on building techniques both in the rural areas and in small towns. Traditional construction techniques are being forgotten under the mistaken notion that the use of reinforced cement concrete signifies progress and modernity, even though the users' understanding of their technology is, in the main, superficial and perfunctory. The quality of 'instantness' of reinforced cement concrete has no doubt been a major incentive for its widespread use.

The master builder of the past combined in himself the role of architect, structural engineer and construction expert, but his tribe has almost vanished without being replaced by any dependable institution. In fact, it could be said that outside the metropolitan areas there exists a void in the field of construction skill.

Present-day economic compulsions leave us with no choice but to take a hard look at our attitudes and practices F.or over 25 years now we have been pursuing the chimera of modern technology in all walks of life and the present climate of scarcity could perhaps be attributed partly to this indefatigable pursuit. In view of our limited energy resources and overall technological insufficiency, the obvious way out is to apply industrial processes in a selective manner.

There is no virtue per se in modern technology. There are areas of the Indian economy where traditional techniques cannot only fill the bill eminently (and thus release industrial capacity for more important use), but are also likely to prove superior and more beneficial to society in many respects.

The field of civil engineering construction is one such sector of the Indian economy which offers immense possibilities if we could revert to traditional technology. A very substantial part of the national effort is absorbed in civil engineering works, be it housing, railways, irrigation, power development or highways. It has been said that over 50 per cent of the investment in the Fifth Plan would possibly be absorbed by construction activity. A significant part of this construction effort is amenable to the use of the older technology. Except for industrial structures, power houses, docks and harbours, old construction practices (suitably modified and improved wherever possible) can meet the requirements.

Traditional techniques for construction were in use till very recent times and started languishing only when products of modern technology, viz., steel and cement, became freely available. Even late in the 19th century, effective use was made of old construction practices, an outstanding example being the Kalka-Simla railway line which was started in 1899.

In this connection it is interesting to note what Mr. P.S.A. Berridge, a railway engineer, has to say about the Kalka-Simla railway in his fascinating book, Coupling to the Khyber:

"A feature of K.S.R. is the almost complete absence of girder bridging, multi-arched galleries looking for all the world like ancient Roman aqueducts, being the commonest means of carrying the lines over the ravines between the hill spurs."

Before any one points out that it must be a slow process, let it be said that work on the Kalka-Simla railway project was started in 1899 and completed in 1903. The completion of 60-mile-long railway line, rising from 2,143 feet above sea-level to 6,810 feet and including 103 tunnels and numerous bridges, within a period of four years is a remarkable achievement even by present-day Indian standards.

It is evident that in a society which has a surfeit of manpower, labour-intensive techniques should be given priority. In these days of scarcity of power, large-scale unemployment and shortage of industrial capacity and raw materials like steel and cement, the traditional system of construction offers a vast scope for civil engineering works.

the form of burnt clay puzzolana or reactive surkhi.

Burnt clay pozzolana was developed and the process standardised by the concrete division of the Central Road Research Institute in mid-1970s. But private house-builders have been slow in going back to lime construction for lack of faith in anything else but cement.

Yet in Rajasthan and Madhya Pradesh cement is hardly used yet except for flooring: roofing is done with stone slabs on beams.

For those susceptible to the 'social prestige' of having used cement in their house construction, NBO experts advise 50 per cent saving of cement by using 'composite mortar'—comprising one part cement, two parts of hydrated (slaked) lime and nine parts of sand.

Hydrated lime in ready-to-use form is being marketed in bags. Plants for making them are more economical if situated near lime-stone quarries. Pozzolana manufacture is still to gain momentum because people would rather pay black market rates than trust a newly-researched product.

Maybe, India's destiny-makers will have second thoughts and give up the craze for cement and iron in the interest of the people and revert to lime and bricks.

#### SERVICE SECTOR

Remains the service sector which employs the largest percentage of people in advanced countries. In India, too, the figure comes next only to those employed in agriculture. This sector is almost entirely non-mechanised; so, no question of preference as between techniques arises today. Nor, in view of the fact that mechanisation of the services normally makes little or no contribution either to the growth of exports or the reduction of imports, and simply serves to reduce the demand for those types of labour which are already in excess supply in the country—should the question arise tomorrow. But, as ill-luck would have it, our governments, since the attainment of Independence in 1947, have had a strange fascination for machinery and would like to import and introduce it in all walks of life—irrespective of the social costs it may imply in terms of unemployment, or disparities in incomes it may create or widen.

As an illustration, the Chairman of the Delhi Transport Corporation told newsmen on June 10, 1976:

"Our ultimate aim is to eliminate conductors" (there are about 5,000 conductors working in the capital's public transport

system). Asked what would happen to these conductors, Mr. Srivastava said: "Some of them may be absorbed in the DTC itself as it is expanding".

Could perversity, could callousness towards the poor and the unemployed go further?

The State Government of Uttar Pradesh had decided to instal computers at all the major development projects during the year 1973-74. "Computerisation", said the Planning Minister, "would save a lot of time and energy in collecting and maintaining correct statistics." Laying the foundations of the computer centre of Lucknow, to be set up in the first phase, the former Chief Minister, Mr. N.D. Tiwari, said this was the age of computers and called for wide application of computers for processing data for proper and speedy planning, implementation and evaluation of development projects. He tried to allay the fears of the opponents of computerisation by declaring that it would not lead to retrenchment of the staff.

Maybe, such equipment raised the quality and speed of the service provided, but it will throw workers out of work who would find it very difficult to obtain new employment. Purchase of foreign equipment implies the use of scarce foreign exchange which might otherwise be used to import capital goods that are complementary to, and not substitutes for, labour.

#### CONCLUSION

So long as this country remains committed to the present pattern of economic development in which it sets up capital-intensive modern industries at enormous cost, only to cater to the needs of the urban elite or to export their products at throw-away prices, not only will unemployment go on increasing and capital go on concentrating in the hands of a few, but it will also run the risk of going deeper and deeper into bondage to the affluent nations. The only and the right way of avoiding this bondage-in other words, of fostering financial and technological self-reliance—is to make a clear break with the prevailing pattern of industrialisation and take to the Gandhian path, adapted, of course, to the changed or changing conditions. This path dictates, for example, that the production of consumer goods by machines is banned, thereby virtually forcing the cottage industries to fill in the gap; chemical fertilisers are replaced with organic manures as rapidly as possible; urban planning is taken in hand with a view to minimising the need for powerdriven transport; and building laws are framed which compel the rich and the poor alike to go in for low-rise, high density housing, using cheap, locally available building materials, like bamboo, clay, bricks and tiles etc.

In fact, up to the time when full employment is achieved, mechanisation has to be scrupulously eschewed, not only in the production of consumer goods but also in the construction of office or residential buildings, roads, bridges, railway tracks or irrigation dams and reservoirs. Pre-fabricated housing factories and earth-movers and earth-excavators will, therefore, have to be shut down or scrapped. Nor will electrocomputers, automatic laundries or automatic telephones and mechanised bakeries, which the Congress government established all over the country, be allowed to function. They will be replaced by the old system which will provide more employment. (So far as agriculture is concerned, only small machines may be used, as in Japan, which will supplement but not supplant human labour.)

In a country like India where unemployment is widespread, it is economically more efficient to raise output by increasing employment with productivity (that is, production per worker) constant than by increasing productivity with employment constant. Mechanisation or further mechanisation of the economy has, therefore, to be discouraged till all the people without jobs have been fully absorbed. Meanwhile, to repeat, if and wherever we are faced with a choice between two techniques, one of which will employ more workers, and the other fewer workers, to produce the same result or amount of GNP, with rare exceptions (which immediate national interest may demand), it is the former that will be chosen.

To conclude: Nehru had written thus on the subject of industrialisation in the form of a Foreword to *China Builds for Democracy*, by Nym Wales, in 1942:

"Gandhiji has, I think, done a great service to India by his emphasis on village industry. Before he did this, we were all, or nearly all, thinking in a lopsided way and ignoring not only the human aspect of the question but the peculiar conditions prevailing in India. India, like China, has enormous manpower, vast unemployment and under-employment. It is no good comparing it with the tight little countries of Europe which gradually became industrialized with small and growing populations. Any scheme, which involves the wastage of our labour or which throws people out of employment, is bad. From the purely economic point of view, even apart from the human aspect, it may be more profitable to use more labour power and less specialised machinery. It is better to find employment for large numbers of people at a low income level than to keep most of them unemployed. It is possible also that the total wealth produced by a large number of cottage industries might be greater than that of some factories producing the same kind of goods."

The Nehru of later days, however, proved to be a different man!

To our politicians use of hands or manual labour is a sign of backwardness, if not outright exploitation. On the other hand, the use of a machine is a sign of progress—socialist transformation—even though workers may be starving in the neighbourhood for want of bread because of want of work.

It is being constantly forgotten or ignored that in all spheres where a work can be accomplished or virtually accomplished by hand, the modern machine does not add to production but saves labour and thus creates unemployment. The machine comes in only when the hands for a job required are too few or the job cannot be executed with hands at all.

If India has to live and make the grade, the vast unemployment and under-employment, which afflict its economy, must be wiped out at the earliest date. It must, therefore, be unequivocally laid down that the aim of our economic policy has been changed from increasing the gross national product to increasing productive employment. In fact, the creation of more jobs would inevitably cause a rise in GNP but when, if at all, faced with the choice between a higher rate of growth of GNP with fewer jobs, on the one hand, and a lower rate of growth with more jobs, on the other, we will unhesitatingly opt for the latter course.

users from cities with a population of researched sub-liberturary ortionally

ON OF THE CONTRACT OF THE PROPERTY OF THE PROPERTY OF THE PARTY OF THE

## Radical Change in Power Structure

Next to ideology, neglect of agriculture (and, therefore, of the village) and many another ill of our economy and administration are largely traceable to the urban orientation of our ruling class. In fact, the ideology of a man is largely governed by his social origin—the home and surroundings in which he is born and bred up.

Inasmuch as political leadership of the country lives remote from the nature and needs of the village, economic policy adopted by it is, to a large extent, adopted—whether consciously or unconsciously—for the town. According to Mr. Satish K. Arora, "over the decads of 1962-72, the 20 per cent of India that is urban, contributed slightly more than half of all Cabinet Ministers at the Centre; and, of these almost two-thirds were from cities with a population of over ten lakhs. The proportion of agriculturists has remained fairly constant at about 17 per cent".1

Ministers from the towns, sitting in New Delhi, could not possibly know how the villager's mind works—how the village society functions. So, while they may have an intellectual sympathy for the rural folk, they have no personal knowledge or psychological appreciation of the needs, problems and handicaps of the farmers: the problem of land is a closed book to them. To give an example or two:

Jawaharlal Nehru confessed at the Nagpur Session of the Indian National Congress held in January, 1959 that he did not know much about land and its problems. Yet, (along with state trading in foodgrains) he recommended to the delegates a motion suggesting that joint farms consisting of all the permanent residents of the village, whether owning land or not, be established in every village mainly with a view to increasing agricultural production. Nothing could be more impracticable, in fact more absurd. Still, the recommendation was made and accepted.

To refer to a minor point: Jawaharlal Nehru converted our old

An article, 'Social Background of the Indian Cabinet' published in the Economic and Political Weekly, Special Number, August, 1972.

systems of weights and measures with which our people were familiar for centuries past, into foreign systems with no perceptible gain at all. On the contrary, the adoption of new systems of metre and kilometre in place of the old yard and mile; gram, kilogram, quintal and tonne in place of tola, chhatank, seer and maund and are (=100 square metres), decare (=10 ares) and hectare (=100 ares) in places of biswa, bigha and acre has created confusion in the public mind and maintenance of records. For example, the new measures of area or surface viz., are, decare and hectare are not intelligible to the rural masses and had no place in India where the ratio of land to population is so low as compared with some European and American countries. The new measures are not known to our language and practice, and are not likely to become part of it in the near future. The same is true about the new measure of weight, viz., 'gram' which means the 'village' in our language throughout the country. Only a leader who was not in tune with and did not know the realities of the economic life, particularly the village life of our people, could order such a change.

With such leadership at the helm of national affairs, planning, which required intimate knowledge and experience of conditions of one's country, was bound to be unrealistic.

Although, theoretically, one does not have to be born poor in order to understand what poverty means, or to be born a farmer in order to understand how agricultural production could be increased, yet, to expect that realistic policies for rural development, eradication of poverty or increase in food production could be framed and implemented by those who have not seen the village or known poverty or experienced hunger, was to expect something out of the ordinary.

Speaking on the 'Conquest of Hunger' at Vigyan Bhawan, New Delhi, on March 15, 1973, the Nobel Laureate, Dr. Norman F. Borlaug, inter alia, suggested that policy-makers in India—political leaders, scientists, bureaucrats and educators—should remain hungry for a fortnight to appreciate the 'biological value' of food.

If they spent the last two days without water, the exercise might provide valuable insight into the 'psychological value' of water as well.

"The economic value of food depends on how hungry you are, when you ate last and what the prospects for the future are", he quipped.

In her book Child of the Dark, Carolina Maria de Jesus, a slumdweller in the opulent city of Sao Paulo, exclaims in despair:

"Brazil needs to be led by a person who has known hunger. Hunger is also a teacher.... Those who govern our country are those who have money, who do not know what hunger is, or pain or poverty."

It should now be clear to our readers why India, so richly endowed by Nature with resources that are necessary for food production, had gone abegging for food all over the world even after—or at least till—the expiry of three decades since the attainment of political Independence: neither those in whose hands lay the ultimate political power, nor those who were near and dear to them, ever knew want or experienced the pangs of hunger.

There is no direct rural presence in the towns where political and economic decisions are made. Small farmers, in particular, have practically no direct impact in State capitals, and permanent migrants from villages to towns identify themselves with the urban elite they have joined. Our political leaders and economic planners are thus almost exclusively exposed to the thought, pressure and company of the tiny sections of our population involved in modern urban politics, trade-unionism, industry, university and administration. They do show a deep, sincere concern for the welfare of farmers, but concern and goodwill are no substitutes for direct contact with the villagers and an intimate knowledge of their problems. However conscientious they may be, the balance of pressures on them is overwhelmingly urban to which they ultimately succumb—consciously or unconsciously.

While one great contribution of Gandhiji was to broadbase the movement for social emancipation, one definite result, though perhaps unintended, of Nehruji's economic and social policies has been greatly to narrow down the base of the ruling class. Elections do not redeem the people. Once elections are over, liaison men and urban lobbies take control. The press, the bureaucrats, business and professional lobbies and the commission agents control the levers of power. Whatever the complexion of the government—Congress, Communist, Janata or any other—it is this class which rules. This is where, perhaps, the Marxist theory of 'ruling class' is appropriate.

During the course of a conversation in mid-fifties, an old educated swami had told an American economist, W. S. Woytinsky: "The trouble is that ours is a country of small farmers, a rural country, but our politians, like all intellectuals, are city people. Most of them are good, honest people. But the needs of large cities always come first with them."

Says Michael Lipton in his book Why Poor People Stay Poor (Heritage Publishers, New Delhi, 1980):

"Poverty persists alongside development largely because poor countries are developed from, by, and for people in cities—people who, acting under normal human pressures, deny the fruits of development to the pressureless village poor. Few of these can escape the trap by joining the exploitative city elite, because high urban wages (and subsidised capital imports) deter employers from using extra labour. Many villagers, once migration has failed to secure entry to the urban labour aristocracy, return to an increasingly land-scarce village: a village that is by policy denied the high food prices

<sup>2.</sup> India: The Awakening Giant (Harper and Bros., New York, 1957).

that would normally be linked to land scarcity, by policy starved of public investment allocations and hence by policy prevented from sharing in development and thus from curing its own poverty."

održio arministinos sili nie arapiliis lo auviturgarinis iro (pp. 68-69)

There is, however, nothing wicked or conspiratorial about it all. It is the natural play of self-interest and power: to give an important example, industrialists, urban workers, government servants, the intelligentsia—even political leaders—all benefit if the farmer is squeezed to produce cheap food and raw materials for the cities. Nobody conspires or need conspire; all the powerful are satisfied. It is a different matter though that labour-intensive small farmer, howsoever efficient, stays poor and powerless: there is nobody who will weep for him. Cheap food is only one of the many ways in which the city (where most government is) screws the village (where most people are) in India as also in other poor countries. In tax incidence, in investment allocation, in the provision of incentives, in education and research: everywhere it is government by the city, from the city, for the city.

As Michael Lipton has said in the Introduction to his book already referred to:

"The most important class conflict in the poor countries of the world today is not between labour and capital. Nor is it between foreign and national interests. It is between the rural classes and the urban classes. The rural sector contains most of the poverty, and most of the low-cost sources of potential advance; but the urban sector contains most of the articulateness, organisation and power. So the urban classes have been able to 'win' most of the rounds of the struggle with the countryside; but in so doing they have made the development process needlessly slow and unfair. Scarce land which might grow millets and bean sprouts for hungry villagers, instead, produces a trickle of costly calories from meat and milk, which few except the urban rich (who have ample protein anyway) can afford. Scarce investment, instead of going into water-pumps to grow rice, is wasted on urban motorways. Scarce human skills design and administer, not clean village wells and agricultural extension services, but world boxing championships in showpiece stadia. In this connection the Indian reader is likly to be reminded of the 'Asiad' (Asian Tournament) which will be staged in New Delhi in 1982-and will cost more than Rs. 350 crores. Resource allocations, within the city and the village as well as between them, reflect urban priorities rather than equity or efficiency. The damage has been increased by misguided ideological imports, liberal and Marxian, and by the town's success in buying off part of the rural elite, thus transferring most of the costs of the process to the rural watch it has been undertaken. The prince ". rood alen

Scattered in relatively small groups over large areas as the rural voters are, few city-based politicians who hold the strings of power in their hands, see little or any gain in espousing rural causes. Even the large number of representatives of villagers in the legislatures of the country is hardly relevant as a counterpoise; they just follow their leaders like sheep. Further, these MLAs and MPs are usually big farmers and their interests are those of urban elite, not of the village from where they have sprung. That is why, more often than not, demands for lower foodgrain prices for consumers in the towns which mean lower prices for producers in the villages, and strikes and gheraos for higher wages which mean dearer manufactured goods for farmers and other villagers, receive their blessings.

