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Some Speculations on Growth, Disparity and Capital Reorganisation in the Indian Economy*

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Looking at the economy today, there is much cause for gloom and depression. After a sustained period of muddling along at a low and halting pace, the economy has now actually moved into the unbelievable zone of negative growth. Real National Income, measured in 1970-71 prices, registered a fall of about 5 per cent in 1979-80 (Rs.44,328 crores) compared to the previous year (Rs.46,636 crores).[1] Allowing for an estimated population growth of about 2 per cent per annum, this amounts to an even sharper fall in real per capita income of the order of 6.8%.

It is true that a large part of this decline occurred in the agricultural sector. While foodgrains output declined by about 5.7 percent, oil seeds production fell by 13.6%, and sugarcane output fell by as much as 15.6%. If this were alone to account for the fall in real national income, the situation would not be so alarming since agriculture everywhere -- even in irrigated tracts -- is dependent on vagaries of the weather and therefore subject to sharp yearly fluctuations, irrespective of the intrinsic health of an economy. However, the current situation does not allow any room for such complacency. For, along with the average decline of 12.7 per cent in agricultural output, the economy has registered a substantial absolute fall in output in the sectors of manufacturing, railways and construction as well. In fact, the only sub-sectors of the national economy

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[1] These figures are based on the Quick Estimates of National Income just released by the CSO. See, The Hindu, of Jan.29, 1981.

which have recorded any significant growth are the service industries like transport (other than railways), communication and public utilities on the one hand and purely unproductive components like public administration and defence on the other. If these dubious components of national income were left out of the reckoning the actual decline in real per capita income based on material production estimates would probably be of the order of eight per cent or more. Alongside the decline in real national income, the investment rate in real terms has come down from 16.8% in 1978-79 to 14.4 per cent in 1979-80 giving us a decline of about 19% in the volume of real capital formation.

Coming as it does at the end of a long fifteen year period of slow and halting growth, there is no getting away from the fact that the economy is still in the throes of a deep depression. Clearly it is not a season for optimism. Speculation about the future in this gloomy air is open to a certain myopia -- a tendency to project too much of the present into the future. There are however some incorrigible optimists who would argue, as I shall argue, that there is a ray of hope. That in the long haul there is a real possibility for the process of capital accumulation to restore itself and for the economy to move into a trajectory of relatively higher growth. But what is likely to be there in such a recovery for the millions of Indian citizens, particularly in the rural sector, who live -- or rather survive -- in grotesquely inhuman conditions of existence? For them, as we shall see below, there can be no real hope of anything better in the forseeable future of this system.

2. A Digression on Crisis Theory

For exploring the prospects of a revived accumulation of capital in India, it is necessary to begin with a digression on crisis theory. In classical political economy the analysis of crisis in capitalist systems can be traced at least as far back as in the debates and correspondence between Malthus and Ricardo. But in the dominant tradition of modern economic analysis a theory of crisis appears only as recently as in Keynes' short period analysis of inadequate effective demand. What provides a direct lineage from the former to the latter, though this has never been recognised in the text books, is Marx's theory of accumulation and a particular interpretation of his theory of crisis which comes rather close to the Keynesian theory. This particular development of Marx's own theory, which for reasons explained below we may call the Realisation Theory of Crisis or simply Realisation Theory, has till recently been in the mainstream of Marxist theorising on the subject and can be primarily identified with the contributions of Sweezy, Kalecki, Sweezy-Baran and Steindl.[2/]

What is common to these theories is their focus on the non-realisation of profit or the surplus because of an inadequacy of aggregate demand. It is easy to see how closely this resembles the

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2/ See, Paul Sweezy - The Theory of Capitalist Development, Monthly Review Press edition, 1968; Michael Kalecki - Selected Essays on the Dynamics of the Capitalist Economy, Cambridge University Press, 1971; Paul Baran and Paul Sweezy - Monopoly Capital, Monthly Review Press, 1966 and Josef Steindl, Maturity and Stagnation of American Capitalism, Monthly Review Press edition, 1976.

more familiar Keynesian theory of inadequate effective demand. It is also important to stress that, at least in the case of Kalecki and Steindl, it is investment that leads the whole movement; recession and a secondary decline in investment following from a primary fall in investment. Here again Realisation Theory is at one with the Keynesian theory and the closeness of the two theories is perhaps revealed most strikingly in Kalecki's original work, completed about the same time as Keynes, where he independently established all the major short period propositions of Keynes. However, the parallels between Realisation Theory and Keynesian theory ought not to conceal their major differences.

For one thing, while Keynes was concerned with a short period analysis, Realisation Theory - except in the case of Kalecki - was distinctly concerned with the long run secular tendencies of the accumulation process. Even in the case of Kalecki, he grew increasingly unhappy with his separation between the analysis of short period business cycles and the trend, his last major contribution on the subject being an attempt to offer a unified theory of trend and the business cycle.[3/]

The second feature, and for my purpose the more significant one, which unifies the Marxian Realisation theories while at the same time distancing them from Keynes is their recognition of monopoly or oligopoly as the characteristic structure of markets. Keynes seemed to rest his macro theory on a micro level foundation of more or less competitive markets. The Realisation theories, on the other hand, based

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3/ See his 1968 essay, Trend and the Business Cycle, reprinted as chapter 15 of his Selected Essays, op.cit.

themselves explicitly on a recognition of market concentration and on the formation of prices and the distribution of income arising out of such concentration. They developed a theory of accumulation which located the origin of secular crisis in the development of monopoly. It is interesting to note that this emphasis on the development of monpoly, which distances Realisation Theory from the Keynesian theory also distances the former from Marx's original theory of capital accumulation and crisis. We shall return to this later. But so far as Keynesian theory itself is concerned, it is important to note that subsequent developments in this tradition were strongly influenced by Realisation Theory, in particular the work of Kalecki. It is not surprising therefore that the Post-Keynesian analysis of contemporary capitalism and its future prospects is rather similar to the recent conclusions of Realisation Theory.[4/] Both Kalecki and Steindl, for instance, in their more recent contributions have tended to leave the long term prospects of industrial capitalism rather open ended and dependent not only on the capacity of the State to set the level of investment and the distribution of income but more fundamentally on the autonomous and purely chance phenomenon of continuing technical progress. Schumpeter has been rediscovered.

4/ For the main features of this emerging paradigm see, Alfred Eichner, (ed.) A Guide to Post Keynesian Economics, M.E. Sharpe Inc. N.Y., 1979.

5/ See, for instance, the articles reprinted in Part III of Kalecki's Selected Essays, op.cit. Especially the essay on Trend and the Business Cycle. See also, Steindl's new Introduction to the 1976 edition of his Maturity and Stagnation in American Capitalism, or his article Stagnation Theory and Stagnation Policy, Cambridge Journal of Economics, March, 1979.

I have said earlier that the emphasis on the development of monopoly, both at the level of aggregate social capital as well as in the market structures of individual industries, which distances Realisation Theory of the Marxian tradition from Keynes also marks the point of departure for this theory from Marx's own analysis of crisis. The reason for this departure would seem to be that while Marx's own analysis of the laws of capital accumulation led him to forsee the development of monopoly he did not, and indeed could not at the time when he was writing, analyse the new 'rules of the game', the mechanism of the accumulation process consequent upon the development of monopoly.[6]

Overshadowed by this dominant Marxist tradition there has existed however a more fundamentalist Marxian tradition dating back to the year of the Great Crash.[7] Revived in recent years in the work of Mattick, Yaffe, Rosdolsky and others, this alternative tradition would hold that the development of Monopoly — or for that matter Imperialism — does not require a modification of Marx's theory of accumulation and crisis.[8]

6/ See, for instance, Chapter XV, "Monopoly and the Laws of Motion of Capitalism" in Sweezy "The Theory of Capitalist Development," op.cit.

