

THE INDIAN PLANS

ACHIEVEMENTS

PREDICAMENTS

CRISIS

by

Dhires Bhattacharyya

CALCUTTA

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ANITA MEMORIAL LECTURES

for 1968

Delivered at the University of Calcutta.

by

Dhires Bhattacharyya



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INTRODUCTION

The essays published here were originally delivered as Anita Ray Chaudhuri Memorial lectures at the Department of Economics, Calcutta University. Tributes to the young lady in whose memory the endowment for these lectures was instituted were paid on the occasion by Dr. Saroj Kumar Basu who kindly agreed to preside over the lectures and by Prof. Amlan Datta, Professor and Head of the Department. These essays are dedicated in all humility to that noble soul so prematurely called to eternal rest.

I am personally grateful to Dr. Saroj Kumar Basu for having generously agreed to conduct the proceedings on all the three days at considerable inconvenience to himself. I also express my appreciation of the patient hearing given to these lectures by the staff and students of the Department of Economics. The comments made on some portions of these lectures by Prof. Amlan Datta and Shri Ashim Das Gupta are thankfully acknowledged, although I have not been in full agreement with their preferred points of view.

Finally, thanks are due to Shri Sushil Kumar Basu of Messrs Progressive Publishers who arranged within a short span of time to bring these lectures to the notice of a wider public.

Calcutta,
February 8, 1970

Dhires Bhattacharyya.

Anita Raychaudhuri :

A BIOGRAPHICAL SKETCH.

Anita Raychaudhuri (born as Anita Chowdhury and married to Shri A. Raychaudhuri) was born on November 14, 1927 in Dacca. She graduated with high second class Honours in Economics in 1948, and obtained a Master's Degree in Economics in 1950. She taught Economics for some time in Bethune College, Calcutta, Bengal Academy College, Rangoon and Delhi College, Delhi. Later, She joined the City University of New York in 1961 and did her M.A. in Economics with a thesis on 'Community Development in India.' She was awarded the Paul Abelson Scholarship by the City University of New York in 1961.

On her return from the United States in 1963, she joined Delhi College. On November 20, 1963 on her way to the College she met with a serious traffic accident. Though she recovered from the injuries for the time being, she had to undergo an operation after a few months to which she succumbed on July 15, 1964. She is survived by her husband, a daughter and a son.

ACHIEVEMENT OF THE THREE PLANS

1.1. At the very outset of our discussion of the achievements of a planned economy in India it is imperative that we should make clear what we mean by the achievements of a Plan. In principle, a clear distinction ought to be made between the achievements of an economy during a Plan period and the achievements of the Plan itself, the latter of course being contained in the former. A certain amount of growth or qualitative improvement occurs in every economy during any period of appreciable length, such growth being the outcome of spontaneous efforts on the part of individuals or groups as well as of adventitious factors such as a more favourable climatic condition or an improvement in the conditions of foreign trade. In principle, again, the favourable outcome of increased investment during a certain period ought to be measurable separately and in isolation from the outcome of the same increment of investment under a planned system, the general presumption being that under a Plan the effectiveness of the same quantum of investment in the aggregate will be appreciably larger than in the absence of planning.¹ The achievement of the Plan will then consist in the difference between the values of the two outputs resulting from the same quantum of investment, one with the Plan and the other without. But when it cannot be asserted that the same amount of investment would have occurred in an economy if a Plan had not been adopted at the national level, it is inappropriate to distinguish between the effects of investment as such and the additional effects of planned investment ; the entire effect of such investment must be credited to the Plan itself.

¹ See, however, J. Jewkes — *Ordeal by Planning*. Also, G. Sirkin — *The Visible Hand*.

1.2. In practice, of course, it is difficult to isolate from the available statistics that part of the achievement during a planning period which can properly be attributed to the Plan itself from the other part which ought in principle to be attributed to natural or spontaneous factors or to an expansion of investment brought about by factors unconnected with the Plan. It is thus very likely that a study of the achievements of an economy where an economic plan has been in operation for some time will to some extent exaggerate the achievements of the Plan itself. But although statistical studies will usually fail to isolate what we really want to know about the effectiveness of a Plan, a sufficiently critical study of the records should indicate to what extent claims made in favour of a Plan are valid in their entirety and whether other extraneous factors have not operated simultaneously in favour of the results achieved at the end of a planning period.

1.3. After these preliminary reflections let us engage ourselves in a study of the achievements of the Indian economy during the first three Plans. It should be noted in this connection that the First Five Year Plan was not ready until December 1952 and public investment projects taken up before that date were not properly coordinated with one another nor were they linked up with the schemes of private investment being undertaken in the same period. Even during the rest of the five-year period 1951-56 public sector investment expenditure failed to follow in all respects the priorities laid down in the First Five Year Plan document. In particular, the industrial investment programme in the public sector lagged behind schedule. There was also little evidence of any systematic effort at synthesising public with private investment schemes by clearly demarcating the fields of operation of the private sector. As a result, the First Five Year Plan — as has often been pointed out — was little better than a catalogue of public investment projects aimed primarily at the development of the basic infra-structure of production. Investment in irrigation and power projects and in the rehabilitation and development of transport constituted the essence of the First Plan. Planning in the

sense of the coordination of investment activities throughout the economy took some more time to emerge. However, in so far as such investments were unlikely to have been undertaken without a special organisational effort in the public sector, their benefits must surely be counted as part of the achievements of planning.

1.4. Let us first note what public investment in the first three plans has achieved in the building up of agricultural over-heads. The 15-year long-term Irrigation Plan drawn up in 1951 aimed at doubling the irrigated area under large and medium projects. Even before the formal adoption of the First Five Year Plan a number of irrigation and power projects had been approved and some were actually in execution. On completion these projects were expected to irrigate about 22 million acres over and above the 24 million acres being irrigated by major and medium projects in 1950-51. The additional irrigation potential that was built up in the first ten years of planning has been estimated at 11.7 million acres. The level of utilisation of this potential was placed at 8.3 million acres or 77 per cent of the potential created. By 1965-66 the additional irrigation potential from large and medium projects may have reached 18 million acres, although a considerable part of this potential still remains unutilised. This means that altogether about 42 million acres of land could obtain the benefit of controlled water supply for purposes of cultivation from the major and medium projects, as compared with only 24 million acres at the commencement of the Planning era. The improvement in agricultural yields recently noticed in different parts of the country must be due in no small measure to the assured water supply from already completed irrigation projects.

1.5. While the irrigation potential from major and medium projects can be more or less definitely estimated, that from minor projects (including tubewell irrigation projects) is more difficult to establish. According to one estimate minor irrigation projects may have benefited about 4.7 million acres during the first ten years of planning. In the Third Plan minor irrigation was assigned a more important role. It is expected that irrigation

was extended to another 9 million acres or so through the minor irrigation schemes included in the Third Plan. The gap between utilisation and potential, a conspicuous feature of the major and medium projects, is unlikely to be significant in the case of the minor projects. Thus while minor irrigation projects benefited 32 million acres or so of agricultural land at the commencement of planning, the extent of area benefited by such projects at the end of the Third Plan could be as high as 46 million acres. If these estimates are correct, the area capable of being irrigated from all sources may have increased from about 56.5 million acres in 1950-51 to about 88 million acres by 1965-66, an expansion of nearly 60 per cent in 15 years, which is a truly remarkable achievement.

1.6. It should be noted that the above figures relate to the irrigation potential. The area actually irrigated will be smaller than this potential, by what margin it is difficult to say. At the same time allowance has to be made for irrigation works falling into disuse either for lack of timely repairs or because their life-span has come to an end. The Review of the First Five-Year Plan frankly admitted in 1957 that "at present there is no record of areas benefiting from small works which go out of irrigation year after year, nor is there a close enough correspondence between returns of areas irrigated and of additional irrigation facilities established in successive years".² The situation does not appear to have improved much since the above view was recorded. Still, from such evidence as is available, one can have no hesitation in accepting that a significant breakthrough has been achieved in the field of irrigation.

1.7. Turning now to other agricultural inputs, such as seeds and fertilisers, the following records of achievement can be noted. Consumption of nitrogenous fertilisers which was only 56,000 tonnes in terms of Nitrogen in 1950-51 increased to 210,000 tonnes ten years later and may have reached a figure exceeding 560,000 tonnes by 1965-66, a ten-fold increase in 15 years. The

² Planning Commission — *Review of the First Five Year Plan*, 1957, p. 91.

domestic production of nitrogenous fertilisers did not keep pace with this increase, having expanded from about 9,000 tonnes in 1950-51 to 2,32,000 tonnes in 1965-66. As a result the demand for fertilisers had to be met from imports. But the dependence on imports was reduced from over 80 per cent to less than 60 per cent. In phosphatic fertilisers also consumption went up from 7,000 tonnes of P_2O_5 to 150,000 tonnes in 15 years and in potassic fertilisers from 6,000 tonnes to over 80,000 tonnes. Domestic production of phosphatic fertilisers increased during the first three Plans from 9,000 tonnes to 111,000 tonnes. Potassic fertilisers have still to be obtained mainly through imports.

1.8. Programmes for multiplication and distribution of improved seeds have formed part of every Plan. The achievement in this respect, however, is less clear than in other respects. By 1960-61 nearly 3,600 seed multiplication farms had been set up and most of these had reached the stage of further multiplication. The area under improved seeds which was perhaps less than 50 million acres in 1950-51 is believed to have reached 120 million acres by 1965-66, but claims in this respect must be treated with some caution. That the necessary organisation for seed multiplication and distribution is not yet in a satisfactory shape will be evident from the following excerpt from the latest Report on the Fourth Five Year Plan: "The seed multiplication programme has not yet resulted in adequate foundation stock of a high percentage of purity. There have also been shortcomings in regard to processing of seeds and the distribution arrangements".³ But with the adoption of the Intensive Agricultural Districts Programme the popularisation of high-yielding varieties of seeds must have received a new impetus.