Nor is it democracy if vast masses in countryside feel deprived of their due and all power and good things of life are concentrated in the hands of a section of our people. Inasmuch as the villager or the cultivator constitutes by far the largest proportion in the country, everyone pays lip-service to him, but there are few who are really jealous of his interest. He is duly remembered at the time of elections, but his voice is rarely heard in the corridors of power.

In the West, the urban complexion of political leadership or administration is not very material inasmuch as the rural sector forms a very small part of their economy and also because in some of these countries, e.g. the USA, they have laid down an unwritten rule that the Minister of Agriculture shall be a person who comes from the agricultural class. Further, famine is not a near threat there as it is in India.

The town occupies the entire or almost the entire mental horizon of our leaders and administrators; the village occupies a very tiny speck, if at all. That is why almost the entire staff which operates newly-established branches of nationalised commercial banks in rural areas, is recruited from the town, and is highly paid. These branches began to be established in 1970. It was, however, only five years later, that is, in 1975, that realisation of the problem that the urban orientation and emoluments of the staff of these banks posted in the countryside, dawned upon the tin gods sitting in New Delhi. According to the proceedings of a conference held in the Capital on August 21 and 22, 1975, it was the high-cost structure of commercial banks and the urban orientation of their employees that disabled them from making the kind of impact they were expected to, in the wake of nationalisation.

One of the main reasons for the failure of the farm extension work in India lies in the social complexion of the extension workers. Says the 'Times of India', New Delhi, in its editorial, dated March 19, 1976:

"Just as community development or *Panchayati Raj* have been distorted in practice to buttress the rural *status quo* rather than energise it into change, so farm extension has been frustrated by the very mode in which it has been undertaken. The principal problem,

as a World Bank expert who was a former agricultural commissioner in India, pointed out not long ago, has been the induction into farming communities of extension workers from outside them. They do not have the farmers' trust, they are not as a rule keen on spending too much time in the villages, they don't always have a farming background so that their concern over the difficulties of their prospective beneficiaries is academic rather than real."

The University Education Commission, 1951, presided over by Dr. Sarvapalli Radhakrishnan, had recommended that, "so far as feasible, agricultural education, agricultural research and the formulation of agricultural policy shall be in the hands of persons and groups or associations of persons, who, by intimate association, participation and experience, have first-hand penetrating knowledge of agricultural life". Nothing came of this recommendation, however: on the contrary, the Government of India has had Ministers of Agriculture who did not know the difference between Rabi and Kharif.

Similarly, there are examples of highly-placed officers serving in the Department of Agriculture who could not distinguish between a sugarcane and a plant of Jowar, officers in the Animal Husbandry who or whose families had never tended or maintained a cow, goat or buffalo before they went to a veterinary college, and Chief Engineers who did not know how many waterings a particular crop required and when to close a canal for repairs and when not. For, what is true of political leaders is true of high-ranking administrators also: the latter are drawn in an overwhelming proportion from the urban class.

One will be amazed to discover that many a planner, economist and administrator had never set his foot in any of the villages where nearly 80 per cent of their compatriots lived and worked. The politician, the civil servant, the university teacher or the businessman caters largely to an urban audience, and in pursuing his interests or his career, has every incentive to spend his time almost wholly in big cities. "Even if villageborn, he has reason to regard his relatives as a burden, the prospect of re-absorption into rurality as the ultimate threat, and the whole rural episode as best forgotten."

The Indian Delegation to China on Agrarian Cooperatives, 1956, headed by Shri R.K. Patil, had this to say:

"Although a change in the attitude of the administration is noticeable, the old system, traditions and outlook have not yet disappeared and it becomes difficult for the administration to function on the basis of trust and cooperation as between equals. Identification with the people is made further difficult by the fact that higher services usully come from higher classes and castes in society." (Report, pp. 139-40)

For example, in the most populous State of the Union, Uttar Pradesh, two of the high castes constituting less than 12 per cent of the population hold 50 to 75 per cent of Government jobs in almost all the departments of administration.

It would appear from an article written by Shri R. K. Trivedi and Dr. D. N. Rao in the journal of the National Academy of Administration, Mussoorie, in its issue of July, 1961 that only 143 out of 1191 (or 12 per cent) IAS officers that there were in the country at the time, were born in the home of an agriculturist. Passage of time has made little or no difference in recruitment to this cadre. In 1974, the percentage of sons of agriculturists recruited to IAS rose to 14.

According to a survey conducted by the Union Public Service Commission, only 50 out of a total of 165 successful candidates for the IAS and IPS in 1975, were from rural areas as a whole, that is, including both having agricultural or non-agricultural backgrounds—which means that a young man of urban origin had 9 times the chance of entering the higher services compared to his compeer from the village.

On the basis of a comprehensive study of higher civil servants in India, V. Subramaniam<sup>3</sup> concluded that a majority (80 per cent or more) of them came from the urban salaried and professional middle class. On the other hand, farmers and agricultural labourers were found to be grossly under-represented in all the central services, even more than artisans and industrial workers. "These findings are significant", points out Baldev R. Sharma, "not only because of the broad scope of this study but also because it deals with Central Government services that operate under, at least, two policy constrainsts—one which specifies a recruitment quota for members of the economically deprived Scheduled Castes and Scheduled Tribes and the other which seeks to establish democratic socialism in India<sup>4</sup>."

An analysis of 702 candidates, who were recommended for appointment on the results of the Civil Services Examination held in 1979 for recruitment to various All-India Services showed that of them 42.73 per cent candidates were from families whose father/guardian was domiciled in a village. This shows that a young man of urban origin had only 5 times the chance that his compatriot from the village had: this is an improvement on the figures of 1975, but there is still a very wide gap between the two groups.

Even the above proportion seems to have alarmed Smt. Gandhi's Congress Government. The reader will be amazed to read the following news-item published in the 'Economic Times', New Delhi, dated 11-6-1980:

<sup>3.</sup> V. Subramaniam, Social Background of India's Administrators, New Delhi: Government of India, Publications Division, 1971.

<sup>4.</sup> Vide 'Economic & Political Weekly', Bombay, February, 1976.

Addressing the senior officials of the Planning Commission in New Delhi, on June 10, 1980, the Union Minister for Planning, Mr. N. D. Tiwari, laid special emphasis on providing employment to the urban educated youth, as thousands of them were coming out of colleges and universities every year. The problem needed immediate attention, he said.

It is in this structure of Indian bureaucracy that one may largely look for unimaginativeness of Government's schemes having to do with, or meant for, welfare—particularly, of the rural masses—and, even if the schemes are realistic, then, for their failure or half-hearted implementation.

"In colonial days", writes Mr. Romesh Thapar in an article 'Rise of Peasant Power' published in the 'Statesman', New Delhi, dated 29-1-1981, "if the social perspectives were lacking, at least the local representative of the British Raj did everything possible to create the feeling that he was around, watching and supervising. Now, except for the occasional rush-through by jeep, thousands of villagers never really feel the impact of the administrator. Either he is weighed down with files and a shortage of staff, or the costs of touring have become prohibitive, or many functions have been delegated (perhaps to lazy performers!), or there is a growing lack of interest in keeping a finger on the pulse of the people. Village India, unlike the town, is not talkative, but it is able to find its own interpretation of what goes on. A profound feeling of neglect prevails."

Mr. Thapar might well have added the social origin of most of our administrators as one of the reasons of neglect of the village and lack of rapport or emotional bond between the ruler and the ruled.

There is a sinister development in this context worth noticing. New recruits to the higher ranks of services are drawn in an increasing proportion from the same ruling class as the present bureaucracy itself—so that the new entrant to the superior services is often the scion or a member of the family of these very services. Not only that: those who hold jobs today have come to regard them as a transferable property or an object of ownership that should pass to their heirs as a matter of right. Writes the 'Financial Express', dated 14th May, 1980 in its editorial thus:

### JOBS FOR DEPENDENTS

The Union Ministry of Railways should have no hesitation in turning down the demand of the National Railway Mazdoor Union that dependents of Railway employees be recruited for Railway service. It is true, of course, that Railway employees are not alone in making this demand. Employees of some banks

are known to have demanded that their children and other dependents should be absorbed in the service of banks irrespective of qualifications of the candidates concerned. There is, of course, no point in blaming trade union leaders for making such preposterous demands when politicians themselves are openly propounding the sons-of-employees theory. A Karnataka minister has reportedly favoured a legislation for reserving jobs for employees' children in Government offices and public sector undertakings. And as the public sector is expected to set an example for private sector units, especially in respect of labour welfare, there is reason to fear that the Government might eventually extend the application of the sons-of-employees theory to the private sector as well. It is, therefore, essential that this new demand should not be allowed to gather momentum.

It has already been pointed out in a preceding chapter (Part I) that professional students were typically sons and daughters of persons holding supervisory and executive positions in Government or industry or of self-employed professionals and businessmen, which means that the present bureaucracy is fast developing into a hereditary caste, and the doors of the higher echelons of Government employment are virtually closed on the sons of those who are outside the charmed circle today, particularly on the sons of the villagers.

Inaugurating a conference of Chairmen of Public Service Commissions in New Delhi on November 15, 1976, the Prime Minister, Shrimati Indira Gandhi, was pleased to observe as follows:

"Our recruitment philosophy must become more and more rural-oriented. This is not because of any idealism but for the hard fact that the vast majority of the Indian people are still living in rural areas and will continue to do so. We do want to industrialise India, but we are quite sure that it will remain largely an agricultural community and we are happy that it should be so because our primary requirement is food and we cannot afford a situation where there is any lack of that. So the rural areas have to be developed and the people, who can go and develop them, must be given a better chance."

The reader will note that the intention was to recruit 'the people who can go and develop the rural areas' and not to recruit those who are born in or belong to these areas. The sermon was meant for, and addressed to, the rural voter as the next parliamentary election was only three months away.

What should cause concern, however, is the fact that our destinymakers are 'happy' that "India will remain largely an agricultural community" because thereby there will be no 'lack of food' which was their primary requirement: what is forgotten is that India's economy can be diversified to a far greater degree than today and yet there will be no lack of food.

The question of ability or sincerity of political leaders or administrators coming from non-agriculturist families is irrelevant in this context. The preponderance of men of urban origin in our political and administrative set-up only means that there is little or no correspondence between the values and interests of the rulers, on the one hand, and of those who are ruled, on the other. A man's opinions are, to a great extent, dictated by the source of income of his family and by his surroundings. His parents, his environment, his occupation and that of his friends, acquaintances and relatives—it is the sum-total of these things—his Sanskars (सरकार)—that determine a man's outlook on life. Education makes very little difference, if any, to a man's outlook and opinion thus formed; at best, it tends to confirm them.

Education could not make a difference otherwise also. Since and despite the attainment of Independence schools and colleges that inculcated western social values and manners, have continued to flourish more than ever. Those who could absorb them best-and it is the scions of rich families in the cities and towns who could do so-due to a similar environment at home, got the best public or private sector jobs, and were paid enough to remain isolated from the bulk of the people, particularly from those who lived in villages. Political direction from the top also worked in a manner that served to confirm the division between the ruler and the ruled : old values and old prejudices prevail unabated. The villager still remains a 'rustic', a ganwar (गंबार), a dehati (देहाती) or a dehkani (दहकानी), fit enough to wield the plough or enter the army or police as a sepoy or a constable. The gains of Independence, democracy and economic development are the preserve—the right—of a few select classes or even families living mostly in urban areas. Social values and economic interests of the two being different, even aspirations to political leadership of a village-based public worker are an anathema to the ruling urban elite.

Apart from other reasons, the village has been neglected and agriculturists unjustly treated because our past has been feudal and colonial, in which the status of agriculturists was that of serfs, and the social relationship and mental attitudes of the past still persist. The lower status accorded to agriculturists in our society is evident from the fact that they have had no say, at least, till yesterday at any stage in the determination of price of their produce, and also that their interest is always subordinated to the interests of urban consumers. In all development programmes, the stress is only on achieving higher production, and no steps are taken to ensure that the benefits of higher production accrue to the producers. In fact, the producer has been conceived as an instrument of production and not as an object of development.

It will not be out of place to refer here to a recent observation made

by Dr. V.K.R.V. Rao in his article 'Has Mixed Economy Become Obsolete' published in the Commerce of November 3, 1979:

"A basic weakness in the Indian situation is that the leadership of the nationalist movement has come predominantly from upper and intermediate classes and castes. Even the composition of the leadership of those calling themselves socialist parties, is as upper and middle class-based as that of the mixed-economy parties like the various factions of the Congress and the Janata. It is this which has prevented the leadership from having a positive and constructive inter-action with the Indian masses and led to the widespread laxity and lack of social discipline that prevails among all sections of Indian society today."

By the way, it might be added here that it is this kind of political leadership of the country, drawn from upper and middle classes, that talks of bonus or thirteen months' pay being awarded to already well-paid organised workers, whether in the private or the public sector and even to Government employees. But that leadership is silent about the army of the vast unorganised mass of marginal farmers, agricultural labourers, slum-dwellers and others who constituted more than 380 million of our people, and are living below the poverty line today.

That the urban elite from which rulers are mostly drawn, does not feel concerned over the fate of those whom it rules, will be evident from the following despatch of its Hyderabad-based correspondent to the 'Hindustan Times', New Delhi, published in its issue dated March 16, 1981:

More than 17 lakh peasants of Andhra Pradesh are suffering under drought, but there are few in the State capital to shed tears over their plight, much less share it. Life here is hunkydory—bars, restaurants, hotels, clubs all looking immune to the sorrows of those let down by Nature.

Who cares for them—their crops languishing in fields, their cattle going without fodder, their children crying for a morsel of food, their women trudging long distances to fetch water? Their prayers to the rain-god have gone unheard, and so, they say, have their prayers to the Government.

But the urbanites are untouched by this grim situation. They have their jazz, their blue films, their cabarets, their cards, their dogs' birthdays, their horse races.

In this connection one is reminded of what Hamlet said when he saw one of the actors in the play-scene act the role of Hecuba and shedding artificial tears: "What's Hecuba to him or he to Hecuba
That he should weep for her."

The urban elite is united on the issue of according a much higher priority to industrialisation than to agriculture. Few Western-trained specialists that fill the top advisory positions in New Delhi, accept the thesis that economic development in a non-industrial society should start with massive investments in agriculture and agricultural processing—investments designed to transform the rural populace into an effective market for domestic manufactures. The bulk of the country's young technocrats prefer to bet their country's economic future on a rapid expansion of industry at the expense of agriculture. To them rural problems and projects are only a reminder of the bad old days.

Says Shri Giri Lal Jain in this connection, in an article published in the 'Times of India', New Delhi, in its issue of March 13, 1974:

"The bias in favour of industry is the result of a variety of factors like the urban character of the dominant national elite, the 19th century belief that industrialisation holds the key to massive employment opportunities not only for the educated youth but also for the surplus population in the countryside which is a drag on agriculture itself, and the equally widespread conviction that industrial growth is synonymous with the modernisation of a tradition-bound and stagnant society, economic prosperity, military strength and status in the world community."

Members of this dominant elite may have differed on whether heavy industry should have top priority in the plans or light industry producing consumer goods should occupy the pride of place. But neither of these groups has regarded agriculture as anything but a hand-maid of industry. Whether consciously or unconsciously, they have always equated industrialisation with progress or economic development of the country.

Besides their heredity and the environment in which they live, the main reason for the above belief or attitude of our ruling class consists in the fact that it is nurtured on text-books which were written in conditions entirely different from those of our country, or which were inspired by the ideology of Karl Marx, who did not believe in the kind of political order we do, and who had made no special study of rural problems. Fascinated by the Marxian teachings and misled by the Soviet propagandists, our political leaders, economic planners and administrators also believed—and still believe, without having made any critical analysis, themselves—that just like big economic units working successfully in the field of manufacturing industry before their eyes, big mechanised undertakings would produce more in the field of agriculture also.

Forgetting the example of Japan and some other countries, where

the area of the family farm is, on the average, smaller than that in India today, they believe that increased production of food necessary to feed the townsmen, and of raw materials necessary to feed the machines of industry (again, located in the towns), cannot be achieved unless huge State farms are established or the peasants abandon small-scale farming and join or merge themselves into societies where large-scale farming is possible, and tractors, harvestor-thrasher combines and other large agricultural machinery can profitably be used. They would like to put agriculture too on a factory basis.

Besides joint cooperative farms, there are three other slogans or schemes which have often been debated in the parlours of New Delhi, Bombay and Calcutta since the attainment of political independence, but yet remain unimplemented and will remain so, viz., State trading in foodgrains, crop-insurance and guaranteeing of minium wages to agricultural labourers. All these schemes have been propounded mostly by our urban elite because of ignorance of human nature, conditions of their countryside, as also of implications of a democratic political set-up that we have given ourselves. The first two, viz., cooperative farms and State trading in foodgrains were incorporated in a resolution passed by the All India National Congress at the instance of Jawaharlal Nehru in its session held at Nagpur in January, 1959. The utility and practicability of the first scheme has already been discussed in Part I of this book.