7/ The book 'Das Akkumulations - und Zusammenbruchsgesetz des Kapitalistischen Systems, published by the German Marxist scholar Henryk Grossman in 1929. So far as I am aware no published English translation of the book is as yet available.

8/ See, for instance, P. Mattick, Marx and Keynes: Limits of the Mixed Economy, Merlin Press, London, 1969; D.S. Yaffe - The Marxian Theory of Crisis, Capital and the State, Conference of Socialist Economists Bulletin, Winter 1972; and R. Rosdolsky - The Making of Marx's Capital, Pluto Press, London, 1968.

According to this fundamentalist interpretation of Marx's theory of accumulation and crisis, which I shall call the Overproduction of Capital Theory or simply Overproduction Theory, capitalist production is nothing but the production of surplus value or, what is really the same thing if we ignore capitalist consumption, the production of capital. This holds regardless of the structure of aggregate social capital and its component parts in the different branches of production. As such the analysis of capital production, so the argument runs, is not specific to the 'competition' stage of capitalism but applies generally to the entire historical domain of capitalist production including the structure of competition as well as monopoly and imperialism.

This general analysis states that at any given time in capitalist production an existing mass of capital is employed to produce more capital, the ratio of the new capital produced to the original capital employed giving the aggregate rate of profit, which is also the rate of expansion of capital (we are ignoring capitalist consumption). Now it is obvious that as the aggregate mass of capital expands or accumulates the mass of surplus or new capital produced by the accumulated capital should also grow, the precise relationship between the two at any time being given by the ratio of the rate of exploitation (s) to the organic composition of capital (c) plus one i.e., $s/(1+c)$. However there is nothing to ensure that the mass of surplus value will expand at the same rate at which the total mass of capital which produces it expands. And it can be easily shown that whenever the rate of expansion of the mass of surplus value exceeds the rate of accumulation of total capital, the rate of capital accumulation - or

the rate of profit -- itself must be rising, i.e., a period of boom. This process will exhaust itself once the heightened rate of capital accumulation has exceeded the rate of expansion of the surplus and now the reverse process will be set in motion for it is again easily shown that whenever the rate of expansion of surplus value is lower than the the rate of total capital accumulation, the rate of capital accumulation -- or the rate of profit -- will be falling, i.e., a period of recession. The end of this period of recession marks the crisis of accumulation. The mass of existing capital at this point "is simultaneously too small and too large, it is too large in relation to the existing surplus-value and it is not large enough to overcome the dearth of surplus value!" (Mattick, 1969, op.cit. p.68). There is in other words an overproduction of capital and the new capital can no longer be valorised. A part of the mass of accumulated capital is now laid waste, devalued -- possibly even physically destroyed -- and above all reorganised such that the rate of exploitation is raised to a new high, the organic composition of capital modified and the rate of profit restored so that a new programme of accumulation can begin. This is the on-going cycle of capital production on an ever expanding scale. All that is required is that capital is able to fully reconstitute and reorganise itself at the end of each cycle so as to restore the rate of profit and that the fundamental relationship defining the system, i.e., the subordination of labour to capital, is itself not destroyed

It will be obvious here that the base of accumulated capital on which each cycle begin is always larger than the base on which the previous cycle began —the system is on an escalating scale. Consequently the magnitude of the crisis at the end of each cycle also tends to be more and more severe in an absolute sense. And the deeper the crisis the greater is the order of capital reorganisation required to restore the programme of accumulation. The transition from Competition to Monpoly Capital and the internationalisation of capital, i.e., Imperialism, would be seen in this theory as the major phases of this reorganisation of capital on an over expanding scale.

It is possible to argue, and with some justification, that the Overproduction Theory of Crisis just outlined is not very different from the Realisation Theory discussed earlier. That the two are really reformulations of the same theory at different levels of abstraction - one specific to the monpolistic market structure and the other more general - and with some differences in emphasis. For after all the non-valorisation of capital in Overproduction Theory is in effect the failure of surplus realisation consequent upon insufficient demand in Realisation Theory. Nevertheless, I would maintain that Overproduction Theory, precisely because it is not elaborated in the context of the <u>specific</u> structure of monopoly capital but at a more abstract level encompassing the entire historical domain of capitalism, offers a more useful point of departure for another specific theory of accumulation and crisis specific to the Indian economy with its own peculiar mix of a backward agrarian sector, an increasingly oligopolistic industrial sector and the state capitalist sector all meshed together in a dependent economy on the periphery of world capitalism.

3. Capital Reorganisation and the Resumption of Accumulation

It is not my purpose here to attempt this formidable task, i.e. build a new theory of accumulation and crisis specific to the Indian economy. Suffice it to say that the abstract over production theory, in stressing the direct causality between the crisis of accumulation and the reorganisation of capital, offers a useful clue for exploring the prospects of growth and accumulation in the near future on the basis of the experience of crisis in the recent past. I would offer the hypothesis that the period of stagnation -- or structural retrogression as it has sometimes been called [9] -- has also been a period of very substantial reorganisation of capital, of shifts in direction before a new phase of accumulation can begin.

This reorganisation of capital is probably still underway and is going on at several levels. What follows in this section is largely an attempt to offer a picture, however tentative and sketchy, of these different levels of capital reorganisation and their implications. The hypothesis being offered is only a working hypothesis and I am aware that the evidence I have to offer at this stage is piecemeal and inconclusive. I have drawn quite substantially upon the data put together by Dr. Shetty in his work referred to earlier. His phenomenal assembly of facts, it seems to me, is the most comprehensive body of data so far available on the question of stagnation.

9/ See, S.L.Shetty, Structural Retrogression in the Indian Economy, Economic and Political Weekly Reprint, Bombay, 1978.

This same body of data offers, however, many clues that this period of structural retrogression is also a period of substantial structural reorganisation preparatory to a new phase of accumulation.

(a) Concentration in Market Structure

The first and most obvious direction of capital reorganisation in the face of crisis is of course a rise in the centralisation and concentration of capital. This phenomenon, originally identified by Marx, was later brilliantly documented in the case of American capitalism by Steindl. Typically, starting with a competitive structure within individual markets, price competition intensifies with the development of crisis and marginal firms with higher costs or lower profit margins are taken over or forced out of the market while the most competitive firms are able to enlarge their share of the market. At the end of a crisis, therefore, markets are more concentrated than at the beginning of the crisis. And as the history of growth, booms and depression proceeds, markets get more and more concentrated leading to the emergence of oligopoly. Corresponding to this concentration within individual product markets, of course, there is the associated concentration of aggregate social capital leading the system to a stage of monopoly capital. All this is well known. It is also known that once oligopolistic structures have developed, this competitive mechanism ceases to work so smoothly and growth becomes difficult. For, the remaining firms are each too powerful to be squeezed out by price competition and all that results is a diminished margin of profit across the board without any compensating gain of market share. Steindl has also interpreted this late or mature period of American Capitalism

as one where further accumulation simply meant investment in more excess capacity.[10]

What concerns me here is that in the presently industrialised capitalist economies this period of mature or concentrated market structures and the consequent stagnation set in at a relatively late stage of development when the economies were already substantially industrialised. Till that stage was reached, 'the normal competitive mechanism' could work in response to a crisis and industrial growth could proceed along with the concentration of markets. In the Indian context this particular route of capital reorganisation was closed off at a very early stage of industrialisation, the concentration having in some sense preceded the whole industrialisation process.[11] The structure of Indian monopoly capital as analysed in the work of Hazari, the Monopolies Enquiry Commission and the Industrial Licensing Policy Inquiry

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10/ The realism of this apparently absurd process has been questioned recently in an interesting paper by Patnaik and Sanyal. See P. Patnaik and A. Sanyal - Some Notes on Monopoly and Accumulation (mimeo), Centre for Economics and Planning, Jawaharlal Nehru University, New Delhi.