1.9. Other programmes in the field of agricultural input development that deserve notice are the programmes for composting and green manuring, the land reclamation and development programme and measures for bringing about consolida-

³ Planning Commission — *Fourth Five Year Plan, 1964-74. Draft* (1969) p. 121.

tion of holdings. In each of these fields significant achievement has been reported. By the end of the Third Plan nearly 3.5 million tonnes of urban compost were being turned out, over 21 million acres of land had received benefits of green organic manuring and over 8 million acres of land had been reclaimed. Also according to these reports over 60 million acres of land had come under some kind of land consolidation scheme. These claims need not be necessarily disbelieved, but since most of these figures are based on the consolidation of reports received from thousands of village officials, there is scope for both under-reporting and over-reporting. Unlike figures for irrigation potential and fertiliser consumption, discussed earlier, these figures cannot be subjected easily to an independent check.

1.10. Before passing on to other topics we have to discuss another important agricultural input without which other inputs may not be utilised at all. This input is finance or credit. It is highly significant that short and medium-term loans advanced by co-operative societies went up from Rs. 22.90 crores in 1950-51 to nearly Rs. 400.00 crores in 1965-66. Even allowing for the rise in agricultural prices this expansion in agricultural credit must be regarded as an important achievement. We cannot say, however, to what extent co-operative credit merely replaced other forms of credit and what has been the net additional use of credit for agricultural operations. Perhaps an even more significant index of achievement is the expansion in land mortgage banking. Long-term loans outstanding rose from Rs. 12 crores in 1950-51 to Rs. 78 crores in 1965-66. Since long-term loans are available to farmers chiefly from the land mortgage agencies, almost the entire amount of this expansion may justifiably be regarded as a net addition to previously available resources of finance.

1.11. The use of new agricultural inputs such as chemical fertilisers and high-yielding varieties of seeds has been made possible by an expansion in agricultural extension work. It is only since 1953 that a comprehensive agricultural extension service has been functioning in India. Whereas in 1951-52 there were only 19 agricultural colleges with a total annual intake

of 1060 students, in 1965-66 the number of such colleges rose to 70 and the figure for annual admissions to over 10,000. It is believed that there were some 32,000 agricultural graduates in the country in 1967-68. Similar increases have occurred in the number of veterinary and dairy personnel. If the full impact of this additional stock of human capital is not yet felt, the blame must be laid partly on the organisation of extension work and partly on the lack of necessary supporting finance for large-scale technological development. In any case the mere fact that all villages in India are now within the reach of the agricultural extension staff is an achievement of no mean order.

II

1.12. We shall now discuss the trends in agricultural production since the advent of planning. It is natural to expect that the achievements in respect of agricultural overheads recounted above will have corresponding beneficial effects on agricultural production. But in India agricultural fortunes are still so much swayed by unpredictable climatic factors that the impact of capital investment in agricultural operations is difficult to establish or follow. Moreover, in the absence of comprehensive soil and hydrographic surveys, it may not always be true that additional water supply or greater application of chemical fertilisers must invariably result in additional output of a specified order. Over the First Five Year Plan agricultural output appears to have increased by 16.8 per cent, but the greater part of this increase must be attributed to factors not connected with agricultural investment. This is evident from the fact that the peak in foodgrains production for that quinquennium was attained in 1953-54 when neither the benefits from the new irrigation projects nor the extension services were still available. During the Second Plan agricultural production again increased by another 21.8 per cent. But it was not a steady expansion. In 1957-58 as well as in 1959-60 the index of agricultural production dipped below levels previously attained. Climatic factors were once

again responsible for the downturn which was more or less generally spread over all major crops except sugar cane. During the Third Plan once again agricultural fortunes fluctuated from year to year; the last year of that Plan in fact saw conditions of near-famine in several regions of the country. Nevertheless, when the year-to-year fluctuations are smoothed out the general level of production in agriculture must be recognised to have gone up over the three Five Year Plans. If population has gone up at about $2\frac{1}{2}$ per cent each year, agricultural output has more than kept pace with it expanding on an average roughly at 3 per cent per annum in the fifteen years covered by the three Five Year Plans.

1.13. Of still greater significance is the fact that compared with 1949-50 nearly 40 million acres of additional land are being utilised to-day for foodgrains production without any diversion of land from other uses. In fact the area under commercial crops has also simultaneously gone up. This implies either that irrigation and other facilities have enabled marginal land to be drawn into cultivation or that double or more frequent cropping of land has become possible through assured water supply all the year round. At the same time the yield from land has gone up by roughly 40 per cent according to available indications. It deserves more than passing notice that even in 1965-66 when drought conditions prevailed over a large part of the country the average yield of foodgrains in the country was nearly 25 per cent higher than in 1949-50. In some of the commercial crops like cotton and oilseeds, however, there has been no appreciable increase in yields per acre; whatever expansion in production has occurred is largely due to the increased acreage under cultivation. Even then the bringing into cultivation of a large amount of uncultivated or under-cultivated area must be counted as an achievement of the planned economy. Along with the fuller cultivation of marginal or sub-marginal soil there must also have come about more adequate utilisation of rural labour. The figures sometimes cited for agricultural employment created under the Plans need not be taken too seriously. But one cannot ignore the fact that the rural

labour force in 1966 was larger than in 1951 by over 4 crores and there was little evidence of visible unemployment afflicting such large numbers. Indirectly this provides evidence that the labour-absorptive power of Indian agriculture increased substantially over the years covered by the three Five-Year Plans.

1.14. The demand for foodgrains has grown in the country both because of an unprecedented rate of increase of population and of a growth in money incomes. The domestic food supply position has not been favourable enough to cope with this growth in demand, and procurement through imports had to be resorted to almost without interruption. But all this does not lessen the importance of the fact that for the first time in recent history the annual rate of expansion in agriculture has exceeded 3 per cent and in certain lines of production even more. If account is taken of all the agricultural overheads that have been created in the course of the first three Plans and of the fact that many of these have not yet been fully exploited, the prospects for accelerating the pace of agricultural expansion in the coming years will appear as reasonably bright.

III

1.15. The capacity created for expanding agricultural production has been of help in expanding industrial production as well by maintaining the supply of agricultural raw materials. Industries like cotton textiles and jute could hardly survive the shock of the partition and of subsequent deterioration in Indo-Pakistan relations unless the agricultural base of these industries could be developed so rapidly after the partition. Here, apart from the Plans, economic forces of the ordinary kind must have played their part in bringing about an expansion. But the Plans must have helped by providing for irrigation in the places where it was needed and by arranging for the availability of other essential inputs. Not only has the previous position of these agriculture-based industries been maintained; they have also been equipped with additional capacity for production to meet in-

creasing demand. Let us take a bird's eye view of the installation of additional capacity in our organised industries over the period of the first three Plans.

1.16 It is well known that the industrial programmes in the public sector could not be taken up in the early years of the First Plan and whatever expansion in industrial capacity occurred up to 1955-56 was mostly due to investment in the private industrial sector. In the Second and Third Plans, however, public sector industrial investment played a larger role, resulting in the creation of new capacity in almost all lines of industrial production, including both established and newly introduced industries. The latter group of industries in particular will be a convincing demonstration of the contribution of economic planning to the development of the economy. Among industries developed under the auspices of the public sector in the early years of planning have been : machine tools, electric cables, insecticides, anti-biotics, railway coaches and locomotives, telephone equipments, fertilisers and newsprint. In all of these a beginning had been made during the First Plan or even earlier. New industrial ventures initiated by the public sector during the Second Plan included ferro-alloys of different types, heavy structural, electric motors and transformers, road rollers and machinery for the paper, cement, sugar and tea industries. In the Third Plan came the production of tractors, diesel and electric locomotives, surgical and X-ray equipments, compressors, organic heavy chemicals, dextrose power, cellulose and several other sophisticated industrial products. Without going into the economies of introducing all these industries at what must be comparatively small levels of capacity, we have no means to decide whether the mere introduction of producing capacity in these industries constitutes an 'achievement' in the proper sense of the term. But one can still readily admit that without the impetus provided by an economic Plan such diversification of industrial capacity would hardly have occurred in the country within such a short span of time.