#### State Trading in Foodgrains

As regards State trading in foodgrains, once the State takes up this scheme—there being no rival purchaser in the market—the State will be free to fix such prices as it pleases. In fact, it is likely to fix a price which will turn the terms of trade in favour of industry.

Further, control of prices has not been successful anywhere without the control of supplies. And for the control of supplies to succeed, the Government will have to take over production of food. It is thus that collective farming came to be established in the USSR—farming which presumably nobody believing in democracy contemplates.

The communists do not make any secret of the fact that under their set-up it is the peasantry which must be squeezed and which must provide on favourable terms industry's working capital in the shape of a surplus of food and raw materials and, at the same time, contribute significantly to the financing of investment in the infra-structure of industry in the form of high levies or taxes, thus foregoing any sizeable increase in its own welfare. In the communist jargon, it is the peasantry which must act as the 'nutrient base' for the non-agricultural sector or pay for economic growth.

#### Crop and Cattle Insurance

So far as the scheme of crop insurance is concerned, it is intended to protect the farmer or his crop, mainly, against natural calamities and his cattle against disease just as price support is intended to protect him against the consequences of over-production.

The All India Congress Committee had passed a resolution for introduction of this scheme with great fanfare in May, 1965. At long last, Government took a decision in May, 1974, to introduce crop insurance in six States—for jute in West Bengal and for cotton and groundnuts in the other five. That the decision was not likely to be an easy one to implement, is suggested by the experience of the only crop insurance experiment that has been made in the country till date. Organised by the Gujarat State Fertilizer Corporation, besides physical inputs, the experiment has needed a very heavy dose of managerial inputs to succeed, trained technicians, supervisors and others having an experience of agriculture who are scarce.

There are obvious difficulties in determining, with any degree of exactitude, the damage that the crop has suffered. Safeguards to prevent unfair practices, therefore, would require a certain amount of ingenuity. Agriculture production being a biological, not a mechanical process, caution is also needed in the light of the varying conditions to which even the same crop is subject in various regions and agro-climatic circumstances.

Other problems also need to be spelt out. Will the scheme be compulsory? At what prices will returns and premia be assessed? What will happen to areas where irrigation is not assured? etc., etc.

According to information available, crop insurance has been introduced in Japan and the U.S.A. Maybe, they are able to make a success of it. It does not follow, however, that we can also do the same. For one thing, standards of integrity here are comparatively low. Whether there was actually some damage to his crops—and if any, its extent, will always be a matter of dispute between the farmer and the agent of the insurer, which is likely to be settled by oiling the palm of the latter. Excessive claims led to discontinuance of the Gujarat Government Insurance Scheme in 1975 after the experience of only one year. Realisation of premium from the farmers will pose another headache to the Government. Adequate payment of the vast number of functionaries, that will be required, will mean a huge financial burden which neither the beneficiaries, viz., the farmers who possess tiny holdings, will be willing to pay nor the Government or any insurance company easily able to shoulder.

It will, perhaps, not be irrelevant to point out here that the present writer had written to the then Prime Minister, Shri Lal Bahadur Shastri in October, 1965 to desist from enforcing the scheme: it was a chimerical idea and bound to fail.

#### Fixation of Minimum Agricultural Wages

Just as in the field of industrial production, so in the field of agriculture, the Agricultural Minimum Wages Act was enacted in 1948 to

ensure a minimum subsistence wage to the labourer. Leave and holidays were guaranteed and maximum hours of work prescribed. Under Section 20, a labourer who is paid less than the minimum wage fixed by the Government, is entitled to sue his employer and claim compensation before the prescribed authority. Trade Unions can also take up the case. For speedy decisions on these complaints, the Act provides for the appointment of Compensation Commissioners.

Enforcement of payment of minimum wages can certainly be one of the effective ways to provide relief to the landless workers or agricultural labourers, provided the agricultural sector, as a whole, can afford to pay such wages and the supply of labour is less than, or equal to, the demand for it. None of the conditions are, at present, being fulfilled, however.

As regards the first: according to the Central Statistical Organisation, the net National Product generated in agriculture in our country in the year 1978-79 at current prices, was worth Rs. 31,023 crores and, according to the latest estimate of the Planning Commission, the number of workers on land—landholders and landless included—was 192.43 million. Their average daily income worked out to be only Rs. 4.43, which was less than the minimum wage applicable in most of the non-agricultural occupations, and certainly much less than what would enable a worker to provide bare bread and clothes to his family, not to speak of maintaining it in reasonable comfort.

As regards the second condition: the actual wages of workers in any industry or occupation are determined by the law of supply and demand. For example, in Punjab, where intensity of agriculture is the highest, demand for farm workers is so great that a large number of workers migrate to that State from Uttar Pradesh, Rajasthan and even from far-off Bihar. The workers there, therefore, get wages which are higher than the minimum fixed by law. In Madhya Pradesh and Bihar, however, the agricultural labourers get very low wages despite law or orders to the contrary, simply because agricultural production in these States is low and the number of potential employees larger than that of potential employers.

The quickest way to solve the problem of the agricultural labourer or of rural poverty in general, therefore, is to create more jobs by intensifying agriculture. But this will be possible only where agriculturists are provided with the minimum facilities required for intensive agriculture. This point will become clear if we compare the facilities available to farmers in Punjab and Madhya Pradesh, the two States in India, in which agriculture productivity is the highest and the lowest (leaving alone semi-desert Rajasthan):

TABLE 145
Comparison of Minimum Facilities required for Intensive Agriculture in
Punjab and Madhya Pradesh

180	live much with the personal to but	Punjab	Madhya Pradesh
*1.	Production of foodgrains per	AT TO English	There is a broken and a
	hectare (Kg.), 1977-78	2400	699
*2.	Percentage of irrigated land		STEEL TO ASSESS THE OWNER, WHERE
	(gross irrigated to gross sown		
	area, 1977-78)	80.6	10.4
3.	Per hectare application of	Prof Bornson V	cleations) wases were
	fertilisers (in Kg. of	the bluew vist	
	nutrient N+P+K)1977-78	72.43	7,45
	1978-79	91.38	9.21
**4.	Power consumed in agriculture		
	as percentage of total power		
	generated with the same and the	27.14	6.09
5.	Credit from institutional		AND ASSESSMENT OF THE PARTY.
	sources available per hectare (Rs.)	130	31
6.	Average size of holdings in	THE RESIDURD OF	ider the Speit of social
	hectares (vide agri. census, 1970-71)	2.89	4.00
7.	Prevalent wage rate of agricultural		ey are freed from thi
	workers (Rs. per day) (annual		beautie more attuned
	average ending June, 1978)	9.86	5.24

\*Based on estimated figures.

\*\*Figures relate to 1976-77.

From this comparison, it is evident that wherever the needs of the farmers have been even partially met, not only has productivity gone up, and is comparable to the best in the world, but the problem of the landless workers has also been satisfactorily solved. Needless to point out here again, non-agricultural jobs also will come into existence only when and where agricultural production is surplus to the needs of the producers. And the problem of unemployment and under-employment of the landless as also of marginal farmers will be solved only by provision of non-agricultural employment on the small or cottage scale.

Further, administrative common sense should tell us that particularly in regions where would-be employees outnumber the employers no Government will be able to implement a law guaranteeing minimum wages: the numbers involved are so huge and the factors involved in determining a wage so complex.

The rate of wages should take into account the area and quality of land possessed by every farmer. Also, the wage should, in justice, fluctuate along with the actual income of the farmer which so largely depends upon the fluctuating weather. Further, fixation of minimum wages has no meaning unless, at the same time, employment to all those who seek it is guaranteed at the prescribed wage, just as minimum support prices for commodities, such as foodgrains, have no meaning unless Government undertakes to buy all the supplies offered at the prescribed price.

There the labourer is indispensable to the running of the factory. Not so in agriculture or the village: in case he considers the statutory wage prohibitive, the average farmer, instead of winding up his farm, will fall back upon the labour resources of his own family—the labour of his aged father, the children and the wife—to make up for want of hired labour.

As in the case of crop insurance, the author had warned the Central Government in 1965 that although the authors of the scheme of minimum agricultural wages were inspired by noble motives, it was also unworkable, but as usual, nobody would listen.

Mahatma Gandhi's powerful advocacy of a truly Indian approach to India's problems notwithstanding, most of India's political leaders are under the spell of social, political and economic ideas and doctrines that they have received or adopted ready-made from foreign oracles. Until they are freed from this spell, or, alternatively, until they are replaced by leaders more attuned to specific Indian problems and developments, we will merely continue to have the same mild mixture of capitalism and socialism which cannot initiate a process of dynamic growth.

The country has been borrowing resources and even ideas and institutions from abroad for so long that it needs to find out whether these have served it well. China's attitude has been strikingly different. For the last 20 years or so its leaders have struggled against impossible odds to shun foreign models and find indigenous solutions to the country's problems. The Chinese have reshaped the country in the physical sense and have done it on a scale no other people has attempted in modern history. They have reclaimed millions of acres from arid mountainous waste land, stopped soil erosion through massive programmes of afforestation, and improved the quality of land all over the country by raising its level, changing the top soil and providing drainage and irrigation facilities. They have, as it were, re-made their country and ensured that nothing like the threat of widespread famine will haunt their people in the foreseeable future. China does not figure today in western lists of disaster-prone countries.

India's programme for raising agricultural production, limited in scope as it is, instead of being based on locally available resources, is critically dependent on inputs which need either to be imported or manufactured on the basis of imported technology. And as for the value we put on programmes of afforestation, it will be clear from the fact that India has engaged in deforestation on a scale that threatens to produce a major disaster by the turn of the century.

India could have also equally well raised a land army consisting of idle and semi-idle labour in our villages which could be employed on formation of capital for a wide variety of common purposes: landlevelling, construction of roads, wells, irrigation dams and canals, flood protection and drainage works, contour and other soil and water conservation structures, digging of ponds, establishment of fuel plantations, as well as improvement in amenities through the construction of community buildings, village sanitation and reconstruction of the countryside in so many other ways. These types of capital formation require technologically only very small amounts of equipment. They can be constructed with the maximum of labour and minimum of capital resources. In fact, in most cases, the large supply of labour would obviate the use of machinery and other capital altogether.

It is less than full, even less than half utilisation of our labour power that partly explains the poor state of the country's economy. Our efforts in the sphere of economic development will bring little results—all success in the sphere of heavy industry and elsewhere will be in vain—if we are unable to mobilise the rural labour force for productive purposes or capital creation.

"No student of Indian politics", laments the Editor of the 'Times of India', in an article published on March 13, 1974, "can fail to take note of the inability of the village-based counter-elite to project or promote a rival approach. Partly because it itself shares the material aspirations of the urban people, partly because it has not been educated and sophisticated enough to make itself felt beyond the level of the district headquarters, or, at best, the State capitals, and partly because it has been put on the defensive by left intellectuals and leaders who have damned its members on the ground of their feudal outlook and behaviour."

Here is a challenge which, one can only hope, youngmen from the villages will avidly accept. India belongs to them more than anybody else. Theirs is the duty and theirs the privilege, therefore, to lead their Motherland on to Mahatma Gandhi's objective where wealth will no longer accumulate in the towns and men will no longer decay in the villages.

Gandhiji had spelt out his objective as under:

"I want to resuscitate the villages of India. Today our villages have become a mere appendage to the cities. They exist, as it were, to be exploited by the latter and depend on the latter's sufferance. This is unnatural. It is only when the cities realize the duty of making an adequate return to the villages for the strength and sustenance which they derive from them, instead of selfishly exploiting them, that a healthy and moral relationship between the two will spring up."

<sup>5.</sup> Vide 'Harijan', 9th October, 1937.

Nine years later, viz., in 1946 Mahatma Gandhi said in an interview with a foreign correspondent as follows:

"The British have exploited India through cities; the latter have exploited the villages. The blood of the villages is the cement with which the edifice of the cities is built. I want the blood that is today inflating the arteries of the cities to run once again in the blood vessels of the villages."

Mahatma Gandhi's wish, however, has not been fulfilled. On the contrary, the draining of the blood of villages has now been more systematised, institutionalised, and perfected.

As has already been pointed out, however, neither agriculture nor handicrafts will prosper and as, a consequence, nor will the villages bloom until the structure of political power in the country changes. Till then migration to the town and exploitation of the village will go on unchecked and the dangerous cultural, economic and psychological chasm between the city and the countryside still continue to widen.

The handful of the upper, educated and articulate sections of the people who form the bulk of the political and administrative leadership of the country, live so far removed from the overwhelmingly large numbers of the common people that they are completely unaware of the prevailing squalor, inhuman living conditions and intolerable misery of the latter. By living for generations in these two completely different worlds, each oblivious of what goes on inside the other, the two sets of people have developed as two different species of animals. Thus, with regard to social environment, tradition, culture and the way of life, there is an ab initio communication chasm between the two-between what are called the elite and the intelligentsia, on the one hand, and the masses, on the other. Since Independence this chasm has widened instead of being bridged. But unless this difference between the two worlds with regard to their language, philosophy, allusions and the very canvas of life is obliterated there can be no communication between the two and, therefore, no understanding and solution of the national problems.

While the writer believes that the villages should be resuscitated and the exodus from the villages to the towns should cease, he does not entertain the idyllic vision of a return to a golden age of happy communal village life. Nor, as the reader must have seen in the first chapter of the Second Part did Gandhiji plead for such a village—a village bereft of the gains of science like electric power and telephones or a society without any machines or big machines at all. As Michael Lipton has said in the introduction to his book Why the Poor People Stay Poor already referred to, "The traditional village economy, society and polity are almost always internally unequal, exploitative and far from idyllic: these features are likely to reassert themselves soon after the

initial enthusiasm of a communal revival have evaporated. Even the village in which Mahatma Gandhi settled for ten years lost its cohesive and egalitarian ideals soon after his charismatic leadership was removed.

Needless to say, privation, dirt, drudgery and dead habit will disappear from the villages that are envisaged in these pages. Women will emerge into their own. The money-lender and bonded labour will be things of the past. Of course, landlordism will have been abolished lock, stock and barrel.

So that, as the reader must have already noticed, when the writer lays emphasis on development of agriculture, he should not be taken to mean or believe that India should 'stay agricultural', instead of developing. Nor does he share the belief that industrialisation ultimately degrades. The argument that neither the carrying capacity of the land, nor the market for farm production, is such as to permit the masses in India and, for the matter of that, in other poor countries to reach high levels of living without a major shift to non-farming activities, is conclusive.

Besides increased agricultural production, however, there is yet another factor, which is vital to the emergence of a vibrating countryside, viz. that of the necessary will power and determination on the part of the educated rural youth and their well-wishers. Unlike in India and other poor countries of today, the workers, rather the masses in the developed countries of Europe and North America proved able to raise their share of political power and economic welfare. But the very pre-conditions for such trends are particularly absent in India, as also in most of today's other developing countries. The rural masses of India, unlike the urban masses of Britain and other Western countries, lack the power to organise the pressure that alone can turn the egalitarian rhetoric of their political leaders into distributive action against the pressure of the elite. The attitude of the Government of India and of the urban elite which is its real prop, would seem to require a revolt on the part of the villagers and the slum-dwellers against the present state of things. When the writer speaks of a 'revolt' he means an organised pressure on Government through the ballot box plus all other possible means short of sabctage and violence. But history shows that, unlike most other countries. the masses of India never revolted against their ruler or government howsoever unjust or oppressive he or it might have been, believing as they do in Fate and the illusory nature of this world.

Thus it is here, viz., in the sphere of our mental attitude or national psychology, that the role of the political parties of the country becomes more relevant than in any other activity; it is their duty and their duty alone, to rouse the masses from their age-old slumber.