11/ Why this happened is a complex question tied up with the whole conjuncture in which India began to industrialise, i.e. the structure of capital inherited from the colonial period, the situation of a late-comer nation in industrialisation, technological dependence, the relationship between the state and state-capitalist sector on the one hand and large capital on the other. This is a problem I do not wish to pursue here. For an interesting theory touching on many of these issues, see, Meir Mehrav - Technological Dependence, Monopoly and Growth Pergamon Press, Oxford, 1969.

Committee is widely known.[12/] An analysis of the concentration of market structures in selected industries based on the ILPIC report is presented in Table 1. Crude as the estimates are, they are quite effective in conveying a picture of how oligopoly had spread across a wide spectrum of industries by the time of the ILPIC exercise.

Table 1

MARKET CONCENTRATION IN SELECTED INDUSTRIES

Name of the Group	Total Number of Products	Number of Products Where Top Four Firms Control	
		100% of Output	Over 75% of Output
(0)	(1)	(2)	(3)
1. Automobile & Allied Industries	102	96 (94)	101 (99)
2. Drugs & Pharmaceuticals	97	90 (93)	96 (99)
3. Insecticides, Plastics & Plastic Chemicals	114	105 (92)	113 (99)
4. Alkalies and Allied Chemicals	20	18 (90)	18 (90)
5. Acids, Fertiliser and other Chemicals	132	116 (88)	130 (98)
6. Cellulose & Timber	17	14 (82)	15 (88)
7. Tools	66	54 (82)	65 (98)
8. Light Mechanical Engineering	93	74 (80)	89 (96)
9. Instruments	19	15 (79)	19(100)
10. Industrial Machinery	71	54 (76)	70 (99)
11. Dyes, Explosives, Coke byproducts & distillation products	42	31 (74)	42(100)
12. Alcohol & Organic Chemicals	27	20 (74)	25 (93)
13. Metallurgical Industries	71	50 (70)	67 (94)
14. Rubber Manufactures	75	50 (67)	74 (99)
15. Oil, Soaps, Paint & Feed	95	61 (64)	88 (93)
16. Mineral Industries	52	29 (56)	43 (83)
17. Heavy Chemical Engineering	15	7 (47)	13 (87)
18. Electrical Engineering	39	17 (44)	33 (85)
19. Leather Manufacture	9	4 (44)	8 (87)
20. Paper Industries	14	5 (36)	11 (78)

Source: N.S.Sidharthan - Technology, Market Structure and the Deceleration in the Growth of Capital stock in the Indian Engineering Industries, SCMIEA Conference, 1980 (mimeo.). Figures in Parenthesis give percentages of corresponding totals in column1.

12/ See R.K.Hazari - The Structure of the Corporate Private Sector, Asia Publishing House, Bombay, 1966; Report of the Monopolies Enquiry Commission. Manager of Publications, Delhi, 1965 and Report of the Industrial Licensing Policy Inquiry Committee, Manager of Publication, New Delhi, 1969.

Notice that what these studies capture is by and large a picture of concentration that had already occurred by the early sixties. By the time the crisis of the mid-sixties set in, therefore, the natural response mechanism of capital reorganisation through further market concentration was no longer available unlike in the case of Western capitalist economies at a comparative stage of industrialisation. I do not of course mean this in any absolute sense. Undoubtedly, concentration of markets and capital has gone on during the last fifteen years and this would probably show up when the relevant data is assembled. What is sought to be emphasised is that since a high degree of concentration had already occurred as it were prematurely, the space available for capital to further reorganise along these lines was obviously limited. Since capital reorganisation at this level of market structures could not now serve as an adequate means of response to the crisis, capital was therefore forced to turn to another more fundamental and long gestating form of reorganisation before normal growth could be resumed.[13/]

(b) Transformation of Industrial Structure

The second level of capital reorganisation, and the one which seems to me to be the main response of capital to the current crisis, is a transformation of the industrial structure. What the aggregate picture of slow growth, stagnation etc. conceals is considerable dynamism

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13/ It is in view of the argument presented in this para, among other reasons, that I feel that a Realisation Theory of the Stiendl type which has served so well to understand the mechanism of accumulation and stagnation in the context of USA etc. - at least upto a certain stage in their development - is not the best framework in which to view our own stagnation crisis and the possible forms of its resolution. Perhaps it is better to start with Marx's more abstract general theory and climb down directly to a specific theory of accumulation and crisis in the Indian economy.

in the industrial structure of the system. It is certainly true that since the mid-sixties most industries grew at much slower rates than during the early import substituting phase which ended by the first half of the sixties. But within the industrial structure some industries have grown much faster than others such that the structure of industries we have today is quite different in terms of relative weights compared to that which obtained some twenty years ago.

As a first clue to this transformation it is instructive to look at the rate of investment. It is often argued that in view of the differential rates of price changes and the volatility of the inventory component of investment which absorbs the first shocks of changes in demand conditions, estimates of aggregate net capital formation at current prices are not very meaningful. In Table 2 we have reproduced Shetty's estimate of Net Fixed Asset Formation as a percentage of Net Domestic Product, measured at constant prices, during the sixties. It will be noticed that by this estimate the rate of real investment appears to have been remarkably stable over a period during which the rate of growth of output fell very sharply from the peak rates of the early sixties to the low rates since the mid sixties. Less conservative estimates of the investment rate for recent years show that the investment rate has tended to be quite high while output growth has continued to be slow. Generally the implicit rise in the incremental capital:output ratio has been attributed to increasing inefficiencies in the system, lower rates of capacity utilisation, cost overruns on new investment projects, etc. While all this may be true it must be recognised that the rising capital-output ratio also reflects a

genuine change in the composition of investment — a shift in favour of more capital intensive industries. We shall return to the implications of this tendency later.

Table 2

Percentage of Net Fixed Assets Formation to Net Domestic Product

(Market Prices, 1960-61)

Year	Percentage	Year	Percentage
1960-61	9.7	1968-69	11.3
1961-62	8.7	1969-70	11.9
1962-63	9.6	1970-71	10.8
1963-64	10.1	1071-72	10.9
1964-65	10.7	1072-73	11.8
1965-66	13.4	1073-74	11.8
1966-67	13.9	1974-75	11.0
1967-68	11.7		

Source: S.L. Shetty - Structural Retrogression in the Indian Economy. Econ. & Pol. Weekly reprint, 1978, table 30.