1.17. The growth of capacity in some of the basic industries of the country may now be studied. The steel industry has

installed in the period between 1951 and 1965 an additional capacity for the production of nearly 6 million tonnes of steel ingots and about 4 million tonnes of finished steel. In aluminium production capacity has gone up from only 4,000 tonnes at the beginning of the period to over 70,000 tonnes at the end. In nitrogenous fertilisers capacity went up from about 46,000 tonnes of Nitrogen to over 550,000 tonnes. In phosphatic fertilisers the increase has been from about 55,000 tonnes in 1950-51 to over 200,000 tonnes, the major part of this expansion taking place during the Third Plan period. Sulphuric acid production capacity, rated at only 150,000 tonnes in 1950-51 increased to over 1 million tonnes at the end of the Third Plan. To take just another instance, the country's cement producing capacity stood at only 3.2 million tons in 1950-51. By the end of the Third Plan this capacity increased to nearly 12 million tonnes.⁴

1.18 Traditional industries like cotton textiles have also added to their capacity, although their expansion has been subject to regulations imposed in the interests of production in the unorganised sector. From about 12 million spindles and 203,000 looms in 1955-56 the number of cotton spindles increased to over 16 million in 1965-66 and the number of looms to 209,000. Other common consumption goods industries where sizeable extension to capacity has taken place in recent years are rayon fibres, radio receivers, motor cycles and scooters and to take an article of daily use, sugar. It is not necessary to go on citing figures to establish that an appreciable increase in industrial production capacity has occurred. The industrial production index itself bears eloquent testimony to the underlying expansion in industrial capacity. In fact, since for a number of reasons production has been generally below rated capacity in recent years, the extent of industrial growth is to some extent underrated by the current production index. This index rose by over 25 per cent during the First Plan, by 40 per cent during the Second Plan and nearly 45 per cent during the Third Plan. Another indication of the accelerated tempo of industrial production can

⁴ See Table relating to growth of industrial capacity on p. 12

TABLE
CAPACITY AND PRODUCTION IN SELECTED INDIAN
INDUSTRIES 1950-51 AND 1965-66

Industry	1950-51		1965-66	
	Capacity	Production	Capacity	Production
1. Pig iron (m. tonnes)	1.88	1.60	—	—
2. Steel ingots (do)		1.42	7.0	6.5
3. Finished Steel (do)	1.0	0.98	5.2	4.5
4. Aluminium (thousand tonnes)	4.1	3.7	88	67
5. Power driven pumps ('000)	33.5	34.3	200	244
6. Diesel engines ('000)	6.3	5.5	100	93.1
7. Machine tools (Rs. Crores)		0.34	30	29.4
8. Textile machinery :				
(i) Carding engines (No.)	600	—	—	—
(ii) Spinning ring frames (No.)	396	260	— [c]	— [c]
(iii) Looms, plain, semi and automatic (No.)	3600	1894	—	—
9. Ball and roller bearings ('000)	600	87	27000	8300
10. Grinding wheels (thousand tonnes)	0.37	0.23	—	—
11. Electric motors (000 H.P.)	150	99	3550 [d]	2250
12. Electric transformers ('000 K.V.A)	370	179	10620 [d]	4200
13. Electric cables and wires (thousand tonnes)	2.5	1.7	103 [d]	40.6
14. Storage batteries ('000)	446	200	855 [d]	708.5
15. Dry batteries (million)	285	136	400 [d]	283
16. Sulphuric acid (thousand tonnes)	152	99	1181	662
17. Soda ash (—do)	55	45	363	331
18. Caustic soda (—do)	20	11	277	218
19. Ammonium sulphate (thousand tonnes of N)		9	586.5	
20. Superphosphates (do of P ₂ O ₅)		9	230	
21. Cement (m. tonnes)	3.24	2.73	12	10.8
22. Paper and paper-board (m. tonnes)	0.14	0.11	0.68	0.56
23. Newsprint (thousand tonnes)		3.7 [a]	30	
24. Petroleum products (in terms of crude oil '000 tonnes)	203	—	17,500 [d]	9750
25. Automobiles ('000)	30	16.5	102	69
26. Railway locomotives (No.)		7	—	137
27. Railway Wagons (No.)*		2924	40,000	34,000
28. Bicycles ('000)	120	101	1679 [d]	1574
29. Sewing machines ('000)	37.5	33	450 [d]	430
30. Electric fans ('000)	288	194	2000	1360
31. Electric lamps (million)	24	15	74.5	74.4

Contd.

Industry	1950-51		1965-66	
	Capacity	Production	Capacity	Production
32. Radio receivers** ('000)	77	49	500	600
33. Cotton yarn (m. Kg.)	751	531	—	907
34. Cotton cloth (m. metres) :				
(i) Mill made	4317	3383	—	4401
(ii) Handloom (estimated)	2730	737	—	3056
35. Jute manufactures (thousand tonnes)	1220	906	1200	1302
36. Rayon filament (m. Kg.)	1.8	0.5	47	45
37. Woollen goods (m. Kg.)	9.1	8.1	—	—
38. Sugar (m. tonnes)	1.56	1.13	3.2	3.5
39. Vanaspati (m. tonnes)	0.33	0.15	0.65 [d]	0.4
40. Matches (m. Gross boxes)	35.3	27.1	—	—
41. Refrigerators and other coolers ('000)		3.3 [a]	—	—
42. Motor Cycles and Scooters ('000)		1.5 [a]	150	40.7
43. Cast iron pipes (thousand tonnes)		97.5 [a]	—	—
44. Steel Wire (do)		36.5 [a]	—	—
45. Steel Castings (do)		15.2 [a]	—	—
46. Sugar mill machinery (Rs. Cr.)		0.2 [a]	16	7.7
47. Cement machinery (do)		0.4 [a]	20	4.9
48. Dye stuffs (m. Kg.)		1.8 [a]	10	7.2
49. Sulpha drugs (tonnes)		83 [a]	—	—
50. Penicillin (m. mega units)		6.6 [a]	—	—
51. D. D. T. (tonnes)		288 [a]	2800 [d]	2700
52. Plastics (thousand tonnes)		0.7 [a]	—	12.2
53. Bicycle tyres (million)		5.8 [a]	21.6 [d]	18
54. Automobile tyres (do)		0.9 [a]	3.3	2.3
55. Refractories (m. tonnes)		0.3 [a]	1.3 [d]	0.7
56. Oxygen (m. c.ft.)		283 [a]	—	—
57. Jute mill machinery (Rs. Cr.)		1.7 [b]	5	—
58. Paper mill machinery (do)		0.01 [b]	7	—
59. Dairy machinery (do)		0.2 [b]	—	—
60. Cranes (thousand tonnes)		1.7 [b]	25.6 [d]	8.2
61. Road rollers (No.)		388 [b]	—	—
62. Steam boilers (Rs. Crores)		0.53 [b]	—	—
63. Typewriters ('000)		23.5 [b]	—	—
64. Clocks (do)		52.3 [b]	—	—
65. Tractors (do)			15	6.3

* in terms of 4 wheelers

** Organised sector only

[a] Figures relate to 1955-56. Production started during First FYP.

[b] Figures relate to 1960-61. Production started during Second FYP.

[c] In 1965-66, estimated capacity Rs. 40 Crores and actual Production Rs. 21.6 crores. [d] Estimated capacity for 1968-69.

Source : Planning Commission, Draft Reports on Forth Five year Plan.

be obtained by looking at that part of the national income which is attributable to factory enterprises. From Rs. 550 crores in 1950-51 the contribution of factory enterprises rose to nearly Rs. 2,000 crores by the end of the Third Plan. Correcting these figures for price changes that have taken place during this period, we are still left with a $2\frac{1}{2}$ -fold increase in the value of industrial production. This implies that industrial production has increased over the three Plans at something between 8 and 9 per cent per annum.

1.19. Corresponding to this expansion in industrial capacity and output there has been a parallel expansion in the installed capacity for power. From only 2.3 million kilowatts in 1950 such capacity rose to 10 million Kw in 1965. While only 3,700 localities were equipped with electrical installations at the beginning of this period, as many as 52,300 towns and villages had been electrified by the end of the period. A highly significant feature of this expansion has been the increasing use of electricity for irrigation. It is reported that nearly 3 lakh pump sets were energised during the Third Plan alone. The spread of electricity to smaller towns and villages has also created conditions favourable to the rapid development of modern types of small-scale industries.

1.20. In the field of small industries a notable achievement of the Planning era is the activation of idle capital and hence, by implication, of under-employed labour in different types of handicrafts. In a capital-poor country with low mobility of labour there appears to be ample justification for the type of policy adopted in our Plans to create conditions conducive to the expansion of production in the traditional cottage industries. The production of handloom cloth for example increased from about 810 million yards in 1950-51 to over 3,300 million yards in 1965-66. Production of raw silk, coir products, gur and khandsari, non-edible oils, soap and hand-made paper etc. made substantial headway during the period, thanks to special measures of assistance afforded under the Plans. The entire structure of technical assistance to small industries consisting of the National Small Industries Corporation, the Small Industries

Service Institutes and their State counterparts is a creation of the Plans. While the NSIC helps small industries by securing Government orders for their products and by selling improved equipment in instalments, the various Service Institutes help in the propagation of new techniques among small artisans and with training in selected crafts. Industrial estates have been set up in a number of regions to provide accommodation, power and common service facilities to small industrialists. There were 66 such estates by 1960-61 and nearly double that number is reported to have been added during the Third Five Year Plan. The number of industrial co-operatives has also increased, some of them venturing into hitherto unexplored avenues of activity, such as sugar production and fertiliser production. In 1955-56 there were only 3 co-operative sugar factories; in 1965-66 their number rose to 51. Nearly a quarter of the sugar produced in India is turned out these days by sugar factories in the co-operative sector. Such changes in the organisation of industrial control and management would not have been achieved so smoothly if the necessary climate had not been created by the Plans.

IV

1.21. Industrial development has called for a large expansion in the facilities for transport and for the supply of trained manpower. We shall briefly discuss the achievements in these fields as well as in respect of certain other related fields of social development, such as health and housing.