Now, the question arises which of the political parties or leaders in the country will rouse the masses out of their slumber? Obviously, only those who know the lay of their motherland—the situation as it exists in the villages and the slums, not those who were born with silver spoons in their mouths and never saw poverty face to face or experienced it in their own lives. It is these leaders who will have to organise the rural, educated youths to no longer suffer injustice or exploitation. And it is these youths who will bridge the chasm between the two 'worlds' of India and provide a new type of authentic Indian leadership both in the sphere of politics and administration—with their eyes and ears attuned to the sacred soil of their land. It is they alone who will solve its problems. Let those youths listen to the advice of Dr. E. F. Schumacher in this connection:

"Perhaps it was the Chinese, before World War II, who calculated that it took the work of thirty peasants to keep one man or woman at a university. If that person at the university took a fiveyear course, by the time he had finished he would have consumed 150 peasant-work-years. How can this be justified? Who has the right to appropriate 150 years of peasant work to keep one person at university for five years, and what do the peasants get back for it? These questions lead us to the parting of the ways: is education to be a passport to privilege or is it something which people take upon themselves almost like a monastic vow, a sacred obligation to serve the people? The first road takes the educated young person into a fashionable district of Bombay, where a lot of other highly educated people have already gone and where he can join a mutual admiration society, a 'trade union of the privileged' to see to it that his privileges are not eroded by the great masses of his contemporaries who have not been educated. This is one way. The other way would be embarked upon in a different spirit and would lead to a different destination. It would take him back to the people who, after all, directly or indirectly, had paid for his education by 150 peasant-work-years; having consumed the fruits of their work, he would feel in honour bound to return something to them."6 (p. 173)

# Epilogue

We have, in the preceding pages, talked of the duty of the leaders of the country to rouse the masses of this land from their age-long stupor and of the obligation of the educated youth, particularly of those coming from the villages, to work as soldiers of this movement and become the foundation-bricks of the grand edifice of greatness and prosperity that our country once was, and as we dream of making it one, once again. It is not an easy task, however; for, it requires a radical change in the attitudes of our people—a psychological transformation on the national scale.<sup>1</sup>

#### MENTAL ATTITUDES

A good few think that, had India, consequent upon the decline of the Moghul Empire, not fallen apart and divided into warring factions and, later on, not fallen a slave to the British thus becoming subject to economic exploitation by foreigners, it would have achieved economic progress on the lines of Western countries. This is far from proved. For, while political independence and stability of a country may be, rather is, one of the pre-conditions of its economic progress, it cannot, be itself, be the cause thereof. Iran and Thailand are two countries of Asia which enjoyed political stability and escaped the colonialist yoke of Europeans. Yet, they are at about the same general level of destitution and want that has been the fate of India and its ex-colonial neighbours. The same is true about the argument regarding the availability or otherwise of natural resources and/or capital. While England, on the one hand, and the latter-day USA and Canada on the other, achieved economic progress, Spain and North America of only three centuries ago, that is,

<sup>1.</sup> The matter of this Chapter has been largely taken from the author's book, India's Poverty and Its Solution, Asia Publishing House, Bombay, 1962.

before the Europeans arrived to colonise it, failed to do so—although Spain was, perhaps, the greediest of all colonial empires and, at one stage of European history, enjoyed unparalleled prosperity because of economic exploitation of its colonies and dependencies, and North America possessed vast natural resources of its own. Besides favourable political conditions and availability of ample natural resources or capital per capita, therefore, there is something else that would seem to be necessary for a country to develop economically. That 'something else' is the human factor of requisite quality. The reason for our economic backwardness lies ultimately not in the British domination, despite the destruction they wreaked on the country and the denial of initiative imposed upon us, nor in our stars or miserliness of Nature towards our country, but in the disquality of its inhabitants—in us and us alone.

Says W.S. Woytinsky:

"Prosperity in modern countries is based not on the accumulation of capital but on the people—the labour force, in the broad sense of the term. The experience of Germany and Japan after World War II illustrates this point. Their cities, ports, rail-roads, bridges, factories and power stations, all the riches accumulated by half a century of hard work, were reduced to heaps of rubble and ashes. Half-naked people were living among ruins. All they had left was their hands and their brains—trained for collective creative work—and determination. With these assets they started rebuilding. A decade later they came back as greater economic powers than before the war." (vide *India*: The Awakening Giant, Harper and Brothers, New York, 1957, pp. 185-86).

It is almost an axiomatic truth that while the quality and quantity of natural resources are a gift of God or Nature and almost beyond human control, the quality or degree of excellence of a people (along with its quantity) is very much of their own making. And, as the example of Japan would show us, deficiency in quantity of natural resources can, to a great degree, be made good or compensated by the quality of the working population. In addition to historical factors, this quality depends upon social and economic attitudes of a people, its quality of health and education as also the kind of leadership provided by the Government.

Excepting for a few communities like the Sindhies, Gujaraties, Marwaries and Punjabies residing in the western parts of the country<sup>2</sup>

<sup>2.</sup> There are three factors—historical, geographical and social—which obviously played a great part in determining these communities' outlook on life. They reside in those regions of the country (a) which had to face most of the foreign invasions, (b) which receive comparatively little rainfall and have therefore suffered from numerous visitations of famine, and (c) where the most radical, social and retigious reform movement in the country, viz. the Arya Samaj, took

EPILOGUE 533

our people, on the other hand, that is, unlike the people of Japan, are easy-going and unambitious; they are not prepared to work hard, of their own free will, with a view to improving their economic and social status. They are afraid of new ideas and ways, of taking chances, of incurring temporary defeat and loss.

It is the religious beliefs and customs of a people which are most relevant in this connection—which determine a people's attitude to life. All kinds of human activity, social and economic, are born in the mind. So, the economic conditions of a society can ultimately be traced to the thought processes or mental attitudes of its members. The cause of prosperity or poverty of a country can, thus, be seen to lie in the minds of its inhabitants. If we are a poor and economically backward society today, the reason can be sought in our defective mental attitudes. As a corollary, if we now want to make our country prosperous, we will have to bring about a change in the present social and economic attitudes of our people. It is only after such a change, that is, after we have come to entertain a desire for economic progress—a desire to occupy a position in the comity of nations which our forefathers once occupied—that we will set about to acquire the means of achieving it, viz., to gain the necessary skills or knowledge and the necessary health or physique and the required will to work hard. Seen in this manner, economic development is not exclusively-maybe, not even primarily-an economic progress: it also involves a deep cultural and social change -a change in values, habits, knowledge, attitudes, ways of life, social ideals and aspirations. This change-or social, cultural and religious reform-is part of the price we will have to pay for getting out of the morass in which we find ourselves today.

For several centuries the Hindu religion, as interpreted by certain schools, has been placing great reliance on asceticism of an individualistic and functionless kind, and gives an extreme rationalisation for ignoring the material world. To them the world is nothing but Maya—an illusion. Great stress has, therefore, been laid on other-worldliness, and little positive inducement has been offered for hard work and accumulation of wealth. Simplicity or unostentatious living has been confused with an inferior mode of living.

Most of our people are content with their lot or *Kismet* and do not believe that they themselves can be the architects of their fate. Instead of relying on their efforts, they look to outside aid, be it God or Government. The result is a society steeped in fatalism and consequent poverty.

That we, the Indians, want to shirk work will be clear from the following table which shows the percentage of working force to total

shape and influenced people's mind greatly. The Punjab, in particular, has been fortunate in another respect also. The last two Sikh Gurus, Tegh Bahadur and Govind Singh as also Guru Arjun Dev, by their own example, succeeded in imbuing the people with a spirit of enterprise and a will to resist all kind of odds including tyranny.

population in 16 countries:

TABLE 146

Economically Active Population by Sex and Percentage of Total
Population—Selected Countries

(1971 or nearest)

Country	Economically active population ('000)				
all of Suremanne	Males	Females	Total		
U.A.R.	8,728	539	9,267		
	(49.3)	(3.1)	(26.4)		
Canada	5,760	3,053	8,813		
	(53.3)	(28.4)	(40.9)		
U.S.A.	58,397	38,520	96,917		
	(55.9)	(35)	(45.2)		
India	149,146	31,339	180,485		
	(52.5)	(11.9)	(32.9)		
Japan	33,680	20,100	53,780		
Lamon /s/SET Fre had	(60.6)	(35.1)	(47.7)		
Pakistan	19,595	1,440	20,035		
	(52.1)	(4.3)	(59.5)		
Czechoslovakia	3,870	3,113	6,983		
er areas on transfer a	(55.4)	(42.3)	(48.7)		
France	14,146	7,988	22,134		
NOTE AND SHORT OF THE PARTY	(54.6)	(29.6)	(41.9)		
Germany (West)	17,075	9,535	26,610		
The state of the state of the state of	(59.2)	(30.0)	(43.9)		
Poland	9,424	8,082	17,507		
OF ALLESS DESIGN OF	(57.8)	(46.7)	(52.0)		
Switzerland	1,973	1,022	2,996		
LIZENSE ZELICIO PRO	(63.9)	(32.1)	(47.8)		
U.K.	16,329	9,387	25,715		
resumbled by the same	(60.6)	(32.1)	(46.3)		
Yugoslavia	5,686	3,203	8,890		
a a Boota i ia	(56.4)	(30.7)	(43.3)		
Australia	3,640	1,691	5,330		
	(56.8)	(26.7)	(41.8)		
New Zealand	862	415	1,276		
Non Zealand	(55.3)	(26.3)	(40.7)		
U.S.S.R.	57,990	59,037	117,028		
U.S.S.K.	(52.1)	(45.3)	(48.4)		
The second secon	(32.1)	(43.3)	(40.4)		

Source: ILO Year Book of Labour Statistics, 1977.

Advent of political independence does not seem to have made any difference at all in this regard. True, the existing poverty of our people and consequent inability to provide against natural hazards including disease, and illiteracy are, to a great extent, responsible for this fatalism or want of initiative, rather a refusal to improve their economic conditions by their own efforts, but our religious beliefs and customs have clearly played a greater role in generating this attitude than any other factor.

Fatalism has to be banished. Leaders of our society have a great responsibility in this regard. The people have to be made to realise that

EPILOGUE 535

our physical environment is not an immutable factor, but it is an ordered world which can be made to yield to productive change. It is not ordained by Providence that our children should remain ignorant or live in want and penury. Human will is free and one can, by one's efforts in present life (प्रक्षायं), negate—or largely negate—the effects of fate or actions in previous life (प्रक्षायं). Fatalism or absolute determinism is not a part or teaching of the Karma theory. Man is not merely a creature, but also a creator of circumstances. The idea of progress through human effort is not only not foreign to Hinduism but is, in fact, a part of its teaching.

The great founder of the Arya Samaj, Swami Dayanand Saraswati, the zeist-geist of social and much other change in India, had reminded the Hindus that the soul is free and action is the generator of destiny. "An energetic and active life", he wrote in the Satyarth Prakash, "is preferable to acceptance of the decrees of destiny. Destiny is the outcome of deeds. Deeds are the creators of destiny. Virtuous activity is superior to passive resignation.... The soul is a free agent, free to act as it pleases. But it depends on the grace of God for the enjoyment of the fruit of its action."

Dr. Sarvapalli Radhakrishnan put it thus:

The cards in the game of life are given to us. We do not select them. They are traced to our past *Karma*, but we can call as we please, lead what suit we will, and as we play we gain or lose, and there is freedom.

Next to religion, custom is singly the most powerful force in every society. A people's conduct or behaviour is largely governed by its social tradition or cultural inheritance, which has perpetuated or transmitted from generation to generation the socially accumulated experience, skills, judgement and wisdom of men who have gone before.

Our customs or cultural traditions, however, like those of any other country, are not all good or unmixed good. While stubborn conservatism has served to preserve precious values—qualities of character and conconduct—which give strength, stability and refinement to our society, and might otherwise have been lost, it has also perpetuated traditions which are not so helpful. They include superstitions, bad habits and folkways which are often the product of some mistaken generalisation, or rules that once were good, but no longer applicable. Such traditions have made the process of living for the mass of the people a heavy, dull burden and blocked progress.

#### THE CASTE SYSTEM

The caste system—a dominant part of our cultural inheritance—is one such custom or institution that is out of date. Today it is one of the built-in features of the Hindu, rather the Indian, mind. In the process

of expanding, and as time rolled by, the pristine teaching became blurred, with the result that the four castes or divisions of society as originally conceived, based on qualities, actions and aptitudes, were superseded by hundreds of castes and thousands of sub-castes in which neophytes within the Hindu fold were accommodated. The method of combining functional skill with new castes was an ingenious way of establishing social harmony by giving the newcomer an assured economic position within Hinduism, and this continued to hold the field as long as the economic basis of the Hindu social order remained stable. The system served as a social insurance for the weak and the unsuccessful. Instead of being thrown in a maelstrom, every member of the society knew his place and had a source of living which was secure from encroachments or grasping proclivities of his neighbour. Division of functions and power among the four classes-Brahmin, Kshatriya, Vaishya and Shudra-was so arranged, and interests of one class were so different from those of others that control over society as a whole could not be gathered, as today in a communist or purely capitalist society, in the hands of any class or group of individuals. The caste system represented an attempt at organisation of society on the doctrine of checks, balances, separation of powers and diffusion of sovereignty.

Today, however, the caste system, leading directly to the fragmentation of Indian society, is a great hindrance to common economic endeavour. With membership of a caste being fixed for life and hereditary choice of the marriage partner being limited to members of one's own caste, and restrictions placed on dining with or eating food cooked by outsiders and even on touching them, the caste system bases the organisation of life on the principle of division and disintegration and, as Kingsley puts it, thus, represents "a most thorough-going attempt known to human history to introduce absolute inequality as the guiding principle in social relationships".3 Community projects become a fantastic paradox in such a society which denies the entire theory of community life altogether, or restricts it to a very narrow circle. The tragedy has been, to quote an eminent thinker, that "emphasizing the unity of the whole world, animate and inanimate, India has yet fostered a social system which has divided her children into water-tight compartments, divided them from one another, generation to generation, through endless centuries, and exposed her to foreign conquests which have left her weak and poor".

The conception of a hereditary occupation is exactly the opposite of the idea of free opportunity, open competition and individual mobility, associated with a dynamic economy. The fact that Japan had a much less rigid caste system than India, helps explain, inter alia, why Japan could industrialise more rapidly. A man's caste in India is immutable. It confers or imposes a definite social status on him, virtually eliminating

<sup>3.</sup> Population of India & Pakistan, Princeton University Press, New Jersey, USA, 1951, p. 170.

EPILOGUE 537

prospects of promotion through hard-work. A man can change his religion, but not his caste.

Further, the system serves to inject in every Hindu mind since child-hood ideas of high and low, superiority and inferiority, and puts a premium on membership of certain castes and a discount on that of others. It runs counter to the conception of dignity of labaur. Manual work is considered degrading: it is more respectable to do nothing at all than to supervise, let alone toil. There is an English adage that 'he that by the plough would thrive, himself must either hold or drive' but there are some high castes in certain parts of India whose members will not 'hold' the plough themselves, nor will their women-folk attend even to milch-cattle. Those who do not work at all, or put in comparatively less work, occupy higher rungs in the social ladder and those who put in more work are assigned to lower rungs. It is not surprising, therefore, if in spite of all the learning of our forefathers, India is so poor.

Also, it is caste that lay at the root of our political slavery. The very weaknesses of a caste-ridden society make it incapable of political unity over a larger territory, and virtually helpless against an invader. India, therefore, hardly ever needed to be conquered in the military sense by the foreigner; he always found it bound hand and foot, and ready, in a way, to welcome the aggressor without a struggle or much of a struggle. India had no jealousy or hatred of the foreigner because it had no sense whatever of patriotism or national unity. There was no *Indian* and, therefore, logically speaking, no foreigner. The notion of patriotism presupposes compatriots or men bred up in a community which may be regarded as a large family, so that it is natural for them to think of the land itself as a mother. But if the community is composed of thousands of castes and sub-castes with no common interest or aspirations, and never meeting on the same social plane, then patriotism or love of the country cannot simply take root in such a society.

True, one of the leading elements of nationality is a common religion and a sense of kindred and common interest engendered by it. In Hinduism, which was prevalent throughout the country, India had a germ out of which, sooner or later, an Indian nationality might have sprung. And foreign invasions which came one after the other through so many centuries supplied precisely the pressure which was most likely to favour the development of this germ. But these hopes were belied: Hinduism did not pass into patriotism and failed to arouse a united India against the invader, simply because the caste system had enfeebled it.

The Moghuls conquered India almost without apparent means. Babar did not come with a mighty nation at his back or leaning on the organisation of some powerful state; yet he succeeded in working a miracle, viz., the establishment of the Moghul Empire which lasted two centuries. This miracle was possible only because hundreds of millions of

Hindus who inhabited this country had not developed the habit of thinking all together, like a single nation. A mere mass of individuals or a conglomeration of groups not connected with each other by any common feelings or interests, the Hindus were easily subjugated just as they had been by previous conquerors, from Mahmud Ghaznavi onwards, because they could be induced either to remain apathetic or to act against each other.

The same story was repeated in the case of conquest by Britain. When authority in India had fallen on the ground through the decay of the Moghul Empire it was picked up in the major part of the country by the Marathas. They had it within their power to unite India, but failed to do so because they placed their narrow interests before those of the country as a whole. The idea of a united India was foreign to them. Not only this: they even failed to build up a united Maratha State, and soon split up into five principalities each based on a separate clan or sub-caste. Answering the question why the Marathas failed to create an enduring State, Sir Jadunath Sarkar cites the Hindu caste system as the major cause. Though Shivaji's own conduct in matters of religion was very liberal, his victories and those of Baji Rao I created a reaction in favour of Hindu orthodoxy which accentuated class distinctions and ceremonial purity of the daily rites:

"In the security, power and wealth engendered by their independence, the Marathas of the 18th century forgot the past record of Muslim persecution; their social grades turned against each other. The Brahmans living east of the Sahyadari range despised those living west of it, and the men of the hills despised their brethren of the plains, because they could now do so with impunity. The head of the state, viz., the Peshwa though a Brahman, was despised by his Brahman servants belonging to other branches of the caste—because the first Peshwa's great-grand-father's great-grand-father had once been lower in society than the Deshastha Brahmans' great-grand-grand-fathers' great-grand-father! While the Chitpawan Brahmans were waging a social war with the Deshastha Brahmans a bitter jealousy raged between the Brahman ministers and governors and the Kayastha secretaries: we have unmistakable traces of it as early as the reign of Shivaji."

It was this division of the Hindu or Indian society into innumberable fragments and not some enormous superiority on the part of the English race that made their empire in India possible. England conquered India and held it by means of Indian troops paid with Indian money. In 1773 the East India Company had 54,000 troops of which 9,000 alone

<sup>4.</sup> Shivaji and His Times, by Sir Jadunath Sarkar (13th edition), pp. 374-75, published by M.C. Sarkar and Jans Ltd., Calcutta, 1952.

EPILOGUE 539

were English: in 1818 these figures stood at 1,60,000 and 25,000, and in 1857, at 2,80,000 and 45,000 respectively. The word 'Indian' was a misnomer. They were either Hindus or Muslims. In fact, there were no 'Hindus' either; the troops that bore or could bear this name had little or no emotional bond that could weld them together; they were blue-blooded Rajputs, Marathas, Jats or Sikhs.

