

Charan Singh

India's Economic Policy

India's Economic Policy

The Gandhian Blueprint

Charan Singh



VIKAS

The book provides a blueprint for the Janata Party to formulate its policy for the economic reconstruction of the country.

While advocating the Gandhian approach to solve the human problems of poverty and unemployment, Charan Singh traces the present economic ills of the country to the grievous mistake made after independence to go industrial. He therefore suggests that top priority should be given to agriculture accompanied by cottage industries and handicrafts, followed by small-scale industries, and then by heavy industries.

The author's thesis is that unless production of food and raw materials in a country is increased and consequently men are released from agriculture for absorption in non-agricultural sector, there can be no improvement in the living standards of its people. He emphasizes the economic truth that small farms and small industry are more labour-intensive than large farms and large industry. Small units produce more goods per unit of land and fixed capital investment.

Rs 30

INDIA'S ECONOMIC POLICY

INDIA'S ECONOMIC POLICY

The Gandhian Blueprint

CHARAN SINGH



VIKAS PUBLISHING HOUSE PVT LTD

New Delhi Bombay Bangalore Calcutta Kanpur

VIKAS PUBLISHING HOUSE PVT LTD

5 Ansari Road, New Delhi 110002

Savoy Chambers, 5 Wallace Street, Bombay 400001

10 First Main Road, Gandhi Nagar, Bangalore 560009

8/1-B Chowringhee Lane, Calcutta 700016

80 Canning Road, Kanpur 208004

COPYRIGHT © CHARAN SINGH, 1978

ISBN 0 7069 0615 2

TV02C2901

First published, 1978

Reprint, 1978

Printed at Skylark Printers, Idgah Road, Delhi

Introduction

I submitted a detailed note to the Janata Party indicating in broad terms the parameters and the contents of what I felt should be the party's economic policy. I claim no originality for the principal ingredients of this policy. I had only sincerely, however imperfectly, attempted to spell it out in terms of what Mahatma Gandhi had reiterated and had also written extensively in depth. Indeed, in very many respects Gandhi's writings on some of the important aspects of free India's economic policy are at once exhaustive and detailed. Our misfortune was we, as a nation, ignored them completely and sought to cheat ourselves and the rest of the world by deifying this great soul but consigning his eminently practical guidelines to cold storage. We were content to pay lip-service to him.

Rejection of the Gandhian approach was nowhere so total as in the field of restructuring our economy after Independence. The steady deepening economic crisis, visible even in the mid-fifties, failed to open our eyes to the mistake we were committing. All the warning signals were ignored. Rejection of the Gandhian approach was accompanied by our persistence with wholly alien models of economic development. This helped only to compound our misery.

The enveloping economic crisis logically erupted in the form of the worst political crisis, culminating in the dark period of the emergency and the 19 months of its nightmarish experience.

The Janata Party was born out of the united will and determination of the people to solve this political crisis. The historic elections held in March and June 1977 conclusively demonstrated the efficacy of the people's choice of the Janata Party as their instrument to solve the political crisis. But, as is evident to any student of current Indian affairs, the political crisis was but largely a manifestation of a deep-rooted economic crisis which had been developing in the Indian society over the past two decades and

more. Just as the solution to the political crisis was found by the people by their near total rejection of the Congress Party and its leadership, so the solution to the economic problems has also to be sought in an equally near total reversal of the economic policy which had guided the country during the Congress rule. The Janata Party was voted to power because its leaders reiterated publicly that they would return to Gandhi as the inspirer of our political renaissance. In my humble view, there is no escape from following an identical course even for solving our economic problems.

The Gandhian blueprint for the framework of our economic policy is revolutionary in the sense that it seeks to keep the people and their capacity to lift themselves by their own efforts in a democratic manner as the focal point of every measure, every move. In the ultimate analysis what mattered to Gandhi was neither money nor machines but men. The primacy given to agriculture, the priority accorded to handicrafts and cottage industries, the emphasis on decentralization and self-reliance, and above all the anxiety to prescribe, as minimal a role as possible, under the circumstances, to the state agencies in the ordering of the economy have all but one aim, and that is to translate into reality the fundamental maxim of democracy as a rule of the people, *by the people, for the people.*

It is an indisputable fact of recent Indian history that Jawaharlal Nehru, whom Gandhi had named as his political heir, played a dominant role in formulating and implementing the economic policies of free India for over a decade and a half. His successors, notably his daughter Indira Gandhi, largely took off from where Nehru had left it. And even though she was responsible for introducing some grave distortions in the basic value-systems evolved by her father, the broad economic framework Nehru had left behind was continued and strengthened.

To the extent to which this course and direction of the Indian economy signified a near total rejection of what Gandhi had envisaged, it is inevitable that any advocacy for a move "towards Gandhi" will necessarily have to be critical of the model of economic growth, fashioned under Nehru's stewardship. But, in my humble submission, such criticism of the Nehruvian approach, as is indeed inevitable, has to be understood in the correct perspective and should not be interpreted to mean even remotely any

attempt to whittle down the memorable contribution made by Nehru in the formative years of our Independence.

History has often been a relentless prosecutor. Sentiments have seldom influenced its verdict. One of the basic functions of history is to teach succeeding generations the lessons it holds forth. If sentiments were to blind our eyes to drawing correct lessons from history, we will only be untrue, not only to ourselves, but also to our forebears and their memory and contributions which we hold as imperishable and dear.

I have not attempted to project the Gandhian alternative to the solution of India's economic problems in any contentious spirit of polemics. I have no desire to run down what has been achieved in India. I shall feel more than satisfied if what I had sought to suggest in a rather imperfectly worked out policy framework provokes a nationwide debate out of which, I am sure, will emerge a broad consensus as to how we, as the second most populous nation, set about the noble task of solving some of our most pressing economic and human problems.

CHARAN SINGH

Contents

1. <i>Role of Agriculture in Economic Development</i>	1
2. <i>Agrarian Structure</i>	10
3. <i>Labour, Capital, and Innovations</i>	27
4. <i>Neglect of Villages and Agriculture: Its Causes</i>	45
5. <i>Industrial Pattern</i>	52
6. <i>Socialism and Mixed Economy</i>	60
7. <i>Foreign Loans and Collaboration</i>	66
8. <i>Private Sector and Concentration of Economic Power</i>	72
9. <i>Dual Economy</i>	79
10. <i>An Alternative Strategy</i>	90
11. <i>Conclusion</i>	117
INDEX	123

One

Role of Agriculture in Economic Development

India is an underdeveloped country and suffers from acute poverty. Poverty is another name for lack of goods, agricultural and non-agricultural, which go to satisfy human wants that living creates. It is land that is the ultimate source of all these goods: it produces both food for direct consumption by man and raw materials which will lead to manufacture of non-agricultural goods, again, for indirect or ultimate use by man.

In other words, in addition to providing food for the entire population, agriculture, which is another name for utilization or exploitation of land, has to provide continuous and increasing quantity of raw materials for feeding the wheels of consumer industries, e.g., textiles, oil-pressing, rice mills, jute, sugar, vanaspati and tobacco manufacture, etc. Similarly, forests and animals which land nourishes make available various kinds of materials like timber, gum, resin, hides, etc., which form the base of innumerable industries. Further, by way of mines and quarries, land yields stone, coal, oil, iron, and other metals or minerals that are so essential for the establishment of a capital goods industry.

Unfortunately, India which was a net exporter of food till 1925 has become a net importer of food since the days of the Bengal Famine (1943). While the average annual imports of food over a period of 20 years ending 1970 cost us Rs 207.8 crores, those during the last five financial years, 1971-76, cost a much higher figure, Rs 289.2 crores. During all these years, India has also received wheat from foreign countries in the form of gift. During 1965-67, the gifts amounted to 4,576,000 tonnes and during 1975, from Canada alone, the gift came to 250,000 tonnes.

valued at Rs 37.8 crores. Not only food even raw materials obtainable from agriculture have had to be imported; for example, cotton which forms the raw material for clothing—the most essential necessity of man next to food. Till 1971-72, the country was, far and away, the top buyer of long staple cotton in the world market.

Surplus food stuffs and raw materials that a developing agriculture will make available can also play a big role in earning foreign exchange with which we can finance imports of capital goods for industrial development—capital goods which, under any kind of economy, even an economy of Gandhi's conception, a country will necessarily have to have. Canada built up its industry on the export of timber, and Japan on the export of silk.

Despite neglect of agriculture by the ruling party, even in 1974-75, the value of exports of agricultural commodities (including products of fisheries, forestry, and animal husbandry), both raw and processed, worked out to full two-thirds of major exports, that is, 52 per cent out of 79 per cent of the total exports. The value of minor exports, both agricultural and non-agricultural, amounted to 21 per cent. The corresponding figures in 1950-51 stood at 75, 77, and 23.

Further, industrial development also can come about only as a result of agricultural prosperity or, at best, it can accompany the latter but can never precede it as, unfortunately, the leadership of the political party which had ruled the country for thirty years without a break, thought and, perhaps, still thinks it could. It is only when there is purchasing power in the pockets of the farmers that a demand for industrial or non-agricultural goods and services (like education, transport, and power) will arise. This purchasing power will be derived from the sale of agricultural products, whether inside the country or outside it. The greater the surplus production available for sale, therefore, the greater the purchasing power available to the seller or the producer. Where the purchasing power of the mass of the population cannot be increased, that is, where surpluses of food production above farmers' consumption are not available, there cannot be any industrial growth.

While a developing agriculture will furnish purchasing power to the masses with which to buy the manufactured goods and the services, it will also release workers from agriculture for trans-

ference to industrial and tertiary employments. With greater and still greater production per acre, consequent on the application of more and more capital and higher and still higher technology, fewer and fewer persons will be required on the same area of land to produce the same quantity of crops.

Further, the migration of owners of undersized and uneconomic holdings to new industrial areas with a view to finding work that will bring a higher income will gradually lead to a situation where such holdings will cease to multiply and ultimately disappear. Without such release of workers from agriculture and their transference to non-agricultural occupations, there can be no economic development of the country or eradication of its poverty. The reasons are simple: goods that agriculture or primary sector produces, and can be used or consumed in the raw form in which they are produced, for example, fruits, milk, and water, are few. Most of the products that the primary sector or agriculture makes available have to be processed by those engaged in the non-agricultural (secondary and tertiary) sectors before they can satisfy the needs of a civilized man. Obviously, therefore, the larger the number of persons in a country engaged in the non-agricultural (secondary and tertiary) sectors of the economy, that is, in processing of agricultural products, production of non-agricultural goods, and provision of services, the wealthier the country or higher the standard of living of its population.

A study of statistics will lead to the conclusion that in all the countries which are prosperous or economically advanced today, there has been an increasing shift of workers from agricultural to non-agricultural employments. So that the percentage of agricultural workers has gradually declined and continues to decline. The table on the next page shows the figures of the working force engaged in India and 15 other selected countries over a long period.

If we want our country to develop, there are only two prescriptions: first, increase in agricultural productivity per acre and simultaneous reduction of the number of workers per acre; secondly, a transformation of our national psychology in the sense that Hindus, in particular, give up the belief that this world is not a mere illusion and, as individuals and also as a nation, we develop an urge to improve our economic condition and to that end, our people learn to work better and harder. Here

VARIATION IN THE SHARE OF WORKING FORCE IN THE
PRIMARY OR AGRICULTURAL SECTOR OF SELECTED
COUNTRIES AND PER CAPITA INCOME

Country	Year	Percentage of working force in agriculture	Per capita income	
			Years	Dollars
United States	1890	43.1	1884-93	355
	1910	32.0	1904-13	508
	1930	22.6	1930	648
	1950	11.6	1950	1,064
	1965	5.1	1965	2,921
Australia	1891	26.5	1891	405
	1911	24.8	1913-14	414
	1933	24.7	1933-34	441
	1947	16.8	1947-48	664
	1966	8.1	1966	1,747
Great Britain (Ireland excluded throughout)	1871	15.0	1871	330
	1891	10.4	1891	453
	1911	7.8	1911	519
	1951	4.5	1951	597
	1966	2.7	1966	1,544
Belgium	1890	18.2	1895	219
	1910	17.6	1913	314
	1930	13.6	1930	324
	1947	10.9	1947	481
	1967	4.3	1967	1,593
Canada	1901	43.6	1900	408
	1931	32.6	1931	432
	1951	18.7	1951	834
	1968	8.2	1968	2,247
New Zealand	1901	29.6	1901	334
	1921	27.3	1925-26	590
	1945	20.1	1945-46	739
	1966	11.9	1966	1,750
France	1901	33.1	1900	231
	1921	28.5	1921	348
	1931	24.5	1931	363
	1951	20.2	1951	509
	1954	19.8	1954	812

<i>Country</i>	<i>Year</i>	<i>Percentage of working force in agriculture</i>	<i>Per capita income</i>	
			<i>Years</i>	<i>Dollars</i>
Netherlands	1899	28.5	1900	329
	1920	21.1	1920	366
	1947	16.8	1947	434
Germany	1882	35.5	1883	206
	1907	23.8	1907	298
	1925	17.8	1925	274
	1933	16.9	1933	295
Germany (F.R.)	1950	11.8	1950	360
	1967	4.9	1967	1,519
Denmark	1901	42.4	1903	481
	1921	31.7	1921	493
	1940	23.6	1940	545
	1960	16.4	1960	1,049
Norway	1890	45.2	1891	145
	1910	37.5	1913	229
	1930	34.0	1930	463
	1960	18.8	1960	964
Japan	1912	48.0	1913	146
	1930	36.2	1930	189
	1950	32.6	1950	194
	1960	18.9	1960	343
	1965	13.7	1965	721
Italy	1901	48.9	1901	132
	1921	46.5	1921	146
	1936	40.3	1936	168
	1951	34.9	1951	250
	1967	17.7	1967	1,075
Switzerland	1900	27.0	1899	245
	1920	21.7	1924	346
	1941	19.9	1941	414
	1950	15.4	1950	638
	1960	10.4	1970	2,963
Sweden	1910	40.8	1910	252
	1930	30.5	1930	358
	1950	19.3	1950	625

Country	Year	Percentage of working force in agriculture	Per capita income	
			Years	Rs
India	1881	74.4	1880	197
	1901	76.1	1900	199
	1951	77.4	1950	253
	1961	73.5	1961-62	309.2
	1971	72.05	1970-71	353.0

SOURCES (for countries except India):

(1) For figures up to 1952, Chapters II and III of *Conditions of Economic Progress* (1957 edition) by Colin Clark, and after 1952, *ILO Year Book of Labour Statistics*, 1961, 1966 and 1968 and *UN Statistical Year Book*, 1962.

(2) Per capita income up to 1952 has been given in terms of an I.U. (International Unit) which equals the quantity of goods exchangeable in the USA for one dollar over the average of the decade, 1925-34. After 1952, it has been given in the current value of the dollar.

SOURCES (for India):

(1) For years 1881, 1901, 1951, and 1961 Simon Kuznets, *The Economic Growth of Nations*, Harvard University, 1971, and for the year 1971, *India's Census Report*, 1971.

(2) Per capita income up to 1955 has been given at 1948-49 prices (or in terms of the value of the purchasing power of the rupee in 1948-49), and taken from Moni Mukherjee's book, *National Income of India: Trends & Structure*, Statistical Publishing Society, Calcutta, p. 61.

The per capita income figures for 1961-62 and 1970-71 are at 1960-61 prices and taken from the *National Accounts Statistics*, CSO, G/I, 1976 (October), Table I, pp. 2-3.

we are not concerned with the second pre-condition of economic development, however.

As desired by Nehru, India does need industrialization or development of non-agricultural resources in order that the living standard of the people may be raised. It is, however, in the heavy industry, the first strategy he adopted in trying to ape the USSR, that his mistake lay which ruined the economy. The living standard will be raised, as pointed out earlier, only to the extent workers can be diverted from agricultural to non-agricultural occupations and they will be so diverted only to the extent agricultural production (surplus to the needs of the producers) goes up. So that if India has to live and progress there

is no escape from agriculture. It would be wrong to conclude, however, that efforts simultaneously for industrialization in India should be discontinued. Agriculture and industry are to a large part complementary to each other: it is more a question of emphasis and priorities.

Industrialists as also some of the political leaders often ridicule the suggestion that emphasis should be on agricultural production, and industry relegated to a secondary role. For, it is asked, how could agricultural production increase without a corresponding rise in industrial output? To irrigate the land, for example, we require reservoirs, canals, and tube-wells which in turn require cement, steel, and power. Conceding inter-dependence of agriculture and industry, industrialists, in fact, almost the entire intelligentsia of the country, would give first priority to, or place more emphasis on, industry. It was a fallacy to hope, they argue, that production on the farms could grow without providing the wherewithal which industry alone could create.

It is this attitude which is at the root of India's economic ruin. While not agreeing with them in regard to the priorities, one may not quarrel with the supporters of the present economic policy that industrialization will help raise productivity in agriculture by supplying consumer goods (e.g., clothes, shoes, and books) to act as inducements for agricultural workers as also capital goods (e.g., working capital like fertilizers and fixed capital like iron tools and diesel pumps) to act as inducements for land, in a way. Also, a growing industry (and along with it, as a necessary concomitant, a growing commerce, transport, and other services) will provide agriculture with an expanded market due to the increased demand of the urban population and processing and manufacturing industries for agricultural products, without which expansion in agricultural production will not proceed beyond the point where the farmer has satisfied his immediate needs. This increased demand for farm products from the industrial centres will increase the per capita income of the farmers. On the other hand, however, it is an advancing agriculture alone which can supply food for industrial and other non-agricultural workers to eat, raw materials for industries to process, foreign exchange to purchase capital goods from abroad, an internal market for the products of industry, and workers to run the industries, transport, commerce, etc.

There can be no doubt that it is shortfall in agricultural production that has become the greatest constraint on further industrialization or development of non-agricultural resources. Along with deficit financing, it has led to a sharp increase in prices and shrinkage of the internal market, fomented unrest in the cities, provoked a series of strikes among both white-collar employees and manual workers, weakened labour discipline, and vitiated the climate for investment. Thus, development of each is, to a varying extent, both a cause and an effect of the other. Just as agriculture develops and farmers thrive when industry prospers so will industry develop and non-agriculturists thrive as agriculture develops.

All this, however, does not mean that industry is as important as agriculture. It is agriculture which plays the primary role—the role of a precursor. While man can do without industrial goods, he cannot do without food. Similarly, while agriculture can, in the ultimate analysis, do without a heavy or capital goods industry, industry cannot do without agriculture at all. Wells, reservoirs, and canals can be built, and had been built by our ancestors and by the British, so also could cloth, shoes, and books be manufactured without the aid of cement, steel, and power on any worthwhile scale. Otherwise also, only a small proportion of these commodities is used in agriculture as compared with industry. So far as fertilizers are concerned, organic fertilizers are any day better than inorganic ones—if only they could be collected and composted as the Chinese have been doing for the last forty centuries.

Economic viability, whether internal or external, cannot possibly be achieved at the cost of agriculture. With this viability is linked up not only domestic political stability but also our international political stature. The mini-states on our frontiers, our traditional allies, are leaving us looking elsewhere for help and protection because India is unable even to maintain itself and has to import food despite the enormous food production available on tap.

Since India's independence in 1947 the world has been a witness to the strange spectacle of its most highly industrialized nation, the USA, feeding a predominantly agricultural nation, India—a country where 75 per cent of the town area is under foodgrains and 52.25 per cent of its working force is engaged exclusively in

producing food. As time passes, food will certainly play an increasingly important role in international politics. There is a distinct possibility of food-exporting countries using their exports as a political weapon against the importing countries. Therefore, if India has to live and make progress its leaders must assign top priority to agriculture.

Two

Agrarian Structure

There are three factors of production: land, labour, and capital. An increase in agricultural production can be brought about if one or more of these factors is increased and/or improvements made in the method or methods of utilizing these factors, that is, innovations are effected in the farming methods and techniques. So far as land—the vital factor—is concerned, its total area is fixed and cannot be changed or increased by any efforts man may make. Its productivity, however, depends greatly on the manner it is held and operated or the kind of agrarian structure it may have—an independent peasantry, cooperative or collective farms, huge state or private farms.

Our agrarian organization (in fact, the entire economy) can possibly have only four aims:

(a) *Maximum production of wealth or eradication of poverty.* With that end in view (along with a transformation in our social and economic attitudes), India requires a system of agriculture which will produce or help produce more and more food and raw materials as time passes.

(b) *Provision of full employment.* Although the ultimate aim is to have fewer and still fewer men working on the soil so that more and more workers are released from agriculture for absorption in production of industrial goods and services that a civilized society needs, as long as there are millions upon millions of unemployed and underemployed persons in the country waiting for employment or full employment, we need to have an agrarian system which, compared to all others, provides the largest employment possible per acre.

(c) *Equitable distribution of wealth or avoidance of undue disparities in income.* With that end in view, ceilings will have

to be imposed on present possessions and future acquisitions of land—if possible a floor will also have to laid down.

(d) *Promotion of the way of life we have chosen for ourselves*, in other words, emergence and strengthening of democratic trends.

It is contended that a system of independent peasantry owning the small patches of land it holds, linked together by service co-operatives, will fulfil all the four aims. This will require that every cultivator is given a stake in the land he holds which means that he will be made its proprietor and no threat of ejection will keep hanging over his head any longer.

"Unless those who work own the land, or are at least secure on the land as tenants," says W.A. Ladejinsky, a leading internationally known authority on land reforms and agriculture and a World Bank Consultant, with experience in Japan, Formosa, and South Vietnam, "all the rest is likely to be writ in water. And this is the most difficult step to achieve. It is relatively easy to use science to increase production, but only if the cultivator's relationship to the land and the state's treatment of him and of agriculture create incentives to invest, to improve the land and to raise productivity."

Farm tenancy, therefore, needs to be replaced by peasant proprietorship which means that landlordism has to be abolished lock, stock and barrel. Every cultivator of the soil, irrespective of his status under the existing law, has to be given permanent rights and brought into direct relationship with the state. No intermediary or landlord shall be permitted to resume land from tenants for self-cultivation, and no farmer to lease out his land unless he is a member of the armed force of the Union, suffers from an unsound mind or is physically handicapped from carrying on cultivation.

If communism, whether of the moderate or extreme variety, has raised its head in Kerala, Andhra, West Bengal or Bihar and violence and discontent stalk in many a part of the country, it is largely due to a breach between the profession and the practice of Congress leadership in regard to abolition of landlordism. Perhaps, there is no sphere where the gulf between official policy and performance has been as wide as in the case of land reforms. Sub-tenants and those who were genuine tenants but, owing to the rapacity of the landlord and the *patwari* or village record-

keeper, were recorded as trespassers, were thrown out summarily all over the country, except in Uttar Pradesh where they were granted permanent rights. Further, *bataidars* or share-croppers and non-occupancy tenants of *sir* or *khud-kasht* (self-cultivated) lands of the zamindar have perhaps not been recognized as tenants in any other state except, again, in Uttar Pradesh, and were still liable to ejection at the landlord's pleasure as before. Not only that in most of the states innumerable persons who were recognized under the law as genuine tenants during the days of the British were ejected in the name of the sacred right of the landlord to resume land for his own cultivation. For example, in Maharashtra alone, in the decade following the first tenancy reforms in 1948, landowners resumed 1.7 million acres for personal cultivation and two out of every three "protected" tenants lost their lands.

"In fact," says W.A. Ladejinsky, in a report "Effect on Land Tenure on Agricultural Production," submitted to the Planning Commission in 1963, "only in Uttar Pradesh has a well-thought-out comprehensive legislation been enacted and effectively implemented. There, millions of tenants and sub-tenants were made owners and hundreds of thousands who had been evicted were restored in their rights." Ladejinsky concluded: "*Many a good piece of agrarian reform legislation has arrived still-born in India, but in Uttar Pradesh it went hand-in-hand with enforcement and important attainments. The lesson to be drawn from this is but one; it can be done when there is a will to do it.*"

A study undertaken by the Government of India in 1969 into the "Causes and Nature of the Current Agrarian Tensions" and discontent in certain parts of the country reached the same conclusions which were reinforced by a World Bank report presented at a meeting of the Aid-India Consortium held in Paris on 17-18 June 1971. According to the World Bank report:

Legislation has yet to be enacted for the abolition of some of the intermediary tenures and interests in Assam, Telengana (Andhra), Himachal Pradesh, Jammu and Kashmir, Punjab and Tamil Nadu. Tenants and share-croppers in Andhra Pradesh, Bihar, Saurashtra and Tamil Nadu continue to be insecure. In Haryana and Punjab, security of tenants is subject to a continuing right of resumption by the landlord. There are

widespread circumvention of laws meant to prevent eviction. . . .

The statutory rent or share of the crop payable to the landlord is on the high side in Andhra, Haryana, Punjab, Jammu and Kashmir [in respect of small holders] and Tamil Nadu.