1.22. At the beginning of the Planning period Indian railways were equipped with a freight-carrying capacity of only about 90 million tons. Even this capacity had been run down by the War and the partition of the Railways' effects in 1947. To a very large extent, therefore, the First Five Year Plan of India was a rehabilitation plan for the railways. After the three Five Year Plans had been put through the carrying capacity of

the Railways went up nearly two and a half times. During this period the Railways succeeded in adding significantly to their rolling stock of locomotives, wagons and coaches. What is more, an increasing proportion of railway rolling stock began to be turned out inside the country. At the same time the number of commercial vehicles on roads advanced from 116,000 or so in 1950-51 to 320,000 fifteen years later. Surfaced roads which measured 156,000 kilometres in 1950-51 attained a level of 286,000 km. in 1965-66. Shipping, both coastal and overseas, improved its position. From less than 4 lakh gross registered tonnage in 1950-51 the tonnage increased to over 15 lakh in 1965-66. Indian shipping engaged in overseas transport increased about seven-fold in gross tonnage over the fifteen years covered in our survey. The cargo-handling capacity of the major ports increased from 20 million tons to nearly 56 million tons in this period.

1.23. Turning to the related field of communications we find that whereas the country had only 18,900 post offices and 1465 telegraph offices at the beginning of the plans, the number of such offices increased to 94,000 and 12,600 respectively at the end of the Third Plan. In 1950-51 the country had only 168,000 telephone connections. This number rose to 736,000 at the end of the Third Plan. The domestic manufacturing capacity in respect of telephone equipments and exchange lines has also simultaneously increased.

1.24. In the field of education, although the goal of universal education up to the age of 14 has not yet been reached, appreciable progress has been made towards that target. In 1950-51 schooling facilities were available only for 18.7 million children in the 6-11 age group, for 3.4 million in the 11-14 age group and for 1.45 million boys and girls in the 14-17 age group. At the end of the Third Plan these numbers rose to 49.3 million, 10.3 million and 5.2 million respectively. It will be obvious that, faced with the tremendous upsurge of population at the school-going age level in particular, educational development cannot be as rapid in terms of proportion of children at school as it has been in terms of absolute numbers. But proportions have also

improved. Nearly 75 per cent of the children in the 6-11 age group are now enrolled in schools as compared with 42.6 per cent in 1950-61. In the 11-14 age group nearly 30 per cent were school students in 1965-66 as compared with only about 13 per cent fifteen years ago. In the 14-17 age group the percentage of enrolment has improved over these years from 5.8 to 17 or so. The number of College and University students, less than 4 lakh in 1950-51, has now reached nearly four times that number. Correspondingly the number of Universities has gone up from only 28 at the beginning of the period to over 60 by the end of the Third Plan. The amount spent by the Central Education Ministry on scholarships and other concessions to students went up during this period from Rs. 2.75 crores to Rs. 35 crores.

1.25. As regards technical education, expansion began even before the Plans were officially taken up. Between 1947 and 1951 nearly 1300 additional seats were provided in engineering degree colleges. The Plans have since added over a thousand seats per year, raising the potential annual intake of students in engineering institutions to nearly 25,000. In technical institutions granting diplomas the provision for annual intake went up in the first fifteen years of planning from 5900 to 48,000 or over. It may be doubted whether the training of technical personnel ahead of the creation of opportunities for their absorption represents a sound investment. But there can be no doubt about the increase in the stock of human capital that has resulted from this investment. It is estimated that the number of graduate engineers in India has now exceeded 130,000 and that of diploma-holding engineering personnel has almost reached the 2 lakh mark. The number of degree-level engineering institutions increased over the first three Plans from 39 to 133 and that of diploma-granting institutions from 64 to 274. Besides these the Ministry of Labour has, through its craftsman training schemes, imparted technical training to tradesmen in both engineering and non-engineering crafts.

1.26. Provision for increasing the supply of medical and para-medical personnel has in the course of the Plans raised the

number of medical graduates by nearly 2,000 per year and the number of registered nurses by about the same extent. While in 1950-51 there were only 30 medical colleges with an annual intake of 2,500 or so, at the end of the Third Plan 87 medical colleges were taking in more than 10,000 students per year for medical training. Corresponding increases in the facilities for training of nurses, midwives, medical technicians, health visitors and other categories of medical personnel have also been established. Along with this the number of hospitals and dispensaries increased from 8,600 at the beginning of the First Plan to over 12,000 by the end of the Third Plan. The number of beds in these institutions went up from 113,000 to 240,000 during this period. To augment medical facilities in rural areas health centres numbering about 4,600 have been ushered into existence largely during the Second and Third Five Year Plans. The same period also saw the intensification of the family planning programme. From a meagre 140 or so family planning clinics in the First Plan period, the number of such clinics grew to over 11,000 by the end of the Third Plan. Training facilities for the personnel engaged in family planning work have been correspondingly augmented.

1.27. Another aspect of planned development has been the provision for housing in urban and industrial areas. The problem of rural housing, of course, is a much bigger one and still remains to be tackled properly. But some progress is noticeable in respect of urban house-building schemes. The number of new houses or tenements that have come into existence as a result of the schemes of housing loans or subsidies introduced by the Government is difficult to come by. A recent estimate puts the number at more than 4 lakhs. This does not take into account the houses built by different Government departments and the Railways for their own workers; nor of course does it include private building. There is reason to believe that the growth in the number of houses has failed to keep pace with the growth in the number of households during the 15-year Plan period which we have been surveying. But then it is doubtful whether without the impetus provided by

Plan expenditures the increase in the number of houses would have been even as rapid as it has actually been.

V

1.28. Having now gone through the records of our achievement in the first 15 years of planning, we may ask ourselves whether comparable development has occurred at any time in the past since the dawn of the modern era without of course the backing and organisation currently being provided by a State-sponsored economic plan. Our study has brought out that in agriculture while output has expanded roughly at the rate of 3 per cent per annum, the area under cultivation has increased (in the case of foodgrains alone) at a rate of slightly over 1 per cent per year. Yields have thus improved in the case of most crops at rates varying between 2 and 3 per cent per year. Such recorded statistics as is available fails to reveal any period of similar length during which similar rates of agricultural growth have been achieved or sustained. Agricultural output virtually remained stagnant in British India during 1900-1947 except in occasional years of favourable weather. The area under cultivation did not increase appreciably after 1910 and yields were very often declining. The evidence therefore decidedly establishes that the planned economy, with its emphasis on agricultural extension, credit and improved agricultural inputs, has brought about a remarkable expansion in all these directions. It is unfortunately true that the expansion in agricultural output so far has not been much faster than the growth in population, so that the balance between population and agricultural resources remains almost as precarious after 15 years of planning as before that period. But availability of food, specially in food-surplus regions, has certainly improved as a consequence of the agricultural expansion and industries based on agricultural raw materials have found it possible to expand their output at a fairly satisfactory rate despite the fact

that certain regions growing such raw materials were lost to India through partition.

1.29. Regarding industrial expansion the rates of growth attained are not without parallel. Taking, for example, the 15-year period from 1928 to 1943 we find that the value of industrial production increased at about the same rate as during the period covered by the first three Plans. There is, however, the important difference that while the index of industrial production was constructed from the output of 8 or 9 industries throughout the earlier period, the number of industries whose output now deserves to enter the industrial production index exceeds 25. The wide variety of industrial capacity recently introduced into India will be evident from the fact that while the first issue of the 'Programmes of Industrial Development' issued by the Planning Commission referred to only 28 industries, the third issue brought within its ambit as many as 75 types of industries. It is true that a large number of these industries have only a very small, and therefore perhaps uneconomic, installed capacity. Their induction into India would hardly have been possible at this stage without specially arranged schemes of foreign assistance and technical collaboration. But the sheer physical achievement of diversification of industrial capacity is considerable. This has certainly made the industrial structure better balanced. Whether this balance is a source of strength or weakness only time can tell.

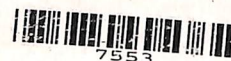
1.30. The achievements in the fields of transport and power development are truly unprecedented. Indian Railways increased their freight-carrying capacity from about 25 million tons in 1900 to 90 million tons in 1951 — an addition of 65 million tons in 50 years. In the fifteen years of planning this capacity has increased by over 130 million tons. The growth of electrical power over the period of the first three Plans has been four times as much as the development in the entire first half of this century. Investment in these basic pre-requisites of production has made possible the rise of new industrial locations and made regional interdependence closer and more complex than ever before. It deserves consideration, however, whether

a smaller investment in the transport network would not have sufficed if a different pattern of industrial location had been chosen. Distribution of electrical power could also perhaps be carried further at the same cost if the initial planning of the distribution network had been more comprehensive, covering wider regions of the country.

1.31. In the field of social services, again, we have ample achievements to refer to. In numerical terms there has been a trebling or even quadrupling of numbers at all levels of education from the elementary to the very advanced. In the training of different types of technical personnel, including medical and engineering personnel, the pace of expansion has sometimes been even faster. Doubts may, however, be expressed on two scores. The first refers to the quality of education. The very rapid pace of expansion may have produced certain not wholly desirable consequences on the standard of education imparted. Apart from the growth of numbers the quality of education has also been affected by a number of experiments with new educational patterns launched without adequate preparation in advance. The second point of doubt relates to the priority of educational investment in a developing society. Investment which is directly productive should obviously receive a higher priority in a low-income society, unless of course investment in trained manpower is an essential pre-requisite for such directly productive investment. It is pertinent to ask whether a considerable part of the educational investment in the Plans could not have been deferred until a later date so that a more concentrated attack on the production front might be possible. Over-investment in the tertiary services at an early stage of planned development may be one important source of inflation.

1.32. As regards the medical services the number of qualified medical personnel has not increased much more than in proportion to the growth of population. The increase in hospital beds, though rapid by previous standards, has in practice led to the problem of congestion in existing institutions since the number of hospitals etc. has increased less than proportionately. A feature of recent health service development is the emphasis

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on family limitation. From the strictly economic point of view investment in the prevention of births may be one of the most remunerative forms of investment in a high-birth and high-mortality country. It is difficult to imagine, however, that family planning services will be eminently successful in their endeavours until general improvement of living conditions has created in the bulk of the population an urge for smaller families and higher standards of living. From this point of view the priority accorded to family planning may be called in question.