It is the rigid caste system, again, with its notions of high and low that drove millions of Hindus into other religious folds in spite of the fact that the spiritual teachings of the latter were in no way superior to those of Hinduism. It is only human nature if members of the despised castes resented the injustice and tyranny which the caste system meant to them in practice and, in the bitterness of public humiliation, sought to be avenged on the persecuting church by going over to other faiths. The irony of the situation lay in the fact that men who were looked down upon by their co-religionist, because of their birth, usually found recognition as equals at the hands of their erstwhile co-religionists as soon as they forsook the religion of their fathers.

Yet, again, it is the caste system which, more than anything else, made it difficult, if not impossible, for the different religious groups of India to come closer together, socially and politically—to weld into one society—and ultimately led to the partition of the country. When the system kept one Hindu away from another it could not possibly tolerate or encourage Hindus as a community to partake in cultural and social activities in common with non-Hindus. Despite sincere protestations on behalf of the Indian National Congress, Muslims continued to apprehend that, after the British had left, they would not get a fair deal from the Hindu majority which was not prepared to accord equal treatment even to its own co-religionists. Indian nationalism fostered by common hatred of the British, thus, always bore the mark of a conflict within itself.

In the course of a letter which the author had occasion to address to Smt. Indira Gandhi on August 9, 1966 he wrote as follows:

A reference to census figures of 1931 relating to Punjab, would show that "the Hindus in the province had been reduced from 43.8% in 1881 to 30.2% while Sikhs had increased from 8.2 per cent to 14.3 per cent and Muslims from 40.6% to 52.4 per cent".

The reason lay—as the Census Report goes on to point out—in the attitude of high caste Hindus towards agricultural tribes like Jat and Saini and towards those who were considered as untouchables, e.g., Chamars and Chuhras. The reaction of the Jats who constituted, by far, the largest community—owing to which fact Punjab is called the 'home of Jats'—will be apparent from the following table:

TABLE 147

Jat Population

(in thousands)

Religion	1881	1931		Variation from 1881 to 1931	
		Actual	Assuming there were no conver- sions	Actual	Assuming there were no conver- sions
Hindu	1445	992	2076	<b>— 453</b>	1084
Sikh	1123	2133	1614	+1010	+ 519
Muslim	1655	2941	2378	+1286	+ 563

Finding that they were looked down upon by their Rajput, Brahmin and Khattri brethren, and that, while it was not possible to change their caste, it was possible to change their religion this sensitive community of brave soldiers and sturdy peasants turned to Sikhism in the Central Punjab and to Islam in the western Punjab.

So that during a period of 50 years, the population of Hindu Jats, instead of going up, came down by 31.4 per cent and that of Sikh Jats and Muslim Jats went up by 90.0 per cent and 77.8 per cent respectively. Thus, conversion of Hindu Jats along led to a loss of 1084000 persons to the Hindu fold during 1881-1931. (The author may like to add here that, inasmuch as the Sikhs believe in transmigration of soul and doctrine of *Karma* which constitute the basic philosophy of Hinduism, he does not consider them different from Hindus.)

Other Hindu communities also responded in the same manner as the Jats. But what is remarkable, is that the Brahmins and Khattries in particular, who had to flee their homes in the western parts of Punjab and flocked to Delhi and other towns of Northern India, even today talk and act in a contemptuous manner towards the Jats and other backward communities: the latter have no right to a place in the power structure—in the sun. The high-caste Hindus have not learnt any lessons, and will not perhaps learn any.

Developments similar to those in Punjab took place in Bengal also, and for almost similar reasons. Hindu and Muslim population was just equal of one another in 1871: in a span of six decades, viz., by 1931 the former declined to 43.5% and the latter rose to 54.4% of the total population of the State. The result? All the learning of those savants in science and literature and all the sacrifice of the political revolutionaries which Bengal had produced during the days of the British rule, went in vain in the context of a decaying and caste-ridden society to which they belonged: On partition of the country in 1947 and in subsequent years they and their children had to flee their

EPILOGUE GRAMTHON DIMENSIONS 541

ancestral homes and hearths in East Bengal for protection of their lives and their honour to West Bengal and Assam.

Coming to the present times, the population of the Hindus and Muslims, during the period, 1961-71, went up by 23.11 and 30.84 per cent respectively. The population of Christians also went up nearly at the same rate as that of Muslims. Disparity in birth rates may be a factor in the disparity in the growth rates, particularly so far as Muslims are concerned, but the major cause will have to be sought elsewhere viz. in social system of the Hindus.

Before the formation of Pakistan there were signs that the Hindus were awakening to their decline. They had begun to take a more active role in behalf of their religion. Social reform movements such as the Arya Samaj were giving Hinduism a more modern approach to the pursuit of its own interests. It was expected that the fact of partition of the country which led to emergence of two new extremely Muslim States on India's frontiers, one in 1947 and the other in 1972. will doubtless accelerate the breakdown of caste and, for its survival if not for anything else, Hinduism will move further more rapidly than in the past in the direction of consolidation. But nothing of the kind has happened: the reforming zeal of organisations like the Arya Samaj and individuals like Swami Dayanand burst against the rocks of the caste system and has spent its force, leaving the problem practically unsolved. In fact, thanks largely to selfish politicians, caste has now assumed a still more ruthless form and created more social bitterness than formerly, inter alia with the result that the percentage of Hindu population goes on declining, and declining further.

As this book goes to the press the 'Indian Express', New Delhi, dated April 13, 1981 carries the following despatch from its correspondent based in Tenkasi (Tirunveli District):

Meenakshipuram, now christened by a majority of the villagers as Rahmat Nagar is a hamlet in the Pothi panchayat and is about 10 km. from Tenkasi.

There has suddenly been a mass conversion. One hundred and eighty Hindu Harijan families have changed their faith, that is, about 1,000 persons have shifted their loyalty to Islam. Another 50 families are likely to embrace Islam by the end of April after the annual temple Kodai celebrations. Evidently these people do not want to have any dues left to their old gods.

Mr. Thangaraj, 35, a medical college dropout, said that police 'harassment' had made life miserable for them. "The name Harijan is only a scarlet letter. Though our economic status has improved, social status is denied to us", he added.

On February 19, a function was arranged with pomp and show at Meenakshipuram. About 4,000 Muslims from neighbouring Tenkasi, Kadayanallur, Vadakari, Vavanagaram and other places participated in the conversion ceremony with their families. Mr. Sahul Hameed, MLA, Kadayanallur, took an active part. The religious leaders of Islam also participated in large numbers.

The Harijans of Meenakshipurem are different from their counter-parts in the district. More than 40 per cent of them are educated, and by and large they are sufficiently rich. Ninety per cent of them are registered cultivating tenants of the Thiruvaduthurai Mutt lands in the adjacent Mekkarai.

Some of the villagers are well-placed in government service. With their improved economic status and literacy rates, the Harijans demanded equal social status with other communities, specially Thevars. But they were ill-treated. They allege that separate tumblers were used for serving coffee and tea in hotels. They were not even allowed to sit in the buses when other caste Hindus were in large numbers. They were socially boycotted and persecuted.

Some came to the conclusion that a change of religion would offer them solace. At this time a double murder took place in Mekkarai. The deceased were Thevars and the Harijans were accused of the crime. The situation deteriorated with the chance finding of a counterfeit currency printing machine. The police inspector in Shenkottai, who is a Thevar, started investigation and it was alleged that some Harijan families in Meenakshipuram were harassed and that some Harijans were illegally detained for more than a month.

Agitated over the attitude of the police and to gain status, the Harijans turned to Islam.

The author does not want to blame the Muslim or any other community for this situation, in the least: it is the Hindus themselves who are responsible for their undoing. They seem to have developed a death-wish and nobody can possibly save them from fulfilment of this ardent wish of theirs, that is, from committing suicide.

Had there been only, say, half a dozen castes or so, with all their members almost equal between themselves, perhaps, the task of abolishing the institution would not have been so difficult. But there are hundreds and thousands of castes or divisions, with sharp differences of rank among themselves and often between members of the same caste. For example, there is no sense of kindredship or equality among the various scheduled castes severally, who have equally suffered from serious social, economic and political handicaps owing to the system. Said Mahatma Gandhi once: "All the various grades of untouchables are untouchable among themselves, each superior grade considering the inferior grade as polluting as the highest class of the caste Hindus regards the worst grade of the untouchables."

5. Kingsley Davis, The Population of India and Pakistan, Princeton University Press, New Jersey, United States, 1951, p. 167.

EPILOGUE 543

The caste system has deep psychological roots: a Marathi poet describes the Hindu society as made up of "men who bow their heads from kicks above and simultaneously give a kick below, never thinking to resist the one or refrain from the other". It is this balance of psychological compensation provided in the heirarchical system of caste that has kept it going in spite of so many onslaughts it had to face and so many disasters it brought upon the country.

However, there is a remedy to every evil: caste can be easily abolished or, at least, robbed of the poison it has injected in our society only if its leaders so willed it. The remedy is very simple: the question merely is whether we are sincere in our professions.

Pointing out that, of our social weaknesses, viz., religion, linguistic differences and the caste system based on birth which led to India's political subjugation for centuries, the author regarded the latter as the single greatest cause, and wrote to Pt. Jawaharlal Nehru on 26 May, 1954 as follows:

The regret, however, is that we seem to have learnt no lessons. The caste feeling, instead of being on the decline, is on the increase obviously owing to the advent of democracy and the scramble for jobs. Not only has it invaded the highest reaches of our public life, but has affected the services also. It leads to acts of discrimination and injustice, warps and narrows a man's mind and heart and creates a vicious circle of accusation and counter-accusation, distrust and suspicion in society. Lately, it has become a weapon of political vendetta.

The question remains: how to eradicate it. Attempts have been made by Teachers and Reformers since the times of Gautam Buddha, but to no avail.

I make bold to offer a suggestion, which I have been recommending in a feeble way in my own sphere for the last six years or so. In modern times caste comes in the life of an individual only at the time of marriage. So, if the evil has to be tackled successfully, steps have to be taken which will rob the easte of its relevance or significance in marriage. That is, the evil has to be tackled at the source. While laying down rules for recruitment to Services, we prescribe all sorts of qualifications in order to ensure that a man fit and suitable for the job alone gets in. These qualifications have only his mind and body in view. But there is no test laid down to measure his heart—to find out how large his sympathies are, whether he will be able to act impartially, whether his heart is big enough to contain all those with whom he will have to deal in the course of his official duties, etc. In my opinion, in the conditions of our country this test will be fulfilled in a large measure if we require the candidates, at least for gazetted jobs in the first instance, to marry outside the narrow circle of their own caste. By

enacting such a provision we will not be compelling anybody to marry against his wish, just as we do not compel anybody to become a graduate today, which is the educational qualification required for many a Government job. It will not at all be difficult to secure such young men in adequate numbers. Today young boys and girls receiving education in our colleges are all prepared for this step. I would lay down the same qualification for legislators. Of course, this qualification of the marriage being an inter-caste will apply only to marriages that take place after a certain date, say, 1st January, 1955. An unmarried man will be free to enter the services or the Legislature, but if later on, he marries inside his castes he will have to resign. Further, for services under the Union we may say that marriage in a different linguistic group will entitle a candidate to a preferential claim. This will be all the more desirable inasmuch as linguistic States are now clearly in the offing. Such provisions should not offend the feelings even of orthodox people, for anuloma marriages have been sanctified by our Shastras also. In effect, we will be converting the present-day caste into so many gotras and discouraging a man's marriage in the gotra of his father

If an article to this intent is inserted in the Constitution, India's greatest social evil and, to use Rajaji's aphorism, India's Enemy No. 1, would have been laid to rest within a period of ten years. The country will never become strong unless caste is rooted out. And this consummation will never be accomplished unless the State intervenes, and strikes at the source. Otherwise, some day the fire of mutual suspicion and hatred which the caste system has kindled for centuries now, will have consumed the country to ashes as surely and imperceptibly as night follows day.

I hope my suggestion will not sound fantastic to you. Men like me know from experience what it means to be born in castes other than those which are regarded or regard themselves as privileged. The contemptuous treatment that is meted out, and the social discrimination that attaches, by virtue of mere birth, to members of such castes, has often led to mass desertions or conversions to other faiths, not only amongst those occupying the lowest rungs of the ladder, but also amongst others....

There will certainly be great opposition to the proposed amendment, but if you are determined to see it through, the opposition will melt away in no time. According to my reading of the situation the proposal will receive a greater welcome amongst the educated sections than certain provisions of the Hindu Code Bill.

Whatever be the obstacles if any amendment of the Constitution on these lines can be secured, it will, according to my little mind, be a service to the country of equal import with the attainment of Swaraj. Then alone, and not till then, will the foundations of our stability have been truly laid.

With respects,

I am, Yours

Pt. Jawaharlal Nehru,
Prime Minister of India, New Delhi.

Sd/- Charan Singh

The reply sent by Pt. Jawaharlal Nehru to the above letter is repoduced below:

CONFIDENTIAL

Camp: The Retreat, Mashobra, Simla May 27, 1954

My dear Charan Singh,

Thank you for your letter of May 22nd.

You know that I attach the greatest importance to the ending of the caste system. I think this is certainly the biggest weakening factor in our society. I also agree with you that finally caste will not go till inter-caste marriages are not unusual and are looked upon as something which is quite normal. I would go further and say that there will be no real unity in the country till our prejudice against marriages between people of different religions also does not go.

But to say, as you do, that we should try to compel people by constitutional provisions and rules to marry outside their castes seems to me to offend against the basic principle of individual freedom. Marriage is very much a personal affair and we are trying to make it more and more a personal affair and to take it out of the old ruts of conventions and customs. What you suggest is definitely a retrograde step from that point of view, although it is meant to encourage a desirable tendency.

We have to create conditions otherwise. The Special Marriage Bill is one such step. Other steps should also follow. Ultimately people marry those who more or less fit in with their way of thinking and living. Indeed any other marriage is a misfit and any imposition from above is likely to lead to disaster in so far as the married couple are concerned. I cannot bring myself to think of the choice of marriage being controlled by legislation or by inducements offered.

Yours Sincerely Sd/- Jawaharlal Nehru

Shri Charan Singh,
Minister, U.P. Government, Lucknow.

It would be seen from Nehru's reply that he was not prepared to take steps for realization of a practicable ideal, viz., that of inter-caste marriages. Nehru's reply was in line with his general pattern of thinking and functioning in the sphere of public affairs. He admitted that 'caste is the biggest weakening factor in our society', but then he would not take any steps to regulate marriages which lay at the root of caste lest it offended the principle of individual choice or freedom.

Secularism was the great need of the country—he cried himself hoarse over it—but then he allowed the Muslim League which was responsible for partition of the country, to continue functioning in politics and permitted the Congress to form a coalition Government with it in the State of Kerala in 1960. This, despite a resolution adopted by the Constituent Assembly (Legislative) on April 3, 1948 as under:

"Whereas it is essential for the proper functioning of democracy and the growth of national unity and solidarity that communalism should be eliminated from Indian life, this Assembly is of opinion that no communal organisation which by its Constitution or by exercise of discretionary power vested in any of its officers and organs, admits to, or excludes from its membership persons on grounds of religion, race and caste, or any of them, should be permitted to engage in any activities other than those essential for the bonafide religious, cultural, social and educational needs of the community, and that all steps, legislative and administrative, necessary to prevent such activities should be taken."

Partition of the country was bad. But, then, we could not think of coercing any large section of the people to continue living with us against their will—Jawahar Lal Nehru said in a resolution prepared and moved by him in a session of the All-India Congress Committee held in Allahabad in 1941. M.A. Jinnah saw through the weakness of the metal Congress leadership was made of, and concluded that only if he stuck to his guns he will have his way.

As a consequence of this attitude of his which led him to qualify almost every statement that he made on public issues by immediately adding a 'but', however', or 'notwithstanding' to it, not only was he not able to solve a single problem which we inherited from the days of the British but created several new ones which now defy solution.

To revert to the question of inter-caste marriages, however; there was no question of any 'imposition from above' in acting up to the suggestion the author had made. For example, as the author had pointed out in his letter, Government cannot be said to have made any 'imposition' on anybody when it lays down physical and educational qualifications for eligibility of a candidate for recruitment to a State or All-India Service. Nor did the author's suggestion amount to such 'control of the choice of marriage by legislation' that was inadmissible or unthinkable by any canon

EPILOGUE 547

of jurisprudence. The legal code of the country already contains several restrictive or regulatory provisions regarding marriage and divorce. The Hindu law laid down thousands of years ago that no one shall marry a cousin within his seven generations, whether on the maternal or paternal side, and the Janata Government laid down only two or three years ago that no Indian shall marry a girl who is less than 18 years of age. According to the Census Report of 1901, Volume I, Part I, p. 537 there were 2378 castes amongst the Hindus: a candidate for membership of a gazetted service or legislature could easily choose his spouse from the remaining 2377 groups professing his own faith.

Today, thanks to the policies followed by Nehru and his daughter as the makers of India's destiny since September 2, 1946 caste-ism and communalism continue to be the two greatest blocks in the way of our social integration and, therefore, of the country's progress. After liberation from centuries of foreign and minority rule the country needed a firm and clear-headed leader, who would close the rents and holes in our society and make it a strong nation—not a political philosopher with no capac!ty for administration and in whose opinion the world had arrived at a stage when national frontiers were no longer relevent.