Meanwhile we have estimates of annual compound rates of growth of major functional groups of industries for different sub-periods between 1961 and 1973 reproduced in Table 3. It will be evident that except in the years 1966-68 basic industries and capital goods industries have grown faster than consumer goods as a whole. Within consumer goods durables, consumed mainly by the upper income groups, have grown faster than non-durables. However Table 3 is still a very aggregative picture

Table 3

Annual Compound Rates of Growth of Major Industrial Groups in the Index of Industrial Production

Industry Group	Annual Compound Rates of Growth			
	1961-73	1961-65	1966-68	1969-73
(0)	(1)	(2)	(3)	(4)
1. Basic Industries	6.72	10.4	5.9	5.2
2. Capital Goods Industries	4.76	19.5	-4.8	5.4
3. Intermediate Goods	3.89	7.0	1.9	3.4
4. Consumer Goods	4.07	5.0	1.1	4.2
(a) Consumer Durables	9.08	10.7	8.5	4.4
(b) Consumer Non-durables	2.81	3.8	-0.9	4.1
General Index	4.88	9.00	1.60	4.50

Source: Studies in the Structure of Indian Economy and Planning for Development, Planning Commission, 1977, table 9.

distorted by the atypical performance of individual industries with a large weightage within the major functional groups. A more detailed industry-wise table given in the Appendix shows that within Basic Industries old industries like iron & steel and mining & quarrying which have large weights have done very badly. By contrast, electricity generation and some relatively new industries like heavy chemicals, fertilisers and aluminum have grown much faster. If the large but atypical industries like iron & steel and mining & quarrying

were kept out Basic Industries as a group would appear to have grown much faster. Exactly the same holds for railway equipment in the Capital Goods sector which has a large weight and showed negative growth from the mid-sixties to the early seventies. Relatively new industries like machinery production, power equipment, cables and wires etc. have grown much faster. The group would therefore show a much higher growth if railway equipment were left out. The peculiar case of slow growth in the Intermediate Goods sector again seems to be largely attributable to cotton spinning and jute manufacture which have done very badly compared to the other industries in this group but completely dominate the group in terms of weighting. In short older and therefore much larger industries seem to have grown very slowly and their performance dominates the picture of aggregate performance in the manufacturing sector. In contrast the disaggregative picture shows a large number of relatively new industries whose relative weights are still low but which have been growing much faster. These seem to be mainly industries concentrated in the chemical, machine building and electrical goods sector. This includes electrical appliances, communication equipment, motor cycle etc. classified under consumer goods.

These differential growth rates of old and new industries which show up so clearly at the disaggregated level are already beginning to reflect themselves even at the aggregative level. Reproduced here in Table 4 is the changing weighting pattern of the major functional groups of industries in the index of industrial production. While the share of capital goods industries increased by nearly four times from 4.71% in 1956 to 16.76% in 1976, the share of basic industries also went up

Table 4

Changes in Weights of Major Industrial Groups in the Index of Industrial Production

Industry Group (0)	1956 (1)	1969 (2)	1965 (3)	1970 (4)	1976 (5)
1. Basic Industries	22.13	25.11	26.84	32.28	36.14
2. Capital Goods Industries	4.71	11.76	18.67	15.74	16.76
3. Intermediate Goods	24.59	25.88	23.60	20.95	19.27
4. Consumer Goods	48.37	37.25	30.89	31.03	27.83
(a) Consumer Durables	-	5.68	6.15	2.92	2.78
(b) Consumer Non-durables	-	31.57	24.75	28.11	25.19
General Index	100.00	100.00	100.00	100.00	100.00

Source: S.L.Shetty, op.cit. table 8.

substantially from 22.63% to 36.14% over the same period. In contrast the share of consumer goods has come down drastically from 48.37% to 27.83%. Within consumer goods the share of durables has fallen from 5.69% in 1960 to 2.78% in 1976. That of non-durables came down from 31.97% in 1960 to 25.19% in 1976. The share of intermediate goods industries also has come down from about 25% in 1956 to just under 20% in 1976. But we have seen already that this is largely due to the slow growth of just two industries, viz., jute manufacture and cotton spinning.

It should be clear by now how capital has been reorganising itself in the industrial structure and where the new investments are going. These major changes in the industrial structure have some far reaching implications. I would like to note some of them briefly:

(i) The structural transformation of Indian manufacturing industries, the shift from old and stagnating industries to new and rapidly growing ones, entails a reorganisation of the aggregate social capital on a much wider and more fundamental scale than the concentration of markets in existing industries. As such it is a much more time consuming process than the market concentration which occurs between the end of one boom period and the beginning of another. The crisis which manifests itself in the interregnum while capital reorganises at the level of industrial structure rather than the market structure is therefore much longer — in our present experience a crisis which has lasted already for over fifteen years. This gloomy picture of stagnation at the aggregative level notwithstanding, it should be obvious that if the trends presently discernable at the disaggregated level persist then in the not so distant future - once a certain critical weighting balance between old and new industries is passed — the growth rate of the manufacturing sector as a whole should increase substantially.

(ii) In terms of an input based classification of industries there seems to be a very clear shift of the manufacturing sector away from the primary input based industries. Particularly away from the agro-based industries, but also away from industries based on mining, quarrying and the processing of some of these basic ores. That is to say,

industrial capital seems to be detaching itself from the primary sector, particularly agriculture, in its backward linkages. To the extent that it succeeds in doing this, the slow growth of that sector will cease to act as a drag on manufacturing growth on the supply side.

iii) However, in another sense a reverse process is also in the making. By their very nature the new industries are energy intensive. As such the energy coefficient of manufacturing will continue to go up as the new industrial structure gradually establishes itself. Whatever the manner in which the energy is consumed, so long as we continue to depend on fossil fuels like coal and petroleum the supply of these primary sector products will appear more and more as basic physical constraints to the accumulation of industrial capital. Already today power shortage has become chronic in several States in the country and it is no coincidence that industrialists repeatedly point to the coal-railway-electricity complex as the source of their problems. It is simply a roadblock which capital is actually experiencing in its attempt to transform the industrial structure.

iv) A fourth characteristic of the emerging industrial structure, already noted earlier, is the shift to capital-intensive industries and to more capital-intensive techniques within industries. This entails at the same time a decline in the labour component in manufacturing industry. The sluggishness of employment growth has been widely noted. What bears emphasis is that while the average annual growth rate of employment in the overall economy came down from about 6.8%

in 1961-66 to only 2.5% in 1966-77, it fell even more sharply in the manufacturing sector from 6.7% to as little as 1.7% between the same periods (see Shetty op.cit, table 24). A point much emphasised by Shetty in his analysis of structural retrogression, this trend may continue even when the overall growth rate picks up and not much purchasing power is likely to find its way to the large mass of consumers — a point we shall return to latter.

v) Finally by the end of this phase of capital reorganisation, the accumulation of capital will be much less dependent on the level of consumption demand -- especially the demand for mass consumer goods. As noted in the preceding para, the emerging new industrial structure is unlikely to create much purchasing power among the large mass of consumers. However this is unlikely to hamper the accumulation programme very much since it would in any case have detached itself to a large extent from the market for mass consumer goods. The share of consumption goods in the final output of the manufacturing sector has already come down substantially and this process is likely to continue as the new industrial structure establishes itself.

c. Ancilliarisation and Dualism

While the transformation of the industrial structure serves as the principal level of capital reorganisation in the current crisis, there is another kind of reorganisation which is underway in the organisation of production within individual industries. This is the process of ancilliarisation or sub-contracting. Wherever this is

technologically feasible as in discrete processing, fabrication and assembly type industries, provided cost efficient production levels are attainable within relatively small sized plants, corporate capital finds a number of advantages in farming out the earlier stages of production to small ancilliary units while itself undertaking only some strategic stages of production such as the final assembly. Principally, these advantages would relate to: (i) Savings in capital equipment, inventories and working capital upstream in the production process. (ii) The elimination of a whole range of problems in personnel management and industrial relations which arise typically in large organisations where workers can unify in large trade unions and enhance their bargaining positions vis-a-vis management, where protective factory and labour legislation apply, etc. (iii) The use of the ancilliaries as shock absorbers with the brunt of the impact of market fluctuations being passed on to them. (iv) Having them compete with each other for the orders as well as assistance from the apex firm so as to ensure minimum costs. Not being saddled with large overheads, and also being beyond the coverage of various protective industrial labour laws, the small ancilliary units are often able to operate with lower costs.