The World Bank report suggested four steps to be taken. First, preparation of record of tenancies; second, fixation of cash rents as a multiple of land revenues; third, abolition of right of resumption by landlords for personal cultivation or permitting it only in exceptional cases; and fourth, regulation of surrenders by the tenants. Otherwise, the report said, the time is fast approaching when rural poverty problems cannot be evaded, in part, because of the strain they impose upon the country's stability.

Speaking of the degree of utilization of the three factors of production, W.J. Spillman said: "The greatest profit from the business as a whole involves the greatest profit per unit of the limiting factor. Thus, if land be the limiting factor, the aim should be to make the largest profit per acre. If labour limits the business, the aim should be the largest possible profit per unit of labour. Similarly, if the limiting factor be materials, the aim should be the greatest profit per unit of materials."¹

There is little possibility of extension of agriculture in India by reclamation and colonization. On the other hand, because of our large and increasing population, the supply of labour is unlimited. That part of capital which mostly provides traction power today, viz., draught cattle, is also, by no means, scarce. In any case, it can be replaced by improved implements or small machinery without much difficulty. So that, of all the three factors of production in agriculture, land alone constitutes the limiting factor.

Our agrarian organization has, therefore, to be such as would lend itself to the maximum exploitation of land, that is, as will give us maximum yield per acre even though it may not be consistent with the maximum exploitation of labour and capital. In other words, that economy alone will suit us where we have to apply to land more, or increasing number of units of labour or capital, or of both in order that the fullest use may be made of the former, or, which is the same thing, bigger yields realized per acre.

¹*The Law of Diminishing Returns*, p. 43

Our aim must be obviously not the highest possible production per man or agricultural worker, but the highest possible production per acre. That is what will give us the largest total for India as a whole and thus eradicate poverty or want of wealth in the absolute.

On the other hand, in countries like the USA, Canada, Australia or New Zealand where land is not a limiting factor and labour is relatively scarce, it may be in the national interest to obtain the maximum output per worker rather than maximum yield per acre. Such countries can afford to have an economy which may be wasteful of land.

Statistics after statistics from all over the world as also from Farm Management Studies conducted under the auspices of the Ministry of Agriculture, Government of India, go to prove that although in theory, the size of the farm is irrelevant to production per acre, yet, in practice, under given conditions, yields per acre accruing to a farmer decline as the size of his farm increases. The reason lies in the fact that agricultural production is a life process and, like living beings, is greatly affected by the care and devotion it receives, and that application of human labour and supervision per acre decreases as the area of the farm increases.

There is less production per man if more than four men work the 100 acres (see the first table on the facing page). The more the workers the less is their per capita production. Dr Elmer Pendell says that he chose soil which was not very good and where the farmers had only a little help from tools. Nor would tools make a difference to per capita production, at least, when as many as 18 men have to support themselves on a hundred acres. For, the less the ground a man has, the less the advantage he has in the use of farming equipment.

John Lossing Buck in a book² reported the results of an extensive study of Chinese farms as shown in the second table on the facing page.

Here we have striking statistical evidence of diminishing returns. It is something like the other table except that this one shows a condition at a subsistence level and an arrival at an actually declining yield per acre. There is no scientific reason, however, why production per acre should go down if the area of the farm decreases to a point below 2.6 acres. Maybe, the diminutive size

²*Land Utilization in China*, University of Chicago Press, 1937.

ILLUSTRATION OF THE LAW OF DIMINISHING RETURNS

<i>No. of men working the land</i>	<i>Acres of land worked by the total number of men</i>	<i>Total production of the hundred acres in equivalents of bushels of grain</i>	<i>Production in bushels of grain attributable to the man in the series who is now considered for the first time</i>	<i>Average production per man in bushels</i>	<i>Average production per acre in bushels</i>
1	2	3	4	5	6
1	100	200	200	200.00	2.00
2	100	500	300	250.00	5.00
3	100	900	400	300.00	9.00
4	100	1,250	350	312.50	12.50
5	100	1,540	290	308.00	15.40
6	100	1,780	240	296.67	17.80
7	100	1,980	200	282.85	19.80
8	100	2,150	170	268.75	21.50
9	100	2,300	150	255.55	23.00
10	100	2,440	140	244.00	24.40
11	100	2,575	135	234.09	25.75
12	100	2,705	130	225.42	27.05
13	100	2,830	125	217.69	28.30
14	100	2,950	120	210.71	29.50
15	100	3,067	117	204.47	30.67
16	100	3,181	114	198.81	31.81
17	100	3,292	111	193.65	32.92
18	100	3,400	108	188.88	34.00

SOURCE: Elmer Pendells, *Population in the Loos*, New York, 1952.

PRODUCTION ON CHINESE FARMS

<i>Farm group</i>	<i>Men equivalents per 100 crop-acres</i>	<i>Crop-acres per man equivalent</i>	<i>Production per man equivalent in equivalents of bushels of grains</i>	<i>Production per acre in equivalents of bushels of grain</i>
1	2	3	4	5
A	25.00	4.0	76.1	19.0
B	31.25	3.2	62.0	19.4
C	38.46	2.6	53.5	20.6
D	47.62	2.1	43.1	20.5
E	66.67	1.5	30.6	20.4

of his holding affects the psychology of the farmer.

The above results are well-nigh universal, output per acre is higher on small farms than on large farms. Thus, if a crowded country like India has a choice between a single 100-acre farm and 40 2.5-acre farms, the capital cost to the national economy will be less if the country chooses the 40 small farms. There is a second reason also in favour of the small farm. India is faced with the problem of unemployment. National interest, therefore, demands an agrarian economy which, while serving to extract the maximum out of the land that constitutes the limiting factor in our circumstances, will provide the optimum of employment for the rural folk.

Largely because of diseconomies of management and difficulty in supervision of a large number of hired workers, large holdings attract the use of large machines, thus displacing labour, whereas small holdings limit the use of the machines, thus employing more human labour. As statistics would show, the number of workers employed per 100 acres in regions or countries where small holdings predominate is greater than that employed in countries where large holdings form a large percentage. For example, Japan, Taiwan, and South Korea, with an average holding of 2.92, 3.14, and 5.12 acres, carry a population per 100 acres (of arable land and land under permanent crops) of 87, 79, and 89 workers respectively. Whereas the corresponding figures for the USA, Mexico, and Brazil stand at 302.65, 305.93, and 178.95 acres and 1, 12, and 17 workers respectively.³

Lastly, a system of agriculture based on small enterprises, where the worker himself is the owner of the land under his plough, will foster democracy. For, it creates a population of independent outlook and action in the social and political fields. The peasant is an incorrigible individualist; his vocation, season in and season out, can be carried on with a pair of bullocks or a small machine in the solitude of nature without the necessity of having to give orders to or take orders from anybody. That is why the peasant class everywhere is the only class which is really democratic without mental reservations. Further, the system of family-sized farms or peasant proprietorship ensures stability because the operator or the peasant has a stake in his farm and would lose by

³FAO *Production Year Book* x, 1966 and 1968.

instability. So that a system of peasant proprietorship not only produces more wealth, provides more employment, and removes glaring disparities from land but will also prove the most secure base of democracy. The liberty of the worker—a condition precedent to successful functioning of democracy—varies inversely with the size of the undertaking in or upon which he is employed.

Such is the land tenure or agrarian structure that our natural endowment and the kind of society that we hope to develop, viz., democracy, dictate. Yet, obsessed with the seeming advantages of large-scale farming adumbrated in the Marxist literature, communists and their fellow-travellers in our country, who do not know much about the village or the farmer, are often heard equating land reforms with cooperative farming under which peasants will pool their individual landholdings in order to form or produce a large farm which will be worked jointly by them. Such a farm will necessarily be operated by large machinery. These well-wishers of the peasantry and the country believe that the use of large machinery will by itself increase per acre production in some mysterious way and would not pause to think or argue. So, instead of adjusting agricultural machinery and its utilization to the given size of the holding which, in India as in many other countries, is small, they have decided to adjust the size of the holding itself to the requirements of the large machine by establishing large joint farms.

Had large machinery by itself contributed to agricultural production, the yield per unit of land in the USA and the USSR, where the chief means employed in working a farm is the use of large machinery, would have been greater than in Western Europe and Japan where much less machinery is used. But we find from the table on the next page that the reverse is the case. Although an average landholding per cultivating family in Japan is the smallest of these countries, viz., three acres or so, it will be seen that its output per unit of land is four times higher than in the UK, ten times higher than in the USA, and 16 times higher than in the USSR. That the production per unit of labour in France, the UK, the United States is several times higher than in Japan is irrelevant. Mechanization of farming operations does improve considerably the yield per unit of labour, but it does not increase the yield per unit of land, and it is this that matters in India more than anything else.

COMPARATIVE LEVELS OF AGRICULTURAL OUTPUT AND PRODUCTIVITY IN 1965

Country	Gross value added in agriculture	Gross value added per person engaged in agriculture	Gross value added per male person engaged in agriculture	Gross value added in per hectare of arable land
1	2	3	4	5
	\$Million at US prices		\$at US prices	
France	5,000	1,573	2,334	154
Germany (FR)	2,482	837	1,321	160
Italy	4,297	867	1,268	203
Japan	5,468	451	948	523
UK	2,849	3,223	3,686	132
USA	23,587	5,429	6,678	50

SOURCE: Angus Maddison, *Economic Progress in Japan and USSR*, George Allen and Unwin Ltd., London, 1969, p. 65.

Agricultural production being a biological process, there are no economies of time and scale in agriculture. Plants occupy the same space to grow and take the same time to mature on a small farm as on a large one. Nor is there any scientific technology which can be used on a large farm, and not on a small one. Enlargement of the size of an undertaking, therefore, does not lead to increased production in agriculture, as it does or may do in some branches of industry. On the contrary, inasmuch as incentives in a joint undertaking are weakened joint farm will lead to decrease in production.

As for a large cooperative farm human nature being what it is, even brothers born of the same mother usually separate from one another after the death of the head of the family. In the circumstances it is utopian to expect that an average householder will, all of a sudden, identify his interests with those of the hundreds of persons in the village or neighbourhood who were hitherto total strangers to his life. A cooperative farm brings together indiscriminately under its banner persons with no long-established ties of kinship or social level—Hindus and Muslims, Brahmins and Harijans, owners, tenants and labourers, agriculturists and non-agriculturists. If a man were to reach the heights

wherefrom he could see his own good in the good of every other human being, he will cease to be a householder that very day. The ties of family, language, religions, and country would no longer have any meaning for him. In such ideal conditions planning will not be necessary. Economic laws will become infructuous and, indeed, even government will itself become a costly luxury. The mother is able to nurse and nourish her child because she is selfish, because in the child she sees her own image. In our enthusiasm for a millennium right now in our own lives, we must not forget that man is not entirely a rational being. He is governed more by heart than by mind and the heart has not yet made (whether it ever will make, is doubtful) the same advance as the mind which has narrowed down physical space and made the world a smaller place than it was in the days of our forefathers. Scientific progress or progress in control of the outer world has not resulted in greater control of the inner world of the self, without which a large joint economic undertaking cannot be run smoothly or successfully. Man remains as selfish or greedy, proud or jealous, and ambitious as in the days of the Mahabharata.

IDEAL SIZE OF A FARM

The question arises: What should be the size or range of a small farm that a man may be allowed to possess? In theory as also in justice, possession or distribution of land in any country should be governed by the principle that none is allowed to hold an area of land which, under its particular technique of farming, is beyond the capacity of an average man or worker to manage, and none possesses less than an area below which land will not produce more per acre. In other words, the upper limit of the farm shall be governed by the working capacity of one worker or one unit of manpower and the lower limit, by the productive capacity of one unit of land. Statistics taken from the previous two tables would indicate that under conditions of non-mechanized farming or farming by manual and animal labour—and this is the only type of farming that we need to consider in our country—as more and more men work a given land area, that is, as area per man decreases, production per acre increases with such great strides that production per man also increases, till land per man is reduced to a point between 33.3 and 25 acres, to be exact, to an area of

27.5 acres. It is at this stage or acreage that the "Law of Diminishing Returns" per man begins to operate. Below 27.5 acres, production per man begins to fall off as the area decreases although production per acre continues to increase till land per man is reduced to a point between 2.6 and 2.1 acres, say 2.5 acres. So that, if the area a man possesses amounts to more than 27.5 acres, land is not fully utilized because of lack of sufficient labour and, if it amounts to less than 2.5 acres per worker, labour is not fully employed because of lack of sufficient land. In between these two levels, the more land a man or an agricultural worker has, the better for him as his total production will rise with every acre added to the holding; the less land he has, the better for the country as the country's total production will rise with every acre taken away from the holding.

In our country, therefore, (a) where it is land that is the limiting factor, not labour; (b) where the area of land a cultivating family (usually consisting of two workers) holds on average today amounts to a bare 6.25 acres or so; (c) where the rate of population growth is very high, viz., nearly 2.5 per cent per annum; and (d) where industrialization or development of non-agriculture is proceeding at such a slow pace that the land-man ratio of the farming population is going down instead of going up, it is in the interest of the people that:

(a) a ceiling on present possessions of land is imposed at a level not more than 27.5 acres per adult worker (including, of course, his wife and minor children, if any) and the area that thus becomes available is distributed to those who possess no land at all or possess less than 2.5 acres each;

(b) a floor is laid at 2.5 acres, that is, the law relating to transfer and partition of land in future is so amended that the area of land per worker is not reduced below 2.5 acres; and

(c) future acquisitions of land are so regulated that, along with what he may be already possessing, the total area a man comes to hold does not exceed a particular limit which may be fixed somewhere between the ceiling and the floor.

Both the actual ceiling and the floor may differ with the circumstances of a region concerned, such as the land-man ratio of its farming population and quality or productivity of the soil. For

example, in sandy areas the two figures may stand at 25 and 5 acres respectively whereas in irrigated areas, having good soil, these may be brought down to 12.5 and 2.5 acres.

LAND REDISTRIBUTION

Inexhaustibility of land gives those directly engaged in working it a feeling of security, which no other means of occupation can offer. Land never disillusiones a man completely; the hope of plenty in the future always remains, and is not infrequently realized. Understandably enough, therefore, there has been much clamour, rather scramble for ownership of land in the country.

Of the 67.4 per cent male workers engaged in directly working the land, only 46.35 per cent are cultivators, that is, enjoy rights of ownership or possession over the land; the rest, 21.05 per cent, are agricultural labourers with no rights in land, proprietary or possessory. As regards disparities in the area of land held by the cultivators *inter se*, we will refer the reader to the *Report on Agricultural Census* (Government of India, 1970-71). He will find that while as many as 50.6 per cent of the cultivators together held only 9 per cent of the land in 1970-71 only 3.9 per cent of the cultivators held as much as 30.9 per cent.

Emphasizing two of the arguments in favour of the small size of the farm, P.S. Appu, Joint Secretary, Agriculture and Land Reforms Commissioner, in his report on *Ceiling on Large Holdings*, submitted to the Government of India in April 1971, said:

There is a point of view that the fixing of a ceiling on agricultural holdings at low levels and the redistribution of surplus land in countries of heavy population pressure and inadequate avenues of productive employment like India, is likely to lead to an increase in overall agricultural production and fuller utilization of the available man-power. The explanation for both these results is that the owners of high holdings generally depend on wage labour and, therefore, they will employ labour only up to the point where the increase in output resulting from the employment of the last unit of labour is at least slightly above the wage level. No such consideration exists in the case of smaller holdings which are generally operated by family labour. There being no alternative sources of employment, family

labour will continue to be employed, far beyond the point where output per unit of labour is equal to the wage level. In fact, as long as there is any hope of increased production, additional family labour will continue to be employed. Thus, the smaller holdings will be cultivated more intensively leading to enhanced overall production. Simultaneously there is also fuller utilization of the available man-power.

The assumption frequently made that there is a conflict between the two goals of economic growth and social justice or greater economic equality has no basis, at least, in the sphere of agricultural production; rather as we have already seen, they are in harmony. Greater equality in distribution of land would also lead to greater economic growth in the countryside.

Besides Kerala, West Bengal, and Andhra Pradesh, communism has raised its head in Bihar and recently in Tamil Nadu also. The high percentage of agricultural labourers as compared with cultivators in these states, as evidenced by the figures below, explains this situation, at least, in part. So, a demand was raised by the have-nots and rightly conceded by the political leadership that land be redistributed.

<i>States</i>	<i>Percentage</i>	<i>States</i>	<i>Percentage</i>
Andhra Pradesh	72.93	Mysore	46.18
Assam	16.5	Orissa	47.52
Bihar	69.82	Punjab	46.3
Gujarat	33.66	Rajasthan	11.55
Haryana	31.62	Tamil Nadu	69.33
Kerala	113.65	Uttar Pradesh	28.64
Madhya Pradesh	33.82	West Bengal	73.00
Maharashtra	59.41		

SOURCE: Paper 1 of 1971 Census, Supplement.

According to the *Report of Agricultural Census* (Government of India, 1970-71), taking the country as a whole, with the ceiling fixed at 10 hectares or 25 acres, about 8.67 million hectares or 21.675 million acres of land would have become available for the landless even in 1970-71. This is after an allowance had been made for 10 per cent of unculturable waste that was included in the large holdings, and for one-half of the holdings that would

have escaped the axe because of joint ownership. While, in fact, only a few lakhs of acres alone have actually been forthcoming.

According to official figures, as on 9 July 1976, 4,397,500 acres of land was estimated to be surplus, 2,025,600 acres was actually declared surplus, and only 1,022,000 acres was taken possession of by government. Of this area, only 694,500 acres had been distributed amongst 354,000 persons, of whom 162,000 belonged to scheduled castes or tribes who got 197,900 acres in all.

Whatever utility or potentiality the programme had was compounded first by the power structure of the ruling party and, second, by its inefficiency. Wolf Ladejinsky in a report to the Planning Commission says:

Not the least in the controversy about land ceilings, is the fact that the rich and well-to-do farm groups in India count very much in the inner counsels of the Congress Party both in the centre and the states, specially on election day. . . . Though the number of those subject to the ceiling is small, their influence is widespread through the control of local seats of power and much else. . . . The so-called "vote banks" are still controlled by them as illustrated by the fact that in the Punjab Assembly 45 out of 64 members are rated as big owners, in Haryana the respective numbers are 30 and 52, and in Madhya Pradesh 96 out of 220 Congress legislators are reported to have landholdings in excess of the declared limit. Many an other state would show roughly the same relationship.

A task force set up by the Planning Commission in 1972 under the chairmanship of the Land Reforms Commissioner, P.S. Appu, to make a critical assessment of the experience in land reform during the previous plan periods, arrived at the same conclusion when it warned the government that "there could be no progress in land reforms in the absence of the requisite political will. . ." (Report, March 1973).

The drum-beating about imposition of land ceilings as being the only solution of the problem of the rural poor and the rural landless, Congress leadership had been indulging in since 1950, put the large farmers on their guard. Much of the surplus land was transferred by them for consideration in favour of strangers or

fictitiously as *benami* in favour of relations of the large holders by the time the legislation was enacted and could be implemented.

Anyway, the belief that distribution of surplus land available on imposition of ceilings was going to solve the problem of the Harijans, the landless or the marginal farmers and thus remove the poverty of the rural society to any appreciable degree, has proved a delusion. Howsoever low the ceiling that might be fixed, the acreage that would be available for distribution will be too little for all those who may need it or even a substantial section of them.

The ultimate solution of the economic problem not only of agricultural labourers but also of tens of millions of other poor or unemployed and underemployed persons in the country will depend, by and large, on development of non-agricultural resources which will, in turn, depend mainly in increased agricultural production and a transformation of the national psychology. Obsession with land redistribution 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.

The Janata Party and its government should now create such conditions that all those who are unemployed and underemployed including agricultural labourers and the very small farmers as also the educated unemployed are attracted to cottage and small-scale industries and other small non-agricultural enterprises.

CONSOLIDATION OF HOLDINGS AND SOURCE COOPERATIVES

With cooperative or any other form of joint farming ruled out, there is only one measure left in the sphere of agrarian organization, viz., consolidation of land holdings, that need to be considered and implemented. We need not here expatiate on the reasons in favour of the step: briefly it can be said that consolidation of scattered plots will lead to efficient utilization of all the three factors of production, viz., land, labour, and capital.

Consolidation of holdings, however, solves only the problem of scatteredness: it is no answer to the problem of the marginal or uneconomic holding. With the passing of time and lack of non-agricultural occupations, uneconomic holdings which are unable to find employment for an average-sized family or to keep it

fed and clothed, if not in reasonable comfort, are multiplying fast.

It has already been pointed out that transformation of peasant proprietorship into joint farming is an institutional change that will always and everywhere meet with the peasant's resistance. Also, it does not help increase agricultural production, reduce unemployment or strengthen democratic behaviour. On the other hand, there are technical improvements or technical facilities which the peasant will welcome, viz., irrigation, water, manure, improved seeds, pesticides, and better farming practices in general, that actually go to increase the production or income of a farmer, and can be as easily used or introduced on small farms as on big farms. In a way, large-scale farming is not essential and peasant farming as such offers no hindrance to technical progress.

All that we have to do is to combine the incentive of individual land use and private ownership of land with the advantages of a large farm. In our circumstances where holdings are small and will remain small, it is the principle of cooperation that offers the right solution. Cooperation is the closer union of otherwise independent units—merely coming together of different entities—for purposes of eliminating certain disadvantages attendant upon independent, isolated action. Its real mission is, first, to save the peasants from the disabilities entailed by the small size of their business and their lack of training in the ways of a commercial civilization and, second, to secure to them all the benefits and technical advantages of private property. Cooperation need not extend to the actual act of farming or production, that is, to those functions of farm management which can properly be executed within the boundaries of a single small farm. Such functions should remain the concern of the independent individual himself. Were the members of a cooperative society or organization to sacrifice their economic and individual independence, it would amount to a merger, not cooperation.

Dr C.R. Fay, Chairman of the Horace Plunkett Foundation, said in 1943: "Northern Europe has proved to the hilt that the biggest degree of technical excellence is entirely compatible with family farming but only on two conditions: first, that the land unit is the special subject of state guardianship and, secondly, that individual family effort on the land is supplemented by group effort in purchase, processing and sale." As a national policy,

therefore, we have to confine ourselves to explaining to the farmers the advantages that service cooperatives or pooling of financial resources and cooperation in all non-farm activities will bring. Our aim must be the creation and maintenance of *independent* existences individually worked but linked or bound together by the principle of cooperation, rejecting both economic anarchy (prevalent in our country today) and collectivism (that has been ushered in in the USSR and China). It is such a system in Japan and Western Europe, where the identity both of the farm and the farmer remains unimpaired, that has resulted in greater production per acre than where land and, therefore, labour also have been pooled. As we have already seen, this system results in an agrarian organization which serves to strengthen democracy. Whereas a joint farm by whatever name it may be called is advocated only by those in our country who doubt whether they will be able to approach and persuade the vast number of peasants involved. It is easier to manage hundreds of millions of farmers after they have been herded into a few thousand of cooperatives or joint enterprises. Much as they would like to copy communistic methods and programmes, owing to circumstances beyond their control, they have to resort to democratic terminology in order to put a cloak on their intention.

Cooperatives will become successful as in Japan, Germany, the UK, and Scandinavian countries only if they spring up as a result of an urge within the people themselves—as an instrument of satisfaction or fulfilment of a common need of theirs. In no country of the world except India, cooperative movement is regarded as a fit subject or policy to be executed through a government department. Our political leaders and economic planners should realize that, considering the deficiencies of our human factor, genuine cooperatives will take decades to strike roots in our society. They would, therefore, do well to proceed slowly.

Three

Labour, Capital, and Innovations

Apart from land, there are two other factors of production: labour and capital. An increase in the application of these two factors will lead to increase in production. So far as labour is concerned, it is a variable factor and can certainly be increased. But in most parts of the country our agriculture today is already labour surplus, that is, at the present levels of utilization it contains or disguises more labour than is necessary. Which means that the marginal productivity of labour of a vast multitude in our villages tends to zero. Agricultural workers in these areas are surplus in the sense that their removal or transfer to non-agricultural occupations will make little or no difference to agricultural output. Productivity in such areas would certainly increase if this labour could be fully utilized on the farms, that is, in the village where it finds itself. This calls for a change in the present agricultural practices or techniques. As the experience of the "green revolution" recently showed us, there are certain techniques (other than mechanization) which require more labour than is employed under present conditions. Besides eliminating under-employment in large parts of the countryside, introduction of such techniques will serve to increase production.

Capital is largely a production of human labour, set aside for and used in further production or, in other words, a product of work carried out in the past, which was not consumed. Like labour, it is a variable factor. Capital can practically be increased indefinitely, provided, of course, that man is prepared to make the necessary sacrifice of not consuming all the product of his labour immediately after its production. Means which aid or contribute to agricultural production, for example, animals, tools or machines and other equipment, seeds, water or sources of irrigation,

manures or fertilizers and pesticides or insecticides, can all be classed as capital.