The real reason behind the reply that Jawahar Lal Nehru made to the author's suggestion lay in the fact that, notwithstanding what he said or wrote, he himself did not believe that caste was such a great evil that called for a drastic remedy. He had no compunction in attending caste gatherings. This will be clear from the following extract from one of the articles of late Shri Durga Das, an eminent journalist, which he used to contribute regularly to the press and featured as Political Diary, under the pseudonym of *Insaf*.

# 'Hindustan Times', New Delhi, dated 29-3-55 POLITICAL DIARY BY INSAF

The Prime Minister hardly set a happy example when he joined a group of Kashmiri Pandits at the house of the Defence Minister to celebrate his community's New Year day. He should know what people talk in lobbies and in backyards about casteism of his caste men.

The 'casteism of his caste men' as Shri Durga Das Dutt put it, was in fact, the direct corollary of Nehru's weakness or preference for Kashmir Pandits in recruitment to Government services and their postings. When the 'talk in lobbies and in backyards' was brought to his notice he is reported to have remarked that 'a devil you know is better than the one you do not know'.

To couclude and in a way, to repeat: all efforts or schemes to make our country great and glorious once again—to wipe out poverty, to eradicate unemployment and to bridge economic disparities—will amount to

weaving ropes of sand unless our people are prepared to work and develop a spirit of self-relience and they will not do so unless they realize that the world is very much real and man is very largely the captain of his fate—as also that manual work is as noble as intellectual, act that every man is born the equal of another.

#### POPULATION CONTROL

Directly derived from our social tradition are our attitudes towards the issue of having children. Birth of a numerous progeny, particularly sons, is regarded, not as a calamity, but with an air of approval. As stated by Dr. Kanti Pakrasi of the Indian Statistical Institute (Calcutta) in a study on 'Bio-social Context of Family Planning in India, (1972)'. a large majority of India couples are yet to accept the social need for family planning and the desire for childern, specially boys, is still the prime facter in their aversion to a family planning programme.

India's population in 1856 stood at a figure of 137.6 million, in 1930 at 275 million and just today (March, 1981), at 684 million.

The following table would show that, while, owing to spread of modern public health services (however unsatisfactory and inadequate these may be, compared with other countries), resulting in control of epidemics, and to improvement of transport and communication facilities both inside the country and outside, making food available to a famine-stricken population within time, the death rate since Independence has rapidly declined, in the absence of an effective programme of family limitation, the birth rate does not show any such alteration. The results is that the growth rate has gone up steeply and our population which stood at 361 million in 1951 shot up to 547 million in 1971:

TABLE 148

Birth, Death and Growth Rate of Population (1901-1971)

Period	Birth Rate (yer 1000 hohulation)	Death Rate (her 1000 hohulation)	Decenuial Growth Rate (%)	Exyectation of Life at birth birth
1901-1911	48.1	42.6	+ 5.70	22.9
1911-1921	49.2	47.2	- 0.30	20.1
1921-1931	46.4	36.3	+11.00	26.8
1931-1941	45.2	31.2	+14.23	31.8
1941-1951	39.9	27.4	+13.31	32.1
1951-1961	41.7	22.8	+21.64	42.2
1961-1971	N.A.	N.A.	+24.80	47.5
N.A.=Not Av	ailable.			A STATE OF THE PARTY OF

Source: Census of India, 1971, (i) Paper 1 of 1971—Supplement: Provisional Population Totals, p. 36; (ii) Paper 2 of 1972: Religion, p. 7; India 1971-72, p. 104.

549

Out of 58 countries having a population or more than 10 millions or more each in 1979, there are 17 countries which have a lower density as also a lower growth rate than India, viz., China, USSR, US, France, Spain, Poland, Argentina, Eastern Germany, Taiwan, Canada, Yugoslavia, Romania, Czechoslovakia, Australia, Hungary, Chile and Cuba, (In fact, one of these countries, Eastern Germany has a minus growth rate). According to the figures thrown up by the latest Census of India (March, 1981), Italy and UK would also fall under this group.

Seven countries, viz., Japan. Western Germany, U.K., Southern Korea, Shri Lanka, Netherlands and Belgium have a higher density but a lower growth rate than India. On the other hand, Tanzania has a lower density but a higher growth-rate.

Burma, Ethiopia, Nepal and Mozambique have the same or almost the same growth rate as India, viz., 2.2 or 2.3 but their density is far lower. Egypt too has the same growth rate as India, but a very high density (683). Bangladesh is the only country which has both a higher density (675) and almost the same growth rate (2.4) as India. In actual fact, the growth rate of Bangladesh is still higher: quite a large number of its citizens are infiltrating for the last 30 years into the adjoining States of India viz. Assam and Tripura.

Out of the remaining countries no figure or area for Taiwan is available. The rest, viz., 26 countries have a higher growth rate than India but a lower density, as would be seen from the table below:

TABLE 149
Comparative Growth Rate and Density World Countries

125	with townsee or current	Population	Population growth	Usable land area	Density (per sq.
SI. No	Country	(in thousands)	rate (%)	(in sq. Km.)	km, of usable land area)
1.	China	865677	1.7	4392000	197
2.	India Contract	625018	2.2	2479500	252
3.	USSR	258932	0.9	15261040	16
4.	United States	216817	0.8	7183000	30
5.	Indonesia	143282	2.6	1512460	64
6.	Brazil	112239	2.8	892110	125
7.	Japan	113863	1.3	303820	374
8.	Bangladesh	80558	2.4	119340	675
9.	Nigeria	66628	2.8	758890	87
10.	Pakistan	75278	3.2	281600	267
11.	Mexico	64594	3.5	1684190	38
12.	Western Germany	61396	0.2	204330	300
13.	Italy	56446	0.7	237960	237
14.	UK	55852	0.1	204460	273
15.	France	53105	0.6	464680	114
16.	Vietnam	47872	2.9	226700	211
17.	Phillippines	45028	2.9	221700	203

(Contd.)

#### (Contd. Table 149)

400					
18.	Thailand San Market Mar	44039	2.8	55310	796
19.	Turkey	42134	2.7	755340	55
20.	Egypt	38741	2.2	56640	683
21.	Spain	36351	1.1	468540	77
22.	Korea Rep. of	36436	1.8	88600	411
23.	Iran Cara Cara Cara Cara Cara Cara Cara C	34782	3.0	449500	77
24.	Poland	34698	0.9	277510	125
25.	Burma and a series as	31510	2.2	556350	56
26.	Ethiopia	28925	2.3	871900	33
27.	South Africa	26952	2.7	1005630	26
28.	Argentina	26056	1.3	2387200	10
29.	Zaire Zaire	26376	2.5	1528830	17
30.	Colombia	25048	2.9	1002450	24
31.	Taiwan	16793	2.0	na <mark>Lai</mark> rei a Sana	- 8
32.	Canada	23316	1.3	3931290	5
33.	Yugoslavia	21718	0.9	234530	92
34.	Romania	21658	1.0	212840	101
35.	Moroco	18245	2.7	255350	71
36.	Algeria	17910	3.2	479220	37
37.	Sudan	16919	2.6	1229950	13
38.	Eastern Germany	16765	0.2	92440	18
39.	Peru	16520	3.0	1043530	15
40.	Tanzania	16363	3.0	808740	20
41.	Czechoslovakia	15031	0.7	114910	130
42.	Kenya	14337	3.6	79140	181
43.	Afghanistan	20339	2.5	154200	131
44.	Sri Lanka	13971	1.6	49530	282
45.	Australia	14074	1.7	6026000	2
46.	Netherlands	13853	0.9	23700	584
47.	Venezuela	12737	3.1	701370	18
48.	Nepal	13136	2.3	84640	155
49.	Malaysia	12600	2.8	282170	44
50.	Uganda	12353	3.4	132970	92
51.	Iraq	11907	3.4	107900	110
52.	Ghana	10475	2.8	158520	66
53.	Hungary	10648	0.4	83040	128
54.	Chile 0020000 5.0	10656	1.9	383140	27
55.	Belgium Market 10.0	9931	0.4	23670	419
56.	Mozambique	9678	2.3	664800	14
57.	Cuba Odistra	9590	1.6	79500	120
58.	Portugal 1000	9577	0.8	77460	123

Source: For figures of population, FAO Production Year Book, 1979, Vol. 33, Table 3 and, for population growth rate, Demographic Year Book, 1977, UNO, Table 3.

For figures of 'Usable Land Area' in column 5 which consists of arable land, land under permanent crops, permanent meadows and pastures, forest and woodlands combined, FAO Production Year Book, 1978 Table 1, pages 45-46.

Note 1. Taiwan has not been shown in this table because although it has a population of more than 10 million its figures of usable land resources and, therefore, of density of population are not available.

 According to preliminary figures of the Census operations held in March, 1981 the growth rate for India during the seventies comes to 2.475 (instead of 2.2 as estimated by the *Demographic Year Book*, 1977). EPILOGUE MAMTHON STRONGON 551

Now, most obviously, our demographic situation is a definite threat to our future: Our population growth rate, coupled with the population density, has had an adverse effect on India's efforts towards the welfare of its people. Some estimable persons, however, consider it as a favourable circumstance for economic development of the country. In the words of Acharya Vinoba Bhave, man need not starve because while God has given him only one mouth to eat. He had equipped him with two hands to work. Inspired by some such ideas, certain writers and political leaders have classed human beings as 'human resources' because resources are helpful. "But most human beings are, in net effect, the opposite of helpful"—says Elmer Pendell. "A resource is a basis of benefits. When people are in excess numbers, however, any random portion of them is, for the rest of them, exactly the opposite of a basis of benefits. They constitute not a resource, but a liability".6

Growing population might be, in fact, it was, an asset in the USA in its pioneering days, when there vacant land laying for the taking, and its vast mineral wealth, in a way extended an invitation to whosever could exploit it. It can be, and is, an asset today in certain countries of Africa and Latin America and also, perhaps, in Australia, Canada and the Soviet Union—countries where there is an abundance of virgin land and other natural resources. New factories need workers, roads must be built, and towns and villages expanded.

But this is not true of India (and other countries similarly placed). Here, each hundred millions of people today make the conditions harsher, not better, for the other hundreds of millions of them. Population growth by itself (or at a rate higher than at which economic development proceeds) will, in our circumstances, only serve to lower the consumption levels still further, with all the misery and degradation that are associated with penury and want. There is not, and there cannot be, a single example where a nation with an increasing population has attained a position of political, cultural or other distinction unless its economic production has been able to outpace population.

Further, as Dr. Kingsley Davis has pointed out, "any attempt to compensate indefinitely on the economic side for population increase is bound to fail, because human beings live in a finite world. Atomic energy, use of sun's rays, harnessing of the tides. all may enormously increase the food supply, but they cannot for ever take care of an ever-growing population". We may select the most desirable crops and live-stock and raise them on the soils best suited to them. We may be able to achieve a still 'greener revolution' than we have been able to do. We may begin to eat grass, for, as scientists have recently found, grass is ten times richer in protein than meat of animals living on it. We may cultivate the sea for fish as the Japanese have begun to do. Innovations or improvement

Population on the Loose, New York, 1951, pp. 4-5.
 The Population of India and Pakistan, 1951, p. 22.

of soil and of plants can increase the product in excess of increase of the people, but there is a limit to such improvement: sooner or later, food production will reach its limit.

Improvements can be effected frequently, but not continuously. The ultimate foctor—the land—cannot perform miracles. There is a limit to what the land can produce—a limit to the extent to which labour and improvements brought about by scientific knowledge and capital investments, can be substituted for land. Ultimately, a point is reached whereafter additional expenditure and additional labour on a given area bring less and less return per unit of expenditure or per unit of labour; so that the amount of land available in a country is singly the most vital factor in the determination of its population policies. If the size of our average farm continues to shrink year by year, as it is rapidly doing in India since 1921, we cannot be far from the point at which the most efficiently-worked unit will be too small for the needs of the farmer and his family, let alone provide a surplus for development of non-agricultural resources and employment.

Finally, granted that we can produce food in virtualy unlimited quantities—but what are we to do about space? The total land area of the globe, including desert, ice and mountain, is only fifty-six million square miles. Suppose we allot each person only one square yard for standing: then, as W. Arthur lewis<sup>8</sup> points out, if world population increases by as little as one per cent per annum, there will be standing room only in as little as 1100 years from now. The actual growth rate of the world today is two per cent per annum and that of India, 2.5 per cent. So that nemesis will overtake the world and India much earlier than 1100 years.

For India, therefore, the academic debate on birth control is no longer relevant, or, should cease to be relevant. It needs to practise birth control in all possible ways and take advantage of all surgical, chemical, biological and mechanical methods of family planning. Inasmuch as child birth in women of younger age is comparatively more frequent, marriageable age of girls needs to be raised. (In China, men are encouraged not to marry before the age of 25 and girls before the age of 22.) In India it has recently (1979) been raised to 18 years for girls. With its high standard of education, disciplined national consciousness and adequate medical resources, Japan has been able to reduce its birth rate through the drastic, costly and unhappy method of induced abortion and without much contraception. India's Medical Termination of Pregnancy Act, passed in 1971, is a significant step in this direction. But it is not thorough-going. To be really meaningful, such an abortion law should incorporate a provision stipulating that when a woman demands an abortion for a second time her husband should be required to undergo a vasectomy operation.

Further, control on population growth being in the interest of the

<sup>8.</sup> The Theory of Economic Growth, George Allen & Unwin Ltd., 1957, p. 309.

nation, a law has to be so framed, and programmes so devised, that all classes and sections of our people make an equal contribution to the national objective. Every citizen should be under statutory obligation to practise family planning with a judicious spacing of children whose number will not exceed three.

Despite all the family planning campaigns and programmes, our country is still in the grip of a demographic explosion of frightening dimensions. The net growth of population, instead of going down, increased from 21.64 per cent in 1951-61 to 24.80 per cent in 1961-71. The preliminary reports of the Census held in March 1981 show virtually no decline in the growth rate: during the seventies it has been found to stand at 24.75 in place of 24.80 in the sixties.

Dr. Jack Lippes, the inventor of the most widely used type of the intra-uterine contraceptive device, had remarked in mid-sixties: "The greatest shortage in India is time. The birth control revolution must be instituted in less than ten years". However, nothing like a revolution has begun as yet. On the contrary, a World Bank projection suggests that, at the present rate of increase, India's population will be 2,800 million in a hundred years from now. In fact, the thousand million mark may be reached well before the end of the present century.

The population problem, however, is not the burden of governments alone. It is a matter of vital concern for every thoughtful citizen. No practical action can result unless the population policy, that may be proposed, has the intelligent backing of informed public opinion. It is the difference between its birth rate and death rate that determines the growth of a country's population. But while the death rate can, and has been, reduced by public action taken by the few, the birth rate can be reduced or stabilised only by private action taken by the many. It is one thing for a government to accept a principle, and another for a people to put it into practice.

The truth must sink in our consciousness that unless there is a decline in birth rate, India will be landing itself in disaster. Gone are the days when our ancestors laid down that a man could attain heaven only if he left behind a son to offer oblations to his spirit; now, as has already been pointed out, there is little land to go around, or sustain an increasing population in comfort. When even the richest country in the world, viz., the USA, considers it necessary to practise family limitation, not much argument should be required to convince us of its need in our conditions. While we will, and should, make all efforts to increase our agricultural and industrial production, we will also have to plan that our population growth rate is substantially reduced. Work in the sphere of economic production and population control can go on simultaneously, there being no contradiction between the two, and both being equally important.

In conclusion, we will refer the reader to what Vera Anstey wrote 50 years ago about India's need to practise birth control;

"First and foremost, it must be definitely recognised shat general prosperity in India can never be rapidly or substantially increased so long as any increase in the income of individuals is absorbed not by a rise in the standard of life, but by an increase in the population. The population problem lies at the root of the whole question of India's economic future, and it is useless to try to burk the fact."

the state of the second ways and take advantage of all authorities

<sup>9.</sup> The Economic Development of India, London: Longmans, 1929, p. 474, quoted in The Population of India and Pakistan, by Dr. Kingsley Davis, p. 203.