For these reasons it is believed that capital in the large scale organised sector is increasingly linking itself to small units for ancilliary production. This marks a major qualitative change in the whole character of small scale production in India from the traditional forms of independent household production to that of satellite

units producing for large firms. There is in other words a tendency towards the development of a new kind of dualistic production structure where an organised sector of large scale production with low employment, high wages, high productivity and high mark-ups is organically linked to an unorganised sector of small units with low wages, or even employing mainly family labour, and very low mark-ups over cost. It is not necessary that small units should have either low capital intensity or low productivity. Though this may be the case initially, both may be expected to rise with careful technical and financial assistance from the principal firm.[14/]

There are of course some clear technological limits to these trends. Technologies requiring large units or those which have little scope for breaking up the production process into discrete stages would rule out ancilliarisation or the kind of monopsonistic structure of intermediate markets described above. There is however another form in which large corporate capital can exercise control over small production in general -- and this is by taking over the marking function or distribution of the product without getting involved in production at all. Typically small scale producers find it difficult to undertake their own marketing and generally tend to leave the marketing to other agents. Systematic data is not available. But the data given in table 5, pertaining to the Agra region, shows for

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14/ There is indeed some evidence to suggest that capital intensity in small units is often quite high. See J.C.Sandesara - Size and Capital Intensity in Indian Industry. Bombay University Press, Bombay, 1969.

Table 5

Percentage Share of Distributor Sales to Total Sales
Small Scale Industries in the Agra Region

Industry	Distributor Sales (%)
1. Paper and allied products	23.7
2. Scientific instruments and chemicals	17.9
3. Agricultural implements	89.7
4. Steel Furniture	31.5
5. Leather and rubber products	81.5
6. Glassware and pottery	55.0
7. Radios and transistors	23.5
8. Readymade garments	40.9
9. Plastic products	89.5
10. Miscellaneous	60.0
Average for all industries	68.8

Source: S.P. Mathur - Economics of Small Scale Industries, Sundeep Prakashan, New Delhi, 1979, table 33.

instance that nearly 70% of the marketing is left to distributors. If this marketing function in specific small scale industries is systematically taken over by large firms it is easy to see that once again a monopsonistic structure analytically similar to the anci-llliarisation case discussed earlier would appear. A few large buyers would use their market power to purchase the products at prices leaving very low margins to the large number of small producers and then add large mark ups of their own to sell as oligopolists in the next stage of the marketing channel.

Much of what has been said here is impressionistic and systematic evidence is not easily available, especially for the period since the mid-sixties which is the relevant period for our hypothesis. There are however some fragments of evidence which suggest that the kind of reorganisation we have discussed has in fact occurred, leading to a rapid growth of small scale industries since the mid-sixties. A recent study states for instance:

> "Since 1965, there has been an even more significant growth in the investment, employment, output and contribution to the national income made by the small scale sector .... it employs about 50 per cent of the total factory labour of the country ... it is pertinent to point that the small industry is providing an increasingly larger share of the ancilliary components to large industry." 15/

Similarly, estimates given by a study of small industry in Rajasthan, reproduced here in table 6, show that growth of the number of small scale industries registered with the directorate of industries in that State fell drastically throughout the sixties but had again started rising very sharply by the early seventies.

Another estimate for Maharashtra, one of the main regions where ancilliarisation has occurred on a wide scale, states that the number of small scale units have increased by around 800% from only 4,860 units in 1961 to some 43,851 units in 1977. The number of workers employed in these units accordingly increased from 90,700 to 599,000 over the same period. 16/

15/ See Ram K. Vepa - Small Industry in the Seventies. Vikas Publications, Delhi, 1971, p.25.

16/ Labour Gazette report cited in J. Banaji - "Accumulation and Exploitability - Some Notes for a Study of Industrial Capitalism in India", Paper presented to the UNITAR Conference on Alternative Development Strategies and the Future of Asia held in New Delhi, March, 1980.

Table 6

Small Scale Units registered with Directorate of Industries, Rajasthan

Year ended	No. of Units	Period	%Change (Annual Average)
1956	356		
1961	1,956	1956-61	90
1967	5,721	1961-67	32
1971	8,970	1967-71	14
1973	18,975	1971-73	56

Source: H.S.Pareek - Financing of Small Scale Industries in a Developing Economy, National Publishing, Delhi, 1978; table 2.4.

Finally we have an interesting table in Shetty's earlier cited work, which gives the quality composition of cotton cloth production at different points of time. It will be noticed that the production of mill-made cotton cloth has been declining absolutely right from the mid-fifties while its quality composition has also not changed much, coarse and lower medium varieties still accounting for about 43% of output. On the other hand handloom and powerloom production outside the organised mill sector has increased nearly 2.5 times over the same period. Consequently in the cotton cloth production industry as a whole the unorganised sector which accounted for roughly 25.5% of the total output in 1956 had doubled its share to 51.1% by 1976.

Table 7

Quality Distribution of Cotton Cloth Production

(million metres)

Year (0)	Total mill production (1)	Of which coarse & lower medium cloth production (2)	Handloom and power-loom production (3)	Total cloth production [(1)+(3)] (4)	%share of unorganised sector [(3)/(4)] (5)
1951	3727		1013	4740	21.4
1956	4852		1663	6515	25.5
1961	4701	2318 (49.3)	2372	7073	33.6
1966	4239	1850 (43.6)	3097	7336	42.2
1971	3957	1541 (38.9)	3399	7356	46.2
1976	3881	1683 (43.4)	4064	7945	51.1

Source: S.L.Shetty - op.cit, table 12.

I am aware that the fragments of evidence just presented are open to various interpretations and by no means conclusive. Nevertheless, confirming as they do our a priori expectations, it seems reasonable to suggest that a certain dualistic structure of production is establishing itself where the small scale sector is not only growing alongside the so called organised sector but is in fact getting organically linked to the latter either in terms of actual ancilliarisation or through the take-over of the marketing function as major operations by the large firms.

This third level of capital reorganisation, the creation of a dualistic but at the same time interlinked production structure, is probably quite recent --at least as a general phenomenon -- and quite different from the traditional type of small industries. As such the process has neither been substantially documented nor have its full implications been properly explored. We have before us however the interesting historical experience of Japan.

Historical comparisons are always fraught with the danger of mechanically projecting the experience of one historical conjuncture across time and space to another conjuncture without adequately recognising the specific differences between the two. Especially in the case of comparing Japan's industrialisation experience with our own it has often been pointed out that during forty years or so at a very early stage of its industrialisation Japan was an imperial power while India is not. The contrast on this ground is probably overdrawn since what

what Japan gained in terms of raw materials and markets in Taiwan, Korea and Manchuria, India in any case has within her own national economy given the fact that we are not a small island economy. What is more to the point, it seems to me, is the particular economic structure India inherited from her long Colonial past -- a legacy which Japan never had to grapple with in her drive to industrial maturity.