1.33. The evidence presented above about the unprecedentedly rapid rates of expansion in different types of production and in basic social services like education and public health leaves us with little difficulty in marking out the period of the first three Plans as one of specially concentrated effort towards development. It can be asserted without hesitation that in no other period since the beginning of the present century has such achievement been recorded in our economic and social life. But whether the Plans have helped us to use our resources with greater effectiveness by devising the most suitable system of priorities in development is a question which we are not prepared to answer at this stage. In the preceding paragraphs we have occasionally suggested that in some cases at least priorities seem to have been wrongly drawn up and in the development of industries in particular some investment must have gone into effete and poorly organised industries simply in order to make the industrial structure more diversified. Whether these lapses from the economic logic of investment detract from the sheer physical achievement in terms of capacity created is a question which the economist will answer in one way and the politically motivated development planner in another.

VI

1.34. So far we have discussed the records purely in terms of physical achievement. But in terms of financial resources mobilised the first fifteen years of planning once again mark a

sharp advance over anything previously achieved in India under Government auspices. In the year 1938-39, which we may describe as the last normal year before the advent of Indian independence, out of an aggregate public expenditure on Revenue Account of about Rs. 170 crores, social and economic development expenditure probably accounted for no more than Rs. 30 crores. Moreover, the larger part of this expenditure could not be described as developmental in the proper sense of the term, being incurred mostly for the maintenance of the social services at an almost unchanged level. Development expenditure on capital account, barring redemption of debt, amounted only to Rs. 9 crores in that particular year, although this was by no means typical. In 1950-51 Central and States' expenditure on Revenue Account amounted to Rs. 742 crores of which Rs. 173 crores or so could perhaps be counted as development expenditure, besides Rs. 35 crores or so incurred for development purposes from Capital receipts. Allowing for the rise in prices that had occurred in the mean time, but also recognising that by 1950-51 important geographical changes had occurred, we should be inclined to take the view that aggregate revenue expenditure had expanded only slightly beyond the 1938-39 level — by about 20 per cent at a rough guess — while development expenditure on Revenue Account had perhaps increased at a slightly faster rate. Since the adoption of the First Five Year Plan in 1951-52 the Government's expenditures on both Revenue and Capital Accounts have increased at a much faster rate. By 1955-56 public expenditure on Revenue Account (Union and States) exceeded Rs. 1,000 crores of which over 40 per cent was being counted as Social and Developmental expenditure. In addition, the Capital Budgets of the Union and the State Governments provided for developmental capital outlay of over Rs. 342 crores. Since a part of this developmental expenditure was incurred outside the plan the actual public sector Plan outlay in 1955-56 was somewhat less than this viz. Rs. 614 crores which itself was more than three times as much as was spent in 1950-51. In subsequent periods prices have risen and comparisons in financial terms have therefore become more and

more difficult. Nevertheless, when all allowances have been made for price increases, the gradual quickening of the pace of mobilisation of financial resources will still remain beyond doubt. From the last year of the First Plan to the last year of the Second, there was almost a doubling of public sector Plan outlay although prices increased by not more than 35 per cent. Again, between 1960-61 and 1965-66 Plan outlay almost doubled, the price index in the mean time having recorded a rise of about 33 per cent. By the end of the Third Plan annual Plan outlay in the public sector rose as a fraction of the national income to about 11 per cent, whereas in 1951-52 this was no more than $2\frac{3}{4}$ per cent.

1.35. This nearly fourfold expansion in the ratio of Plan outlay to national income between the opening and closing years of our fifteen-year period of planning called for substantial resource mobilisation efforts. It is true that almost 25 per cent of Plan outlay has been financed by funds received from abroad. But even foreign funds have not been available without a considerable amount of coaxing and canvassing. Besides, the accumulation of foreign debts has called for additional resources mobilised through the budget for servicing of such debts. In fact, the Government of India's expenditure on debt services increased almost ten-fold over the period of the Plans. But apart from the efforts to meet external obligations, internal mobilisation of resources has also been substantial. Over Rs. 4,000 crores have been raised through additional taxation in fifteen years for financing public sector Plan outlay, not to mention another Rs. 750 crores or so mobilised through public sector enterprises. The level of taxation, Central and State, went up from Rs. 646 crores in 1950-51 to Rs. 2,900 crores in 1965-66, the proportion of tax revenue to national income in these two years being respectively 6.7 and 14.3 per cent.

1.36. In addition to the tax effort involved in the mobilisation of financial resources for the Plan, special measures had also to be adopted to make the money and capital markets absorb larger public and private issues of securities. Internal borrowing of the Union Government went up from Rs. 30 crores

or so in 1950-51 to nearly Rs. 280 crores in 1965-66. Private security issues in 1966 have been estimated at Rs. 102 crores. Loans disbursed by the institutional financial agencies like the IFC, IDBI etc. in the final year of our fifteen-year period rose to Rs. 90 crores. Net collections from small savings went up from Rs. 33.5 crores in 1950-51 to Rs. 151.2 crores in 1965-66. These figures give us some idea of the changes brought about in the organisation of the money and capital markets since the beginning of the period of planning. Estimates of Saving and Investment indicate that over the 15 years under our consideration the proportion of saving to national income has been doubled and the share of investment in national income has gone up in real terms nearly $2\frac{1}{2}$ -fold.

1.37. A part of Plan outlay has been financed by money creation and hence must bear responsibility for the rise in prices that has occurred. Although it would certainly have been more desirable to finance Plan outlay with the genuine savings of the public, the method of forcing some savings out of the public in order to have a comparatively large Plan cannot be denounced in all circumstances and has many precedents in other countries. If the physical achievements discussed earlier in this paper are regarded as adequate returns for the investment undertaken, the methods adopted to finance that investment can hardly be condemned. The really important question is whether the yield from the aggregate investment undertaken has been high enough in the period under survey. In trying to answer this question we must of course bear in mind that many of the projects taken up in our Plans have a fairly long gestation period and an estimate of yield from them may not be very meaningful unless the structure of lags between investment and income is satisfactorily analysed.

VII

1.38. Although Indian achievement is undoubtedly very great in comparison with what could be achieved in earlier

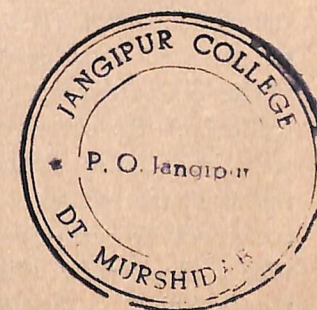
periods, there is some reason to believe that the returns to investment in India are of a lower order than what seems to have been obtained in other planned economies in recent periods. Materials for a direct and elaborate comparison are lacking. But some idea about the orders of magnitude involved may perhaps be obtained by a comparison with Soviet experience. It appears that in the first Soviet Five Year Plan of 1928-32 investment in industry rose from about 9 per cent of gross national product to about 14 per cent. But the industrial production index during the same period rose, according to Hodgman's index, by 72 per cent.⁵ In the next Soviet Five Year Plan the amount of industrial investment corrected for price changes rose only marginally. Yet industrial production more than doubled in five years, undoubtedly because of the fuller utilisation of capacity installed in earlier years. Prof. Gerschenkron's index of Soviet machinery production reveals a five-fold increase in machine production in less than ten years, but there is evidence to show that investment in machine-building industries at no time exceeded 12 to 14 per cent of the national product. That Soviet industrial production expanded at a much faster rate than Indian industrial output during 1951-66 will also be apparent from the fact that the non-agricultural labour force increased three-fold in Soviet Russia in the ten years 1928-1938, nearly 18 million workers being absorbed in large-scale industrial production during that period.

1.39. In power and transport development India has completed in fifteen years almost the same amount of transformation as the U.S.S.R. did in the first ten years of its planning. But there is evidence to show that in the field of power development at any rate the Soviet planners were much more economical than their Indian counterparts, producing a much larger supply of power from the same or similar installed capacity. This implies that Indian planners have been more lavish in their use of capital and have failed to exploit methods of economising in the use of installed capacity in the basic industries.

⁵ D. R. Hodgman — *Soviet Industrial Production, 1928-1951*, as cited in S. Schwartz — *Russia's Soviet Economy*.

1.40. But when we come to the field of agricultural expansion the comparison seems to favour India. Acreage expansion in the first ten years of planning was probably less in Soviet Russia and expansion in yield per acre almost certainly less. The huge expansion in irrigation potential which India has achieved in the planning period has no counterpart in Russian experience. Between 1928 and 1941 only 6 million acres of land seem to have been brought under irrigation in that country. It is true that Soviet consumption of artificial fertilisers went up more rapidly than in India. But allowance must be made for the loss of organic manures caused by the heavy destruction of livestock in 1930-32.

1.41. Although our comparison is only in fragments, there can be little doubt that Indian planning suffers in comparison in certain respects mainly because the planning effort in Soviet Russia was much more concentrated in special fields like machine production. In contrast, Indian planners have thought of planning as an exercise in all-round development so that spectacular results have not perhaps been achieved in any particular field. As already noticed, perhaps planning in India has involved more cost in terms of investible resources than did Soviet planning of the 1930's. But the basis for this statement remains open to question since figures relating to Soviet investment in all fields of development are not readily available and a direct comparison with Indian investment figures would hardly be meaningful.