Besides physical increase in land, labour and capital, agricultural production turns also on an innovation or improvement in the techniques or art of farming. An innovation may be defined as a new application of either old or new knowledge to a production process. It aims at a better combination of the three factors of production with a view to getting the most from the available resources.

Therefore, if we seek economic development of the country, that is, want men to be released from agriculture for diversion to industry, commerce, transport, and other non-agricultural occupations and inasmuch as they will be released only to the extent agricultural production goes up, with fewer and still fewer men on the soil, capital in land will have to be invested in a far greater measure and technological improvements in agriculture effected at a far greater rate than we imagine, and have planned for. In other words, it can be stated as a rule of thumb that the degree of economic development of India turns on the extent of improvement in agricultural practices we are able to effect and the amount of capital we are able to invest in land.

Next to, or along with the need to invest more and more capital in irrigation and fertilizers, comes the need for research. The most decisive incentive to the farmer can come only from research—increased production as a result of new and newer technology—in seeds, irrigation or water management, application of fertilizers, etc.

CAPITAL STARVATION OF AGRICULTURE

Though the Government of India has constantly talked about top priority for agriculture and set ambitious targets of production, public outlays allocated for agriculture in our plans are pitifully low and private capital is offered little or no incentive. In fact, one would be justified in saying that Indian agriculture is deliberately starved of capital: money has been available with the government for almost everything under the sun but not for agriculture. With the result that while, during the period 1951-73, agricultural production went up by 75 per cent, i.e., at the annual rate of 3 per cent, industrial production during an equivalent

period multiplied 3.6 times—the index rising from 54.8 in 1951 to 200.8 in 1973 (1960=100), an annual rise of 12 per cent (simple). Not many industrial countries exceeded this pace. It ranged from 1.1 to 3.2 times the rates of expansion in Belgium, Canada, France, Norway, Sweden, the UK, and the USA.

The accompanying table shows actual investments made in the various plans at constant prices (1961-62). It will show that the amount of funds invested during the third plan (1961-66) and the fourth plan (1969-74) despite a lapse of eight years between the two plans was virtually the same. The astronomical figures at current prices mentioned in the official literature only tend, if not actually intended, to mislead the unwary.

It will be seen that there has been no change in the pattern of investment since the second plan was launched in April 1956 though the country's food situation has, over a period, gone from bad to worse. The allocations for agriculture in the public sector were reduced from 37 per cent in the first plan to 17.3 per cent in the second plan, and thereafter never rose beyond 23.4 per cent. While those for organized industry and mining were raised from 4.9 per cent in the first plan to 23.8 per cent in the second plan and thereafter did not fall below 23.7 per cent.

While the outlay for industry and minerals was raised from 22.6 per cent in the annual plan for 1974-75 to 27.5 per cent in the annual plan for 1975-76, that for agriculture (including irrigation) was reduced from 21.1 per cent to 19.4 per cent. In the annual plan for 1976-77 the two figures stood at 27.82 and 20.16 per cent respectively. So that in 1975-76, the allocation for industry was 41.81 per cent higher than that for agriculture, and in 1976-77, 38 per cent—ratios which never obtained before.

As an example of lack of appreciation of the needs of agriculture, it may be pointed out, while almost a fourth of the country's land suffers from erosion, only a paltry sum of Rs 47.05 crores was spent on soil conservation between 1951 and 1973. It must be remembered that soil conservation is equally, if not more, important than soil utilization or raising of agricultural crops.

The break-up of this amount planwise is given in the table on p. 33.

In order to arrive at a more precise ratio of allocations between agriculture and industry—between the rural and urban areas—the total amount spent on power, education, medical relief, roads

PLAN EXPENDITURE IN THE PUBLIC SECTOR: 1951-52 TO 1975-76
(CENTRE, STATE, AND UNION TERRITORIES)

By Broad Heads of Development

(In crores of rupees)

<i>Period/Year</i>	<i>At 1961-62 Prices</i>					<i>Total</i>
	<i>Agriculture and allied sectors</i>	<i>Irrigation and flood control</i>	<i>Power</i>	<i>Village and small industries</i>	<i>Industry and minerals</i>	
<i>First Plan</i>						
1951-52	32.09		91.21		11.62	284.03
1952-53	37.52		122.39		11.75	334.83
1953-54	55.02		133.40		21.96	410.33
1954-55	97.29		168.69		27.61	610.94
1955-56	147.21		214.87		50.00	830.73
Total: 1951-56	369.13 (14.94)		730.56 (29.57)		122.94 (4.98)	2470.86 (100.00)
<i>Second Plan</i>						
1956-57	81.96		193.02		96.82	751.58
1957-58	98.99		185.65		262.15	1019.83
1958-59	121.02		182.60		309.69	1110.24
1959-60	133.41		188.64		287.23	1079.60
1960-61	140.42		201.30		219.00	1973.18
Total: 1956-61	575.80 (11.44)		951.21 (18.89)		1174.89 (23.34)	5034.43 (100.00)

Third Plan

1961-62	148.15	106.00	139.49	38.13	197.71	1130.26
1962-63	167.39	110.36	175.73	38.73	249.26	1334.82
1963-64	188.31	110.61	235.97	39.68	315.37	1555.04
1964-65	206.12	121.93	250.23	42.21	332.61	1647.39
1965-66	233.61	132.67	275.78	43.16	399.54	1772.26

Total: 1961-66	943.58 (12.68)	581.56 (7.82)	1077.20 (14.84)	201.91 (2.71)	1494.49 (20.09)	7439.77 (100.00)
----------------	-------------------	------------------	--------------------	------------------	--------------------	---------------------

Annual Plans

1966-67	222.99	99.66	269.31	28.69	343.04	1443.97
1967-68	187.46	86.72	236.81	25.47	281.31	1246.22
1968-69	277.62	106.71	249.45	24.49	317.77	1436.49

Total: 1966-69	668.07 (16.67)	293.09 (7.10)	755.57 (18.31)	78.65 (1.91)	942.12 (22.83)	4126.68 (100.00)
----------------	-------------------	------------------	-------------------	-----------------	-------------------	---------------------

Fourth Plan

1969-70	193.88*	112.65	273.72	23.48	259.21	1287.82
1970-71	206.74*	115.79	283.99	23.74	256.82	1393.43
1971-72	253.71*	131.53	321.50	25.69	313.53	1661.52
1972-73	276.19*	154.76	316.66	26.70	303.38	1799.76
1973-74	221.60*	150.59	269.94	21.87	289.34	1647.44†

Total: 1969-74	1152.12 (14.79)	665.32 (8.45)	1465.81 (18.82)	121.48 (1.56)	1422.28 (18.26)	7789.97 (100.00)
----------------	--------------------	------------------	--------------------	------------------	--------------------	---------------------

(In crores of rupees)

Period/Year	At 1961-62 Prices					Total
	Agriculture and allied sectors	Irrigation and flood control	Power	Village and small industries	Industry and minerals	
<i>Fifth Plan</i>						
1974-75 (Outlay)	203.96 (13.18)	123.10 (7.96)	244.92 (15.83)	21.98 (1.42)	349.30 (22.57)	1547.51 (100.00)
1975-76 (Outlay)	228.34 (11.57)	154.63 (7.83)	363.80 (18.43)	24.40 (1.24)	542.94 (27.50)	1974.27 (100.00)

*Includes buffer stock.

†Excludes expenditure on nutrition.

NOTE: Figures in parentheses represent the percentage share of the relevant "Head" in the total plan expenditure of the period.

EXPENDITURE ON SOIL CONSERVATION

(In crores of rupees)

First plan	0.36
Second plan	2.07
Third plan	11.21
Annual plans (1966-69)	9.45
Fourth plan	23.96
Total	47.05

SOURCE: *Report of the National Commission on Agriculture*, Vol. V, 1976, p. 392.

and transport, etc., will have to be added to the two sectors in the proportion in which these services are made available to them. However, no statistics relating to investments in those spheres except for power are available to us. The table on the facing page shows that in 1974-75, only 12.31 per cent of electric energy produced in the country was utilized by agriculture as compared with 65.69 per cent that was utilized by industries.

It will not be out of place to give here some specific examples of where our desire to "catch up with the West" has led the country to. Although steel production at the end of the fourth plan was about the same as at the beginning of the plan—at least 30 per cent below the existing capacity—still, if all would have gone well, the Planning Commission proposed to spend a staggering sum of Rs 2,800 crores during 1974-79 to expand the existing steel plants or put up new ones. They earmarked a sum of Rs 450 crores, for instance, for "preliminary work" on the Rs 753-crore Vijayanagar (Karnataka) project and Rs 747 crores on Visakhapatnam (Andhra Pradesh) plant in the fifth plan. They knew that the two schemes could only produce high-cost steel and could have never paid their way. In fact, they would have incurred a perpetual loss of at least Rs 125 crores a year on completion, even if their capacity was utilized cent per cent!

More than the public sector investments, however, it is the private sector investments in agriculture that impinge on it much more directly. But as statistics will prove, the agricultural part of private sector investments which are still routed mostly through cooperatives, professional moneylenders, relatives, traders and commission agents, landlords, commercial banks and others—

CONSUMPTION OF ELECTRICITY BY CLASS OF
UTILIZATION: 1950 TO 1974-75

(In million KWH)

Year	Domestic	Commercial	Traction	Industrial	Public lighting	Agricultural pumpings	Water works	Miscellaneous	Total
1950	525 (9.33)	309 (5.49)	308 (5.48)	4073 (72.39)	60 (1.07)	162 (2.88)	189 (3.36)	—	5625 (100)
1955	850 (9.14)	514 (5.53)	403 (4.34)	6882 (74.04)	106 (1.14)	255 (2.74)	285 (3.07)	—	9296 (100)
1960-61	1492 (8.70)	848 (4.95)	454 (2.65)	12883 (75.17)	193 (1.13)	833 (4.86)	436 (2.54)	—	17139 (100)
1965-66	2355 (7.70)	1650 (5.40)	1057 (3.46)	22711 (74.29)	280 (0.92)	1892 (6.19)	625 (2.04)	—	30570 (100)
1970-71	3840 (7.82)	2573 (5.24)	1364 (2.78)	34963 (71.19)	500 (1.02)	4470 (9.10)	1016 (2.07)	382 (0.78)	49108 (100)
1974-75	5163 (8.73)	3210 (5.43)	1621 (2.74)	38856 (65.69)	506 (0.85)	7579 (12.81)	1213 (2.05)	1007 (1.70)	59155 (100)

NOTE: The figures in brackets represent the percentage share of the particular class in the total consumption of electricity in the relevant year.

SOURCE: *Basic Statistics Relating to the Indian Economy* (various issues), issued by the Central Statistical Organization, Department of Statistics, Ministry of Planning, Government of India, New Delhi.

expressed as a percentage of the total private sector investments—tended downwards from 20.2 per cent in the second plan to 19.5 per cent in the third plan and to 17.8 per cent in the fourth plan. So that in private sector investments, too, agriculture gets a back seat. Owing to official policy, manufacturing industry receives a pampered treatment in both the sectors.

FARM PRICES

Next to research or technological innovations, preservation of the farmer's incentive is the most decisive pre-condition for increasing agricultural production. But here, too, as in the matter of adequate financial outlays for agriculture, the previous government failed miserably in assessing the realities of the situation. Its policy of supplying cheap food to the urban population and deficit areas has served to depress production rather than increase it.

There is a widespread belief in urban and government quarters that farmers should have no reason to complain if they receive for their produce a price that covers costs and brings a "reasonable" profit. This is the basis on which the Agricultural Prices Commission (APC) operates when recommending prices for agricultural produce. The reaction of wheat farmers to price changes show however that what farmers take note of is relative prices and profit. If the cost plus formula should yield less profit in wheat than in other crops, then, like other prudent businessmen, the farmers would divert, as they are entitled to divert, the existing acreage under wheat to those under other crops.

The argument is often advanced that a higher price paid to the farmers would lead to inflation. But the government's argument suffers from a common fallacy of confusing cause with effect: higher food prices in themselves have been largely caused by rise in prices which, in turn, is the effect of disproportionate increase in money supply that government has pumped or continues to pump into the economy.

It is submitted that, during times of scarcity, in the absence of a better alternative, a scheme providing for (a) compulsory procurement of a part, on a graduated scale, but in no case more than, say, 60 per cent of the possible or estimated surplus production from comparatively large farmers alone, say, those who possess more than three hectares or 7.5 acres, at a parity price,

leaving the balance with them and whatever the small farmers who are exempted, might be able to spare, to be handled by the trade, and (b) supply of food not to the entire population of urban areas, but only to such of them whose incomes fall below the national average or average of the particular state concerned, at rates which may, if necessary, be subsidized by the government, may meet the situation.

The above scheme, however, is only an improvement on the schemes that have been in operation in some of the hitherto Congress-ruled states. Below is outlined another scheme thought out recently by a colleague, Bhanu Pratap Singh, Minister of State for Agriculture, which reconciles the interests of all parties concerned—the producer, the consumer, the trader, and the government:

(1) That foodgrain imports be not resorted to, except to meet extreme scarcity conditions.

(2) That the whole country be treated as one food zone, or in other words, there should be no restriction on free movement of foodgrain from one part of the country to another.

(3) That the ratio which obtains between the prices, at which the farmer sells his produce, and the prices he pays for goods he buys, in a particular year which may be regarded as the base year, be maintained to measure whether a certain price is fair or unfair to producers and consumers. The price thus arrived at may be called the "parity price."

(4) Having determined the parity price of important foodgrains, the government should announce that it would not intervene in the foodgrain trade, so long as the trade is operated within 85 per cent and 115 per cent of the parity price, which should respectively be called the "minimum" and the "maximum" prices.

(5) When price falls below the "minimum" price of any foodgrain, the government will make purchases directly from farmers at the "minimum" price.

(6) When the price rises above the "maximum" price, the government will have the right to acquire at the parity price all stocks, which are in excess of the family needs of the stockist, whether he be a farmer or a trader.

(7) To prevent distress sales by small farmers, warehouses

should be established at all *vikas kendras* (development blocks which will cover, on the average, an arable area of about 26,000 acres each) where any farmer may deliver his produce, and get paid promptly at the rate of the "minimum" price. Later on, the farmer should have the option to take out his stock, and sell it in the open market, at a higher price, after repaying the advance with interest and storage charges. However, if the open market price rises above 115 per cent of the parity price, the government will have the right to procure the stock at the parity price, by making additional payment to the stockist.

In the above scheme of foodgrains trade (a) the farmer will be assured of the minimum price which will not be less than 85 per cent of the parity; (b) the consumer, of the supplies at less than the "maximum" price which will not exceed 115 per cent of the parity price; (c) the trader, of the opportunity to pursue his profession, if he accepts the discipline of operating between 85 per cent and 115 per cent of the parity price; (d) the small farmer, who cannot retain his produce, of better prices, later in the season, by delivering his produce at the warehouses; and (e) the government, of the facility to locate and procure foodgrain stocks, in case prices rise beyond the maximum price.

It is contended by some of the well-wishers of the farmer that even the best of technical and administrative programmes of agricultural development will not produce the desired result if prices are allowed to fall to unremunerative levels. Inasmuch as, owing largely to uncertainties of weather, there is a wide fluctuation in yields, agricultural production cannot be adjusted to demand. This peculiarity of agriculture (coupled with the fact that most of the farm products have a relatively low price elasticity) is the chief cause of the farmer's poverty. Price manipulation and guaranteeing of minimum prices to the farmer will, therefore, it is argued, help him much more than any other kind of assistance by the state.

The above argument about price support makes a great appeal to the farmer, but in our opinion, any effective policy in this regard, except for limited periods or selected crops (like jute, cotton, groundnut, and sugarcane), is unworkable in India. It is an idea borrowed from the Western countries where this policy was practised during the two world wars with great advantage

to agricultural production. It has been practised in times of peace also in some countries, particularly in the USA, where agricultural economy is faced with such overproduction and surplus that a whole range of financial contrivances have been devised to maintain farm prices at a level that will provide the farmer with profits which, in turn, can be spent in purchasing the products of the country's vast industries.

A policy of price support or fixation of minimum price of agricultural produce means that funds are transferred from the national exchequer to the pockets of the agricultural community. Now, if this community is small in comparison to the general community, as it is in the UK and the USA where it constitutes only 3 or 4 per cent of the total population, the policy is workable. The pockets of 96 or 97 per cent of the people can be taxed in order to subsidize the remaining 3 or 4 per cent whose survival is essential in the ultimate interest and welfare of the nation. But if those who have to be subsidized constitute some 70 per cent of the people, as the cultivators and the labourers combined do in India, any policy of agricultural price support, in the final analysis, only means that the subsidy in the form of difference between the market price of the commodity and the price guaranteed to the producer by the state will be coming, to a very large extent, from their own pockets.

The money spent on provision of godowns and transport, payment of salaries to the huge staff that will have to be raised and maintained for this purpose, and other overhead expenses as also the damage or wastage of grain that is inevitably involved in storage, if not for any other reason, then, through sheer negligence, will be an additional drain on the lean finances of the country. Also, it must not be forgotten that in a poor, underdeveloped country like India, multiplication of government employees, who cannot be adequately paid, means multiplication of corruption.

Apart from its financial and administrative implications, it is doubtful whether fixation of minimum agricultural prices is otherwise desirable. In view of the relative smallness of the non-agricultural sector in our country, and the very high percentage of income that is spent on food, subsidizing of agriculture, as is commonly done in some developed countries, will increase food prices which will set the pace for the prices of other commodities. This will serve to keep agricultural workers tied down to land and

hamper growth of the non-agricultural sector that the country so urgently needs.

Those of the farmers and their well-wishers who argue that if, in the interest of consumers, it is the responsibility of the state to impose a levy on foodgrains when there is a fall in production and, therefore, a likelihood of an undue rise in prices, so should the state be saddled with the responsibility, in the interest of the producer, of purchasing all the surplus when there is a rise in production and, therefore, a likelihood of an undue fall in prices, are virtually asking for state trading in foodgrains or state control over distribution of food and thus unwittingly playing into the hands of their opponents. There being a conflict of interests between the urban requirement of cheap food and high prices for the articles the town produces, on the one hand, and the rural desire for high food prices and cheap products from the artisan's shop and from the factory, on the other, the argument sounds plausible. But it is not tenable. For, it is food, not factory goods, which are the first necessity of man and it is the farmer, not the factory-owner, who is in possession of land (a national asset) which produces food. So that when there is underproduction as a result of which prices are likely to shoot up, it becomes the duty of the state to procure food from the growers and ensure its supply at reasonable, even subsidized rates to those sections of our society which do not possess land and are too poor to purchase food at market prices. There is no such duty cast on the state when there is overproduction and food is surplus. But if we seek the aid of the state in this case also, we are, in a way, inviting its firm presence in our economic life which is exactly the aim of the communists.

Once the state takes up trading in foodgrains which is only one step forward from fixation of agricultural price, 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 the advocates of fixation of minimum prices of agricultural produce do not desire or contemplate.

According to the communists, the aim of the state is or should be to secure a maximum marginal rate of saving in the agricultural sector, acquire these savings, and use them to finance capital formation in the industrial sector. The higher the marginal rate of saving, it is argued, the less strain will there be upon both agriculture and industry. In other words, the greater the surplus, rather the savings that can be mopped up or extracted from the rural areas, the less the demand by the peasantry for consumer goods and the cheaper the food for industrial workers.

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 infrastructure of industry in the form of high levies or taxes, thus forgoing 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.

The question arises: what is the way out of the dilemma which increased production poses to the farmer? There are, at least, five ways out of such a situation: (a) export of agricultural products to other countries, (b) more consumption by our own countrymen, (c) a change in the cropping pattern, (d) industrial use of agricultural products within the country itself, and (e) a decrease in the number of agricultural workers.

We will elaborate here only the fifth and the main solution, viz., that agricultural workers should shift to non-agricultural occupations as they have already done in all developed countries. Production of agricultural products in quantities surplus to the needs of the community must necessarily result in a fall in agricultural prices, particularly in an open, democratic society. Well-wishers of the country who were asking the farmer to increase his production must be presumed to have known all along that they were in a way asking for, and seeking this very "fall." If and when this fall occurs and persists over time, the most obvious course, dictated by elementary principles of economic science and by their own self-interest, is for workers from agricultural pursuits with lower incomes to shift to non-agricultural pursuits, or industries and services with higher incomes. With greater and still

greater production per acre, consequent on application of more and more capital and higher and still higher technology, fewer and still fewer persons will be required on the same area of land to produce the same quantity of crops. It is not a calamity but a consummation much to be desired. For, let us remember, the larger the number of agricultural workers who shift to non-agricultural occupations, the greater the wealth that will be produced in the country and higher the standard of living of our people as a whole including the (erstwhile) agricultural workers themselves.

Those who cite the example of the UK, the USA, or other highly developed countries fail to realize that while the problem for these countries is how to make the few persons that there are still left in agriculture stay therein, the problem for India, in fact, for every underdeveloped country, is just the contrary, viz., how to ensure that release of workers from agriculture is not impeded. The combination of a marked rise in the productivity of labour in agriculture with a secular limit imposed on the demand for its products must, in a dynamic society or one that desires economic progress, result in a sharp release of workers from agriculture. In this release or shift of workers or diversification of employment coincide the main solution of the problem of surplus agricultural production and the main aim of our economy.

Despite the prospects of higher income in the non-agricultural sector, however, it is not easy for the farmer or his son to leave his ancestral occupation. The question is: Why? The answer is, in part, provided by some of those very reasons which are responsible for smaller incomes of agricultural producers than of non-agricultural producers. Alternative opportunities of employment are not easily available to the farmers in every country. The farmer, more often than not, lacks resources in fluid capital (savings or realized assets), which keeps him tied to the village or agriculture. Land and buildings that he possesses are immovable, and largely unrealizable assets. Sentimental attachment of the farmer apart, they cannot always be sold at remunerative prices. And a farmer on moving to a non-agricultural employment in an urban centre experiences a wrench which an industrial worker moving from one industry or factory to another does not. He faces a complete break with the way of life he was hitherto leading.

A farmer also stays in agriculture because of the self-sufficient

nature of his profession. He is practically sure of raising, at least, as much as he needs for maintaining himself and his family, and this fact makes him, to a large extent, independent of the existing economic conditions and enables him to defy the trend of economic forces for a long period. Moreover, as we will see later, in certain countries like India, the people continue in agriculture because they are not, in general, inspired by any urge to improve their economic conditions. Even if they are so minded, the farmers, because of their illiteracy and lack of knowledge of ways of the modern world, do not know where to seek better prospects, granting that they are available. Further, many persons prefer to enter or remain in agriculture because of the non-material satisfactions that rural life affords or is supposed to afford.

So far as the mechanism of income differential or the pull which, in view of the superiority that industry and commerce enjoyed over agriculture as a source of income, the former exercised over the mind of a worker engaged in the latter, is concerned, in Britain and West European countries it was greatly aided or reinforced by the law of primogeniture, viz., that landed patrimony shall pass only to one heir, which compelled junior members of the family to seek non-agricultural employment; in Japan by imposition of a very severe land tax in the days of Emperor Mikado, i.e. in the 1870s, and in the USSR by forcible collectivization of farming in the 1920s.

In the social, political, and economic circumstances of our country, however, none of the above courses appears to be feasible except perhaps a variant of the first. A landed patrimony should not be so divided as to make a share less than one hectare or 2.5 acres in area. In cases where heirs have to be deprived or disinherited, they should be compensated. In any event, the government and public workers will have to educate the farmers, through the various means and media at their disposal, that diversification of employment is in their own good and that, in the ultimate analysis, land is limited and cannot support an indefinite number of people whereas no such limitation applies to the non-agricultural sector. So far as the rising generation and people from those regions where the pressure of the existing population against the existing soil is so great that the stage of a static yield per acre has been reached are concerned, they should not have difficulty in making the choice. Few young men in Japan today are willing to remain in agriculture.

It has to be noted, however, that under an economy advocated by me, only a few of the farmers' sons need to sell their patrimony or leave their homes. Most of them can and should take to cottage or small industries in their village or its neighbourhood as a subsidiary or alternative occupation which does not require much capital. Provision of electric energy to the rural areas will greatly help the process. While increased agricultural production is a precondition to diversion of workers from agricultural to non-agricultural occupation, ultimately, it is a question of attitudes, however, whether there will actually be such a diversion or not.

A search for or a shift from agricultural to non-agricultural employments will take a spirit of enterprise in the farmers—an urge or ambition for material advancement and a willingness to work hard for it—which unfortunately, except for a few communities like the Sindhis, Gujaratis, Marwaris and Punjabis residing in the western parts of the country, our people generally lack. Without the necessary social and economic attitudes there will be no movement of workers from primary to secondary and tertiary employment *even if there is an agricultural surplus*. That is, in order to achieve economic progress, both conditions must co-exist, *viz.*, increased agricultural production and the necessary social and economic attitudes. An increase in agricultural production entails or should entail a proportionate decrease in the number of farmers. Increased agricultural production will, therefore, lead to less employment and more underemployment in the rural areas unless it is accompanied by a shift of workers from agricultural to non-agricultural employments.