I do not see, however, why this particular difference in the initial conditions of industrialisation should render illegitimate the particular comparison I have in mind, namely the emergence of a dualistic structure of the kind discussed here in the organisation of industrial production. There is some evidence to indicate that there is a distinct contrast here. As I have suggested above, this particular form of capital reorganisation is a relatively recent phenomenon in India. It is a strategy that capital has not systematically employed before. In contrast the case of such dualistic structures of production and technology have been very much a part of the Japanese industrialisation experience, as also the role of trading houses which developed and controlled widespread distribution networks, both within and outside the Japanese economy, from the very beginning.[17/] The cost advantages inherent in these production and marketing structures and their implications for Japan's industrialisation and eventual penetration of highly competitive international markets is too well known to require further

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17/ For some evidence of the contrasts in technological choices, manufacturing organisation etc. between India's early industrialisation experience and that of Japan, see Sudipto Mundle - Technology, Labour Intensity and the Organisation of Industrial Production: A Tentative Comparison of India and Japan, CDS Working Paper No.118, (mimeo) 1980.

emphasis. Now that this has appeared in India as what seems to be the third level of capital reorganisation in response to the current crisis of accumulation, the question needs to be seriously posed as to what are its implications in terms of India's own economic conjuncture both internally and in the context of the international economy.

d. New Techniques and Work Reorganisation

I have tried to sketch above what seem to me to be the three main levels of capital reorganisation underlying the aggregate phenomenon of crisis or retrogression. In addition to these there is also a fourth level at which capital is reorganising itself and that is the level within individual units of production both in the large scale organised sector as well as within the so-called unorganised or small scale sector which is organically linked to it. This is the level at which new techniques are introduced and along with the transformation of production processes there comes the reorganisation of the labour process itself. A movement aimed directly at raising not only the productivity of labour but also the share of the surplus and hence the rate of profit. There is no attempt to either analyse or document this level of capital reorganisation here, largely because the present author lacks the technical competence necessary to seriously observe and analyse these processes. Processes which are best understood by the managers, technicians and above all the working men who directly experience these processes.[18/] Nevertheless it needs to be recognised that

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18/ Braverman's well known work is perhaps the example that comes to mind most easily. See H. Braverman - Labour and Monopoly Capital: The Degradation of Work in the Twentieth Century. Monthly Review Press, New York, 1974.

this is also one of the major levels of capital reorganisation.

The burden of the entire argument offered in this section is to suggest that the current crisis of accumulation must be read not only as a period of stagnation or retrogression but also a phase of substantial capital reorganisation. Reorganisation at various levels, especially the transformation of the industrial structure, which capital is carrying through before it can resume a normal programme of accumulation. In particular the period should not be read as some sort of permanent crisis, dead end or prelude to a breakdown of the system of capital production which is how it has been read in some formulations deriving from Realisation Theory - in particular the underconsumptionist variants of that theory.[19] It is entirely a different matter that the resumption of normal accumulation will have nothing much to offer the overwhelming majority of Indians who lack the means to live like normal human beings. That is not the concern of capital.

19/ Perhaps one could extend this to an analysis of the developed capitalist countries as well and argue that in establishing and focussing entirely on the causality between the development of oligopolistic market structures and stagnation Realisation Theory has failed to grasp the many other levels at which capital can manouver and reorganise itself. Steindl's shift of emphasis, as in Kalecki's work, on the role of technical progress is instructive; as also the current optimism of the Post-Keynesian tradition (see the references in footnotes 4 and 5 above). However this is beyond my present concern.

IV: Land and the level of living

The only real concern of capital is capital itself and the prospects of its own expansion. It is only from this particular point of view that capital is ever interested -- or rather compelled -- to consider the conditions of existence of the large mass of people. That is to say that to the extent the low purchasing power of the consuming population acts as a barrier to the self-expansion of capital, the latter is concerned with questions of poverty, inequality etc. This I believe is the core of the under-consumptionist argument that inequalities in income distribution and poverty of people obstructs the programme of accumulation. It is true that the over production of capital in relation to the size of the surplus manifests itself as an over production of commodities, including consumer goods, in relation to the size of the market, but the market is not only a market for consumption goods. It is also a market for the means of production. And in reorganising and expanding itself capital also expands the size of the market. The limitation of the market is only a passive manifestation in the sphere of circulation of crisis which invariably have their origin in the sphere of production. It appears and vanishes with the appearance and resolution of the latter. The demand for consumption goods is therefore a problem by itself only in so far as the production of constant capital in Department I requires labour which must be sustained by the consumer goods produced in Department II. This requires the maintenance of certain material and value balances between the two. Capitalist production not being centrally planned

production these balances can and do get disturbed from time to time.

This apart the size of the market for consumer goods, or the purchasing power of consumers underlying it, is of no concern to capital. Indeed it is by now a well established fact of history that as accumulation proceeds a smaller and smaller proportion of output is made up of the items of consumption and capital increasingly detaches itself from the market for consumer goods. As we have seen in the preceeding section, this is also one of the principal characteristics of capital reorganisation in our current crisis

So the well being of the people is not the concern of capital. But for people themselves it is very much <u>the</u> concern. And while our analysis may lead us to see that growth and the accumulation of capital will resume once capital has adequately reorganised itself, the really important question to be answered is how this resumed accumulation will affect the material conditions of the people. As we have suggested from the outset, it is not likely to make much of a difference. By its very nature the manner of reorganisation that capital is undertaking is unlikely to generate much employment. Our earlier evidence has indicated that there is not only a shift away from labour intensive to less labour intensive techniques of production, as is generally the case in all technical change outside agriculture, but also a shift away from whole <u>branches</u> of production which are labour intensive to those which are less labour intensive. As such even when the accumulation of capital is revived, this is not likely to either generate much employment or place much more purchasing power in the hands of the working

people.[20] The best that can be hoped for, at least for the next decade or two, is that the growth of manufacturing and allied activities in non-agriculture will absorb the internal growth of the work force within the sector.

Meanwhile there is the remaining seventy per cent or so of our population who make their livelihood out of agriculture and will have to continue to do so. All that we have said so far about capital reorganisation and resumed accumulation in industry is therefore, from the point of view of this seventy per cent, quite irrelevant. And at its roots the question of material well being of the large majority of Indians is really the agrarian question. It is possible that eventually agriculture itself will be industrialised. That is to say, agricultural enterprises -- whether large capitalist farms or small peasant farms-- may become highly productive and technologically 'controlled' units of production fully integrated within a vast industrial organism, much like the ancilliary manufacturing units of today or the plantations. In many of the presently industrialised countries this industrialisation of agriculture has already occurred. But in India this is a prospect-- if it is a prospect at all-- of the distant future. No such transformation is forseeable in the near future within this system. So far as the next decade or two is concerned, therefore, it seems prudent to base our expectations on trends observed in the recent past.

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[20] This situation is not likely to be much altered by the growth of the small scale sector either. As we have tried to indicate earlier, the new kind of small units which are likely to grow most rapidly as ancilliaries to large industry are not like the traditional small scale industries. The labour employed in relation to means of production is often quite low, for the prime consideration here is really to get high productivity without the accompanying high wages of the organised sector.

Land, the principal means of production in agriculture, cannot be extended once the entire available area has been colonised. Nor can it be manufactured like the means of production in industry. The question of the material well-being of the agrarian population is thus, principally, a question of the distribution of land. It can be argued here that while the mass of land available cannot be extended its productiveness can be increased which, analytically, would amount to much the same thing for our purpose. While this is true, it must be recognised that the pace at which this productiveness can be raised is excruciatingly slow compared to the possibilities in manufacturing industry. According to one estimate, for instance, the trend rate of growth of crop production in India since 1950-51 has been only of the order of 2.6% per annum.[21] And this is by no means a low rate of growth for agriculture in comparison with known international standards.