THE PREDICAMENTS OF PLANNING

2.1. Although the achievement of the first three Plans was truly unprecedented and did not compare very unfavourably with similar achievements of the Soviet-type of planned economy, we have seen that our Plans have a tendency towards dilution of effort as well as a relatively lavish use of capital as compared with Soviet-type Plans. The reasons for this comparative failure of Indian planning to develop an appropriate system of priorities and to adhere rigidly to capital-saving methods of development require careful analysis.

2.2. The two characteristics of our planned economy which, we believe, are basically responsible for this type of development are, first, that we have a mixed economic system with public and private enterprises working side by side according to their own motivations and secondly, that much of our development has been conditioned by the foreign aid received for the various projects of development. Both these features stand in sharp contrast to the Soviet-type of planned economy where public enterprise, in one form or another, dominates the economic scene and where economic development followed a path charted out in the main by the availability of domestic resources and constraints emanating from foreign capital resources were not operative.

2.3. From the very outset Indian planning was plagued by the public sector *versus* private sector controversy. It is not necessary for us to go through the various stages of evolution of public policy towards the private sector. Suffice it to say that while both the sectors were permitted to grow, their relations were inadequately defined in the various Plan documents with the result that neither the instruments of regulation in the private sector nor the agencies of operation in the public sector could take a shape which might give a clearer meaning to our planning exercise. In the next section of this paper we shall be con-

cerned with the various ways in which regulation intended to govern the activities of the private sector in the context of planning failed to bring about the desired effects and to that extent contributed to the futility of planning. Depending upon one's inclinations one may regard such failure either as administrative bungling or as showing the predicaments of planning in an overwhelmingly private enterprise economy.

II

2.4. From the First Plan document to the Third the intention to limit the size of the private sector and enlarge the scope of public enterprises has been more and more clearly stressed. The First Plan spoke of "a progressive widening of the public sector and a re-orientation of the private sector to the needs of a planned economy". At that time Industrial Policy was still based on the Policy Statement of 1948 which was regarded by the private sector as a Damocles' sword hanging over its head and by the public authorities as too innocuous a demarcation of functions to scare the private sector. In the industrial field the private sector was to be curbed by the introduction of public entities for fresh industrial expansion but not for taking over existing private units, while in the agricultural sphere the deficiencies of purely private enterprise would be remedied by encouraging co-operative methods, not so much in actual farming, but in processing and marketing. After the Avadi Congress and the Industrial Policy Statement of 1956 the objective of imposing definite curbs on the operation of the private sector was reiterated in somewhat stronger terms. The ideal of a Socialist Pattern of Society was adumbrated and the assertion was made that the State will have "to assume direct responsibility for the future development of industries over a wider area than before". In particular, the development of large-scale industries in the private sector was to be regulated by giving special encouragement and assistance to the village and small-scale industries. So far as the private sector in agriculture was concerned, co-

operativisation of farming operations themselves came to be adopted as the prime objective of agrarian reform. The Third Plan went one step ahead. While the first two Plans confined the public sector largely to heavy and basic industries, the Third Plan recognised that drawing the boundary in this fashion might not be very appropriate for the requirements of planned development. Accordingly it was proposed that even consumer goods industries producing articles of basic necessity may have to be developed in the public sector if such a necessity arose.

2.5. So much for the professions. In actual practice, however, suitable instruments had to be devised to keep private enterprise confined to the sphere allotted to it, to ensure that regulations relating to size and location of new industrial units were strictly observed and to bring about a wide dispersal of industrial entrepreneurship. It took some time before the machinery for regulation of the private sector was fully operative. Initially the Industries (Development and Regulation) Act was made applicable to a very limited number of so-called key industries. Later when the ramifications of industrial inter-relations were more clearly realised, the net of control was cast over a wider area. But both such measures of control and the parallel efforts at building up a new public sector suffered from set-backs. The private sector soon discovered methods to frustrate the purpose of the licensing regulations. Partly this was due to the natural difficulties faced by small units in the private sector to obtain and utilise industrial licences. But to a larger extent, perhaps, licensing failed in its purpose because of the wily manipulations of big industrial interests. The administration either failed in comprehending the objective of industrial licensing or, in a desire to placate powerful interests, financial and political, made wilful departure from the spirit of the regulations. But the very existence of such regulations and the necessity for devising methods of circumventing them gave rise to extra costs of promoting industrial ventures which in turn led to over-capitalisation and excessive cost of production. This must also have limited the market for newly developed products and played its own part in the under-utilisation of installed capacity.

2.6. In certain spheres of production curbs on private enterprise had to be lifted when it was realised that the organisation of public enterprise was too difficult to make possible the complete elimination of private enterprise from those spheres. This was particularly true in those cases where unfamiliar foreign techniques had to be imported for the first time on the basis of collaboration agreements. The preference of some foreign collaborators for private enterprise, the difficulties of maintaining secrecy when techniques are passed on to the public sector and the pressure from international financial agencies in some cases, all combined to usher in a somewhat different species of the 'mixed' economy than was originally envisaged in the Plans. Although it may be true that the share of the public sector in the reproducible tangible wealth of the country increased from 15 per cent to 35 per cent in the course of the three Plans, the vision of the public sector calling the tune in industrial development has somehow faded away because of the simultaneous growth of big private industrial interests, not all of them indigenous. Pre-emption of industrial capacity by these interests is a factor that goes to show the ineffectiveness of the planning exercise one of whose objects was to keep the sphere of activities of large business interests confined within safe limits.

2.7. Against the above view it may be argued that the original vision in our Plans was itself faulty because technical factors to-day favour the large-scale business operator and the idea that the Socialistic Pattern of Society could be ushered in by encouraging the small entrepreneur was as anachronistic as the American desire to restore effective competition by dissolving the Trusts. This view would have been plausible if the bigger industrial units had reached their present position after engaging in effective competition with their smaller rivals. In fact, however, the present situation has arisen because the small entrepreneur was not given a reasonable opportunity to prove his mettle. Besides, the issue of industrial licences would by itself require entrepreneurs to operate on a certain reasonable scale and the question, therefore, was not one of the technical scale of operations. Clearly it was financial size that dominated the mecha-

nism of issue of industrial licences giving rise to the present deviations from the pattern of industrial entrepreneurship envisaged in the Plans. The failure of the Plans to devise an effective instrument for the realisation of their objectives in relation to the private industrial sector may therefore be taken as established. Even if we are not in a position to assert definitely that this pattern of development has been more costly than the alternative pattern originally envisaged, we have at least to recognise that the growth of the industrial sector has not proceeded according to a Plan, but has been the outcome of an intense competitive process based, not on cost and quality differences, but largely on the extent of financial resources commanded by the contending parties.

2.8. This failure of the controlling mechanism is again seen in the allocation of foreign exchange for non-Plan purposes. The story of the foreign exchange crisis that struck the Second Five Year Plan when it was barely a year old has been often pointed out as an example of the lack of co-ordination between the planning and the executing organs. But there was little in the Plan to suggest that the planners were even aware at that time of the important problem of phasing the release of foreign exchange. Foreign exchange scarcity has haunted our planners ever since that memorable crisis. Occasionally the scarcity has been aggravated by extraneous factors like the closure of the Suez canal or the Indo-Pak War. But even now the release of foreign exchange does not take place according to any pre-established plan of utilisation. The result is often found in the form of costly imported equipments lying under-utilised or unutilised because of the non-availability of complementary factors at home while other equally important sectors may be suffering simultaneously for the lack of imported components or equipments. The absence of an effective scheme of co-ordination between utilisation of foreign exchange and the utilisation of the imported materials makes our Plans more capital-intensive than they should be on technical considerations alone. Our Plans have failed to devise a suitable inventory schedule for foreign-exchange-intensive materials in use.

2.9. Turning now to the private sector in agriculture, we again find that the pattern of farming envisaged in the Plans has not made much headway, although progress in the development of ancillary agricultural services has been considerable. These ancillary services, whether they take the form of co-operative credit agencies or the extension apparatus, are undoubtedly serviceable to a class of peasant proprietors, helping them to augment their incomes. But as recent rural surveys have time and again pointed out, they have increased the gulf between different sections of villagers by assisting the more prosperous farmers and generally bypassing the small peasants and the landless population. Referring to the rise in food prices towards the middle of the Second Plan, the Foodgrains Enquiry Committee of 1957 emphasised the role of hoarding by this class of assisted peasant proprietors in aggravating the food shortage. Planning has thus become a misnomer so far as the agrarian structure of the country is concerned, since this type of development in the countryside does precious little to further general economic development. It may be true that a moderately rich class of peasant proprietors has been sustaining the present demand for various types of modern farming implements and even of consumer goods in general. But in the nature of the case the size of this class must be very limited and general economic prosperity can hardly be made to depend on the prosperity of this narrow segment of the population. On the contrary, if this class builds up its prosperity by withholding supplies which are vitally necessary for accelerated industrial development, this must be regarded as an unhealthy development from the long-term point of view.