## Index

Abbot Laboratories, 329 Adams, Brooks, 258 Adult education, 232 Advanced countries, 258-9 Advani, Lalkrishna, 438 Agrarian organisation Aims, 100-1 Agrarian tension, 126 Agrawal, Anil, 496 Agrawal, Satish Chandra, 424 Agricultural credit Commercial banks, 172-6 Cooperative, 177-8 Agricultural education, 233, 515 Agricultural exports, 70-1 Agricultural income tax, 204 Agricultural inputs Prices, 194-5, 198 Agricultural machinery, 119-20, 134-5 Agricultural markets, 226-7 Agricultural prices, 186-208 Agricultural Prices Commission Price fixing, 193 Agricultural production, 9, 96, 114, 209, 400-5, 526, 529 As source of purchasing power, 49-52 Decline, 92 Growth rate, 38-40 Raw material, 46-9 Agricultural Refinance and Development Corporation IDA loan, 311 Agricultural techniques Improvement, 55 Agricultural wages, 523-6 Agricultural workers, 72-3, 76, 79, 120, 129-32, 134, 141, 211 Expenditures, 209 Income, 218-20 Percentage to work force, 252 Shifting, 53-69 Agriculture

Capital starvation, 161 85, 405 Employment generation, 485-7 Neglection, 395, 510 Potentials, 400-6 Private sector's investment, 170-1, 274 Release of workers, 53-69 Role of, 30-71, 396 Subsidies, 168-9 Vis-a-vis industry, 83-99 Agriculture/industry allocation ratio, 169-72 Agro-Economic Research Centres, 183 Ahluwalia, Montek, 212 Ahmed, Fakhruddin Ali, 327 Akbar, Emperor, 5 All India Congress Committee Chandigarh meeting (1959), 245 All India Rural Debt and Investment Survey (RBI), 210-11 American Overseas Development Council, 400 Amrit Kaur, Rajkumari, 454 Anand, M. Paul, 28 Anstey, Vera, 553 Appropriate techniques, 471-6 Criteria, 474 Priorities, 474-5 Appu, P.S., 140-141 Architecture, 501-3 Army Scale of rations, 41-2 Arora, Satish K., 510 Artisans, 211, 362 Arya Samaj, 541 Asian Games (1982), 434-6, 513 Atkinson, Mr., 5 Aurangzeb, Emperor, 341 Austin, Alfred, 501 Automation, 449 Azad, Abul Kalam, 272

Bagchi, Amiya Kumar, 361-2

Bahuguna, H.N., 149 Baljit Singh, 95 Banks, 514 Agricultural credit, 172-6 Arrears' realisation, 229 Interest rate, 179 Nationalisation, 290 Over-time paid, 290 Performance, 290-1 Written off loans, 290-1 Bardhan, Pranab K., 17 Barot, Maganbhai, 422 Basic industries, 289 Basu, A.K., 232 Basu, Jyotirmoy, 328 Bauer, P.T., 289, 317 Bekari hatao, 483 Bengal famine (1943), 33, 34, Bernier, François, 341 Bernstein, Esuard, 280 Berridge, P.S.A., 503 Bhaduri, Amit, 431 Bhagwati Committee on Unemployment, 350, 371 Bhat, R.S., 319 Bhave, Vinobha, 551 Bhindra, P.S., 388 Bhinwandiwallas, 334 Bhoothlingam Committee, 343 Big business, 330-4 Assets, etc., 333-4 Excess installed capacity, 338-9 Size and growth, 331-2 Birlas, 330, 334, 342, 346 Birth control, 552-4 Blanchard, Francis, 484 Blinds, 25 Bodhgaya case, 138-9 Bolts, William, 358 Bonded labour, 529 Bonus, 381, 423 Borlaug, Norman D., 196, 511 Brahmanand, P.R., 85, 453 Brain drain, 355-6 Brij Narain, 4, 5 British companies in India, 318 British conquest, 538-9 British goods in India, 77 British India Corporation group, 333 Bromfield, Louis, 52 Buchanan, Francis, 360 Buchanan's Report, 78

Buck, John Lossing, 118

Building construction

Employment generation, 499-506 Bureaucracy Expansion, emoluments, etc., 81, 409-25 Urban orientation, 515-17 Butz, Earl, 46

Capital formation, 9, 246-7 Capital-intensive industries, 342 As compared to labour-intensive, 441-70 Conditions for non-existent, 246-52 Capital-output-ratio, 247 Capitalist farming, 188 Caste and occupation, 362-3, 536-7 Caste system, 535-48 Cattle insurance, 522-3 Central Research Institute for Village Industries, 472 Cereals Production, 402-3 Chanana, Charanjit, 303 Charan Singh Letter to Indira Gandhi, 539 Letter to Pt. Nehru, 543-5; Nehru's reply, 545 Charkha, 450-1, 455-6 Chase Manhattan Bank Moscow branch, 265 Chavan, Y.B., 290, 328 Child health, 22-3, 25 Children's education allowance, 415 Children's journey allowance, 416 China Agricultural production, 118 Economic conditions, 13, 266 Heavy projects, 304-5 Planning, 89-90 Christians, 541 Churchill, Winston W., 106 Cities and towns Concentration, 458-61 City compensatory allowance, 345 Civil service Urban orientation, 516 Civilization, Hindu, 77-8 Clark, Colin, 4, 76, 77, 183 Coal mines, 291-2 Wage structure, 345 Coal resources, 252, 253-5 Coca-Cola Export Corporation, 328-9

Colgate Palmolive, 329

Collective bargaining, 385

Collective farming, 101-11, 116, 259, 261, 262 Collins, Larry, 21 Coomaraswamy, Ananda, 501 Commercial policy British period, 77, 78-9 Commodity loans, 312 Communal farms, 103 Communism, 32, 126, 143 Compensatory city allowance, 415 Confucius, 32 Consolidation of holdings, 153-8 Construction employment, 497-506 Consumer expenditure, 14-21, 209 Consumption levels, 13-21, 246-7 Contract labour, 380-1 Conveyance allowance, 345, 416 Cooperation, 159-60 Cooperative farming, 83, 102-11, 116, 153, 274-5, 522 Cooperative societies, 274 Farm credit, 177-8 Corruption, 284 Cottage industries, 51, 121, 239, 397, 398, 441-51, 485, 489, 494 Democratic values, 455-6 Employment generation, 450-1, 494 Improved techniques, 471-6 Income disparities avoidance, 451-6 Labour, capital, output relation, 443 Cotton goods trade, 359 Cotton production, 47-9, 206 Cotton weaving Capital and output, 441-3 Crew, Marquis of, 501 Crop area, 38-40 Crop insurance, 522-3, 526 Cultivation cost, 189, 196-7 Customs, 533, 535 Cycle allowance, 416

Daga, Mool Chand, 25
Daily employment, 354
Dandakaranya project, 432
Dandekar, V.M., 16, 125, 199, 201, 209, 447
Dantwala, M.L., 478
Darling, Malcolm, 157
Das, M., 292
Davis, Kingsley, 536, 551
Dayanand, Swami, 535, 541
Dearness allowance, 344, 345, 414, 421-2
Death rate, 224
Debt, Foreign, 306-17

Decentralisation, 483-509 Decentralised industry, 441-70 Deforestation, 150-2 De-industrialisation, 357-62 Delhi Development Authority Building, 432 Delhi University students, 234 Desai, Morarji, 491 Development Capital cost, 377 Dhar, P.N., 447, 448 Diseases, 28-9 Distribution, 453 Durant, Will and Ariel, 502 Durga Das, 287 Dutt, Durga Das, 547 Dutt, Romesh, 78-9 Dutt Committee on Industrial Licensing, 321, 328, 336 East India Company Commercial policy, 77, 78-9, 358-62, 365 Economic activities Classification, 31 Employment distribution, 68-9 Economic and Social Commission for Asia and the Pacific, 71 Economic conditions India's place in the world, 10-14 Staticity, 72-82 Economic power, 9 Concentration, 330-4, 342 Economics of scale, 449 Educated unemployment, 355-7, 367 Education, 519 Rural areas, 229-34 Eisendrath, Charles N., 460 Elections, 512 Electrification, Rural, 227-8 Embassy building, Islamabad, 433 Employment exchanges Live register applicants, 349-50, 355, 371 Energy sales, 169 Engels, 102 Engineers Wages, etc., 342 Equal distribution, 481-2 Equity ownership, 325 Export subsidy, 430-1 Family farms, 486 Family holding, 148

Family planning, 552-4

Famine Commission (1880), 79 Farm inputs Prices, 194-6, 198 Farm ownership, 111-23 Farm size, 141, 145-7 Farm tenancy, 123 Farmers, Exploitation of, 186-208 Farming equipments, 149-50 Fatalism, 534 Fay, C.R., 159 Fertilizers Prices, 194-5 Five-star hotels, 431-2 Five Year Plan, 1st, 104 On family holding, 148 On village industries, 451 Five Year Plan, 2nd, 3, 84 Incorporated cooperative farming, 104 Five Year Plan, 3rd, 3, 84, 126 Five Year Plan, 4th On cooperative farming, 109-10; Cultivation cost, 189; Land redistribution, 144 Five Year Plan, 5th, 454 On agriculture, 204; Employment, 368-9 Five Year Plan 6th On employment, 350, 371-2, 374 Folklore, 235 Food and Agriculture Organisation of the UN, 41, 71 Food exports, 70-1 Food for work programme, 353 Food habits, 22 Food imports, 9, 33-7, 45, 85-6, 192 American dependency, 45-6 Prices, 189, 201, 206 To USSR, 108-9 Food prices, 186-208 Food procurement Prices, 189 Food production, 9, 30-46, 400-4 Growth rate, 37-40 Yields per acre, 401-3 Food shortage, 41-4 Food subsidy, 168 Foreign aid, 183-4, 267, 306-17 International agencies, 311-12, 313 Strings and conditions, 312-13, 314-15 Foreign collaborations, 320-9 Foreign equity, 325 Foreign investments, 318-29 Tax evasion, 322-3 Foreign loans, 306-17

Foreign technology, 393-4
Foreign trade, 292-3
Forests, 151-2
Free trade, 360
Freedom, 481-2
Furnivall, J.S., 271

Ghaffar Khan, Khan Abdul, 163 Gandhi, Indira, 281, 339

On cooperative farming, 110; Foodgrain prices, 199; India's economy, 267-8; Malnutrition, 19; Nationalisation, 289; Poverty, 18, Public sector, 303; Recruitment, 518; Satellites, 436; Socialism, 276-7

Gandhi, M.K., 3, 30, 266, 267, 376, 457, 462, 469, 494, 496-7, 512, 526

Champaran study, 18 His ideal village, 243

On caste system, 542; Cottage industries, 240, 450; Decentralisation, 485; Equal distribution, 481; Foreign know-how, 325; Improved techniques, 472; Industrialisation, 91, 162, 239, 242-3, 277-8, 363, 454, 465; Liberty, 456; Luxurious living, 440; Mechanisation, 121, 240-3; Rural-urban disparity, 162, 527-8, 529; Riches abdication, 143; Starvation, 32; Trusteeship, 478

Gandhian approach, 394-9, 441
Garibi hatao, 342, 483
Global poverty, 316
Gobar gas, 471
Gokhale, H.R., 329
Government accommodation, 416
Government employees, 342
Advances admissible, 417-18
Allowances, 414-18
Compulsory insurance scheme, 421

Allowances, 414-18
Compulsory insurance scheme, 421
Growth, emoluments etc., 409-25
Leave entitlement, 418-19
Medical facilities, 420
Pension and gratuity, 419
Provident fund, 419-20
Rural areas, 234
Urban orientation, 515-17
Voluntary retirement, 420-1
Welfare measures, 423-4

Government offices

Concentration, 458-9 Goyal, S.K., 337

Gratuity, 419
Green Revolution, 126, 183, 196

Gregg, Richard D., 488 Gross domestic products, 63-9 Growth rate, 7-10 Post-independent period, 8-9 Gupta, G.S., 500

Hamilton, Walter, 325 Handicrafts, 51, 274, 397, 489 Handloom-weaving, 362 Hassan, Nurul, 232 Hazari, R.K., 328 Health services, 223-4 Heavy industries, 248, 395 Nehru's preference, 83, 398 Hee, Park Chung, 199 Hereditary occupation, 536-7 Herman, B., 448 Higher education, 229 Hindu jats, 539-40 Hindu religion, 533-5 Hindu women, 77 Hindustan Housing Factory, 499 Hitler, Adolf, 270 Holenstein, Anne-Marie, 45, 82, 86 Holland, Thomas, 357 Hostel subsidy, 415 Hotels, 431-2 House rent allowance, 345, 415 Household industry Industrial workers, 366 Housing, 225-6 Hughes, Edward, 107 Human excreta 225

Improved techniques, 471-6, 486 Criteria, 474, Priorities, 474-5 Income disparities, 9, 126, 341-7, 482 Indian Council of Medical Research, 23 Indian Foreign Service, 424 Indian Institute of Public Administration, 337, 353 Indian National Congress Avadi session (1955), 84, 272, 276 Bhubaneswar session (1964), 276 Cooperative farming resulution (1959), 104, 143 Election manifesto (1971), 276, 286, 330 Karachi session (1931), 272 Saheednagar session (1956), 273 Industrial Commission (1916-18), 357 Industrial Licensing Committee, 321,

328

Industrial licensing policy, 333, 336-8 Industrial Policy Resolution (1948), 272 Industrial Policy Resolution (1956), 84, 245, 273-4, 280, 425 Industrial production, 9, 163, 454-5 Industrial workers, 365-6 Industrialisation, 91, 162, 239-68, 396, 449-50, 454, 495, 521 529 Dangers, 86 Vis-a-vis agriculture, 84-99 Industry Decentralisation, 441-70 Employment generation, 487-97 Installed capacity utilisation, 49-50 Industry, Labour-intensive, 441-70 Industry, Small-scale, 121, 239, 274, 364, 397, 398, 441-51, 494 Democratic values, 455-6 Employment generation, 450-1, 494 Income disparities avoidance, 451-6 Labour, capital, output relation, 443 Inflation, 199-200, 382 Intensive agriculture, 524-5 Inter-caste marriages, 545-6 Interest rate, 179 International Labour Organisation, 380 Investments, Foreign, 318-29 Iron ore resources, 252, 256 Irrigation, 405, 486

Jain, Girilal, 265, 301, 521
Janata Party, 135, 197, 371, 479, 492
Jat population, 539-40
Jehangir, Emperor, 5
Jesus, Carolina Maria de, 511
Jha, Prem Shanker, 413
Jinnah, M.A., 546
Jobs for dependents, 517-18
Jobs or jails movement, 491
Joint farming, 101-11, 153, 159, 510, 522
Jowar
Prices, 192

Kamath, M.V., 303
Karan Singh, 25
Kasim, Mir, 358
Kennedy, President, 143
Kerala cooperative farm, 110-11
Khruschev, Nikita, 89, 108
Khudanpur, C.J., 125
Khusro, A M., 148
Kidron, Michael, 328
Kissinger, Henry, 46
Kothari, Rajni, 283

Kothari (G.D.) Group, 333 Krishnan, Parvati, 367 Kumarappa, Dr., 487 Kuznets, Simon, 79, 252

Labour intensive industries, 441-70, 489 Improved techniques, 471-6 Labour policy, 379-89

Labour productivity, 449 Labour shifts, 53-69

Labour unrest, 283

Ladejinsky, W.A., 123, 124, 125, 126, 138, 144

Lakhan, H.G., 328 Lal. M.B., 383

Land

Population pressure, 4, 51, 400 Land acquisition, 228 Land ceiling, 125-6, 142, 143-4, 147,

150, 188 Land holdings, 56, 111-23, 127-9, 133, 188, 205

Consolidation 153-8

Land redistribution, 137, 140-53

Land reforms, 123-40

Major ingredients, 135-7

Land revenue, 193, 204

Land system, 100-60 Land utilisation, 248-51

Landlordism, 123-6, 529

Lapeirree, Dominique, 21

Larsen & Toubro, 334

Law of Diminishing Return, 50, 54, 115, 116-17, 147

Lavoffs, 367

Leave Travel Concession, 416-17

Lenin, V.I., 103, 270, 280

Lent, George, 490

Leontief, Wassily, 90

Lewis, Arthur, 164, 165, 266, 552

Life Insurance Corporation

Wage structure, 344-5

Lindbeck, Asar, 165 Lippes, Jack, 553

Lipton, Michael, 164 182, 186, 192, 224,

233, 512-13

List, Friedrich 360

Lohia, Ram Manohar

Trusteeship Bill, 478-9 Lokanathan, P.S., 441

Loktak Hydro-Electric project, 432

Luxurious living, 437-40

Lydall, R.P., 447, 448

Lyons, Eugene, 106

MacNamara, Robert S., 315-16

Maddison, Angus, 263

Mahalanobis, P.C., 84, 85, 180, 293, 444

Mahbub-ul-Hag, 369

Malnutrition, 9, 19, 21-7, 44

Managers

Wages, etc., 342

Manevich, Y.L., 288

Manpower waste, 356

Manufacturing industries

Employment generation, 487-97 Mao Tse-Tung, 202, 266, 460

On planning, 89-90

Martin, Montgomery, 78, 359-60

Marx, Karl, 82, 101-2, 269, 270, 279, 280, 281, 385, 452, 477, 521

Mashruwala, Kishori Lal, 478

Mayhew, Christopher, 18

Mechanisation, 119-22, 449, 508

Mechanised farms, 134-5

Medical manpower, 356

Medvedev, Roy, 265

Mehrotra, Prakash, 290

Mental attitude, 531-5

Milk supply, 22 Mineral resources, 252-7

Minhas, B.S., 17, 18, 180, 286, 463

Minimum Need Programme, 408

Minimum wage, 380, 523-6

Minor irrigation

Subsidies, 168

Mitra, Ashok, 484

Mitrany, David, 102 Mixed economy, 269-78, 520

Moghuls' conquest, 537-8

Money lenders, 178-9, 529

Monopolies Inquiry Commission, 330

Monopoly houses, 339, 342, 454

Morgan, Arthur E., 161, 162

Moynihan, Daniel, 405

Mukherjee, Moni, 6

Mukherjee, Radhakamal, 4, 5

Mukherji, K.M., 80

Mukherji, Shekhar, 482

Multi-nationals, 318-29

Multiple cropping, 144, 404

Munro, Thomas, 77-8

On handicrafts, 468

Muslim League, 546 Muslims, 539, 540-1

Myrdal, Gunnar, 22, 271, 448, 495, 496,

497

Nanjundappa, D.M., 497 National Building Construction Corporation, 499, 505 National Commission on Agriculture On foodgrains demand, 70 National Cooperative Development Corporation, 177 National Council of Applied Economic

Research, 213, 216 National Development Council 1954 meeting, Nehru's speech, 83, 245 1963 meeting, Nehru's speech, 88 1972 meeting, Indira Gandhi's speech,

276

National income, 6-7, 80-1, 218, 394, 452

Agriculture's share, 80-1, 92, 93-4 Distribution, 341-7

National Industrial Conference Board, 30

National Nutrition Monitoring Bureau,

National product, 9-11 India's position in world, 10-12 National socialism, 270 Nationalisation, 276, 279, 282, 289, 302, 306