One may point to the region of Bundelkhand in the state of Uttar Pradesh and, amongst countries, to Thailand as examples where, in the absence of proper attitudes, surplus agricultural production did not lead to economic progress. When both the requirements subsist together in a society or a region, it takes rapid strides towards economic prosperity as is illustrated by the example of Punjab.

Anyway, if the people are not prepared to give up their fatalistic attitudes, that is, are content with their *kismet*, nobody will be able to help them. All government schemes will come to naught and prayers to the Divine Being will not yield any results. There will, then, be only one alternative left for the country, *viz.*, communism under which, our people must know, they will have

little or no liberty to choose, refuse or hesitate. While establishing collective farms in order that a substantial part of the produce might be extracted or taken away to construct an industrial society, communism would recruit surplus labour in villages (or, to be exact, in the collective farms into which all villagers would have already been huddled), in accordance with a plan, for employment in industrial or other non-agricultural activities. The sort of work the conscripts will do—the factory or enterprise to which they will be assigned—will be chosen for them by the agents of the almighty state. In other words, communism would use political compulsion in order to achieve economic welfare of the people whereas democracy uses economic incentives in order to achieve the same aim. Thus, costs of economic progress will have to be paid in any case. Under a democracy they are paid knowingly or willingly; under a dictatorship, a man's own wish or opinion is irrelevant.

Four

Neglect of Villages and Agriculture: Its Causes

The living standard or the per capita income of the rural sector as a whole, compared with the urban sector, has greatly deteriorated since 1947. The gulf between the two is now far wider than what it was at the time when the foreigners left our shores.

In arriving at the per capita income of the two sets, we are handicapped by the fact that while the figures of rural and urban population are available as also those of the incomes of agricultural and non-agricultural sectors as a whole, figures of income of the non-agricultural section of the rural population (as also those of the agricultural section of the urban population) are not forthcoming. So, one will have to content oneself with comparing the figures of agricultural and non-agricultural incomes as a whole. But this will serve our purpose fairly well. For, the agriculturists, that is, the farmers and agricultural labourers, together form the overwhelming percentage of the village and the income of the non-agriculturists composed of artisans and other servants of the village society is governed almost wholly by the agricultural income of the village.

Using the annual figures of agricultural population projected on the basis of FAO figures for 1950, 1960, and 1970, and the CSO (Central Statistical Organization, Government of India) figures of income one arrives at the table given on the next page.

The attitude of the government towards the village is reflected in the discrimination it makes in provision of social amenities like health, housing, transport, power, and, above all, education available to the urban and rural areas—discrimination in investment in the human factor in the town and the village. Investment in social amenities is, at least, as important as *inputs* like

TRENDS IN NET DOMESTIC PRODUCT (NDP) 1950-51 TO 1974-75

AGRICULTURE VERSUS REST OF THE ECONOMY

(AT CONSTANT 1960-61 PRICES)

Period	Year	Per capita NDP at 1960-61 prices (Rs)			4 as percentage of 5 (4/5)	5 as percentage of 4 (5/4)
		average 1/4	Agricultural 2/5	Non-agricultural 3/6		
1	2	3	4	5	6	7
Pre-plan	1950-51	254.1	204.3 (80.40)	369.2 (145.30)	55.3	180.7
Annual average of first plan	1951-56	266.6	210.4 (78.92)	405.0 (151.91)	52.0	129.5
Annual average of second plan	1956-61	290.9	208.5 (71.67)	516.8 (177.66)	40.3	247.9
Annual average of third plan	1961-66	319.1	205.9 (64.5)	612.4 (191.9)	33.6	297.4
Annual average of annual plans	1966-69	324.1	201.6 (62.2)	604.6 (186.5)	33.3	299.9
Annual average of fourth plan	1969-74	349.0	220.6 (63.2)	610.2 (174.8)	36.2	276.6
Fifth plan	1974-75	343.3	209.4 (61.0)	593.4 (172.9)	35.3	283.4

fertilizers and irrigation in agriculture. When the man behind the plough is not healthy or educated, he cannot make efficient use of these inputs.

As for supply of clean drinking water, on the eve of the fifth plan, while 85 per cent of the urban population had piped water supply, 1.16 lakh villages with a population of 61 million did not have the most elementary water supply system. In 90,000 villages out of these, there was no water within a radius of one mile.

Not only are the villages starved of energy, but there is discrimination in the cost of energy also charged from the farmers as compared to industries. To take the case of Uttar Pradesh:

<i>Year</i>	<i>Actual cost/unit for industry (in paise)</i>	<i>Actual cost/unit for agriculture (in paise)</i>
1970-71	10.6	15.78
1971-72	10.0	16.68
1972-73	11.8	26.47
1973-74	14.0	29.75

Further, as against the cost of 14 paise per unit consumed in industry as a whole and that of 29.75 paise per unit for agriculture an agreement was recently entered into between the UP Government and the firm HINDALCO of the Birlas under which it was to be supplied 30 megawatts of energy at the cost of 10.5 paise per unit, as if aluminium were more important than wheat in our condition. It will not be out of place to mention here that formerly the price charged from the Birlas since 1961 stood at 2 paise per unit only. Moreover, every cultivator who has put up a tube-well of his own has to pay Rs 180 per H.P. per year whether he actually receives any energy or not. This pushes the cost of energy for the farmer still higher.

Education opens up the mind of a person as nothing else does. It is now generally recognized that education rather than being an effect of economic development is a condition for it, and this would also be true for the agricultural sector. But as in other spheres, an urban bias is noticeable in education also. Rural areas of our country lack in educational facilities even of the primary and the secondary standard as compared to the urban areas.

According to the census report of 1971, the figures of literacy for the rural and urban areas stood at 23.74 and 52.49 per cent respectively.

So far as higher technical education is concerned, a study of the socio-economic background of students in 12 colleges and institutions of professional training covering six professions, viz., architecture, engineering, law, management, medicine, and social work, concluded that "in a country which is still predominantly rural, the representation of rural students in the selected professions is to the extent of only 13 per cent whereas those from urban areas are grossly over-represented."¹

<i>Background</i>	<i>Number</i>	<i>Per cent</i>
Village	219	13.08
Town (less than one lakh)	268	16.01
City (one lakh or more)	1,159	69.24
Not ascertained	28	1.67
Total	1,674	100.00

Less than 2 per cent of the fathers of the students were in blue-collar occupations; only 11 per cent were in agriculture; and just 6 per cent were clerks including salesmen. Altogether, only one-fifth of the fathers were in these three categories of work. As against this, 72 per cent of the fathers were either holding supervisory and executive positions in industry and government or were self-employed professionals. As many as 59 per cent of the fathers were senior government officers, businessmen or professionals.

In the main, however, neglect of agriculture (and, therefore, of the village) is traceable to the urban origin or 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 grows up.

Inasmuch as political leadership of the country is remote from the needs of the village, economic policy made by it is to a large extent made consciously or unconsciously for the town. According to Satish K. Arora, "over the decade of 1962-72, the

¹Baldev R. Sharma's article in *Economic and Political Weekly*, 28 February 1976.

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 over 10,00,000 population. The proportion of agriculturists has remained fairly constant at about 17 per cent.²

Ministers from the towns sitting in New Delhi could not possibly know how the villager's mind works and 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 farming community. The problem of land is a closed book to them.

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

It would appear from a study³ that out of 1,291 IAS officers in the country at the time only 143 (or 12 per cent) 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 agriculturists recruited to IAS rose to 14. There is no reason to suppose that the proportion is higher in other services either.

According to a survey conducted by the Union Public Service Commission, out of a total of 165 successful candidates for the IAS and IFS in 1975, only 50 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 more than nine times the chances of entering the higher services compared to his compeer from the villages.

On the basis of a comprehensive study of higher civil servants in India, Subramaniam concluded that a majority (80 per cent or more) of them came from the urban salaried and professional

² "Social Background of the Indian Cabinet," *Economic and Political Weekly*, Special Number, August 1972.

³ Article by R.K. Trivedi and D.N. Rao in the *Journal of the National Academy of Administration*, Mussorie, July 1961.

middle class.⁴ On the other hand, the farmers and agricultural labourers were found to be grossly underrepresented in all the central services, even more than the artisans and the 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 constraints—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."⁵

It is in this structure of the bureaucracy that one may largely look for unimaginativeness of government schemes meant for the welfare, particularly, of the rural masses and, even if the schemes are realistic, then, for their failure or half-hearted implementation.

There is one sinister development in this context. New recruits to the higher ranks of services are drawn in an increasing proportion from the present bureaucracy itself so that the new entrant to the superior services is often the scion or a member of these very services. It has already been pointed out that professional students were typically sons and daughters of persons holding supervisory and executive positions in government or industry or self-employed professionals and businessmen. This 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 to the sons of those who are outside the charmed circle, particularly the villagers.

This is not to dispute the ability or sincerity of political leaders or administrators coming from non-agriculturist families. It only means there is little or no correspondence between the values and interests of the political leader and the administrator, on the one hand, and of those whose affairs they are called upon to administer, 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 business, his friends, acquaintances and relatives—it is the sum total of these things that determines a man's outlook on life. Education makes very little

⁴V. Subramaniam, *Social Background of India's Administrators*, Publications Division, Government of India, New Delhi, 1971.

⁵*Economic and Political Weekly*, 28 February 1976.

difference, if any, to a man's outlook and opinion thus formed: it rather tends to confirm them.

Despite his genuine concern for the plight of the dumb millions in the countryside, Nehru accepted an industry-based model of economic growth recommended by foreign economists. Unlike Mao Tse-tung, he did not develop an independent approach to India's problems. The explanation is not far to seek: unlike Mao, Nehru was the product of an urban environment and Western education.

Five

Industrial Pattern

Man's wants other than food are so numerous and so diverse that virtually no limit can be placed on use or consumption of manufactured goods and utilization of social services. Nor is there any serious limiting factor in the industry and service sectors, analogous to the availability of land in agriculture which will impede the realization of increasing returns. There is, therefore, no limit to the amount of non-agricultural resources and number of opportunities that a developing country like India may need or choose to create and, thus, no limit to the number of persons who can be employed in non-agricultural occupations. So that development of non-agricultural resources is necessary not only *as a means of raising our standard of living but also as a source of employment.*

The question is what kind of industrial pattern we shall adopt or should have adopted on attainment of political independence in 1947. There are two points of view or schools of thought—one represented by Mahatma Gandhi, the *zeitgeist* of India's political awakening, and the other by Jawaharlal Nehru, the first Prime Minister of free India.

Mahatma Gandhi always advocated the use and encouragement of cottage industries in the country. He said India lived in villages, not in cities. Villagers were poor because most of them were underemployed or unemployed. They have to be given productive employment which will add to the wealth of the nation. In the circumstances of the country which had such vast manpower and comparatively little land and other natural resources, he argued, it could only be cottage industry, which required little or nominal capital, that could provide the needed employment and otherwise answer our needs best, not capital-intensive, mechanized industry based on the Western model of economic growth which would

only add to unemployment and concentrate wealth in the hands of a few, and thus usher in capitalism with all its abuses. The *charkha*, the spinning wheel, which is associated with his name, was only representative of all kinds of handicrafts and cottage industry.

Voicing his unqualified preference for decentralized production through small units, he once said: "Instead of production by the fewest possible hands through the aid of highly complicated machinery at a particular centre, I would have individual production in people's own homes multiplied by a million of times."

The clear principle that he would have liked India to follow was that heavy or capital-intensive industry shall be established only for production of goods which could not be manufactured otherwise, and large-scale mechanized projects undertaken only for purposes which could not be carried out by human labour on a small or cottage scale. His views are finally summed up as follows in his own words:

If I can convert the country to my point of view, the social order of the future will be based predominantly on the *Charkha* and all it implies. It will include everything that promotes the well-being of the villagers. I do visualise electricity, ship-building, iron works, machine-making and the like existing side by side with village handicrafts. But the order of dependence will be reversed. Hitherto, the industrialisation has been so planned as to destroy the villages and the village crafts. In the state of the future it will subserve the villages and their crafts. I do not share the socialist belief that centralization of the necessities of life will conduce to the common welfare, that is, when the centralised industries are planned and owned by the State.¹

Jawaharlal Nehru was, on the other hand, in favour of the development of large-scale industries. The picture which he had in mind is best reflected in the speech he made before the National Development Council in January 1956:

In the meeting of the Standing Committee. . . greater stress was

¹ *Why the Constructive Programme?*, published by the Indian National Congress, New Delhi, 1948, p. 19.

laid on the heavy machine-making industry being encouraged, as it was said to be the basis of industrial growth. If you do not do that, then naturally industrial growth is delayed. There is one approach which has sometimes been put forward that you should build up your consumer goods industries and gradually save money thereby, and build up something else, thereby getting some more employment. That, I believe, from the point of view of planning is a discarded theory completely. Of course, it does some good here and there; I would not enter into the details but this approach is not a planned approach at all. If you want India to industrialize and to go ahead, as we must, as is essential, then you must industrialize and not potter about with old little factories producing hair oil and the like—it is totally immaterial what the things are, whether they are small or big consumer articles. You must go to the root and the base and build up the structure of industrial growth. Therefore, it is the heavy industries that count; nothing else counts, excepting as a balancing factor, which is, of course, important. We want planning for heavy machine-making industries and heavy industries, we want industries that will make heavy machines and we should set about them as rapidly as possible because it takes time.

In April 1956 the government laid down by way of a formal resolution, known as the Industrial Policy Resolution, that in order to realize the objective of "a socialistic pattern of society," it is essential to *accelerate the rate of economic growth*, speed up industrialization, particularly develop heavy and machine-making industries, expand the "public sector," and build up a large and growing cooperative sector. The resolution was embodied in the second five-year plan.

Jawaharlal Nehru made his position very clear in his speech delivered at the meeting of the All-India Congress Committee held in Chandigarh on 28 September 1959. He said: "*The primary thing about an integrated plan was production and not employment. Employment was important, but it was utterly unimportant in the context of production. It followed production and not preceded production. And production would only go up by better techniques which meant modern methods.*"

In the long run, it was assumed by Nehru and his advisers, the rate of industrialization and growth of national economy would

depend on the increasing production of coal, electricity, iron and steel, heavy machinery, heavy chemicals, and heavy industries generally, which would increase the capacity for capital formation. It was conceded that heavy industries required large amounts of capital and a long gestation period but, the argument ran, without them India would continue importing not only producer goods, but even essential consumer goods which will hamper accumulation of capital within the country. The heavy industries must, therefore, be expanded speedily. That is why all the five-year plans except the first were based on the premise that heavy industry was fundamental to rapid growth, that its expansion largely determined the pace at which the economy could become self-reliant and self-generating, and that it would in turn stimulate the growth of medium and small-scale industry, producing its components and utilizing its products, and *thus ultimately provide a larger employment potential*. The strategy governing planning was to industrialize the country at the earliest and that meant the basic heavy industries being given the first place.

CONDITIONS FOR CAPITAL-INTENSIVE INDUSTRIES NON-EXISTENT

The school of thought, opposed to Nehru's views, had pleaded that the Western model of development which he wanted to copy required large capital investment per worker which was and is not practicable in India.

The quantity and quality of land and other natural resources being fixed, with a growing population, income or output per head will ordinarily rise only if the rate of growth of capital, or of improvements in technology, or of both combined, is not only greater, but far greater than the rate of growth in population—it being assumed that the working force is imbued with a desire for material prosperity and works hard to that end. So that it is the rate of saving or accumulation of capital, in other words, capital formation or the net rate of investment in the economy, that is the primary determinant of economic growth. Saving is the difference between income and expenditure and may be held in the form of cash or bank deposits. When these savings are invested, i.e. used to construct a building, a factory or develop a farm, we have capital formation. Theoretically, capital formation may include additions to stocks.

Of the two domestic sources of capital available, voluntary savings and taxes, we are here concerned only with the first. Savings are, to state it in a simple way, the difference between what one earns and what one eats. In a country with a dense agrarian economy, where incomes are low and levels of consumption are close to the subsistence level, where the bulk of the aggregate money income of the population is spent on food and relatively primitive items of clothing and household necessities, an increase in savings is not easy to achieve. Private consumption in 1973-74 was of the order of Rs 43,062 crores at current prices which amounted to 75 per cent of the gross national product, the food items alone accounting for 65 per cent of the consumption basket. And as bare necessities are met, further increases are made to population so that the supply of necessities must be constantly expanded. This leads to a situation which makes it hard to accumulate surplus or capital in any substantial quantity.

The Planning Commission's projection of the investment needed to generate one rupee's worth of extra output has gone hopelessly awry. The first plan had assumed an incremental capital output ratio of 3 to 1. Thanks mainly to excellent harvests and the cutting down of the forest to extend the area under cultivation (the loss of timber and the ecological damage were, of course, never taken into account), the actual ratio turned out to be 1.88 to 1. For the second plan the planners postulated a ratio of 2.3 to 1 and for the third and fourth plans they expected it to be 2.62 : 1 and 3.36 : 1 respectively. All these projections turned out to be wildly optimistic. The actual ratios proved to be more than twice as high during the second, third, and fourth plans.

Now, assuming that the capital-output ratio can be reduced to 4 : 1 in future, and population growth rate brought down from the present figure of 2.5 per cent per annum to 2.25, just to maintain the present standard of living, we need to make an investment of 9 (2.25×4) per cent of the national income annually. So that an increase of 1 per cent of output per head will require an additional investment of 13 (Rs 9.0 + Rs 4.0) per cent in all, and an increase of 2 per cent, an investment of 17 per cent. And calculation by the logarithmic method shows that capital investment at the rate of 17 per cent will take 51 years to double our present standard of living! Whereas the ratio of savings to national income came to 5 per cent in 1950-51, 6.3 per cent in 1955-56, 3.5 per cent

in 1960-61, 4.1 per cent in 1965-66, and 4.8 per cent in 1971-72.

It is this hard irrefutable fact of low rate of saving arising out of the ratio between our huge population (with its potential growth), on the one hand, and natural resources, on the other, coupled with the disquality of our human factor, that advocates of high capital-intensive enterprises or heavy industries have overlooked. This makes them wrong and those of low capital-intensive, decentralized industries, right.

Leaving out tiny territories like Ireland, Puerto Rico, and Libyan Arab Republic, with a respective population in mid-1973 of 3,030,000, 2,950,000, and 2,119,000, there are, according to the *World Bank Atlas* (1975), only 22 countries in the world having a per capita GNP of more than \$ 2,000 each. Now, inasmuch as the percentage of the working force engaged in agriculture exceeds a quarter of the total in the USSR (32) and Poland (38) they cannot qualify for inclusion in the category of economically developed countries despite their sufficiently high GNP. Of the remaining 20 developed countries, two, Democratic Republic of Germany and Czechoslovakia, were parts of Germany only 30 years ago and had attained great economic progress before they were sucked into the communist camp. So that we are left only with 18 countries whose mode of economic development has to be studied. Of these, barring Israel and Switzerland, 16 can be divided into two categories of eight each, the first, consisting of the Netherlands, Belgium, Japan, Germany, the United Kingdom or Britain, Italy, Denmark, and France—countries which had little or few natural resources relative to population density, but had grabbed colonies and dependencies, thus making up for lack of resources at home. The second category consisted of Austria, Norway, Sweden, the United States of America, New Zealand, Finland, Canada, and Australia—countries which had comparatively high physical resources relative to population density (and, therefore, no need or excuse to seize other lands). Their own resources produced not only raw materials that fed the factories, but also food in quantities that left a surplus over rural requirements, to feed industrial workers and those engaged in capital formation.

None of the other countries, including the USSR (with a per capita gross product of \$ 2,030 only), can be regarded as fully developed or economically advanced. All of them excepting Korea, Pakistan, Ceylon, and India enjoy the advantage of a high

land or natural resources-man ratio, yet they have not been able to make the grade: they have not reached the height of living standard or per capita income justified by their natural resources. The main reason lies ultimately in the disquality of their human factor as contrasted with the quality of the human factor in developed countries (which, *inter alia*, led to some of them acquiring foreign territories). There is yet another reason in the case of the USSR, *viz.*, the release of workers from its agriculture is hampered because of low productivity of the collective farms into which the peasantry was forced by the communists against its will. The four countries immediately mentioned above suffer both from paucity of resources and disquality of their people. Though not yet an advanced country, Korea has, however, made good progress recently.

The opportunities that were available to the advanced countries like the Netherlands and others (included in the first category mentioned above) are not available to India. Ethics of the matter apart, there are no colonies or dependencies to exploit, any longer. We have arrived on the world stage at a point of time when people and the resources of other lands cannot possibly be exploited. Also, all underdeveloped countries are trying to make up leeway so that soon there will be left few or no external markets to exploit or to buy our industrial goods.

Perhaps, the Western path of development would have been open to India if it had begun to industrialize in earnest a hundred years ago when the combined population of the subcontinent was no more than 200 million, the death rate was high and the rate of population growth less than half a per cent per year, and industry itself was not, by today's standards, very capital-intensive. But today it is decisively closed. We cannot spare or accumulate capital to the extent that heavy industry requires nor can heavy industry find employment for the huge population that India carries today.

Obviously, the USSR does not offer an example which India could usefully imitate: in given circumstances, communism is far less efficient than capitalism in raising production. Nor is there any question of taking lessons from China either. If under the sign of communism, the USSR could not significantly raise the living standard of its people despite its vast resources, China with comparatively little resources could not possibly hope to do so.

Although no reliable information is available, yet if it is a success story in comparison with India or if its people are better fed and clothed than Indians, then, one of the reasons may be that it has taken more than a leaf from Gandhi's teachings. Various reports from unimpeachable sources indicate that not only had Mao Tse-tung given first priority to agriculture since 1962, but had relied more on human labour and decentralized labour-intensive enterprises in building his country than on large-scale, mechanized projects and industries. Thus, we arrive at the irrefutable conclusion that capital in a measure required for a capital-intensive structure in India cannot be had, at least, rapidly through domestic savings, whether under a democratic or communist set-up.

There was a source of capital, however, to which we could look for assistance, *viz.*, the international market. The justification for this course has been spelt out by Western economists, Ranger Nurske and Arthur Lewis among them. Poor countries are caught in a vicious circle: because their incomes were low, savings were low, because savings were low investment was low because investment was low productivity was low, because productivity was low incomes were low. So, India could not and, for that reason, no poor country could raise itself in a reasonable period by its own bootstraps. The vicious circle, it was argued, in which the country finds itself caught, could not be broken—India's substantial development could not proceed without massive foreign aid.

Nehru fell in for these arguments despite the advice of many an economist and well-wisher of the country to the contrary. There was another course open, *viz.*, as advised by the Mahatma, to build up the country slowly and patiently from below on the strength of its own resources. But Nehru would not listen. His heart was bent upon establishment of an industrial structure on the lines of the USA and the USSR and, to that end, he decided to go hammer and tongs, both for foreign capital and foreign technology as also to divert all possible domestic resources to heavy industry even at the cost of food, water, clothing, housing, education, and health.

Socialism and Mixed Economy

Being staunch believers in democracy as adumbrated in the Western literature and, at the same time, fascinated by the goals of the Russian Revolution, a large section of Indian political leadership dreamt of a politico-economic order under which not only nobody would be exploited but everybody would be afforded an opportunity for self-improvement—a dream which provided both for democratic freedom and economic equality consistent with rapid economic growth. So, influenced largely by Nehru, they plumped for a compromise between socialism and capitalism—a “mixed” economy in which material resources of the nation would be owned and worked partly by the state and partly by citizens, in other words, where the private and the public sector would co-exist. That is why, perhaps, big businessmen also can afford to believe in or even propound “socialism” as a practical policy goal in India.

At its Bhubaneshwar Session in January 1964, the Congress Party defined its objective as a “socialist state based on parliamentary democracy.” As every public man in India knows, the hare of socialism was formally started at the Avadi Session of the Congress in January 1955, but the Congress leaders do not yet seem to know what exactly they have in mind. Nehru himself, through all his years of office, was never able to indicate the precise path along which he would lead the country to the objective which he had set before it.

In view of the need to conciliate public opinion, the New Congress (led by Prime Minister Indira Gandhi) made a categorical declaration in its election manifesto issued in January 1971—subject to measures which will serve to prevent concentration of economic power and wealth in a few hands, “it has no intention

of abolishing the institution of private property." On the other hand, in order to emphasize the "socialist" character of her policies, she declared a year later in Bhubaneswar that "the thinking of the Communists and the Congress was the same in domestic and foreign policies."¹

Faced, however, by criticism of the working of the public sector, she declared at public functions, time and again, that socialism did not mean nationalization of all industries and that the government would nationalize an industry only when it was essential. In Gandhinagar (Gujarat) on 9 and 10 October 1972, she is reported to have exploded the myth, as the press put it, that "nationalization by itself was a socialistic step."