2.10. Co-operative farming which was so much in the air in the late 'fifties almost faded away as a possible form of agricultural organisation in the 'sixties. The references in the Third Plan to co-operative farming are half-hearted and appear to be very much on the defensive. Yet it is obvious that the existing structure of agrarian relations is responsible for increasing the costs of agricultural extension in all its forms and results in seriously limiting its effectiveness. It is also an obstacle

to the procurement programme, thereby adding to the costs of industrial development. Nothing is clearer from the experience of the first three Five-Year Plans than the inability of the agricultural population in general to reap properly the benefits of public agricultural investment which undoubtedly has added huge agricultural overheads to the country's capital stock. This is largely explained by the preponderance of small farm operators in the countryside and is unlikely to be remedied by redistribution of land or by tenancy reforms. If the agricultural base of the country is to be strengthened and agricultural prosperity is to provide a powerful stimulus to industrial development, certain changes in the present organisation of agriculture on broad collectivist lines appear to be essential. Simply by assisting increasing numbers of peasant proprietors, most of them necessarily operating within the limits of self-sufficiency, we are unlikely to convert agriculture into a spearhead of development. Yet the promise which the First and Second Five-Year Plans held out in respect of organisational changes in agriculture appears to be receding with the passage of time. We have, of course, accounts of various degrees of progress on the technical side in agriculture, such as the growing popularity of High-Yielding Varieties, increasing use of chemical fertilisers, and the use of power-driven pumps in larger numbers. Such spontaneous increases in the demand for sophisticated agricultural inputs will, in the Indian context, exhaust their force within a short time unless they are accompanied by changes of a far-reaching character in the organisation of rural life.

2.11. Introduction of organisational changes is not an easy task. The uproar which followed the adoption of the Nagpur Resolution of the Indian National Congress in 1959 made quite clear the problem of democracy in subordinating short-run sectional interests to long-run national ones. Even co-operative farming would not offer a panacea unless suitable principles of operation could be evolved on generally accepted lines. Yet in so vital a sector as agriculture the wastage of capital invested now comes on top of the already existing problem of manpower wastage, because new organisational forms to utilise these redun-

dant resources have not yet been evolved. This is one of the biggest challenges which the country now faces. Planning, in the simple sense of diverting larger investible funds to agriculture, is clearly inadequate in the context just described.

III

2.12. If the private sector in both industry and agriculture has evolved during the Plan period in ways not contemplated by the planners, the growth of the public sector has also failed to fulfil the aspirations of those who regard nationalisation as a magic wand of prosperity. From the purely distributive point of view the growth of the public enterprise system over the period of the Plans is certainly a welcome development. But this system has not distinguished itself by establishing new norms of efficiency and innovational enterprise. The reasons for this dismal performance of the public sector in India are at present under the scrutiny of the Administrative Reforms Commission and a number of reports have already been submitted by that body. It is unnecessary for our purpose to attempt a detailed analysis of the ills that have afflicted our public undertakings; the general nature of the problem is undoubtedly one of finding out new administrative forms and the nature of re-training involved for the administrative personnel. But one or two points of a special nature have perhaps received less attention than they deserve and may usefully be discussed here.

2.13. One may, for example, wonder whether we have not made a miscalculation by trying to develop the public enterprise system too soon after attaining independence without making adequate prior experiments with suitable methods of running such enterprises. After independence and the partition, the then existing administrative apparatus was overwhelmed with the problems of millions of displaced persons. The over-worked group of top administrators was almost immediately called upon to take up the additional work of organising new public enterprises in diverse fields of operation. It was not un-

natural that the work of organisation suffered. The Soviet economy, by contrast, got about ten years to remodel the administration before the system of planning was launched. During that period numerous methods of organisation were tried and lessons were learnt from their failures and successes. It is at least conceivable that Indian administrators could have given a better account of themselves if they had got the same breathing space before an elaborate system of public sector undertakings was introduced into our economy as an essential adjunct of our Plans.

2.14. At the same time the operation of public undertakings may have suffered from their juxtaposition with private enterprise. New types of attitude which might have developed if only public enterprises were in operation were prevented from emerging because the private enterprise system continued to dominate the mixed system. Attitudes appropriate to the latter form of enterprise continued to prevail in the public enterprise system as well and neither the management nor the workers could be conditioned for a change in their approaches to the problem of work organisation. In this respect the mixed economic system which we adopted as the most practicable method of development in the existing circumstances was found to fall far short of the ideal system which it was supposed to represent. In effect, it prevented public enterprise from acquiring a truly public character.

2.15. Any study of the development of the Soviet factory system — such as the one by David Granick — shows very clearly that while the management in Soviet factories had to accept limitations on its powers in the public interest, the workers there had to assume new responsibilities for factory administration and improvement.⁶ In very few public undertakings in India even a fraction of such changes has taken place. Practices prevailing in private organisations have been adopted in toto, thus eclipsing completely the public purpose for which the

⁶ D. Granick — *Management of the Industrial Firm in the U.S.S.R.*

undertaking was launched. This has tended to promote irresponsibility in the management and a pervading distrust of the managerial cadre among the rank and file. Private enterprise has at least its own long-term interest to protect and preserve, which prevents the situation in respect of management-labour relations too often getting out of hand. In public enterprises, so long as the general awareness of the public purpose is still dim, neither management nor workers will care to improve the vicious atmosphere and the operations of the enterprise will suffer from a chronic malady too difficult to remedy by usual methods of conciliation.

2.16. It remains to add that even newly organised public services, ushered into existence solely for the purpose of realising the targets of the Plans, have not totally escaped the contamination of the prevailing mixed economic system. The Agricultural Extension Service in India is an offspring of the Plans and is supposed to be working not merely for the spread of improved agricultural practices but also for the development of a self-reliant rural community. Yet, apart from its quite useful service of providing agricultural advice and technical assistance, it has very little else to show to its credit. Its primary contribution has been to introduce into the rural areas another agency of a paternal government, almost exclusively concerned with measuring its own performance in conventional terms, for example, the number of wells dug or compost pits prepared, whereas, as a public agency, it should have been more interested in assessing the achievements of the population which it has been called upon to serve. Attitudes common to private enterprise, thus transmitted to the public services, have tended to detract attention from the ultimate outcome of planned outlays in various spheres of development.

IV

2.17. It is not only the domestic developments described earlier that are responsible for the relatively planless character

of our planned development. Quite a large share of the responsibility in this regard must be attributed to our foreign benefactors who have, in one sense, furthered the progress of investment in the economy and, in another sense, made such investment less effective than it might otherwise have been. In a purely quantitative sense, foreign capital receipts have no doubt been of help in raising the level of investment in the economy from about 5 per cent of the national income in 1950-51 to over 13 per cent by the end of the Third Plan, that is, roughly from Rs. 450 crores to Rs. 2,600 crores per annum. But foreign capital has also added to the capital costs of development, both by foisting on us excessively capital-intensive methods of production and by inflating the costs of installation of the capital equipments needed.

2.18. The first of these charges can, of course, be definitely established only on the basis of a case-by-case study by experts in the respective techniques of production. We can only speak of a general tendency in this respect, arguing from the type of foreign aid that we have most commonly received. In most cases, such aid has come to us in the form of project aid and very often the entire shape of the project has been decided for us by foreign technicians and aid-givers. The package of aid that has descended on us in this way must have contained a number of ingredients which would have been largely different if indigenous techniques had been allowed the time and opportunity to develop. The variety of minor adjustments that would certainly have been introduced in the light of local circumstances could not come into play because foreign aid was based not on what we needed, but on what the aid-givers were in a position to provide.

2.19. The difficulties inherent in such a situation were aggravated by the fact that project aid failed to be supplemented by non-project aid programmes of a suitable type and magnitude, so that the capital equipment received by way of aid had to remain under-utilised for lack of materials and components. The sale of equipments having been negotiated, the aid-givers lost interest in the subsequent course of the project, even though

by all canons of prudent finance, they should have created conditions for the successful operation of the projects, since this was essential for returning the aid received. But since aid-giving has still remained very much a part of international diplomacy, with its emphasis on short-period effects, such far-sightedness was, in the majority of cases, too much to expect. It is strange, however, that even such an institutional agency as the International Bank for Reconstruction and Development failed for a long time to realise the connection between project aid and non-project aid, and even when the importance of the latter form of aid was realised, very little was done, at least in the early years, to alter the character of aid.

2.20. A second source of inefficiency in the aid received was the practice of tied credit. It has been estimated that the value of American aid received by India was reduced by almost 20 per cent because of this practice. Although it is doubtful whether this particular figure will bear scrutiny, since actually available alternatives must have been few at the time, there can be little doubt that the value of the capital received had to be entered in our books at much inflated figures than would have been the case if normal trade channels could be explored. Add to this the cost of shipping on foreign bottoms, and the extra charges for insurance during periods of upheaval so common since our Second Plan was launched, and the top-heavy capital structure that we have reared so far without adequate returns will be largely explained. The Soviet economy avoided this particular cost of importing foreign capital, but then it had to bear the cost in the form of a severer inflation than what the Indian economy has at any time witnessed since our Plans were adopted. It is not easy to decide which of these costs will have a longer and deeper impact on the economy in question, but from the simple point of view of the returns to capital invested the Soviet method must obviously appear as more economical.

2.21. An interesting question, related to the above, is whether the food and other agricultural commodity imports financed by American Public Law provisions have on balance helped or hindered our development. Once again, speaking

quantitatively, there can be little doubt that aid received in this form has added substantially to our domestic resources and thereby has helped to assuage the problem of inflation. But in so far as it stifled price incentives for the private sector in agriculture and permitted the government to go slow with its internal procurement programme, it stood in the way of vital structural changes in the economy — changes without which a sustained development programme can hardly be undertaken in an economy with a high marginal propensity to consume. A much harsher set of restraints on consumption would, perhaps, have been necessary if domestic inflation had to be fought by domestic methods alone, as the Soviet economy amply testifies. But the returns from investment would in all probability have been faster and ampler. This last assertion is of course based on the important assumption that the economic administration would not crack under the pressures of the forces that would have come into play if harsher restraints on consumption had to be imposed.