Since a part of this growth in crop production has come out of increases in acreage, the rate of growth of land productivity itself is still lower though, admittedly, this has accounted for a relatively larger component of growth in recent years than in the earlier years

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21/ See A.Vaidyanathan - Performance and Prospects of Crop Production in India. Economic and Political Weekly, Special Number August 1977. There has been an extended discussion about what was the actual rate of growth and whether it has declined in recent years. Obviously there is no such thing as the trend rate of growth since the exact number would depend on which out of a number of possible alternative curves one chooses to fit. And the high coefficient of explained variation is by no means an adequate criterion for choice. However, estimates generally vary between 2% per annum to 3% per annum and while there has been some dispute as to whether the growth rate in agriculture has fallen the important point is that no one has seriously claimed that it has risen - the Green Revolution notwithstanding.

upto about the mid-sixties. Finally it has to be kept in mind that this slow growth of land productivity has been offset to a considerable degree by the increasing pressure of population on land. It will be noted from table 8, for instance, that while the total rural (agricultural) area operated went up by hardly 9% from 336 million acres in 1954-55 to 366 million acres in 1970-71, the number of rural (agricultural) households supported by this land went up by as much as 31% from 61 million households to 80 million households over the same period. The average operated area available per household thus came down from 5.5 acres in 1954-55 to 4.6 acres in 1970-71. The land-man ratio, measured as rural (agricultural) operated area per head of rural (agricultural) population declined during this period from 1.28 acres per head to about 0.96 acres per head.[22/] Thus, even after allowing for increases in productiveness, the availability of land so augmented cannot be taken to have increased very significantly in relation to the population which it has to support. Which brings me back to my original point that primarily it is the distribution of land which governs the material standards of living of the large mass of people in the Indian context.

Information on the distribution of households and operational holdings by size groups of operational holdings in 1954-55 and 1971-72

22/ The rural (agricultural) population estimates used for this calculation are based on S. Mundle - Surplus Flows and Growth Imbalances. Allied Publishers, New Delhi, forthcoming. It has been pointed out to me by Professor Vaidyanathan that a calculation based on the NSS landholding data is likely to underestimate the land-man ratio since the total operated area as per NSS estimates is less than the actual. But since the same data source is used for both points of time, the direction of change indicated here is probably unaffected by the bias.

Table 8

Distribution of Households & Operational Holdings by Size Class of Operational Holdings in Rural India (agricultural).

Size Class of Holdings (acres)	Number of Households (millions)			Area Operated (millions			Distribution of Households (%)		Distribution of area operated (%)		Relative gain/ Loss in share of operated area (%)
	1954-55	1971-72	%Change 1954-55 to 1971-72	1954-55	1971-72	%Change 1954-55 to 1971-72	1954-55	1971-72	1954-55	1971-72	(col.10/col.9-1)x100
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0.00	17.2	21.9	27.3	-	-	-	28.2	27.4	-	-	-
0.01-0.99	8.6	11.9	38.4	3.6	6.2	72.2	14.2	14.9	1.1	1.7	72.2
1.00-2.49	8.5	14.4	69.4	14.6	27.7	89.7	14.1	18.0	4.3	7.6	41.7
2.50-4.99	9.1	13.2	45.1	33.6	54.4	61.9	15.0	16.4	10.0	14.9	
5.00-7.49	5.3	6.9	30.2	33.2	48.7	46.7	8.7	8.7	9.9	13.3	
7.50-9.99	3.3	3.4	3.0	29.3	34.0	16.0	5.4	4.3	8.7	9.3	10.8
10.00-14.99	3.4	3.8	11.8	42.1	52.0	23.5	5.6	4.7	12.5	14.2	
15.00 & above	5.5	4.5	-18.2	179.3	142.7	-20.4	9.0	5.6	53.4	39.0	-27.0
Total	61.0	80.0	25.0	335.7	365.7		100*	100	100*	100	

Source: Computed from K.N.Raj - Peasants & Potatoes, Centre for Development Studies Working Paper No.123, Table 1. *Colums do not add up to 100 because of rounding errors.

based on NSS landholding surveys, has been summarised in Table 8. The extreme inequality of the distribution of operational holdings will be obvious straightaway from fractile comparisons of the distribution of area operated against that of households in either year (columns 7 to 10). Thus in 1971-72 while the top 10% of all households operated as much as 53.2% of total operated area, or the top 14.6% of households operated 62.5% of the area, the lowest 27.4% of households at the other end of the distribution did not operate any land at all. Or the lowest 42.3% of households operated only 1.7% of the total area.

What is important to note, for purposes of identifying the dynamics at work, is however the changes in the shares of the different size classes over the twenty five year period.(col.11). Thus the share of holdings of size less than 2.5 acres went up the most - by as much as 72.2%, followed by holdings in the size class of 2.5 to less than 7.5 acres which raised their share by 41.7%. Holdings in the next higher size groups of 7.5 to less than 15 acres raised their share by only 10.8%. Finally the share of holdings of the size of 15 acres or more decreased by 27.0%. There seems to have been therefore a marked shift of the distribution away from the larger sized operational units in favour of smaller units, the relative gain in share of total operated area being inversely related to the size class of operational holdings.

This inverse relationship becomes very clear when we look at changes in the number of households or total operated area within each size class. Once again we find that there has been a maximum increase in the number of households operating holdings of less than 2.5 acres, particularly holdings of the size of 1.0 to 2.49 acres (cols.1 to col.3). This is followed by a substantial though relatively smaller increase of households operating holdings of size 2.5 to less than 5 acres, a still smaller increase in households operating holdings of between 5 to less than 10 acres and so on till we reach households operating holdings of size 15 acres or more. The number of households in this size class actually declined from 5.5 million in 1954-55 to 4.5 million households in 1971-72. The pattern of increase (decrease) in total operated area in different size classes follows an identical pattern. (Cols.4 to 6). The area operated in each except the highest size class has grown while the proportion of increase seems to be inversely related to the size class. These increases have come partly out of the decrease in area under the largest size class -- a decrease of 36.6 million acres -- and partly out of an increase of 30 million acres in total operated area.

The basic dynamic of the situation, therefore, seems to be quite clear. With the increasing pressure of population on land a growing mass of rural households are being forced to operate on progressively smaller plots of land. This has some serious, if obvious, implications not only for the material conditions of the self-cultivating peasant households but also for the levels of living of rural or agricultural

labour households. As these growing numbers of cultivating households are forced to make do with smaller plots, they are not only unable to employ any outside labour on their own plots but are on the contrary themselves forced to search for work outside in order to augment their dwindling income from own cultivation. Where the whole or a part of the operational holdings is leased in, the terms of lease are also possibly getting more harsh. The smaller the size of the operating unit, the greater is the dependence of these households on outside work. And at the bottom of this heap there is that vast collection of households, about 22 million of them in 1971-72, who are unable to operate any land at all and are forced to live entirely on the employment offered by others. The dividing line between these purely labour households and households operating the smallest plots of land is of course a meaningless one, both categories being dependent basically on employment offered by others.

On the one hand, therefore, the proportion of total operated area where employment is offered to outside labour is diminishing. On the other hand there is a growing number, and proportion, of households who must offer themselves partly or wholly for precisely such employment. The implications of this situation for the large mass of our rural population is frighteningly obvious.