Whereas, while Gandhi was clear in his mind that the minimum number of large-scale projects or industries that are inevitable must be either owned or controlled by the state. He said:

What I would personally prefer would be not centralization of power in the hands of the state but an extension of the sense of trusteeship as in my opinion the violence of private ownership is less injurious than the violence of the state. However, if it is unavoidable I would support a minimum of state ownership.²

What Gandhi thought of socialism as a system where property is owned by the state will be clear from the fact that he had warned the country against the state developing into a leviathan:

Self-government means a continuous effort to be independent of Government control whether it is foreign Government or whether it is national. *Swarajya* Government will be a sorry affair if the people look up to it for the regulation of every details of life.

A nation that runs its affairs smoothly and effectively without much state interference is truly democratic. Where such condition is absent, the form of Government is democratic only in name.

I look upon an increase in the power of the state with the greatest fear because although while apparently doing good by

¹*Times of India*, 10 February 1974.

²"An Interview with Gandhi Ji," *Modern Review*, October 1935.

minimising exploitation, it does the greatest harm by destroying individuality which lies at the root of all progress.

Planning from the top down, which socialism necessarily involves, undermines freedom because it requires people to obey orders rather than pursue their own judgment. Further, it is inefficient because it makes impossible the use of the detailed knowledge stored among millions of individuals. Whereas planning from the bottom up, which the economy of Gandhi's conception implied, enlists the interests of each in promoting the well-being of all and, thus, subserves true democracy.

PUBLIC SECTOR

The demand for public ownership of factories and other means of production in mid-nineteenth century in pursuit of socialism was raised mainly in order to put an end to the exploitation of workers who possessed no right to vote, no right to strike, no right to form an association, and no safeguard at all against arbitrary dismissal. Also, it was thought, public ownership of the factory will raise the status of the workers and usher in a more democratic and egalitarian society than the one at present. Further, a factory will be administered more efficiently once it was operated by the state for public good than previously when it was managed by a capitalist in his own interest.

Now, so far as the first objective was concerned, it is no longer relevant. *The prophecy of Karl Marx regarding increasing proletarianization of the industrial workers has not come true.* Whatever else may have or may not have overtaken the conventional working class in the capitalist countries, liberal capitalism has been able to afford a flow of consumer goods so substantial and steady as to consign conditions of popular poverty to the limbo of an age as different to the present as the one that upheld the divine right of kings.

Abolition of private property alone, which the public sector or socialism implied, could not possibly lead to an end of the exploitation of workers. The problem of checking the bureaucracy remained and, because human conduct is involved, it shows little or no signs of solution. If labour relations in many of the big public projects in the country are so messy, it is because the

hierarchy of bureaucratic power is far too remote from the worker. The hope that the government by its ideal behaviour would act as a model for the private sector has been completely belied.

Public ownership or nationalization has not given the worker a new status nor has it been accompanied by a strengthening of the workers' identification with the plant or with the job to be done. Even with the support of powerful trade unions in all the nationalized industries, the individual employee continues to feel that he has no real control over most of the circumstances of his working life, and has merely been transferred from one set of bosses to another.

As regards bringing about a more egalitarian society and the curbing of private monopolies which was sought to be achieved through public ownership, it was discovered that the objective could be achieved by other methods, such as taxation, price control, quality requirements, social legislation like old age pensions, sickness benefits, and the countervailing power of trade unions. In the UK and the USA the gap between the rich and the poor has been greatly narrowed during the last quarter of a century by resorting to these methods. Whereas in India where 60 per cent of the industrial capacity is now owned by the state, the gap has greatly widened.

As on 31 March 1976 there were 140 central government public undertakings. Of these eight are under construction, seven are insurance corporations, three are registered under Section 25 of the Company's Act, 42 are service enterprises, and the remaining 79 are engaged in production. The number of such units and the growth of investment in them since the commencement of the first five-year plan is shown in the table below:

<i>Period</i>	<i>Total investment (Rs crores)</i>	<i>No. of units</i>
<i>1</i>	<i>2</i>	<i>3</i>
At the commencement of the first plan	29	5
At the commencement of the second plan	81	21
At the commencement of the third plan	953	48
At the end of the third plan (as on 31 March 1966)	2,415	74

<i>1</i>	<i>2</i>	<i>3</i>
As on 31 March 1967	2,841	77
As on 31 March 1968	3,333	83
As on 31 March 1969	3,902	85
As on 31 March 1970	4,301	91
As on 31 March 1971	4,692	97
As on 31 March 1972	5,052	101
As on 31 March 1973	5,571	22
As on 31 March 1974	6,237	122
As on 31 March 1975	7,261	129
As on 31 March 1976	8,973	129

As on March 1976 the investment on state-owned public undertakings stood at Rs 8,973 crores—nearly half of the country's total investment in organized industry. If the amount outstanding (Rs 2,023 crores) under the cash credit arrangements is included, the amount would swell to Rs 10,996 crores. Out of this, the Steel Authority of India, Hindustan Steel Limited, and Bokaro Steel Limited accounted for an investment of around Rs 2,570 crores. This constituted about 28.6 per cent of total investment in the public sector. Of this, a little over Rs 2,300 crores was accounted for by Hindustan Steel and Bokaro including Rs 872 crores during the fourth plan period.

Corrupt payments, idle capacities, and inefficiency have impinged directly on costs of the public sector and, hence, on its returns. A substantial part of the investments which may vary from 20 to 40 per cent, depending on the projects and the parties concerned, shown in the account books, gets converted into private incomes via corrupt payments. Actual investments, therefore, are less than those shown in the ledgers, by the amount of the corrupt payments of what are called "kick-back." Second, part of the actual investments, i.e. the investments remaining after conversion of a portion into corrupt payments, gets immobilized in idle production capacities. While these investments remain idle, the investment resources they embody are a waste. Third, wastages of raw materials and accessories, over-staffing, inefficient maintenance of plant and equipment, etc., have impinged adversely on costs, quality, and the quantum of output. With the result that the value added per unit of fixed capital investment in the public sector factories is the lowest—one-sixth of that in the private

sector factories. Figures shown in columns 2 and 3 of the following table have been taken from the Government of India publication, *Annual Survey of Industries*, 1970:

<i>Type of ownership</i>	<i>Fixed capital per employee</i>	<i>Value added per employee</i>	<i>Value added capital investment</i>
	(Rs)	(Rs)	(Col. 3/Col. 2)
1	2	3	4
Public Sector	48923	6146	0.125
Joint Sector	27490	7592	0.276
Private Sector	9256	6927	0.748
All Sectors	19656	6762	0.344

Seven

Foreign Loans and Collaboration

Establishment of heavy industry in the public sector, coupled with nationalization of existing private industry, had led to an unconscionable burden of foreign debt. At the time of India's independence Britain had left behind gold, coin, and bullion worth Rs 1,810 crores in the Reserve Bank plus Rs 1,733 crores of sterling balances, Rs 425 crores of repatriation pre-war debt, and Rs 115 crores in the Empire Dollar Pool—a sum of Rs 3,452 crores in all. But today although the volume of exports has gone up and remittances of upkeep on foreign rulers have almost ceased, India has become, since independence, a topmost debtor country.

In 1972 the external debt constituted 20.2 per cent of our national income—the highest of any country for which figures are available.

By 1950-51 all the money left to our credit by the British had been squandered, and we came to owe a debt of Rs 32 crores to foreign countries. As the table on the facing page will show, the external assistance that we sought and secured during the period 1951-76 amounted to Rs 17,654.6 crores, of which 7.3 per cent or a sum of Rs 1,288.8 crores constituted outright grant. It must be noted that the amount of Rs 17,654.6 crores is exclusive of the loan of two million tonnes of wheat from the USSR in 1972-73, credit secured for financing a part of the oil imports from Iran, and a huge sum of PL-480 debt—Rs 1,664 crores which was written off by the USA in 1974. Out of this huge total, a sum of Rs 5,425.6 crores had been paid off to the creditors by March 1976—Rs 3,435.8 crores towards principal and Rs 1,989.8 crores towards interest. During 1976-77, the amount of external debt servicing (not shown in the table) stood at Rs 760.7 crores—taking the total to Rs 6,186.3 crores.

**TOTAL EXTERNAL ASSISTANCE, SHARE OF GRANTS, DEBTS
SERVICING CHARGES, AND NET INFLOW OF ASSISTANCE**

(In crores of rupees)

<i>Period</i>	<i>Total* external assistance</i>	<i>Share of grants in total assistance</i>	<i>Total debt ser- vicing (Amortiza- tion+ interest payments)†</i>	<i>Net inflow of assis- tance</i>
Up to first plan	317.7	34.8	23.8	293.9
During second plan (1956-61)	2252.6	11.2	119.4	2133.2
During third plan (1961-66)	4531.0	3.7	542.6	3988.4
1966-67	1131.4	8.6	274.5	856.9
1967-68	1195.6	5.1	333.0	862.6
1968-69	902.6	7.2	375.0	527.6
1969-70	856.3	3.0	412.5	443.8
1970-71	791.4	5.5	450.0	341.4
1971-72	834.1	6.1	479.3	354.8
1972-73	666.2	1.8	507.4	158.8
1973-74	999.3	2.4	595.8	403.5
1974-75	1337.4	7.0	626.0	711.4
1975-76	1839.0	15.4	686.3	1152.7
TOTAL	17654.6	7.3	5425.6	12229.0

SOURCE: *Economic Survey, 1976-77*, Tables 7.4 and 7.6, pp. 114 and 116.

*Amount expressed in foreign currencies have been converted into rupees at the post-devaluation rate of exchange (\$ 1 = Rs 7.50) up to 1970-71. For 1971-72, pre-May 1971 exchange rates have been retained for conversion into rupees. For 1972-73, the rupee figures have been derived on the basis of the central rates which prevailed following the currency realignment of December 1971. For 1973-74, the quarterly average of the exchange rate of the rupee with individual donor currency has been applied to the quarterly data in respect of utilization for arriving at the equivalent rupee figures. For 1974-75, utilization figures have been worked out at current rates which is the monthly average exchange rate of the rupee with individual donor currencies. Utilization figures for 1975-76 are based on actual daily rates of the rupee with the donor currency on the respective dates.

†These figures relate to payments made in foreign exchange and through export of goods. Conversions in rupee are at the pre-devaluation rate of exchange (\$ 1 = Rs 4.7619) for the first three plans and at the post-devaluation rate of exchange (\$ 1 = Rs 7.50) for the subsequent years up to 1970-71. For 1971-72, pre-May 1971 exchange rates have been retained for

COLLABORATION

Besides incurring loans, it was argued by some economists, there was another way of utilizing foreign capital, viz., of attracting private investors who may themselves prefer to participate in the establishments of plants and factories in India. In addition to providing employment such factories will make available the technical know-how and managerial skills that we do not possess. At the same time, no question of repayment of capital and its interest will arise, nor any question of political strings being attached. So, foreign investment has been unabashedly invited in the name of "collaboration."

As has already been pointed out, however, Nehru, the worshipper at the shrine of modern industry, went all out for foreign capital, whether in the form of loans or in the form of investment in India by foreign capitalists. And the apprehensions that were voiced at the time have come true. Foreign collaboration has simply turned out to be another name for loot of India's financial resources.

On 29 August 1975, R. S. Bhat, Chairman of the India Investment Centre, boasted at a press conference in New Delhi that several foreign firms had told him that the guidelines enshrining government's policy in this regard were "fair and reasonable" and "no other country in the world permitted foreign firms to have an equity share of as much as 74 per cent."

As a result of this policy foreign investors who were prepared to pack up on the advent of political independence in the country decided to stay, and the amount of foreign investment rose from Rs 260 crores in 1948 to Rs 1,611.8 crores in March 1969, and to Rs 1,816.3 crores in 1973. This, despite the fact that we were supposed to have wrested independence from the exploitation

conversion into rupees of amortization payments; but central rates have been used for computing the rupee equivalent of interest payments effected between 20 December 1971 and 31 March 1972. For 1972-73, central rates have been used. For 1973-74 the quarterly average of the exchange rate of the rupee with individual donor currency has been applied for arriving at the equivalent of rupee figures. For arriving at the rupee equivalent of repayments of principal and interest from 1974-75 onwards actual daily exchange rates of rupee with the individual donor currency applicable on the respective dates have been used.

of the British imperialists and given freedom to our people. It would seem today we have not one foreign exploiter but several who have increased their exploitation sevenfold over the last twenty-five years. The details of private foreign investment are as under:

**FOREIGN INVESTMENT IN INDIA:
DISTRIBUTION COUNTRYWISE**

(In millions of rupees)

Country	<i>As at the end of March</i>				
	1969	1970	1971	1972	1973
	1	2	3	4	5
UK	6,367	6,179	6,175	6,410	6,496
USA	4,339	4,313	4,567	4,848	5,097
West Germany (FRG)	1,040	1,157	1,196	1,367	1,562
Italy	734	902	911	840	787
Japan	814	713	603	547	493
Switzerland	324	445	463	464	488
France	560	532	481	495	472
Canada	185	206	238	280	298
Sweden	186	188	195	202	205
Other countries	766	962	1,115	1,203	1,183
International institutions	878	812	852	901	1,082
TOTAL	16,193	16,409	16,796	17,557	18,163

SOURCE: *Reserve Bank of India Bulletin*, May 1976.

The total amount of remittances made abroad by foreign companies from India, in their various forms in 1972-73, stood at Rs 88.88 crores, as can be seen from the following table:

(In millions of rupees)

<i>Head</i>	<i>1971-72</i>	<i>1972-73</i>
Profits	99.4	155.4
Dividends	388.7	390.8
Royalties	58.6	73.3
Technical know-how	139.0	113.3
Interest payment by private sector	121.3	156.0
TOTAL	807.0	888.8

The Public Undertakings Committee has also found that the public sector undertakings have been indiscriminately entering into foreign technical collaboration in spite of the fact that the required technology is available in India. In their 89th Report (Fifth Lok Sabha) they have given several instances of foreign collaboration by private parties when technology was available with local public undertakings. One such instance related to Nitroteloume which was obtained through foreign collaboration by a firm in Bombay when Hindustan Organic Chemicals, Poona, were having the know-how. Again, Indian Oxygen Limited had entered into a foreign collaboration for an oxygen plant when the Bharat Heavy Plate and Vessels, Visakhapatnam, had the necessary know-how. Texmaco, Calcutta, had a foreign collaboration for industrial boilers when BHEL, Trichi, had the necessary know-how. The instances can be multiplied, but those already quoted should show the indiscriminate manner in which foreign collaborations have been obtained in India.

The people of India may be surprised to know that foreign companies were permitted as recently as in 1975 to expand their capacity of 25 per cent. They should not be therefore surprised if an enquiry establishes that some of the political big-wigs are co-sharers in the loot of their beloved country.

Today, like most other poor nations, India is more dependent on the rich not merely for developmental assistance but also for technology. With foreign capital came foreign technology. When you invite a blind person to dinner you have to make preparations for two. The two were inseparable. In fact, the two were knowingly invited. In addition to capital, availability of foreign technology was the main reason behind the policy of "collaboration." There was no public speech in which Nehru did not refer to India's need for "advanced" technology, refusing to see that the "advanced" consisted not in increasing production per unit of land or capital investment but per worker employed or per entrepreneur, leading to wide disparities in incomes, unemployment, and concentration of economic power—the very ills which our founding fathers had wanted to eradicate, and said so in the Constitution.

Addressing the annual session of the Indian National Committee of the International Chamber of Commerce (ICC) in New Delhi on 25 November 1976, Y. B. Chavan, Union Minister for External

Affairs, confessed that "foreign investment also brought with it a capital-intensive technology which was not necessarily suited to the needs of labour-surplus developing countries where the effort should be to economize on capital, a scarce item." It must be remembered that it was Chavan himself who had on the floor of the Lok Sabha supported the policy of importing private foreign capital with a view to "bridging the technological gap" in the country. Be it as it may, possessing neither capital to the required degree nor technological knowledge to the required standard, we are caught in the never-ending cycle of relying on other nations for assistance. Economic development of our nation has, thus, now become tragically dependent on foreign capital, foreign machinery, and foreign technology.

On the other hand, there are the examples of China and Japan. China has struggled against impossible odds for the last 16 years. that is, since the USSR recalled its technicians from China, to shun foreign models and foreign aid and find indigenous solutions to their problems. So far as Japan is concerned, it has been importing foreign technology only when inevitable, but not foreign equity capital or management. According to Japanese economists, "this has had the effect of encouraging the development of local entrepreneurship and has prevented the formation of 'foreign enclaves' in the economy, which is often the case in the under-developed countries."

Eight

Private Sector and Concentration of Economic Power

In pursuance of a directive principle contained in the Constitution, Indian National Congress pledged itself by way of its manifesto issued on the occasion of the Lok Sabha elections in March 1971 "to prevent concentration of economic power and wealth in a few hands, as this is inconsistent with the concept of democracy and social justice." But as in other spheres, the pious platitudes expressed in official documents have been totally and conspicuously flouted by the course of objective development. Thanks to heavy industry, concentration of wealth and economic power has been growing by leaps and bounds from year to year. During the period of ten years of Indira Gandhi's rule, the total assets of 20 top groups increased by 120 per cent—from Rs 2,335 crores in 1966 to Rs 5,111 crores in 1975-76.

In an article, "How Big is India's Big Business?" (*Illustrated Weekly of India*, 18 September 1977) A.N. Oza has made an excellent study of the problem. The following account, in brief, is taken from this article.

In 1966, the house of Birlas controlled as many as 290 companies and Tatas 70 companies. Bangurs had under them over 93 companies. Soorajmull Nagarmull controlled 104 companies. Mafatlals had 34 companies under their control and Thapars, J.K. (Singhania), Shri Ram, and Sahu Jain controlled 59, 47, 36, and 29 companies respectively. In all, the top 20 big business houses—each controlling assets worth more than Rs 35 crores—had at least a thousand companies under their control in 1966.

The accompanying table gives the data relating to the size and growth of the largest big business houses from 1951 to 1975 in terms of their total (net) assets. The sources of these data are also

SIZE AND GROWTH OF BIG BUSINESS GROUPS: TOTAL ASSETS

(In crores of rupees)

<i>Business group</i>	<i>1951 (R.K.H. Report)</i>	<i>1958 (R.K.H. Report)</i>	<i>1963 (MIC Report)</i>	<i>1966 (ILPIC Report)</i>	<i>1971 (Dept. of Com. Affairs)</i>	<i>1975-76 (Economic Times)</i>	<i>Percentage of increase between 1963 and 1971</i>	<i>Per- centage of increase between 1972 and 1976</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
Tata	116	303	418(1)	505(1)	818(1)	975(2)	96	42.2
Birla	153	294	304(2)	458(2)	726(2)	1,065(1)	139	46.7
Mafatlal	13	25	46(16)	93(7)	235(3)	284(3)	411	29.9
Martin Burn	41	112	150(3)	153(3)	173(4)	—	15	—
Bangor	20	54	78(5)	104(4)	149(5)	196(7)	91	40.0
Thapar	16	47	72(7)	99(5)	145(6)	204(6)	101	54.7
I.C.I.	—	—	37(19)	50(20)	137(7)	182(10)	270	24.3
A.C.C.	22	49	77(6)	90(8)	129(8)	169(12)	68	23.3
Shri Ram	12	27	55(12)	74(10)	128(9)	187(8)	133	35.6
J.K. Singhania	37	39	59(10)	67(12)	119(10)	224(4)	102	63.8
Surajmull Nagarmull	—	—	81(4)	96(6)	114(11)	—	41	—
Walchand	13	20	55(11)	81(9)	103(12)	135(17)	87	35.9

1	2	3	4	5	6	7	8	9
Sarabhai	—	—	43(17)	57(16)	97(13)	183(9)	126	40.9
Killick	—	—	42(18)	51(13)	—	139(16)	—	48.8
Macneil Barry/Binny	—	—	50(13)	57(15)	97(14)	—	94	—
Kirloskar	2	6	19(36)	43(23)	95(15)	177(11)	400	54.8
Bajaj	—	—	21(30)	35(18)	N.A.	143(15)	—	51.1
Sahu Jain	130	257	68(8)	59(14)	93(16)	—	37	—
Scindia	25	48	47(14)	56(17)	90(17)	217(5)	92	70.9
Bird Heilgers	34	47	60(9)	69(11)	85(18)	—	42	—
Larsen and Toubro	—	—	—	—	—	114(19)	—	109.0
Goenka	—	—	47(15)	65(13)	79(19)	—	68	—
Kasturbhai Lalbhai	13	22	34(21)	51(18)	76(20)	109(20)	124	27.3
Modi	—	—	11(55)	19	—	116(18)	—	86.4
T.V. Sundaram Iyengar	—	—	22(27)	44(22)	74(21)	—	236	—
Mahindra	1	12	20(33)	38(26)	72(22)	144(14)	260	73.2
Parry	—	—	12(52)	42(24)	70(23)	148(13)	483	33.2
Total of top 20 groups	648	1,362	1,823	2,335	3,688	5,111	102.3	45.3
Total of top 10 groups	594	1,250	1,367	1,753	2,759	3,717	102.8	43.3

MIC— Monopolies Inquiry Commission. ILPIC— Industrial Licensing Policy Inquiry Committee. R.K.H. — R.K. Hazari.
 Figures in brackets indicate rank.

indicated. These data are self-explanatory and need not be paraphrased here.

However, to understand them, the following points should be noted. The business houses selected for this table are those that were the largest 23 in 1971. Data for earlier years, therefore, also include some business houses which were not among the largest 20 in those years. Second, the Hazari data for 1951 relate only to the public companies. Lastly, the accuracy of the *Economic Times* data relating to 1972-73 and 1975-76 cannot be vouched for. For example, they do not include data for the Soorajmull Nagarmull group which ranked eleventh in 1971.

DEGREE OF CONCENTRATION

The figures in brackets in each column of the table indicate the rank of each house in that year according to size. From this ranking, one can notice the degree of vertical mobility among these houses. For instance, Mafatlal ranked sixteenth in 1963 but shot up to the third position in 1971. Kirloskar, whose rank was 36 in 1963, grew fast enough to become the fifteenth largest in 1971. On the other hand, Soorajmull Nagarmull went down in rank from sixth in 1966 to eleventh in 1971.

The importance of large foreign companies as a component of Indian big business can be realized from the fact that, among the largest companies in India, about 20 to 25 are foreign companies. Their aggregate total assets were equal to 15 to 20 per cent of the aggregate total assets of the top 20 business groups. Besides, two of the top 25 big business houses—ICI and Parry—have very close foreign connections. The aggregate total assets of the largest 20 foreign companies have increased by 138 per cent during the last decade.

SPECIAL FAVOURS

The Dutt Committee Report shows that the 20 big business houses secured a disproportionately large share both in the number of licences issued and the value of investment licensed. The share of the top 20 houses in the number of licences issued was 20 per cent but in the amount of investment licensed, their share was 41 per cent. Also, whereas only 20 per cent of the applications from

20 big houses were rejected, the proportion of rejection of the non-big house applications was 66 per cent.

In the matter of issuing licences the big houses are also shown special favours in many ways. These are: (i) Early intimation. Particular parties are intimated and approached in advance about certain projects and asked to apply accordingly after it is already approved (e.g., aluminium project of Birlas). (ii) Lifting of "ban" on the licensing of new capacity for particular products to suit particular applicants, mainly belonging to big houses (e.g., calcium carbide project of Shri Ram). (iii) Expeditious disposal. While most applications take months and years for final decision, applications of certain favoured parties are disposed of at great speed under definite instructions "from above." A classic example of this is the application from a foreign party (Pure Drinks) for production of soft drinks which was granted a licence within just one day. (iv) Inadequate scrutiny. Licences were granted to certain big houses for certain products without adequate scrutiny (e.g., rayon project of Birlas, superphosphate project of Kasturbhai). (v) "On File" decisions, that is, decisions outside the normal procedure of the Licensing Committee. About 50 applications from big houses were favourably decided in this way (e.g., wire products project of Bangur).

SHUTTING OUT RIVALS

More important than the cases of favourable treatment is the fact that the big business houses have turned the licensing restriction on private investment to their advantage by pre-empting and foreclosing licensable capacity and shutting out their less privileged competitors who do not possess the advantage of size. They have achieved this purpose by making multiple and repetitive applications for the same product and by the non-implementation of licences granted to them for an unduly long period. The first method ensures that they have greater chances of receiving a licence than those who make only one application for a particular product. The second method ensures that once they have obtained a licence, till the time they implement it, the other competing applicants would be rejected on the ground of "no scope." Even Tatas, who consider themselves "different" from other big houses, had not completed the implementation of about six

licences for a period of three to more than six years. The big houses also foreclose entry of new producers by creating capacity in excess of capacity licensed to them (e.g., out of 25 licensees producing more than double the licensed capacity, two belonged to Birlas and two to Tatas).