Navy

Scale of rations, 41-2

Naxalites, 143

Nehru, Jawaharlal, 3, 85, 262, 267, 280, 287, 301, 311, 339, 424, 452, 457, 492, 510, 512

Caste-ism, 547-8

China visit (1954), 83

On basic industries, 289; Concentration in cities, 458-9; Cooperative farming, 103-4, 119, 274-5; Employment generation, 368; Foreign capital, 317, 319; Industrialisation, 162, 239, 244-6, 352, 462, 508; Planning, 376, 454; Socialism, 271-4; Preference to heavy industries, 83-6. 87-8, 91

Night duty allowance, 415-16 Non-food crops Cultivated area, 47 Nuclear energy, 469 Nurske Ranger, 266 Nutrition Export Group, 19 Nutritional levels, 16 Nutritional needs, 41-3 Nutter, Warren, 263 Nyerere, President, 394

Oil-food war, 46 Ojala, E.M., 113, 116 Overtime payment, 383, 414, 415, 422-3 Owen, Robert, 269 Owens, Edgar, 377, 378, 448 Oza, A.N., 330, 340

PL-480 Agreement, 35-6, 85-6 190, 193, 306, 311

Impact on farmers, 192-3 Pai, M.P., 200

Pai Panandikar, D.H., 370-1

Pande, K.C., 205 Parikh, Narhari, 478

Parliament Assistants

Special allowance, 416

Patel, S., 341

Paterson, Peter G., 264

Patil, R.K., 515

Pavlov, S., 108

Pay ceiling, 344

Peasant proprietorship, 111-23, 485-6

Peasants, 519-21

Pendell, Elmer, 54, 97, 115, 117, 118, 119, 148, 551

Pensions, 419

Peoples' attitude, 531-5

Petroleum resources, 252, 257

Pfizer India Ltd., 329

Plan expenditure, 165-7

Planning

Communists' influence, 88-9

Priorities, 83

Techniques, 84-5 Planning Commission, 3, 16, 41, 72, 92

134, 143, 228 Land Reforms Division, 136

On farm mechanisation, 121

Poverty-line estimates, 19-20

Political leaders

Radical change needed, 510-30, 531

Political parties

Foreign companies contributions, 327

Poojary, Janardan, 422

Population

Control, 548-54

Growth, 9, 32, 43, 367, 548-50

Percentage to working force, 533-4 Poverty, 9, 16-21, 186, 209-36, 316, 407,

482, 484, 513, 534

Power, Jonathan, 45, 82, 86

Prasad, Kedarnath, 468

Prem Nath, 5

Primary industries, 31 Share in national income, 80-1 Prisoners' ration, 42 Private sector, 330-40, 480 Procurement prices, 189, 196-7, 201 Fixation, 202-3 Project crop production, 405 Provident fund, 419-20 Public distribution system, 193 Public health, 28-9 Public sector, 272, 276, 278-305, 480 Capital output ratio, 297-8 Employment generation, 95, 294 Foreign collaboration, 321 Investments, 293-4, 299, 426 Performance, 290-3, 295-6, 298-300 Profits, 287, 298, 426 Resources wastage, 425-9 Weaknesses, 284-5 Public utility, 275 Pulses Production, 402-3 Purchasing power, 49-52, 56, 193-4, 200, 202 Pyare Lal, 478

### Quaternary sector, 31

Richard, Mr., 358

Radhakrishnan, S., 515, 535 Railways, 76-7 Raj, K.N., 364, 443 Rao, D.N. 516 Rao, V.K.R.V., 186, 209, 212, 520 Rath, Nilakantha, 16, 209, 447 Ration scale, 41-2 Non-cereal part 43 Pulses, 43 Ration shops, 168 RAW Headquarters, 433 Raw material, 258 Production, 46-9 Refrigeration, 228 Regional Rural Banks, 175 Relay cropping, 144, 404 Religious beliefs, 533-5 Renne, Roland R., 50 Reserve Bank of India Wage structure, 345 Revolving restaurant, 433 Input-output price relation, 194 Prices, 191-2 Production, 403

Roads construction Employment generation, 497-9 Roy, Kalyan, 290 Ruling class Marxist theory, 512 Rupee devaluation (1966), 314 Rural areas Consumer expenditure, 15, 16 Rural deprivation, 209-36 Rural development Funds creating, 407-40 Rural health service, 223-4 Rural housing, 225-6 Rural income, 213-15 Rural poverty, 209-36 Rural savings, 142, 222-3 Rural transportation, 226 Rural unemployment, 353 Rural-urban disparity, 162-3 Rural-urban migration, 161, 235-6, 457 Rural voters, 514-Rural youth, 529

Sachar Committee, 336 Sakharove, Andre, 264 Salal hydro-electric project, 433 Sanitation, 225 Saouma, Edouard, 71 Satellites, 436 Savings, 142, 222-3, 246, 247-8 Saxena, N.S., 139 Schultz, Theodore W., 164, 208 Schumachar, E.F., 283, 530 Secondary industries, 31 Share in national income, 80-1 Secularism, 546 Seers, Dudley, 223, 371, 376, 448, 454, 495 Segal, Ronald, 259, 265, 283 Selbourne, David, 400 Seldon, Arthur, 425 Self employment, 480-2 Service cooperatives, 159-60 Services sector, 51 Employment generation, 506-7 Share in national income, 81 Seymour, Lord, 359 Shah, C.H., 70, 405 Shankaranand, B., 356 Sharma, Baldeo R., 229, 516 Shaw, Bernard, 279, 280 Shaw, Robert, 448 Shinde, A.P., 205 Shipping Corporation of India Wage structure, 345

Shivshankar, 334 Shukla, V.C., 434 Silvano, Sushil J. 353 Singh, B.D., 212 Singh, Bhanu Pratap, 206, 222 Singh, N.P., 474 Singh, Vir Bahadur, 149 Singhania, H.S., 303 Singhanias (J.K.), 334 Slave trade, 258 Slums 9, 407, 457-8 Small farmers, 188, 512 Bank credit, 172, 174 Small Farmers' Development Agencies, 149 Small farms, 116-23, 141, 153 Small towns, 460-1 Smith, Adam, 177 Smith, Richard, 97, 236 Smuts, P.T. Bauer, 87, 398 Social amenities, 223-36 Socialism, 269-78, 285, 288, 345, 379 Socialistic pattern of society, 83-4, 245, 280 Soorajmull Nagarmull group, 330, 442 Spillman, W.J., 112 Staff-cars, 431 Stalin, Joseph, 106 Starvation, 9, 32 State trading, 190, 522 State Trading Corporation, 293 Steel industry, 290 Wages, 345 Students Socio-economic status, 229-30 Subramaniam, C., 454, 500 Subramaniam, L.V., 427 Subramaniam, V., 516 Subsidies, 168-9, 193 Suicide Poverty-hit families, 27 Support price, 189 Surplus land Distribution, 137, 140-53

Swaminathan, M.S., 404, 406
Swatantra Party, 288

Tandon Committee on Export Strategy, 430
Taskforce on Agrarian Relations (1972), 140
Tatas, 334, 343, 346
Tax incentives, 490
Taxation, 193, 480, 489-90

Technical education, 229, 231-2 Technology transfer, 323 Telephones, 227 Televisions, Voloured, 439 Tertiary industries, 31, 82 Share in national income, 80-1 Textbooks subsidy, 415 Textile Enquiry Committee (1954) 443-4 Thapar, Ashok, 51 Thapar, Romesh, 517 Tinbergan, Jan, 448 Tito, Marshall, 285 Tiwari, N.D., 507, 517 Tourchine, Valentine, 265 Trade unions, 382, 383-9 Transfer pricing, 323 Transport cost, 76-7 Travelling allowance, 416 Trivedi, R.K., 516 Trusteeship, 477-9 Essentials, 478 Ram Manohar Lohia's Bill, 478-9 Tution fee reimbursement, 415 Uneconomic holdings, 56 Unemployment, 9, 119, 223, 348-78, 466 Daily status rates, 351 Educated, 355-7 Eradication, 483-509 Ratio to labour force, 351-2 Volume at end of each 5-Year Plan. 348-9 U.S.S.R. Economic development, 260-5 Military might, 262 Planning, 88-9 UNIDO Conference (1980), 433-4 United States Agriculture, 30-1, 87 Congress Joint Committee Soviet Economy Study, 263 Economic conditions, 262-5 Programme Guidance Manual, 312 University Education Commission (1951), 515Urban employment, 234 Urban population Consumer expenditure, 15, 16

Urban poverty, 407, 408 Urbanisatlon, 408

On planning, 84-5, 453

Vakil, C.N.

Van Der Post, 112
Vegetable oils
Imports, 206
Venkataraman, R., 291, 427
Video recording, 439
Vigyan Bhavan
Renovation, 434
Vivekananda, Swami, 313
Voluntary retirement, 420-1

Wages, 4-6, 12, 281-2, 523-6
Ancient period, 5-6
Inequality, 342-4
Mughal period, 5
Wales, Nym, 508
Washing allowance, 417
Wasteful expenditure, 430-6
Water supply, 223
Wealth, Distribution of, 216-21
Webb, Beatrice and Sidney, 279, 280
Weights and measures, 511
Weissman Dr., 200
Welfare state, 379
Wheat
Production cost, 196

Wheat area, 190, 191 Wheat imports, 189-90 White-coller jobs Wafes, 12 Williams, Eric, 258, 315 Wilson, H.H., 78, 351 Wilson, H.H., 78, 351 Work opportunities, 353-4 Workers Release from agriculture, 53-63 Workers' attitude, 282-3, 383, 462 Workers' discipline, 384-5 Workers' earnings, 281-2 Working population Share of agriculture, 72, 73, 76, 79 Works & Housing Ministry Steel wire purchase, 433 World Bank Report (1971), 135, 136 World Development Report (1979). 13-14 World Food Council, 71 Woytinsky, W. S., 261, 268, 395, 512,

Yom Kipper War, 46

### ERRATA

Reference to page/ para and line	Amendment
- OR COMPANY OF THE PARK OF	
12/4/1 & 2	For 'and' read 'are' and in line 2 omit 's' from
Assessment of the second	'destitutes'.
13/first line	For 'the same garment' read 'it'.
15/2/last three	For these lines beginning 'In this connection'
lines	read 'While the prices of some of the consumer goods
	and services are higher in the rural than in urban
	areas there are certain other goods where reverse is
	the case'.
30/3/2	For 'economics' read 'economy'.
46/7th line from	For 'most World' read 'post-World'.
top	Allow Till and the control of the co
50/5/1	Insert 'in' between 'whether' and 'the'.
52/1 para beginning	In line 4 read '1952' for '1950'. In lines 5 and 6
'Agriculture'	read '(vide table 26)' for words beginning 'and'
lines 4, 5, 6, 8 & 9	and ending '1967'. In line 8 read '6.0' for '3.0' and
	for figure '28' read '27'. In line 9 insert 'in 1952'
	between 'USA' and 'did'.
55/para beginning	Insert 'from' between 'results' and 'diminishing'.
'India's' line 10	Insert 'on' between 'goes' and 'and'.
56/3/13	For 'constructive' read 'construction'.
63/Note 2 below table,	For constructive read construction.
lines 1 and 2	
70/last para	Read '19' for '18'.
beginning 'If we'	3491217 For 'have reading the survivor
line 2	
82/1/6	The comma after 'ticky tacky' has to be omitted.
99/3/5	Insert 'it has' between 'financing' and 'led to'.
108/line 1st	Replace 'inefficient' by 'efficient'.
127/last para/8	Insert 'as' between 'classed' and 'farmers'.
129/4/2	Read 'coverage' for 'average'.
131/last two lines	Read 'Tamilnadu and Maharashtra' for 'Maharashtra
of the Note to	and Tamilnadu'.
table 45	
140/1/following	In lines 4 and 5 read 'an amendment of' for
Redistribution	'radically amending'.
of Land	375 lest line Insert in lawar and keeps
141/1st line	Omit the dash or hyphen between 'destroyed' and
	'howsoever'.

187/2/9 Read 'sort' for 'short'. 190/line 3 from Read '186' for '185'. bottom 191/Table 66 Against '1973-74' and '1974-75' read 186 and 180 respectively in place of 191 and 181. Delete note below table. Read 'some' for 'sum'. 192/Quotation from Lipton line 9 204/2/10 Insert '(vide table 83)' between 'Rs. 1341.0' and 'the farmer'. 208/3/8 Insert 'which' between 'commodities' and 'have' as also insert 'in our country' between 'prices' and 'unduly'. 244/3 (para Read 'The discussion, thereafter, could not be beginning 'No resumed owing to quick political changes and, later, correspondence...') due to outbreak of communal riots' for 'No correspondence between the two after the above letter is available to the writer'. (In para beginning 'Of') Read 'preceding' for 'last'. 300/3/3 Read 'rolling mills' for 'rolling-mlles'. 305/line 3 from bottom Read 'Rs. 8783.7' for 'Rs. 7883.7'. 306/2/line 3 from bottom For 'Rs. 1.758' read 'Rs. 1758'. 322/para beginning 'As...' line 5 Insert 'each' between Rs. 1,00,000 and 'during'. 341/3/3 For '1: 2' read '1: 78', for '1: 4' read '3: 45'. 346/1/6 349/2/7 For 'have' read 'has'. Read 'so' for 'as'. 358/4th line from bottom Insert 'which were' between 'articles' and 'the' and 360/1st quotation omit the comma 'articles',. line 6 363/last line of Read 'existence' for 'existing'. para beginning 'Palme Dutt' 366/1/line 4 Read '15' for '14'. line 9 Add a comma after 'occupations' and read 'it' for 'It'. Read 'devices' for 'devics'. 366/3/10 Insert 'in Taiwan and Korea' between 'manufac-378/last line turing' and 'doubled'.

Insert 'after' between 'India' and '2000'.

393/1/4

414/para beginning 'According...'/15 424/5/2 427/4/4 441/2/8 443/1/2 452/para beginning 'A highly...'/line 11 465/5/1 465/6/last line 473 para beginning 'In a way...'/line 1 481/para beginning with 'Mahatma Gandhi...'/line 3 484/para beginning with 'ILO'/3 484/para beginning 'ILO...'/4 & 5

486/para beginning with 'Construction ...'/lines 3, 4 & 5

499/2/3 & 4

513/para beginning 'The most poor...'/ 17, 18 & 19 524/para 4 beginning 'The quickest ...'/7 529/line 3 from top 540/para beginning with 'So that...'/4 548/line 4 from the top 548/para beginning with 'Directly...'/ last line 551/2/2 551/line 7 from

top

Read '42' for '52'.

Read 'hunting ground' for 'holding-ground'.
Read 'are' for 'is'.
For 'ascending' read 'descending'.
For 'another volume' read 'chapter 16'.
Read 'three fold' for 'five fold'.

Insert 'thus' between 'wrote' and 'in the Harijan'. Read 'a large part' for 'most cases'. Put a colon between 'repeat' and 'the'.

Insert 'is' between 'Life' and 'inherited'.

Read '750' for '818'.

In lines 4 & 5 for words 'meet even...years ago' read 'satisfy their basic needs and living conditions beneath any reasonable standard of human decency'. In place of sentence beginning 'Yet, all.....better' read it as 'All-too-often, machine-oriented bureaucrats believe a bulldozer or earth-remover can do every job better than men can do with their hands'. In line 3, place a full stop after 'manyfold' and delete 'although'. In third line, put 'T' in place of 't'.

Delete sentence beginning with 'In this connection' and ending with 'crores'.

Read 'agricultural' for 'agriculture'.

Insert inverted commas after 'removed'. For 'along' read 'alone'.

For 'act' read 'and'.

For 'facter' read 'factor'.

Insert 'was' between 'there' and 'vacant'. Put comma after 'eat' and put short 'he' for capital 'He'.

### THE AUTHOR

Ch. CHARAN SINGH was born on December, 1902 in village Noorpur, District Meerut (U.P.). He passed his Matriculation Examination from the Government High School Meerut and took his Graduate (Science) and Post-Graduate (History) degrees from the Agra College, Agra. He was married to Smt. Gayatri Devi on 5th June, 1925. He practised as a lawyer in Ghaziabad and Meerut. He began to take active part in the activities of the Indian National Congress in 1929 and remained there till 1967. After leaving the Congress Party, he formed a new Party named "Bhartiya Kranti Dal' in 1967. In 1974 he made efforts to unite all opposition parties which led to merger of four parties into a new Party named 'Bhartiya Lok Dal'. He is also the main architect of the 'Janata Party' which was formed in 1977 and in which Bhartiya Lok Dal also merged. After a split in Janata Party in 1979, he revived his old party in the name of 'Lok Dal' in September, 1979.

He was Vice-Chairman District Board, Meerut in the years 1932-36. He was a member of Uttar Pradesh Legislative Assembly during the period 1937-77 from his constituency of Chhaprauli, in Meerut District. He was Parliamentary Secretary, Uttar Pradesh Congress Government during 1946-51 and an important member of the State Cabinet, with a short break, from 1951 till 1967. He was Chief Minister of two non-Congress Coalition Governments of Uttar Pradesh in 1967-68 and 1970. Thereafter and till 1977 he was leader of the Opposition in the U.P. State Legislative Assembly. In 1977, he was elected to the sixth Lok Sabha. From March, 1977 to June, 1978, he was Union Minister of Home Affairs. January, 1979, he assumed the office of Deputy Prime Minister and Union Minister of Finance and continued to hold it till July, 1979. In July, 1979 he took over as Prime Minister and continued till January, 1980.