It is captured, though only partly, in the estimates of wage earners from rural labour households based on the First and Second Rural Labour Enquiries presented in Table 9. I say <u>partly</u> because we have here only the estimates corresponding to those households whose <u>main</u> source of income is from labour. There would be in

Table 9

Number of Wage Earners in Rural Labour Households

	1964-65	1974-75	increase (%)
Men	20.5	30.5	48.8
Women	12.8	20.6	60.5
Children	2.0	3.5	77.6
Total	35.3	54.6	54.7

Source: K.N. Raj - Peasants & Potatoes, Centre for Development Studies, Working Paper No.123; table 2.

addition to this a sizeable group which offers itself for labour but is not represented here because they come from households where the main source of income may be own-cultivation or some occupation other than labour.

Even this partial evidence however is enough to tell a grim tale. In the ten years between 1964-65 and 1974-75, the total number of wage earners from rural labour households had increased by over 54%. But among these the number of women wage earners grew much faster than men wage earners and child labour grew the fastest of all. In view of the arguments presented earlier, it should be obvious that these growing numbers do not reflect by any means a buoyant demand situation with employers running after labourers in the wake of a booming growth of agricultural output. The situation is in fact quite the reverse. The demand for agricultural labour may have actually stagnated or even shrunk. On the other hand, unable to subsist any more on their shrinking units of land the large mass of peasant households are now being forced to send out in increasing numbers not only the men but also the women and children to get such employment as they can and to somehow eke out a living. And while the number of wage earners is increasing, the number of days of employment per head is probably diminishing.

Our interpretation of the rural situation as one of extreme deprivation --and growing desperation --is easily confirmed by such evidence as is there on the levels of living of the rural poor. On a recent reckoning, based on a consumption level of Rs.15 per head

per month at 1960-61 prices, it turns out that roughly half the rural population has been subsisting at or below this level.[23] It should be obvious that the level in question here is really a level bordering on starvation. And half the rural population below that level means well over 200 million people. But as I have said earlier, this is not the concern of capital.

I have confined myself here to observations at an aggregative level. For an agrarian system as large and varied as ours this is hazardous. However, the basic causality between a deteriorating land: man ratio and the spread of impoverishment, via the changing operational distribution of land, which has been outlined here would probably survive the required disaggregative analysis. It should be immediately emphasised that what has been said here is not offered as an analysis of the agrarian system as such. I have only underlined what seems to me to be one important dynamic of this system. And it needs to be added here that our reading of a system based on the distribution of land perhaps ought not to be forced into the framework of a theory built primarily to analyse the system of capital accumulation in industry. Both systems conform to the general laws of historical development and their movements are certainly inter-related. But their specific dynamics are quite different.

22/ M.S.Ahluwalia - Rural Poverty and Agricultural Performance in India, Journal of Development Studies, April 1978.

APPENDIX: COMPOUND ANNUAL GROWTH RATES AND WEIGHTS IN THE INDEX OF INDUSTRIAL PRODUCTION

INDUSTRY	INDEX OF INDUSTRIAL PRODUCTION ANNUAL COMPOUND RATES OF GROWTH				WEIGHTING IN THE INDEX OF INDUSTRIAL PRODUCTION	
	1961-73	1961-65	1966-68	1969-73	1960	1970
(0)	(1)	(2)	(3)	(4)	(5)	(6)
I. BASIC INDUSTRIES	6.72	10.4	5.9	5.2		
1. Mining & Quarrying	3.48	5.7	3.1	2.6	9.72	9.69
2. Salt Refining					0.19	0.21
3. Heavy Organic Chemicals	10.30	16.4	8.1	7.9	0.10	0.54
4. Heavy Inorganic Chemicals					0.60	1.01
5. Fertilizers	28.04	20.3	21.2	17.9	0.46	1.39
6. Cement	5.72	6.2	4.2	4.7	1.17	1.17
7. Iron & Steel Basic Industries	2.86	13.1	0.0	1.4	6.23	7.04
8. Aluminium manufacturing	14.57	18.7	19.3	5.5	0.57	1.30
9. Brass Manufacturing					0.29	0.35
10. Electricity	11.13	13.8	11.8	7.6	5.37	9.28
II. CAPITAL GOODS INDUSTRIES	4.76	19.5	-4.8	5.4		
11. Machinery, apparatus and supplies for Power Transformers	11.24	33.8	-7.7	9.6	0.38	1.48
12. Electrical Motor/ Furnaces	9.23	34.4	4.1	-1.7	0.27	0.35
13. Cables & Insulated Wires	7.54	14.7	-1.2	9.5	0.68	0.85
14. Railroad equipment	-8.20	21.0	-20.4	-7.7	3.50	2.99
15. Motor Vehicles	4.68	6.3	3.2	3.5	2.51	3.03
III. INTERMEDIATE GOODS	3.89	7.0	1.9	3.4		
16. Cotton Spinning	1.28	3.9	0.9	1.0	11.79	6.24
17. Jute Manufactures	- 1.79	3.8	-7.1	-1.2	3.97	2.71
18. Tyes & Tubes	9.26	11.7	9.5	6.5	1.48	1.43
19. Synthetic Fibres	5.97	11.7	9.8	0.1	0.64	1.19

APPENDIX (Contd.)

(0)	(1)	(2)	(3)	(4)	(5)	(6)
20. Dye stuff and dyes	6.96	7.2	8.5	3.2	0.61	0.63
21. Paint, varnish and lacquer					0.32	0.30
22. Petroleum Products	10.98	9.7	17.9	5.0	1.34	1.62
23. Structural Clay Products	11.77	4.4	23.3	11.0	0.77	0.65
24. Batteries					0.38	0.55
IV. CONSUMER GOODS	4.07	5.0	1.1	4.2		
A. CONSUMER NONDURABLES	2.81	3.8	-0.9	4.1		
25. Sugar factories and refineries	3.24	4.5	-12.2	11.0	3.50	2.79
26. Hydrogenated oil (vanaspati)	4.33	4.9	3.4	-0.3	1.09	0.68
27. Tea	2.10	2.7	-2.8	6.8	5.12	2.57
28. Cigarettes	4.43	7.9	3.8	0.7	2.15	2.21
29. Cotton textile weaving	-0.73	0.0	-1.3	-0.6	9.39	5.41
30. Woollen fabrics					0.36	0.31
31. Paper & Paper Products	7.32	8.0	7.9	5.3	1.61	2.24
32. Footwear					0.43	0.44
33. Fine & Pharmaceutical chemicals	3.85	6.0	4.9	4.4	2.21	3.12
34. Soapes & detergents	8.65	3.9	8.5	8.5	0.95	0.65
35. Matches	-1.73	2.1	-4.1	-5.3	0.50	0.26
36. Glass & Glass Products	2.10	5.6	-2.7	3.5	0.57	0.50
B. CONSUMER DURABLES	9.08	10.7	8.5	4.4		
37. Commercial office & household machines	3.27	6.6	2.0	3.7	0.53	0.52
38. Electrical Appliances	7.78	8.8	3.8	8.8	0.56	0.97
39. Communication Equipment	18.80	16.8	32.9	3.9	0.61	0.48
40. Motorcycles & bicyles	10.14	10.5	10.1	8.5	0.62	0.75
GENERAL INDEX	4.88	9.0	1.6	4.5		

Source: Studies on the Structure of Indian Economy and Planning for Development, Planning Commission, G.O.I., 1977, Tables 9 and para 19.