Most people are carried away by the much-publicized "contributions" of big houses and foreign companies to India's industrial development. But before accepting this claim, one must bear in mind the following facts.

The Lion's Share

The big business houses have made no noticeable effort to develop indigenous technology despite the vast human and other resources at their command. In good measure, their growth is dependent upon import of foreign technology and capital. Between 1956 and 1968, nearly 25 per cent of the foreign collaborations approved related to the top 20 houses and their share in the import of capital goods approved was 40 per cent. Thereafter, the growth of foreign collaborations has increased more rapidly and many of them have been linked with big business houses. Foreign capitalists prefer big houses and the latter prefer collaboration with foreigners. In almost every new or modern infrastructural industry that they have entered, they have done so with the help of foreign capital and technology. Nearly 40 per cent of their investment proposals approved involved foreign collaboration and, according to Hazari, the import component of their investment was about 60 per cent. Secondly, big business has also made little effort to raise capital on its own for the large projects that it has set up. At least 50 per cent of its project cost is financed by public sector financial institutions. The lion's share of the flow of institutional finance has gone to the big business houses. In this respect, too, they have an edge over their small and medium-sized rivals.

Authoritarian Politics

In the light of all this, it is not at all surprising that big business—and the newspapers they control—went out of their way to support Mrs Gandhi during the emergency. They very well knew that the emergency would greatly enhance the advantages they already enjoyed. It meant that there would be no Parliament and no Opposition MPs to hamper or pry into their contacts with the

real rulers. There would be no trade unions to put a squeeze on their profits and irritate their loyal managers. And, if Mrs Gandhi was going to confer all these benefits on them in the name of the down-trodden and democracy, they surely had nothing to lose but a lot to gain by the emergency. To them, the gains of the emergency far exceeded the sacrifice of a few of their brethren like Goenka or Viren Shah. After all, the interests of a few recalcitrant individuals could not be allowed to transcend the interests of big business as a class.

Historically speaking, in Germany as well as in Japan, big business was instrumental in destroying parliamentary democracy. Even in the USA, the "greatest" democracy, big business supported Nixon in his authoritarian politics. Not for nothing did Eisenhower warn his people about the dangers of the "military-industrial complex." The role of the big business in India during the emergency shows that it is no exception to this rule.

Nine

Dual Economy

The heavy or capital-intensive industry, whether in the private sector or the public sector, has served to create a dual economy with small enclaves of prosperity in a hinterland of poverty, unemployment, and stagnation. It had led to concentration of wealth at the top and, inasmuch as millions of people are going unemployed and underemployed, to pauperization at the bottom. Despite their profession of *garibi hatao*, the policies of the then ruling party have resulted in the emergence of monopoly houses with their ever-increasing capital stock and mounting profits in contrast to crores of semi-starved and ill-clad dwellers of hutments in the countryside and slums in the cities. While, on the one hand, tens of thousands wallow in luxury knowing not what to make of their windfalls or ill-gotten gains, on the other, tens of millions starve for want of a morsel of bread. True, a wide gulf between the rich and the poor has existed in India through the centuries but, instead of narrowing down, it has accentuated with the advent of independence a quarter of a century ago.

In countries with dense agrarian economies like India, the idea that prosperity can be attained through a steady expansion of industrial enclaves until they embrace the bulk of the population, and percolation, over time, of the benefits of a high rate of growth of GNP to all strata of society, is as unsound in theory as it has proved unworkable in practice. Adoption of capital-intensive techniques in a country with surfeit of labour was bound to result, and has resulted, in a dual economy—a few islands of prosperity which cities signify are surrounded by a vast sea of misery in the form of slums and villages.

The reasons are simple and not far to seek. First, because of the skills needed to run the large and technologically complex

enterprises, managers and engineers command high wages. Second, the more capital-intensive the investment, the smaller is the labour force employed and the higher its productivity. Their small numbers and concentration in a small area make it easy for the workers to band together and demand a large share of the products. Employers, whether the state or a citizen, can afford to raise wages because of the high productivity of such enterprises as well as the heavy penalty that they will have to pay, in terms of output foregone, for any stoppage of work.

The inequity of wage structure, accentuated by somewhat unrealistic tribunal awards, become apparent if the earnings in industry and elsewhere were compared. A sweeper in an organized industry received a monthly wage of Rs 400, a driver Rs 1,200, and a clerk between Rs 750 and Rs 900. Against this, the monthly salary of a double graduate started around Rs 450 and a qualified university teacher earned Rs 650 a month.

A survey has shown that industrial workers in Bombay and other cities in the lower category earn Rs 360 to Rs 1,400 per month. A truck driver in a large-scale industry today earns considerably more than a college lecturer. The total monthly emoluments of a peon in a government-owned commercial bank may vary from Rs 450 to Rs 600 per month and of a clerk from Rs 550 to Rs 1,300 per month.

There is no ceiling on the pay plus dearness allowance of Class III and Class IV employees in the Life Insurance Corporation of India. From 1 August 1977, Class III employees are getting D.A. at the rate of 162 per cent of their basic pay and Class IV employees at the rate of 216 per cent of their basic pay. For the purpose of illustration, a comparative statement showing the salaries of Class I officers and Class III employees of the LIC as on 1 August 1977 at common pay ranges is given on the facing page.

Government services did not lag behind. The arguments that applied to industrial workers and employees of public enterprises, applied to them also. Further, they had a large say in the result of elections. So they also raised their voice and were promptly heard. Salary increases and dearness allowances followed yearly and even quarterly.

With the backing of the powerful assistance of central and state government employees and powerful trade unions respectively, the white-collar workers and the organized industrial workers have

Pay	Class III		Class I	
	D.A.	Total	D.A.	Total
	Rs	Rs	Rs	Rs
530	859	1,389	710	1,240
610	988	1,598	870	1,480
690	1,118	1,808	880	1,570
770	1,247	2,017	890	1,660
850	1,377	2,227	890	1,740
920	1,490	2,410	875	1,805
1,600	—	—	755	2,355
2,250	—	—	135	2,385

Besides this amount payable to a Class III employee, he gets a bonus of 15 per cent on the basic pay.

become a privileged class in a society where hundreds of millions, more than half of the people in any case, eke out an existence below the poverty line.

The limitless prosperity, which socialism of the Congress variety has brought to the upper crust of society, is visible to the naked eye—in the change in the style and affluence of their living, in the proliferation of the four- and five-star hotels, which are filled to capacity, in the growth of luxury travel facilities, in the overcrowding of the noted holiday resorts, in the multiplication of lavish residences with rich furnishings and the display of wealth at marriages and other social functions. It is evident, too, in the steep rise in the statistics of the production and supply of luxury goods, most of which are well beyond the access of the masses.

It is with a view to meeting the needs of this class overwhelmingly composed of industrial workers and government employees, the richest, predominantly urban section of the population, which has adopted a largely Western style of living, that much of the modern industry has come into existence.

A comparison of the figures in the two tables (pp. 83 and 84) shows that while the share of top 20 per cent of the people in national incomes in the United States went down from 45.7 per cent in 1950 to 43 per cent in 1959 and, in Sri Lanka, from 53.9 per cent in 1952-53 to 42.3 per cent in 1963, that in India shot up from 42 per cent in the four-year period, 1953-57, to 53.3 per cent in 1967-68. Further, while the share of bottom 20 per cent of the people during the corresponding periods went down in the United

States by 4 per cent and, in Sri Lanka, by 12 per cent only, that in India went down by 40 per cent. It will also be noted that while 10 per cent top people shared only 27.8 per cent of the national income in the USA in 1959, they shared 36.5 per cent in India in 1967-68. Yet, a virulent propaganda at the official level, condemning the capitalistic policies of the USA in comparison to the socialistic policies of our own, goes on unabashed and unabated.

INCREASING UNEMPLOYMENT

Now, we will turn to the worst consequence of heavy industry—the increasing unemployment and underemployment which have virtually eaten into the vitals of the nation. Nehru's and his advisers' almost mystic faith in the twin gods of technology and heavy industry has turned out to have been misplaced. Western technology, which developed in the West in response to a shortage of labour and the consequent need to replace men with machines, provides no short-cut to prosperity in countries with a surfeit of underemployment and undernourished labour and an acute shortage of capital.

Even in the heyday of the industrial revolution the population growth rate in England, France, and Germany remained substantially below 1 per cent per annum. The growth rate for the continent of Europe as a whole reached 1.1 per cent only in the first decade of the present century. Whereas the growth rate of population in the developing countries of Asia, Africa, and Latin America during 1952-72 came to 2.4 per cent per annum. Hardly any of the existing underdeveloped or developing countries which are short of natural resources and capital and rich in labour can, therefore, hope to develop economically by the same process which the advanced countries of today had adopted. The traditional Western model of development, where agricultural development led directly to a transfer of labour to modern or capital-intensive industry in cities, is not strictly applicable to overpopulated economies.

In agreement with orthodox or traditional economists, however, in the post-independence era, Nehru thought that heavy capital-intensive industry led to higher output and, therefore, to higher national income or Gross National Product (GNP) and that poverty and unemployment will take care of themselves once we

PERCENTAGE SHARES OF ORDINAL GROUPS OF UNITS
(HOUSEHOLDS OR TAX RETURNS) IN PERSONAL
INCOME: SELECTED COUNTRIES

Countries and year	Shares of ordinal groups				
	Bottom 20%	Bottom 60%	Top 20%	Top 10%	Top 5%
<i>Underdeveloped countries</i>					
India, 1953-54 to 1956-57	8.00	36.00	42.00	28.00	20.00
Ceylon, 1952-53	5.1	27.7	53.9	40.6	31.0
Mexico, 1957	5.4	21.2	61.4	46.4	37.0
Barbados, 1951-52	3.6	27.1	51.6	34.2	22.3
Puerto Rico, 1953	5.6	30.3	50.8	32.9	23.4
Italy, 1948	6.1	31.2	48.5	34.1	24.1
<i>Developed countries</i>					
United Kingdom, 1951-52	5.4	33.3	44.5	30.2	20.9
West Germany, 1950	4.0	29.0	48.0	34.0	23.6
The Netherlands, 1950	4.2	29.5	49.0	53.0	24.6
Denmark, 1952	3.4	29.5	47.0	30.7	20.1
Sweden, 1948	3.2	29.1	46.6	30.3	20.1
United States, 1950	4.8	32.0	45.7	30.3	20.4

SOURCES: *Reserve Bank of India Bulletin*, September 1963, p. 1140.

United Nations, "National Income and its Distribution in Underdeveloped Countries," *Statistical Papers*, Series E No. 3, New York, 1951, p. 29.

United Nations, Economic Commission for Europe, *Economic Survey of Europe, 1956*, Geneva, 1957, Chapter IX, Table 3, p. 6.

Kuznets, Simon, *Quantitative Aspects of the Economic Growth of Nations, VIII, Distribution of Income by Size, Economic Development and Cultural Change*, January 1963, Table 3, pp. 13-15.

United States Department of Commerce, *Income Distribution in the United States*, Washington, 1953, Table 21, p. 85.

COMPARISON OF DISTRIBUTION OF FAMILY INCOME,
SELECTED ASIAN COUNTRIES, AND UNITED STATES,
WITH INDIA BY INCOME SHARE OF DECILE GROUPS*

Country	Year	Percentage share of total income for decile group									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
United States	1959	1.3	3.3	5.1	6.7	7.9	9.1	11.1	12.4	15.2	27.8
Japan	1963	3.0	4.7	5.7	7.3	7.9	9.0	10.4	12.0	16.0	24.0
Taiwan	1964	3.0	4.1	5.7	6.9	7.6	8.9	9.8	13.2	13.8	26.3
South Korea	1966	4.0	5.0	7.0	7.0	9.0	9.0	11.0	12.0	15.0	21.0
Philippines	1965	1.1	2.9	3.0	4.7	5.8	6.9	9.0	11.6	15.0	40.0
Thailand	1962	2.8	2.9	3.1	4.1	5.1	6.8	8.2	9.3	14.7	43.0
Malaya	1957-										
	58	2.6	3.9	6.1	5.1	7.2	8.5	10.3	12.4	16.1	27.8
Ceylon	1963	1.5	3.0	4.0	5.2	6.3	7.5	9.0	11.2	15.5	36.8
India (Present Survey 1967-68)		1.8	3.0	3.7	4.6	5.8	7.0	9.0	11.8	16.8	36.5

NOTE: D₁ denotes the bottom 10 per cent and D₁₀ denotes the top 10 per cent of the households.

*Basic Statistics relating to Indian Economy, 1950-51 to 1972-73, Table 10, CSO, Ministry of Planning, Government of India.

SOURCE: "Income Inequality and Economic Growth, The Postwar Experience of Asian Countries," *The Malayan Economic Review*, Vol. XV, No. 2, October 1970, p. 7.

took care of GNP. The argument was that availability of capital was the basic condition to economic growth; that capital-intensive industries led to a distribution of incomes favourable to profits or concentration of money in a few hands although this was never admitted in so many words; that the rich having a higher propensity to save, those who will be deriving profits from capital-intensive industries, will accumulate savings; that these savings will necessarily be invested by the savers, the industrialists themselves, in new, large or capital-intensive undertakings or mopped up by government in the form of taxes in order to establish industries in the public sector, and so on and on till, in the long run, the economy would have become self-generating, stimulating medium and small industry and creating a vast employment potential. It is thus and why Jawaharlal Nehru came to look upon increase

in national income as the supreme target of our planning—why in spite of a number of references in the plans to the employment problem, the creation of employment opportunities was seen more or less as an adjunct to or a by-product of the development strategy. The view taken in the fourth plan is a somewhat sharper echo of the views expressed in the earlier plans. It went on to say that in a poor country like India no significant result can be achieved through redistributive policies since "whatever surpluses can be mobilized from the higher incomes of the richer classes are needed for investment in the economy to lay the basis for larger consumption in the future." The poor and the weak, therefore, have to be helped through faster growth of the economy and other specific policy measures.

With a view to achieving faster growth capital was subsidized and administrative controls used to accelerate large-scale capital-intensive investment. Employment was relegated to the back seat as a by-product of the overall growth. Whereas, in our circumstances, it is employment that should have been made the aim or the target, and overall growth considered as its by-product. The initial reaction of most economists, Nehru's advisers, to the employment crisis was to plead for still more of the same type of investment that does not create enough jobs.

When some economists observed that large firms and large farms use less labour than small ones, other economists countered with the assertion that investment in small producers would slow down the rate of economic growth. Income of labour-intensive undertakings, they argued, would be distributed into so many hands that there will be little or no savings to mobilize and invest. The long-term problems created by a slowing down of growth rates would offset any short-term gains in employment.

But as Professor Dudley Seers of the University of Sussex, who was deputed by the ILO to study the unemployment problems of Colombia, had concluded, "to try to solve the unemployment problem by just accelerating the overall economic growth is to take on voluntarily the task of Tantalus—the target recedes as one reaches for it!"

In reality, there is no conflict between employment and production, between a simultaneous increase in employment and growth of income. Social justice and development, or what is called Gross National Product (GNP), can be combined. But suppos-

ing labour-intensive enterprises produce less per unit of capital investment than capital-intensive enterprises which Nehru advocated, the question arises whether it is productivity of capital alone which will serve to raise average per capita income, that will be the primary consideration irrespective of other circumstances whatsoever. If there is any real dilemma (there is no reason to think there is), it is a question of balancing the loss of those who would otherwise be unemployed against the potential progress of the rest of the community. In our country where 40 to 50 per cent of the people have been living below the level of desirable minimum for decades, the choice is not difficult to make; we have to raise the income and consumption of those at the bottom of the income distribution, rather than the income and consumption of those above it. Employment of those at the bottom is worth paying the price in terms of slower rise in incomes for the rest of the community.

The reasons, *inter alia*, why our leaders fell in for the modern sector despite Mahatma Gandhi's advice to the contrary, were psychological or ideological: benefits which many of the technical advances had undoubtedly brought to developed countries were so enormous, the glamour of the technical novelty was so dazzling that it blinded them to what technology as a by-product was doing to their economy, *viz.*, to its social costs in terms of increasing unemployment and increasing income disparities. They forgot that their circumstances were different from those of other countries.

So that if even after establishment of Swaraj some thirty years ago, we are faced with continuance of vast misery in our towns and villages throughout the country, on the one hand, and emergence of monopolies on the other, it is not an accident but a result of conscious planning.

It was after his policy of giving preference to heavy industry over a long period of 17 years, *i.e.*, since 2 September 1946 when he took over virtually as Prime Minister, had caused immense harm to the country that it dawned upon Jawaharlal Nehru that, after all, Mahatma Gandhi was right. Speaking on planning, he said in Parliament on 11 December 1963:

I begin to think more and more of Mahatma Gandhi's approach . . . I am entirely an admirer of the modern machine

and I want the best machinery and the best technique, but taking things as they are in India, however rapidly we advance in the modern age, the fact remains that a large number of our people will not be touched by it for a considerable time. Some other method has to be evolved so that they become partners in production even though the production apparatus may not be efficient as compared to modern technique.

But it was too late. He was a sick man at the time he made the above speech, and passed away after barely six months.

Governments of Latin America have committed the same mistake which our leadership did—economic growth without employment. And with the same results—public discontent. Chile and Uruguay, in particular, furnish two examples.

"For many years," pointed out Edgar Owens, a US development economist, at an international seminar organized by the Forum of Financial Writers in New Delhi in the first week of December 1972, "GNP has been rising at 5 per cent or more in the Latin countries and manufacturing output at a much higher rate. But the proportion of the labour force employed in manufacturing has actually declined a little, from 14.4 per cent in 1950 to 13.8 per cent in 1969."

Primarily because of industry's failure to create jobs during the 1960s, only three-fifths of the increase in the labour force in these countries was absorbed into economic activities. In sharp contrast, in labour-intensive Taiwan and South Korea, during the sixties, the proportion of the labour force employed in manufacturing doubled.

The table on the next page worked out by Dr K.N. Raj highlights the advantages which large-scale industry enjoys over cottage and small-scale industry.

The surplus formed in capital-intensive industry is so large that even with all sorts of ups and downs, market fluctuations, tariff policies and the like, sufficient profit would still be available to an entrepreneur whereas other types of industrial production would become uneconomic. For example, if net value added per yard is reduced from 25 paise to 12 paise, then there will be no surplus formed in cottage or traditional industry. On the other hand, the wage of the worker would be reduced to one-half or 50 paise. In small-scale industry, the surplus formed will be lowered and the

	<i>Artisan type (traditional)</i>	<i>Small-scale (semi-auto- matic loom)</i>	<i>Large-scale (fully auto- matic loom)</i>
	<i>Rs</i>	<i>Rs</i>	<i>Rs</i>
Capital cost per loom	50	200	10,000
No. of looms workable by a worker	1	1	16
Capital cost per worker	50	200	1,60,000
Output per loom per day	4 Yds.	20 Yds.	80 Yds.
Net value added per loom (on the assumption of 25 paise per yard and 300 working days per year)	300	1,500	96,000
Net value added per worker per year	300	1,500	96,000
Yearly wage usually earned by a worker	@ Re 1 = Rs 300	@ Rs 3 = Rs 900	@ Rs 5 = Rs 1,500
Surplus per worker per year	Nil	Rs 600	Rs 94,500

Source: *Economic Weekly*, Bombay, 14 April 1956, p. 436.

wage rate will be cut down by about 15 per cent so that the worker and the enterprise can still carry on, though there is little or no scope left for the entrepreneur to earn profits. In large-scale industry, however, there will still be enough surplus left to keep the worker paid in full besides some net income for the entrepreneur.

As a result, that is, unable to face competition from factory products, mainly owing to their cheapness, small enterprises of low capital intensity, particularly handicrafts, are either being forced out of work or are not coming into existence at all. Factory products are bound to be cheaper, as they are processed or produced mechanically, than those produced manually. So that, more and more men are becoming unemployed with more and more capital-intensive industries entering the field. Highly ambitious five-year plans in our country, with undue emphasis on heavy industry, therefore, regularly show a greater volume of unemployment at the end of every five-year period than at the beginning, even assuming that the plan is fully implemented.

It will not be out of place to mention here that the ranks of the unemployed who migrate to cities are greatly reinforced by surplus labour on the farm. Because family holdings are becoming smaller

and smaller and quite a considerable proportion of those who held tenancies during British rule but on precarious tenure, e.g., sub-tenants, share-croppers, and so-called trespassers, even non-occupancy tenants of *sir* and *khuakast* (self-cultivated lands of zamindars), face ejection or have already been summarily ejected. Large mechanized farms that one sees all over the country today did not exist before 1947, but are a development of the post-independence era. They were established on the backs of lakhs of farmers who were ejected by force or fraud, and their continued existence keeps lakhs of agricultural labourers unemployed. It is these farmers—the former toilers on land—who form the core of Naxalism in the country—the deprived, the disinherited, the under-privileged for whom no dog barked in the camps of the ruling party till yesterday. It is to be hoped that they will bark, and bark fiercely in the camps of the Janata Party.

An Alternative Strategy

If the country has to be saved, the Nehruvian strategy will have to be replaced by the Gandhian approach. That is, we will have to return to Gandhi for redemption. His thought has immense relevance not only to India, 1977, but also to India, 2000. India made a great mistake in 1947 in entirely abandoning the Gandhian path and in adopting a Westernized, centralized, trickle-down-from-the-top model that persists till today. Perhaps, the solution to India's problem lies in finding a suitable blend of the two models. Gandhian thought does not preclude large-scale or machine enterprise from which modern society cannot altogether be divorced. But it would maximize production and organization on a widely-decentralized basis and utilize local endowments and talents.

There are two main causes of our failure on the economic front: misallocation of financial outlays between industry and agriculture and introduction, rather multiplication, of the big machine. So, there are two main remedies: revision of the allocations in favour of agriculture and discarding of the big machine to the extent possible. The former involves top emphasis on rural development and the latter, a decision to switch over to self-reliance to the exclusion of foreign capital and foreign technology—an economy that is directed by our factor endowment.

Neglect of agriculture is, so to say, the "original sin" of the planners of India's destiny. Neglect of agriculture meant lack of agricultural surplus, that is, lack of food and raw materials. For want of adequate food production we have had to spend an amount of Rs 6,000 crores or more on food imports till date and, for want of both food and raw materials, our industry and other non-agricultural employments have not developed. In 1951, 72 per

cent of our workers were employed in agriculture, 10 per cent in industry, and 18 per cent in the rest of the economy: exactly the same proportion obtains today. So far as national income per capita is concerned, our country is one of the very poorest. What is still more alarming, our rate of economic growth is almost the lowest. In the international sphere we enjoy the reputation of a beggar.

Second, we committed the mistake of setting our sights too high and, on attainment of political power, immediately fell for heavy industry. Gandhi wanted to build the country from the bottom upwards on the strength of its own resources—with the village or agriculture and handicrafts as the base and the town or a few large-scale industries, that we must inevitably have, as the apex. We forgot that development of India's economy or a rise in the living standard of its vast millions will have to take place within the framework of its own factor endowment (in other words, within the limitations set by its low land or natural resources-man ratio) and of democratic freedoms which prevent exploitation of its own working force beyond a point.

The present situation can therefore be remedied by a shift of resources from the metropolitan, industrialized, capital-intensive and centralized production based on the purchasing power of the upper-middle classes to agriculture, employment-oriented and decentralized production which, in Gandhi's telling words, is "not only for the masses but also by the masses."

In most countries, the development of both agriculture and labour-intensive industries, which Mahatma Gandhi had advocated, came first and this policy has paid them handsome dividends. Japan provides the most prominent example; even mainland China has been following it since 1962 (with the important difference that farming is collectivized). This is the only way that a large and labour-surplus country, particularly India, can solve the employment-poverty problem for the mass of the people, while simultaneously building the heavy industry it ought to have.

Heavy industry and specially heavy-machine-making industry has never been the "root and base"¹ of economic growth. The

¹Words use by Nehru to describe the role of heavy industry in economic progress of the country.

basis of economic growth in the early phase of industrialization was agriculture, trade and handicrafts. In all the great industrial powers except the USSR and Japan, heavy industry grew on the basis of consumer goods industries responding to their demand and adjusting itself to their needs. This refers not only to the United States, Great Britain and Germany but also to France, Italy, Canada and so on. The opposite course of development in Russia and Japan was due to exceptional historical conditions. In Russia after Peter the Great, Japan after the Meiji Restoration, industrialization was promoted and largely controlled by the Government and subordinated to its political aims. In both countries heavy industry was pushed ahead as the basis of military power rather than the foundation of further industrialization. The Soviets in Russia and the military party in Japan on the eve of World War II took over and carried forward this policy with increased ruthlessness.²

Looked at more critically, it is agriculture, and agriculture alone which is the "root and base" of economic progress. A country will go on developing only to the extent supply of food and raw materials available from land allows it. Unless the farmers produce more than their needs, they will have nothing to sell and, therefore, no wherewithal to buy. This means that in the absence of increased agricultural production, there will be even no trade and no handicrafts.

As already pointed out, there can be no improvement in the living standards of a people, no economic development of a country, unless surplus of food and raw materials are available within the country itself (or, their supply in exchange of manufactures is assured from outside). Not only that, the speed and scope or pattern of its industrialization depends on the rate and amount of the surpluses a country is able to realize. Circumstances of a country like India where the land-man ratio is low, where labour is relatively abundant and capital scarce, that is, men are cheaper than machines, call for an economy in which hand-operated industries or handicrafts and cottage industries will predominate. When agricultural productivity goes up, resulting in a further

²*India: The Awakening Giant*, Harper and Brothers, New York, 1957, p. 175.

increase of farm incomes and, consequently, a higher demand for manufactured goods, a cumulative process is set in motion, that is, more and more industries are set up and the industrialization that has already been affected itself becomes a cause rather than merely remain a consequence of increase in incomes.

There being a great diversity of human wants, various industries particularly those which are mutually complementary, that is, which provide a market for, and thus support each other—and most industries fall under this definition—begin to spring up one after another, and per capita incomes go on increasing further and further.

Gradually, a point is reached where (owing to growth of various kinds of industries and services) labour becomes relatively scarce and capital abundant, that is, when men cease to be cheaper, but become dearer than machines. It is at this stage, a stage which in India will take very long to arrive, that an economy takes on a character or develops into one where machine-operated or mechanized industries will predominate. The progression from handicrafts to mechanized industries, from labour-intensive techniques to capital-intensive techniques is governed by the rate at which farm surpluses are available or capital becomes available relatively to labour that is released from, or no longer required in, agriculture. As cottage and small-scale industries grow on the basis of agricultural surpluses, mainly in the form of food and raw materials, so will grow mechanized industries on the basis of cottage and small-scale industries, responding to their demand and adjusting themselves to their needs. So that, in our circumstances of a dense agrarian economy, heavy or large-scale mechanized industries should come in course of time as the apex of an economic structure with agriculture and handicrafts or village industries as its base.

In India, progress has to be measured not in the quantity of steel or number of automobiles and television sets that we are able to manufacture, but in the quantity and quality of basic necessities of life like food, clothes, houses, health, education, etc., that become available to "the last man" as Gandhi used to say. Assigning priority to heavy industry in India and other similarly situated countries means retardation of agricultural development, food shortage, and dependence on imported food.

There are several countries in the developing world also, with

no better natural resources than India, where jobs are plentiful and the poor are creating wealth, where fewer babies are dying and everyone is becoming literate. Among these countries, democratic in political complexion, are Taiwan, Israel, Puerto Rico, and Egypt. The question arises: Why is it, then, that India is still floundering in poverty and misery and has not been able to forge ahead? Obviously, our policies have been faulty and need to be revised. This involves shedding of certain fallacies that have been fostered for too long.

To mention only one or two of the fallacies: many people believe that large farms produce and employ more than small farms. In fact, small farms produce more and employ more per acre than large mechanized farms—small and cottage industries produce more and employ more per unit of capital investment than big urban factories equipped with the latest machines. It is land in the field of agriculture and capital in the field of industry that are the limiting factors in India and, as every tyro in economics knows, should therefore be utilized to the maximum. What is more: there is no other democratic method of ensuring economic growth with social justice.

JUSTIFICATION OF GANDHIAN APPROACH TO INDUSTRY

The kind of industrial economy that will suit India depends upon the answer to the question: what do we aim at? If we aim merely at the highest output per person employed, output being positively correlated with capital per head, we must have an economy with a capital structure on the pattern of Western countries where this amount is large. But if the good of the people as a whole is at our heart, by and large, in a capital-poor and labour-rich country like India, there is no escape from an economy which Mahatma Gandhi advocated. His kind of economy will not only, in the present context, produce greater wealth, but will also serve all our other aims, viz., it will provide optimum employment, ensure equitable distribution of the national product, and promote a democratic way of life.

A few examples showing the relationship between capital and output in the cotton industry will serve to show that on the whole, it is a less capital-intensive structure that meets India's need best. According to late Dr P. S. Loknathan, textile fabrics in India were

manufactured in the forties, broadly speaking, by four different methods of production involving an ascending degree of capital-intensity (that is, capital investment per head of worker). Relevant details are roughly given below:

CAPITAL AND OUTPUT IN COTTON WEAVING IN INDIA

<i>Method of production</i>	<i>Capital intensity (or capital investment per head of worker)</i>	<i>Output (or net value added per head)</i>	<i>Capital co-efficient (or ratio of value or output to capital)</i>	<i>Amount of labour employed per unit of capital</i>
1	2	3	4	5
Modern mill or large composite factory consisting of spinning-cum-weaving establishments (large-scale industry)	1,200	650	1.54	1
Powerloom or small factory consisting of weaving establishments alone (small-scale industry)	300	200	0.66	3
Automatic loom (cottage industry)	90	80	0.90	15
Handloom (cottage industry)	35	45	1.29	25

SOURCE: *Eastern Economist*, 23 July 1943, p. 340.

NOTE: See table on p. 88.

The relationship between labour, capital, and output obtaining in three kinds of industries—cottage, small-scale, and large-scale—can be summarized as follows:

<i>Cottage</i>	<i>Net output or value added per worker</i>		<i>Net output or value added per unit of capital</i>			<i>Labour employed per unit of capital</i>		
	<i>Small-scale</i>	<i>Large-scale</i>	<i>Cottage</i>	<i>Small-scale</i>	<i>Large-scale</i>	<i>Cottage</i>	<i>Small-scale</i>	<i>Large-scale</i>
45	200	650	1.29	0.60	0.54	25	3	1
450	2,250	48,000	9.0	1.5	0.6			
300	1,500	96,000	6.0	7.5	0.6	3,200	4	1

It will be seen that so far as *net output (or value added) per worker* is concerned, it bears a positive correlation to the size and technique of enterprise, that is, the output per worker increases as the size, capital-intensity or capital invested per worker, and/or the technology improves. Cottage industry yields less per worker than small-scale industry, and small-scale industry in turn yields less than large-scale or capital-intensive industry. Whereas, *in terms of value added as also amount of labour employed per unit of fixed capital investment*, the correlation is negative. That is, less goods are produced and less persons are employed in an enterprise as its capital-intensity, that is, capital investment per head of worker increases and technology improves.

There is still another, a very significant set of statistics contained in an article³ written by Professor Mahalanobis, Statistical Adviser of the Planning Commission, who may, in a way, be considered the architect of our heavy industry programme.

<i>Invested in</i>	<i>Produces additional resources</i>	<i>And generates employment</i>
Heavy industry	Rs 14 lakhs	500
Consumer goods industry	Rs 33 lakhs	1,500
Agriculture	Rs 57 to 69 lakhs	4,000

According to a report on the working of the khadi and village industries section of the Industries Department, Government of India, released by the government in August 1974, during the fourth plan period 1969-74, the capital investment for providing employment to a worker in khadi and village industries was very low compared to large-sector industries. The average investment in khadi and village industries was Rs 530 against Rs 10,000 in the textile industry and rupees five to ten lakhs in the cement or steel industry. Whereas according to the Annual Survey of Industries (ASI), for 1974-75, the amount of investment required for employment of one person in the large-scale sector as a whole was Rs 29,600.

The table below gives comparative figures for important characteristics of the census sector factories, both large-scale and small-

³Journal of Indian Statistical Institute, December 1965.

scale for 1970—a small-scale factory being one which had a gross investment in plant and machinery of Rs 7.5 lakhs or less:

STRUCTURAL RELATIONSHIP (SIZEWISE)—1970

<i>Items</i>	<i>Large</i>	<i>Small</i>
<i>1</i>	<i>2</i>	<i>3</i>
Productive capital per factory (Rs lakhs)	203.13	1.89
Employment per one lakh of rupees	3.8	19.0
Employment per factory (No.)	777	36
Gross output per factory (Rs lakhs)	169.94	5.73
Value added	42.68	0.96
Productive capital per worker (Rs lakhs)	26,130.00	5,240.00
Gross output per worker (Rs)	21,861.00	15,917.00
Value added per worker (Rs)	5,490	2,665.00
Value added as per cent of value of gross output	25.1	16.7
Ratios of:		
Productive capital to value added	4.76	1.97
Productive capital to value of gross output	1.20	0.33

The table below shows investment cost and labour's share in factory units of various sizes in Taiwan in 1961. The capital-to-output ratio of units of less than \$2,500 investment is about half of those between \$250,000 and \$2.5 million and labour's share of income, therefore, is twice as large:

INVESTMENT COST OF INCREASING PRODUCTION AND LABOUR'S SHARE OF INCOME BY FACTORY SIZE, TAIWAN, 1961

<i>Size of industry by amount of investment</i>	<i>Investment cost of increasing output by \$ 1.00</i>	<i>Labour's share of income per \$ 1.00</i>
Less than 2,500	\$ 1.97	74 cents
\$ 2,500 to 25,000	\$ 2.52	72 cents
\$ 25,000 to 250,000	\$ 3.26	50 cents
\$ 250,000 to 2.5 million	\$ 3.66	39 cents
More than 2.5 million	\$ 4.46	31 cents

SOURCE: Edgar Owens and Robert Shaw, *Development Reconsidered*, Lexington Books, Massachusetts, 1972.

It is clear that there are no "economies of scale" in manufacturing industry as a whole so far as output per unit of capital investment is concerned. In other words, there is no law or rule of thumb operating in actual life which would show that the output-capital ratio grows with concentration of capital in an industrial enterprise. Nor is there any foundation for it in science. Mechanization and automation were introduced to increase the productivity of labour, i.e., the output-worker ratio, and their effect on the output-capital ratio may be just as well positive as it may be negative. Advances in technology only serve to eliminate labour-intensive enterprises at the cost of an additional input of capital without affecting the volume of output.

Evidence of economies of scale that we meet in our textbooks is based mainly on experience in highly industrialized countries. In India, it is mostly in industries producing capital goods like steel that economies of scale are discernible or significant, that is, the larger the plant and its production, the smaller the cost per unit. In consumer industries, as a whole, they are virtually non-existent.

Though industrialization in the modern sense of mills and factories began in India in the middle of the nineteenth century yet the contribution of "factory establishments" (that is, of all factories, large and small governed by the Factories Act, 1948) to the total product of the Indian Union in 1948-49 stood only at 6.3 per cent while that of "small enterprises" or enterprises not falling within the definition of a "factory" at 10 per cent. After 20 years of disproportionately heavy investment in large-scale industry, the former figure could be raised only to 10.7 per cent in 1968-69 whereas the latter came down to 7 per cent during the same period. (Figures of break-up of income from the two kinds of industries are not available.) So that the total contribution of manufacturing industries to GNP rose from 16.3 per cent in 1948-49 to 17.7 per cent in 1968-69. Despite spectacular industrialization pushing India to the eighth or ninth position among the world's industrialized countries, the Indian standard of living is around the lowest in Asia and 35 crores of people are living on the borderline of starvation.

Those who are enamoured of heavy or large-scale modern industry should, in particular, ponder over the hard fact that while, owing to our policies, cottage industry was declining, all

factories in 1973, large and small, put together, employed only 5.5 million workers. Whereas the country's labour force went up by 5 million or so per annum. Estimates of rural unemployment vary from 9 to 26 million. Relevant in this context is the observation of the National Commission on Agriculture that the transfer of workers from the agricultural to the non-agricultural sector is going to be slow. At best, the non-agricultural sector can provide jobs for 30 per cent of the total labour force by the end of the century.

The unrealistic thinking of those who believe that modern industry will ultimately solve our problem of unemployment and underemployment will become all the more evident when it is realized that, owing to almost continuous advance in technology, we require fewer and still fewer hands to produce the same amount of goods. For example, 445 textile mills in 1961 consumed 3,687,000 bales of cotton and employed 722,000 workers. In 1972, while the number of textile mills increased to 684 and the cotton consumption leapt to 6,251,000 bales, the number of workers rose only to 761,000. The textile industry has used its profits to instal modern machinery which displaces labour. Similar trends are noticed in other industries like cement, coal, and mining.

What things are coming to will be clear from the fact that a fertilizer factory situated in Mehsana district of Gujarat with a capital investment of Rs 70 crores provides employment only to 350 persons. And according to a press report, a Rs 250-crore fertilizer project, proposed to be set up in Broach district of the same state, will directly employ only 1,100 persons with the commissioning of the plant by the middle of 1979.⁴

While productivity of human labour improves with the progress of industrial technology, at the same time, it takes a greater amount of capital to employ a worker. In fact, *it is because a worker is aided with a great deal of capital that his productivity is increased*. Hence, in a capital-short economy, the adoption of an advanced industrial technology would mean employment of a few, though with higher incomes, at the cost of many with no incomes at all. Under our circumstances, therefore, where capital is scarce and labour not only abundant but redundant, it will not be in the national interest to use the latest, highly automatic,

⁴*Times of India*, New Delhi, 3 December 1975.

costly machines which require more capital relative to labour. There is a clear case in our country for adoption of a labour-intensive technology—a technology which would require less capital to employ a worker and hence, with given capital, would employ a larger number of workers. Which means saying, in other words, that, capital being the limiting factor in India, our economic organization has necessarily to be such or overwhelmingly such that the ratio of output to capital is higher, and that to labour, than in economically advanced countries where it is labour that is the scarce resource.

While higher capital-intensive enterprises may be advantageous to the persons who are employed therein, for they will get higher wages, it is labour-intensive enterprises that are advantageous to India as a whole—a country where capital is scarce (for, such enterprises require less capital), poverty is extreme (for, they yield larger product in the total per unit of investment), and labour is plentiful (for, they provide more employment). In the Western world, governments and economists are concerned with increasing the productivity of labour whereas we, as a nation, should be concerned with increasing the productivity of capital because we are short of capital, not of labour as the advanced countries are. Of the two routes, viz., high incomes for a few or the capital-intensive route, and modest but rising incomes for all or the labour-intensive route, we have to choose the latter which is also the Japanese route.

Monopolies have come into existence and disparities have, therefore, widened as a consequence of official policies followed since 1947. Ideology hampered economic progress and, paradoxically enough, assisted the very forces it opposed on the surface. Inequality was deliberately created in the hope that surplus income available from big or capital-intensive units will be easy to mobilize and plough back into the economy and gradually a time will arrive when people displaced (or not employed) by them will be absorbed into employment. The hope did not materialize and, as Professor Dudley Seers has pointed out, never will. India, in particular, had no excuse for this distortion of the economy and consequent misery; it had the benefit of Gandhi's teachings for so long, which other countries did not have. Growth and distribution, GNP and social justice were not enemies of each other. Both could co-exist.

In a letter to Rajkumari Amrit Kaur, Mahatma Gandhi had said as long ago as in 1939: "Jawaharlal's plans would be a sure waste, but he was one who would not be satisfied with anything that was not big."

Nehru realized his blunder, but then it was too late. He confessed in the Lok Sabha on 11 December 1963 that "planning should not lead to heavy accumulations of wealth in the hands of a few. . . ."

MEASURES FOR ERADICATING UNEMPLOYMENT

Unemployment is India's greatest enemy. Either it should be eliminated or it will eliminate us from the comity of civilized nations. Its solution therefore is the key to the solution of poverty and wide income inequalities as well. Once employment of a worker is assured, inasmuch as he will be having some income, poverty will be alleviated and income disparities narrowed down. So, the challenge that unemployment poses cannot be burked. In fact, just as the morals 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 can the quality of an economic policy or political leadership be judged by how it proposes to serve or to 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.

Most of them do not vote very often, nor do they understand what political ideology means. They do not even believe any longer in the possibility of progress; so much have they been cheated in life, and for so long. Political leadership of India will be judged not according to how revolutionary its slogans are, but according to how it deals with this section of "atomic dignity."

Unfortunately it is not yet realized 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 programme or slum clearance schemes, etc., do not provide a lasting or complete remedy of the cancer of unemployment that is eating into the vitals of the nation. After all, the ultimate objective of policy is not just to provide any kind of programme or jobs, but to provide work that is economically productive and yields enough

tural 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. Mechanization helps a farmer in cultivating or controlling a larger area of land, rather than increasing per acre production (which is what has to be aimed at in India). The main policy rule could therefore be to emphasize those elements in modern technology which do not displace labour—seeds, fertilizers, and pesticides—and 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 mechanized, it should be mechanized, as Gandhi pointed out, with machines that supplement human effort and ease or lighten its burden rather than supplant it—the Japanese style of farm machinery.

The recommendation made in the previous pages 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 utilized or that there was no scope for further employment in agriculture, or that unemployed and underemployed persons should not take to or remain in agriculture though non-agricultural occupations (for whatever reason) are not coming up 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. But, as irony would have it, prosperity (or increase in productivity) of agriculture is the pre-condition of this shifting, in other words, of shrinking of employment in agriculture—of its own ruin, in a way, but of prosperity of the community as a whole, in the long run. Combination of a marked rise in productivity of agriculture, with secular limits imposed by nature on consumption of its products, results in a sharp and uniform reduction of labour in agriculture.

Referring to employment in the organized industry ceasing to grow in the last nine years, and the number of young persons

entering the job market increasing fact every year, the *Times of India* (New Delhi) in its editorial (21 October 1975) wrote:

A part of the blame for this may be attributed to the fact that a very large number of the consumer goods industries that have come into being in the last three decades are employment-displacing. Shoe factories, mechanised bakeries, cooking utensils plants, mechanised brick plants, textile dyeing and printing mills and the like have thrown millions of cobblers, bakers, potters, brickmakers, printers and others out of work. Since these crafts have not yet died out, it should still be possible for the government to revive them and to create millions of more jobs simply by banning the relevant large scale industries or at least imposing heavy duties on their production.

Inasmuch as in a free market, benefits of decentralized, less intensive types are insufficient to offset, at least, financially the superior technology of the modern industry, labour-intensive enterprises cannot survive or be revived unless they are protected by statute against the raids of large, automatic industries. If we mean business, therefore, a strict law demarcating the spheres of various industries will have to be placed on the statute book. *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, and no small-scale industry shall be allowed to be established, which will produce goods or services that cottage 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.*

To the critics of this proposal one may point out that even sophisticated industries like steel, sugar, 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 gets 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. Fifty crores or more are being sunk annually in 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.

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 popular in our country.

The above approach reconciles the dictates of social justice (and employment) with the need for increase in GNP. Just as in the case of agriculture, there is normally no conflict in the field of manufacturing industry either, between maximizing production and maximizing 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.)

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

Addressing the international seminar of economic journalists organized by the Forum of Financial Writers in New Delhi in the first week of December 1972, Edgar Owens, a US development economist, drew attention to this phenomenon in the following words:

Generally speaking, the investment cost of increasing production, or to use the technical term, the incremental capital-output ratio, should be low in the developing countries, partly because of the shortage of capital, partly because the kind of technology needed to make people more productive than they now are, is relatively simple and cheap.

In the rich countries the investment cost of increasing production should be much higher because sophisticated technology is expensive. Thus, one would expect this investment cost to be low in the labour-intensive, capital-saving, small producer economies of Taiwan and Korea to be higher in the almost rich economies like Japan and Israel; and to be highest of all in the capital-intensive, labour-saving, big producer economies of the West.

But the reverse is the case. Countries which are rich in labour have relied more on machines than on people. The investment cost of increasing production is higher in a number of Latin countries than in high-income Japan and Israel; or lower in Japan than in the Philippines, even though Japan is very much richer; *or about the same in India and the USA.*

Similarly, imports of machinery in developing countries have tended to receive preferential treatment in the tariff structure and in the granting of import permits without due consideration to their employment implications. The exchange rate has at times been overvalued to an extent that it amounted to a subsidy on imported capital goods. Inside the country, interest rates have been kept artificially low so that large modern companies have enjoyed easier access to credit. But unless measures are taken to make the employment of capital far more expensive by an undervalued exchange rate and a high rate of interest and to *keep* the

CAPITAL COST OF DEVELOPMENT

Countries	Investment cost of in-reasing production by \$ (1960-69)	Average annual in- crease in per capita GNP (1960-69)
	\$	%
Korea	1.70	6.4
Taiwan	2.10	6.3
Mexico	3.10	3.4
Morocco	3.20	3.4
Philippines	3.50	1.9
India	3.90	1.1
Peru	4.00	1.4
Colombia	4.30	1.5
Venezuela	4.90	2.5
Israel	2.90	5.3
Japan	2.90	10.0
USA	3.70	3.2
France	4.00	4.8
Netherlands	5.00	3.1

SOURCE: World Bank, Organization for Economic Cooperation and Development, 1971; and US Agency for International Development, 1970.

labour cheap by curbing the trade unions, no entrepreneur would search in earnest for labour-intensive techniques of production, even where these already existed.

Referring to the role of trade unions, Professor Seers says that they serve to make labour expensive—far more expensive than it need be in underdeveloped or developing countries like India. "Labour legislation [and high wages paid in the modern sector] have discouraged the hiring of new personnel. If these biases were removed, employers would be compelled to think harder before introducing highly mechanised techniques." If trade unionism is kept within limits our cheap labour can be a great asset to the big industries in competing with foreign goods in foreign markets.

That we have a great asset in the form of a vast manpower—cheap labour—may not be known to our leaders and economists, but it is known to foreigners. *The Times of India* (New Delhi) in its issue of 25 November 1973 carried the following report:

Four more foreign firms have proposed to shift their entire factories to India and buy all the output of the shifted plants.

Their objective is to take advantage of the cheap cost of skilled labour in India. As the entire production of the plants after moving to India will be exported, the net foreign exchange earnings will be very substantial.

Now, it may be possible to follow appropriate policies in the field of credit and foreign exchange and in regard to import of foreign machinery, but political circumstances being what they are, it is not possible to do so in the field of labour legislation. It is not possible to curb the trade unions, in other words, to ask factory workers to curb their appetites or exercise self-restraint. It is possible, however, to so control or regulate the techniques of production that control over the trade unions or the appetite of workers becomes virtually unnecessary. All that the Planning Commission or the Government of India need to do is to listen to the still small voice of the Mahatma whose memory is being desecrated every day. Gandhi's prescription that only those articles shall be manufactured on a large, factory scale which cannot be manufactured on a small or cottage scale, will not only bring down the cost of development and, at the same time, increase employment opportunities steeply but will render trade unions irrelevant. For there will be no hired workers in cottage industry and only a few of them in small-scale industry.

Although there will be strong opposition to the proposal on social and political grounds, no regulations enforcing minimum wages or countering discrepancy in wages in small-scale industry need be introduced. Cheap labour is our greatest asset, and should not in its own or national interest be allowed to go waste. Needless to say, forbearance in this respect will widen employment opportunities, increase the rate of economic growth, reduce income disparities, and promote export trade.

Once the techniques are controlled, that is, once we ensure how goods are made and that, 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 needed. Further, the government will have been saved an attempt at drawing a line between the two kinds of goods (which in any case will be arbitrary), the need to put curbs on consumption in the form of control over price, quality and quantity, etc., and the temptation to introduce institutional reforms which increasingly limit the domain of free economic activity and, to that extent, the domain of democracy.

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 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 are 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. The main consideration in the present context of our economic conditions is to provide employment to people in the villages and, although small-scale industry provides more employment (and, in an overwhelming percentage of cases, also produces more) per unit of investment than medium and large-scale industry, it provides for less employment (and produces less) than cottage industry in every case. While, therefore, in most cases small-scale industry will also 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 half a century ago, viz., "to return to the villages what has so cruelly and thoughtlessly been snatched away from them by city-dwellers."

Discussing industrialization 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.

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 larger 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.⁵

As amongst sub-sectors of the non-agricultural sector, next to manufacturing, construction and transport can provide the largest employment. In 1974 transport and communications provided employment to 23.9 lakhs of workers, and construction to 11.8 lakhs. A much larger contribution than at present could, however, be obtained from those sources. Next to food and raiment, house or shelter is the basic necessity of a man. But as we have seen, millions of people in our country live 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 other countries of the world.

The building 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 supply of inputs, enlarges the size of the market and marketable surplus, fetches a better price, 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 unutilized if the products could not be transported to areas where there is a demand for them.

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 technical personnel every year as shown in the table on the next page.

From the norm "construction" employment for different heads of development, roads seem to have the highest employment

⁵*Asian Drama*, p. 1239.

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, 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, 300 for housing, 3,200 for village and small industries and 2,500 for road transport.*

<i>Category of technical personnel</i>	<i>For construction and planning</i>	<i>For maintenance</i>
Graduates	360	18
Diploma holders	1,080	53
Other technical staff	1,125	62

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 1973-74, each costing Rs 10,000 with pre-fabricated material. Leaving aside the question of employment which will necessarily shrink, all this is being done in the teeth of clear evidence that pre-fabricated housing is more expensive than conventional construction. Similarly, pre-fabricated bridges are being put up while thousands of our people in the immediate neighbourhood of the site may be rotting away in enforced idleness, who could with equal efficiency construct these bridges with their hands. Mechanical brick-laying is also being encouraged.

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

*Ashok V. Buleshkar, ed., *Towards Socialist Transformation of Indian Economy*, Popular Prakashan, 1972.

in construction of houses or buildings and public works of any kind.

In view of our huge manpower available, the use of giant earth excavators and earth-movers is unnecessary because it serves to create unemployment. After all, roads, bridges, and dams or reservoirs do not have to compete in world markets which might require mechanization of their construction.

All the departments at the Centre, barring a few, had acquired computers and data-processing equipment. It is being constantly forgotten or ignored that in all spheres where a work can be accomplished by hand, the modern machine does not add to production, but saves labour and thus creates unemployment. The machines come 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 underemployment which afflict its economy must be wiped out at the earliest. It must, therefore, be unequivocally laid down that the aim of our economic policy will be changed from increasing the gross national production to increasing productive employment. The creation of more jobs would unavoidably cause a rise in GNP but when, if at all, faced with the choice between the 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.

CONCLUSION

Gandhi visualized the growth of Indian economy on the basis of our own resource-endowment and our own techniques or techniques evolved to suit our conditions of scarce capital and redundant labour. The choice of an appropriate growth strategy was to be conditioned and determined entirely by what our country possessed. Self-reliance was accorded high priority.

Unfortunately, our post-independence leadership had other ideas and views. The country's economic plans came to be geared largely to foreign technology. The incongruity between our domestic economic and social conditions and the fruits of such foreign technology did not strike them. Steel, then a scarce commodity, replaced wood and bamboo; cement substituted lime and in the field of traction and power generation, petrol and petroleum pro-

ducts began to play an expanding role at the expense of coal. Chemical fertilizers began to be preferred to organic manure and even in the manufacture of fertilizers, naphtha began to be favoured to coal.

There was thus a deliberate and steady shift away from the Gandhian prescriptions. The imperatives of self-reliance were totally ignored. Foreign technology came to be grafted on to our economic system in total disregard of the vast differential in their respective resource-availabilities.

The contribution that individuals could make in terms of higher national income and provision of more goods and services was completely belittled. In its place, the state and its capacity to find solutions to vast and intractable socio-economic problems was greatly exaggerated. The entire emphasis was thus shifted to state initiative and gigantic projects involving, almost in every case, import of foreign technology together with foreign basic resources whether primary, processed or intermediate. Jobs were created in other countries, and our own people at home kept in enforced idleness.

This tragic orientation of our strategy for economic growth resulted in the creation, within our country, of a very powerful class which developed a vested interest in imports of all kinds, including indiscriminate import of foreign technology. The specious plea began to be advanced that thereby the pace of the country's development was being quickened!

We have thus built an edifice which has little support from the base. Millions of our people are neither beneficiaries nor participants in the growth process. In real terms, there is a continuous drain of resources. Urges at all levels have been stifled and all incentives and initiatives stifled. An all out crisis has become a built-in feature of the approach.

The ominous dimensions of our deepening economic crisis is a true index of the shift that had been brought about from the path shown by Gandhi. His approach was simple and clear: mobilize the people to create wealth. Let them develop village forests and organic manure, dig canals, and produce energy from numerous micro-projects. Let people's initiative be diffused as extensively as possible. Let us have, if necessary, big capital-intensive projects but let these be created and run by local resources.

While India unceremoniously discarded Gandhi with such

disastrous consequences, other countries, notably China, Viet Nam, and Tanzania, not only benefited and even succeeded in demonstrating to the rest of the world how Gandhian type of planning was basically right for a predominantly agricultural country, especially in the early stages of its development.

After its initial dependence on the Soviet Union, China was quick to free itself from the Soviet apron-strings. Despite its uncompromising stand, China, when Mao died, owed no debt to any country and her unemployment problem had practically been solved. Viet Nam's achievements are equally spectacular while Tanzania, under President Nyerere, has almost become an authentic model for the successful application of the main principles of the Gandhian approach to planning.

Therefore, 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, 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 industrialization and take to the Gandhian path, adapted of course to the changed or changing conditions. This path dictates that the production of consumer goods, for example, shoes, clothes, or soap by machines, is banned, thereby virtually forcing the cottage industries to fill in the gap; chemical fertilizers are replaced with organic manures as rapidly as possible; urban planning is taken in hand with a view to minimizing the need for power-driven transport; and building laws are framed which compel rich and poor alike to go in for low-rise, high density housing, using cheap, locally available building materials like bamboo, clay, bricks and tiles.

In fact, up to the time when full employment has been achieved, mechanization has to be scrupulously eschewed, for example, in construction of office or residential buildings, roads, bridges, railway tracks or irrigation dams and reservoirs. Pre-fabricated housing factories and earth-excavators and earth-movers will, therefore, have to be shut down or scrapped. Nor will electro-

computers, automatic laundries or automatic telephones and mechanized bakeries, which the Congress government established all over the country, be allowed to function. They will be replaced by the old systems 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. Mechanization or further mechanization of the economy has, therefore, to be discouraged till all the people without jobs have been fully absorbed. Meanwhile, 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 latter that will be chosen.

Eleven

Conclusion

Were this writer saddled with the responsibility of framing a testament of economic philosophy for the Janata Party, he would do it briefly as follows.

Man does not live by bread alone. Freedom and equality are as indispensable as the satisfaction of his material wants. The Janata Party is, therefore, pledged towards building up an economic system which will secure all these requirements—bread, freedom, and equality—to the maximum extent possible.

The record of human history is replete with the lesson that freedom and equality, in absolute terms, are sworn and everlasting enemies; where one prevails, the other either dies or withers away. Leave men free, and their natural inequalities multiply almost geometrically. Try to make them equal, they become slaves. So, the need arises for India to develop an alternative to the two extreme forms—a capitalistic democracy as it originally developed in the Western countries, and the democratic centralism as practised in the communist states.

The Janata Party believes in treading the middle path—in creating a society based mainly on self-employment. Knowing that, inasmuch as practical ability differs from man to man, inequality in achievements will continue, howsoever freedom may be repressed, it believes in an egalitarian society with narrow income differentials—a system where, subject to exceptions, the citizens will be free in the choice and operation of their economic life.

The Janata Party is opposed to any system which allows individuals unrestricted freedom to exploit the economic needs of others; at the same time, it is equally opposed to the state possessing unlimited powers to curb initiative, restrict economic

freedom or take it away altogether, thereby creating a monopoly for itself. In other words, while being a friend or a servant of the small man and striving always for the uplift of the underdog, the Janata Party does not believe in any system which *snatches away human dignity and freedom*. At the same time, while believing in freedom of enterprise, the Janata Party does not believe in any system which exploits the labour of others.

The party believes that the widest dispersion of ownership of property and means of production is the only assurance that democracy is safe and would endure. *It is, therefore, opposed to all concentration of economic power*, whether it be in the hands of a few capitalists or the state itself. Such concentration inhibits freedom, in one case, and gives rise to undue disparities in levels of living, in the other, thereby engendering social and political tensions.

With a view to attaining its deal, the party will 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 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 industrial production, for the future, so that monopolies of wealth or gross inequalities in incomes that prevail in our economy do not re-emerge or get accentuated. A technique of production not only generates certain incomes but also serves to distribute it in a particular fashion.

This sums up the party's economic ideology and philosophy. The question arises as to how this will come to be actually applied on the ground. For this, we will have first to identify the problems that call for immediate solutions. Obviously, the three problems which the country faces in the economic sphere, or the three ills which afflict our economy, can be identified as *Poverty, Mounting Unemployment, and Widening Disparities in Wealth and Incomes*.

Logically, the aim of our economic policy should be the establishment of a structure which, while serving to increase production, will at the same time provide employment, as also reduce, if not entirely eliminate, income disparities. Inasmuch as social, political, and economic life is intertwined, India's preference

should be for an economy which, even as it ensures bread, freedom, and equality to the maximum extent possible, also releases forces which promote and strengthen the democratic way of life that we have chosen for ourselves.

While proceeding to translate the above beliefs into practice, the Janata Party, in fact any political party anywhere, will have to keep the country's factor endowment in mind. It can but rear, or should rear, an economic structure whereby the people derive the greatest profit per unit of the limiting factor (of production). Thus, if land be the limiting factor, the aim should be to make the largest profit per acre. If labour limits the business, the aim should be the largest possible profit per unit of labour. Similarly, if the limiting factor be capital, the aim should be the greatest profit per unit of fixed capital investment.

The Janata Party will strive for establishment of an economy which will:

(a) (i) ensure higher production per unit of land in the field of agriculture, because land is the crucial limiting factor in our conditions and, therefore, more valuable than either labour or capital; (ii) ensure optimum production per unit of capital investment in the field of industry, because capital is comparatively scarce and, therefore, more valuable than labour;

(b) provide maximum employment per unit of land in agriculture and per unit of capital investment in industry, as we have a huge population to support and unemployment is on the increase;

(c) serve to reduce inequalities in incomes, because perpetuation and accentuation of the existing disparities aggravate social and political tensions in society; and

(d) help avoid exploitation of others' labour to the maximum extent possible so that opportunity is provided to the largest number of our people for development of their personality and pursuit of their individual interests.

India's purpose will be served best by an economy which consists of small independent peasant-farms, interlinked by service co-operatives in the field of agriculture, and, subject to certain exceptions (projects which cannot be operated on a small scale), mainly of cottage and small-scale enterprises, again served by co-

operatives where necessary, in the field of manufacturing industry. Such an economy will produce more goods, provide more employment, curb income-disparities, and promote a democratic way of life.

Today, our industrial economy is a mixed one: it consists of both private and public sectors. 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 incomes, 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, its performance, at least, in our country has been disappointing. While there is no question of taxation in this sector, 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.

There is a way out, however, propounded by Gandhi under which it is simple labour-intensive techniques and small-scale decentralized production that will constitute 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 labour-intensive enterprises it is labour that gets the largest share; in capital-intensive 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 individually earn their own living, that is, avail 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 or a bureaucracy.

During the later part of his life Gandhi had thought out a scheme under which industrialists would work as trustees on behalf of the society. He had talked of this to avoid the evils of heavy industry while keeping it alive. He spoke and wrote about it many times. Perhaps, the clearest and briefest account is given in an issue of the *Harijan*, in which he wrote that under it industrialists "would be allowed to retain the stewardship of their possessions and to use their talent 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 will 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 share-holders. But this would be achieved without losing the expertise of the proprietors or managers or the incentive to increase production. All the profits will go to the state and will be ploughed back into the economy. The surplus value produced by heavy industry belongs neither to the worker nor to the entrepreneur, but to the entire nation whose labours and brain power made the establishment of such industry and its operation possible. What would be avoided are both private capitalism and state ownership which Gandhi dreaded—and not without good reason—as many more of us realize today than when he was alive.

But in this matter-of-fact world it is not possible to persuade owners to give up effective control of industry merely by appealing

to their benevolence and sense of national duty. A world teacher that he was, the Mahatma talked of the ultimate and set heights which are not easy to scale, at least today. Yet, the Janata Party would like to make an experiment of trusteeship in selected spheres, somewhat on the lines advocated by him.

Index

- Advanced industrial technology, criticism of, 99, 100
- Agrarian organization, aims of, 10, 11, 26
- Agrarian reforms, need for, 11, 12; World Bank report on, 12, 13
- Agrarian tensions (1969), study of, 12
- Agricultural commodities, value of exports, 2
- Agricultural output and productivity, comparative levels of, 17, 18
- Agricultural prices, 100-109
- Agricultural Prices Commission (APC), recommendations of, 35
- Agricultural production, need of, 3, 6, 102, 103; rise in, 28
- Agricultural workers, decline of, 3-6
- Agriculture, and industry, relationship between, 7; development role of, 8; emphasis on, 93, 94; neglect of, 2, 90; plan allocation for, 28, 29; priority to, 9; use of small machines in, 116
- Annual Survey of Industries, 96
- Appu, P. S., 21, 23
- Automation, introduction of, 98
- Bengal Famine (1943), 1
- Bhat, R. S., and foreign collaboration, 68
- Big business houses, and Dutt Committee Report on, 75, 76; emergence of, 79, 86; lion's share of, 77; negative role of, 77; role during the emergency, 76, 77; size and growth of, 73, 74; total assets of, 72
- Buck, John Lossing, on Chinese farms, 14, 15
- Canals, digging of, 114; priority to, 7
- Capital sources, 59
- Capital cost of development, statistics of, 106, 108
- Capital investment, Planning Commission's projection of, 56
- Capital-intensive industries plan, opposition of, 55-59
- Capital-intensive techniques, impact of, 79
- Capital-output ratio, 56
- Ceiling on large holdings, report on, 21, 22
- Charkha, meaning of, 53
- Chavan, Y. B., 70
- China, collective farming in, 26, 91; economic progress of, 115; employment problem in, 115; foreign technology and, 71; priority to agriculture in, 39
- Civil servants, social background of, 49, 50
- Collective farming, 26, 91
- Concentration of economic power and wealth, and Congress election manifesto of 1971, 72
- Communism vs capitalism, 58
- Congress (R) election manifesto of 1971, 60, 61, 72
- Congress government, criticism of, 116

- Congress Party, Avadi Session of, 60; Bhubneshwar Session of, 60; Chandigarh Session and Nehru's speech, 54; wrong policies of, 79, 80
- Cooperative farming, 18, 19, 24-26
- Cooperative sector, 54
- Consolidation of holdings, 24, 25
- Cottage industry, advantages of, 87, 88; Gandhi's encouragement to, 52, 53; decline of, 98, 99; relationship between labour, capital and output, 95-97
- Cotton consumption, 99
- Cotton import, 2
- Cotton weaving, capital and output in, 94, 95
- Credit, appropriate policy in the field of, 109
- Czechoslovakia, economic development of, 57
- Decentralized production, Gandhi's unqualified support for, 40, 53, 91
- Deficit financing, impact of, 8
- Dutt Committee Report, 75, 76
- Economic growth, poor projection of, 91; Gandhi's approach towards, 113, 114
- Economic policies, causes of failure, 90, 93, 94, 101, 113
- Elections, impact of, 80
- Electric energy, consumption of, 33, 34; production of, 114
- Emergency, industrialists' role during, 78
- Employment and production, 85
- Employment opportunities, 85
- Energy cost, 47
- Exports, volume of, 66
- Export trade, promotion of, 109
- Factories Act (1948), 98
- Family-sized farms, system of, 16, 17
- Farm Management Studies, 14
- Farm size, analysis of, 19-21
- Fay, Dr C. R., 25
- Fertilizer project, investment and employment in, 99
- Food exports, 1
- Food imports, 1; expenditure on, 90
- Food items, consumption of, 56
- Foreign aid, dependence on, 59; statistics of, 66
- Foreign capital, 59; amount of, 68; methods of utilization of, 69
- Foreign collaboration, 69-71; criticism of, 70-71; data on, 70; growth of, 77
- Foreign companies, total assets of, 75
- Foreign debt, burden of, 66; statistics of, 66
- Foreign debts services charges, 67
- Foreign exchange, appropriate policy for, 109
- Foreign technology, 59, 70, 71, 77, 113; exclusion of, 90; Nehru's admiration for, 90
- Forum of Financial Writers, New Delhi, 86, 87
- GNP, rise of, 87; total contribution of manufacturing industries to, 98
- Gandhi, Indira, 60; industrialists' support during the emergency, 77, 78
- Gandhi, Mahatma, 52, 61, 86, 104, 109, 120, 122
- Germany, Democratic Republic of, economic development in, 57
- Green Revolution, 27, 103
- Harjan*, 121
- Hazari, R. K., 73-75
- HINDALCO, and cost of energy, 47
- Improved seeds, emphasis on, 25, 28

- Income disparities, 100, 101, 109
- Indian National Committee of the International Chamber of Commerce (ICC), New Delhi (1976), Chavan's address on foreign collaboration, 70, 71
- Indian standard of living, 98
- India's administrators, social background of, 50, 51
- Industrial pattern, two schools of thought, 52, 53
- Industrial Policy Resolution (1956), 54
- Industrial production, rise of, 28, 29
- Industrial revolution, 82
- Industrial workers in Bombay, survey and comparative study of other sectors, 80, 81
- Industrialization, background of, 98; criticism of, 6, 7, 53; Nehru's emphasis on, 6
- Innovation, definition of, 28
- International politics, role of food in, 9
- Irrigation, 25, 28
- Janata Party, economic philosophy of, 24, 117-22
- Japan, development of agricultural and labour-intensive industries in, 91; average holding in, 16; Meiji Restoration, 92
- Joint farming, 18, 24; *see also* Cooperative farming
- Kaur, Rajkumari Amrit, 101
- Khadi and village industries, report on the working of, 96
- Korea, economic progress in, 58
- Labour, utilization of, 27
- Labour force, 99; decline in Latin American countries, 87
- Labour legislation, 108
- Labour shortage in advanced countries, 100
- Labour unrest, causes of, 79
- Ladejinsky, W. A., and tenancy reforms, 11, 12, 23
- Land ceilings, controversy on, 23, 24
- Land distribution, system of, 21-24
- Land erosion, 29
- Land-man ratio, 20, 92, 104
- Landlordism, abolition of, 11
- Large mechanized farms, criticism of, 17, 19-21, 89, 94
- Large-scale industry, emphasis on, 55; Nehru's advocacy for, 53, 54, 82
- Law of Diminishing Returns, illustration of, 15, 20
- Licensing Committee, 76
- Licensing policy, restrictions on, 76, 77
- Life Insurance Corporation of India, salaries of Class I officers and Class III employees, study of, 80
- Literacy, statistics of, 47, 48
- Lokanathan, Dr P. S., 94
- Lewis, Arthur, 59
- Luxury goods, production and supply of, 81
- Mahalanobis, 96
- Manpower, utilization of, 108, 109
- Mao Tse-tung, 51, 59, 115
- Marx, Karl, 62
- Mechanization, introduction of, 98; Gandhian approach, 103, 104
- Mining, plan allocation for, 29
- Mixed economy, 60
- Multiple cropping, scheme of, 83
- Myrdal, Gunnar, on the industrialization policies of the South Asian countries, 110, 111
- National Commission on Agriculture, observations of, 99
- National Development Council, Nehru's speech on large-scale industries, 53, 54

- National income, 91; of India and other countries, comparative study of, 81, 82
- Nationalization, Mrs Gandhi's views on, 61
- Naxalism, 89
- Nehru, Jawaharlal, 6, 60, 82, 85, 86; and heavy industries, 52, 53; and advanced technology and foreign collaboration, 68
- Nixon, big business support to, 78
- Non-agricultural commodities, value of exports, 2
- Non-agricultural resources, approach towards, 104; development of, 52
- Nurske, Ranger, 59
- Old age pensions, 63
- Oil imports from Iran, data on, 66
- Organic manure, 8, 114, 115
- Organized industry, plan allocation for, 29
- Owens, Edgar, 87, 107
- Oza, A. N., study of the problem of big business houses, 73-75
- Peasant proprietorship, transformation of, 11, 12, 25
- Pendell, Dr Elmer, 14
- Per capita income, 91
- Planning, Gandhian approach to, 115
- Population growth rate, 56-58; of developing countries, 82
- Poverty, cause of capital-intensive industry, 79; eradication of, 1, 10
- Poverty line, 86
- Pre-fabricated housing factories, plan to set up, 112
- Price control, 63, 110
- Private consumption (1973-74), statistics of, 56
- Private foreign capital, Chavan's support for, 71
- Private monopolies, 63; *see also* Big business houses
- Private property, abolition of, 62
- Production, factors of, 10
- Production per acre, aim of, 14
- PL-480 debt, 66
- Public sector, criticism of, 61; expansion of, 54; labour relations, 62, 63; corruption in, 64; number of companies, 64; plan expenditure in, 28-33; reasons for failure of, 64, 65; total investment in, 64
- Raj, Dr K. N., on the advantages of cottage and small-scale industry, 87, 88
- Raw material, role in foreign exchange earning, 2
- Report on Agricultural Census*, 21, 22
- Rich and poor, gulf between, 63, 79
- Road plan, annual expenditure on, 111, 112
- Rural development, emphasis on, 90
- Rural employment, estimates of, 99
- Russian Revolution, influence of, 60
- Savings to national income, ratio of, 56, 57
- Scheduled castes and scheduled tribes, recruitment quota for, 50
- Seers, Dudley, 100, 106; on the role of labour unions, 108; study of employment problems of Colombia by, 85
- Self-government, meaning of, 61
- Self-reliance, priority to, 62
- Shah, Viren, 78
- Sharma, Baldev R., 50
- Singh, Bhanu Pratap, 36
- Small enterprises, 16
- Small farms, positive role of, 16, 21, 25, 94
- Small-scale industry, advantages of, 87, 88; Gandhi's emphasis on, 91

- Socialistic pattern of society, objective of, 54
- Socialism, and capitalism, compromise between, 60; criticism of, 81; definition of, 60; goal of, 60
- Soil conservation, 29
- South Korea, average holding in, 16
- Spillman, W. J., on the utilization of production factors, 13
- Spinning wheel, emphasis on, 53
- State-owned public undertakings, investment in, 64
- Steel production, plan allocation for, 33
- Surplus food stuffs, role in foreign exchange earning, 2
- Swaminathan, M.S., 103
- Taiwan, average holding in, 16, 97
- Textile mills, workers employed in, 99
- Trade unions, countervailing power of, 63; role of, 108
- Transport and communication, and employment problem, 111
- Tube-wells, emphasis on, 7
- Unemployment problem, 82-89, 90, 116; of capital-intensive industry, 79; measures for eradication of, 91, 101-12; causes of, 82, 86
- Underemployment problem, 99, 103; eradication of, 27
- Union Public Service Commission, 49
- UK, gap between rich and poor in, 63
- USA, gap between rich and poor in, 63
- USSR, collective farming in, 26, 42; heavy industries in, 92; per capita gross product of, 57; yield per unit of land in, 17
- Viet Nam, achievements of, 64
- Vijayanagar (Karnataka) project, plan allocation for, 33
- Village crafts, 53
- Visakhapatnam Plant, plan allocation for, 33
- Wages, discrepancy in, 109
- Western model of economic growth, Gandhi's rejection of, 52, 53, 55
- White-collar workers, as privileged class, 80, 81
- World Bank Report on agrarian reforms, 12, 13

CHARAN SINGH, Union Home Minister, is Chairman of the Cabinet Sub-Committee in charge of the formulation of the economic policy of the new government.

Charan Singh, even as an active politician, was an ardent student of Indian economy. He was the chief architect of land reforms in UP, held to be a model for the rest of India by well-known agrarian experts. He played a leading part in the enactment of the Debt Redemption Bill, 1939, which brought relief to the rural indebted. Several legislations enacted in UP, dealing with soil conservation, forestry, and animal husbandry, which owe their inspiration to him have been acknowledged as pacesetters for the rest of the country.

While commanding popular will at the grassroots level, Charan Singh, through his dedicated and staunch belief in social justice, has acquired a deep insight into the country's economic ills. His characteristic brooding over the economic problems has brought him closer to Mahatma Gandhi and the solutions he suggested for uplifting the people of India.

His other publications are *Abolition of Zamindari*, *Cooperative Farming X-rayed*, *India Poverty and its Solution*, *Peasantry Proprietorship*, and *Prevention of Diffusion of Holdings Below a Certain Minimum*.

Jacket design: Vikas Studio

IV02C2901

ISBN 0 7069 0615 2

AGRICULTURE IN ECONOMIC DEVELOPMENT

RABINDRA NATH GHOSH

This study systematically examines the forces which brought about the spectacular economic transformation of the Punjab region, which was backward in 1947, at the time of India's independence. The author maintains that agricultural development held the key.

The book is divided into two parts. Part I consists of a selective survey of existing theoretical literature on the role of agriculture in economic development. The British and Japanese development models have been examined in historical perspective. Part II specifically deals with the experience of the Punjab region.

AGRICULTURAL PROBLEMS OF INDIA

Third Revised and Enlarged Edition

P. C. BANSIL

The book analyzes lucidly the evolution of agricultural policy in the light of the five-year plans. It examines comprehensively such recurring problems as famine, flood, and drought and also suggests practical remedies. Agricultural finance, agricultural marketing, agricultural education, labour policy, land policy, the cooperative movement, and community development are discussed in the context of the overall socio-economic development of India.

AGRICULTURAL DEVELOPMENT OF INDIA

P. V. SHENOI

The book argues that increasing agricultural production is not just a matter of quantifying various inputs, supplying them and waiting for bumper harvests. What is of crucial importance is the overall management of the different factors—human and technological—in such a way that every aspect of the specific development programme can be monitored in its minutest detail. Without a comprehensive management strategy it is not possible, as has been proved often, to meet projected targets.

VIKAS PUBLISHING HOUSE PVT LTD