V

2.22. So far our endeavour has been to explain why a relatively capital-intensive type of development was almost inevitable for India in the circumstances in which she initiated and executed her Plans. Neither the state of the domestic economic organisation nor the conditions under which foreign aid was received were conducive to economies on capital account. We can round off this discussion by pointing to a different set of factors which may also have contributed to the unsatisfactory rate of utilisation of the capital installed.

2.23. It is well known that our Plans have attempted to develop at the same time two different types of economic institutions — one based on the latest technology available and so contributing little to the problem of absorption of under-utilised labour, the other giving a new lease of life to obsolete technology which requires a fairly large complement of labour to be put

into use. These two sectors naturally operate in almost watertight compartments. Expansion in the latter sector does very little to create additional demand for the output of the former, while expansion in the former sector can proceed only on the basis of a demand coming strictly from within that sector. At the present stage of development quite a large fraction of the additional incomes generated in the modern sector leaks out in the form of demand for imports, with the result that the sector suffers chronically from lack of demand for its output. As India becomes more self-sufficient in respect of equipments for industrial development, or is enabled by cost reduction or other methods to sell more of its current output abroad, the problem of demand deficiency in this sector will gradually evaporate. But to-day it has to be reckoned with as an important factor in the situation. The concentration on two extreme ends of the technological spectrum, and the relative neglect of intermediate technologies has been responsible for this state of affairs.

2.24. The expansion in the traditional sector of production has been considerable, as we have seen. But the extra demand which has sustained this expansion has been somewhat artificially diverted from the modern sector through an elaborate system of special cesses and subsidies. This implies that the expansion in this sector of the economy, instead of providing a stimulus for the growth of the other sectors, has rather acted as an incubus on general expansion. The increase in the output of the traditional sector has come about mainly as a result of the active utilisation of dormant capital. Demand for new capital formation has been negligible. Even if new capital equipments have been necessary, the very fact that traditional techniques have been artificially safeguarded has prevented a gradual movement towards more advanced techniques which might have created additional demand for the output of the modern sector. Thus, the modern sector has been made to support the expansion of the traditional sector without being in turn benefited by that expansion. However useful the encouragement of traditional industries may have been from the point of view of relieving under-employment, such industries have, by and large, failed

to create any net addition to the level of effective demand in the economy and have survived by simply appropriating a part of the demand created for goods elsewhere in the economy.

2.25. Apart from this serious lack of co-ordination between the two main types of industries taken up for development, the Plans have also suffered because of failure to synchronise the development of related groups of industries. In most such instances, while groups of industries might have been projected as an inter-related whole, the execution of the different parts, usually entrusted to different agencies, has failed to proceed in step. At the same time the planners have neglected to introduce an agency of intervention in circumstances where different inter-related parts of the economy have been out of step with one another. This, again, can be regarded as an incidental outcome of the type of mixed economy that we have raised up as an ideal in our Plans. Merely by licensing industrial capacity in the private sector, one can hardly ensure that different types of related capacity will be brought into being at about the same time. For this a tighter schedule of planned execution seems to be called for and one may be permitted to doubt whether this is compatible with the type of division of responsibility between the public and private sectors which we have so long regarded as sufficient. Even if the remedy for this situation does not lie in an immediate extension of public sector activity in every nook and corner of the economy, there must at least be a well thought-out procedure to deal with situations where licences issued do not materialise into expanded capacity within a reasonable period of time.

2.26. In some cases the blame for failure to develop planned capacity may not lie with the private sector at all. Different parts of a project, entrusted for execution to different public undertakings, will hardly move in unison unless a fairly rigid time-table of execution has been laid down in advance. Our planners have shown a lamentable disregard of the importance of phasing out the different inter-related projects, even when all such projects have belonged to the public sector. This has introduced some avoidable wastes in our investment pro-

gramme. With a more synchronised execution of the different inter-related projects, the level of utilisation of installed capacity could in all likelihood be substantially improved.

VI

2.27. Information available in 1966 showed that in a number of important industries installed capacity was more than 200 per cent of the current level of production. Almost all the machine-building industries that had newly come into existence over the period 1956-1966 belonged to this category. In mining machinery, for example, while installed capacity was rated at 45,000 tonnes, actual production in 1965-66 was expected to be no more than 7000 tonnes. In cement machinery, capacity had been installed for the production of Rs. 20 crores worth of machinery, while actual production was no more than Rs. 3.5 crores. In respect of agricultural tractors the position was no less unsatisfactory. Against an installed capacity of 15,000, actual production was perhaps no more than 5,600. Such under-utilisation of capacity, installed at exorbitant cost, obviously resulted in keeping up the unit cost of production and limited the extent of sales of the product concerned. From the macro-economic point of view the consequence would be an artificially blown-up capital-output ratio which, when used for the next period of planning, might lead to serious errors of allocation.

2.28. For a poor country struggling hard to equip its population with only the minimal amount of capital necessary for attaining a satisfactory per capita level of production, such under-utilisation of capital is a far more serious thing than in countries where capital is cyclically under-utilised for a period for lack of effective demand. The term 'recession' which is generally used in advanced economies to describe a temporary withdrawal of demand in various lines of production cannot adequately describe the situation which India has been facing in consequence of the lop-sided execution of her Plans. It is impossible to say without detailed investigation whether in any

particular industry under-utilisation of capacity was due to supply imbalances or to demand deficiency. But whichever reason may have been more important in particular cases, the originating cause is more likely to be found in a shortcoming of the underlying Plan than in a sudden recession in demand.

2.29. It appears from recently available statistics that the rate of utilisation of installed capacity has not significantly improved over the last three years, as should have been the case if the downswing in demand was simply a transient and self-reversing phenomenon. Although the rate of growth of production increased marginally, the growth of capacity in many instances occurred at a more than proportionate rate. An extreme case in which capacity increased by nearly two-thirds, but production actually declined is furnished by the machine tools industry. In 1965-66 capacity in this industry was rated at Rs. 300 million, actual production in that year being Rs. 294 million. Three years later, in 1968-69, capacity was estimated as Rs. 500 million while production actually fell to Rs. 250 million. More typical, however, are cases where both production and capacity have increased, leading to little, if any, improvement in the utilisation ratio. While investment has proceeded according to plan, albeit with a longer gestation lag than was initially contemplated, the degree of utilisation did not improve over time, presumably because of the same factors as stood in the way of normal utilisation several years earlier. It will be unwise to ignore the deficiencies in planning and execution which could lead to this unsatisfactory state of affairs by simply attributing this to a sudden recession which developed quite outside the province of action of the planners. In a few cases, vagaries of demand might have played their part in complicating the situation. But by and large such inadequate utilisation of installed capacity implies a failure in the mechanism of planning. It shows that when investment programmes were being drawn up, complementarities of demand were left out of account. Thus a time-profile of the growth of demand failed to emerge, thereby creating the current imbalance between capacity and production. In some cases it is not unlikely that restrictive

practices, characteristic of monopoly and oligopoly, may also have played their part in keeping down the rate of utilisation of capacity. Failure to rear up an effective agency for the promotion of exports must also be taken into account in this connection.

VII

2.30. The First Five Year Plan did not contain any target for export growth. The planners dismissed this aspect of the problem of economic growth by remarking rather casually that "conditions of foreign trade.... are apt to change frequently and sometimes violently. Precise year by year targets for exports and imports.... would therefore serve little purpose".⁷ Nevertheless their calculations of production and consumption targets for principal commodities yielded a sort of projection for exports and imports at the end of the Plan period. It was estimated that in 1955-56 export volume will be more than 10 per cent higher compared with 1950-51 and the import volume nearly 18 per cent higher. Although as a consequence the balance of payment was expected to deteriorate, the planners were not unduly worried about the problem of export creation since a comfortable cushion of foreign exchange reserves still existed. In fact, however, export volume as measured by the Reserve Bank's index fell by about 2 per cent at the end of the Plan than at the beginning, while the import volume went up by only 1.4 per cent. The delay in the implementation of some of the more capital-intensive projects was no doubt responsible for the slow growth of imports, but the fact that even at this rate of import growth exports failed to keep pace with imports was rather ominous. The balance of payments position, however, remained favourable, thanks to the growth of invisible imports and a larger inflow of official aid. Even then the surplus

⁷ Planning Commission — *The First Five Year Plan*, p. 452.

in the balance of payments was cut down by nearly two-thirds between 1950-51 and 1955-56.

2.31. In the Second Five Year Plan the planners realised that "uncertainties notwithstanding, it is essential to form a view of the likely trends in the balance of payments and to assess the adequacy of foreign exchange resources in the light of requirements". Accordingly a more elaborate exercise in forecasting the balance of payments was undertaken than in the case of the First Plan, revealing an aggregate current account deficit of over Rs. 1,100 crores in five years. This was based on the assumption that increase in exports over the Plan period was unlikely to be very striking, since domestic production had first to be fully organised before larger export earnings became possible. In fact, the average of exports over the five years 1956-57 to 1960-61 was expected to be a little less than the level of 1955-56 because the domestic use of some hitherto exported raw materials would be going up. But the planners were not very much daunted by the size of the foreign exchange gap. With about Rs. 200 crores of reserves still available for use and looking forward to nearly Rs. 900 crores worth of inflow of foreign aid, they dismissed the balance of payments problem as of little consequence, provided that utmost economies could be exercised in respect of non-Plan imports. But subsequent events proved that a most vulnerable part of the plan was thus left undefended.

2.32. The course of events that followed showed that although exports increased at a slightly faster rate than what the planners thought it would be possible to accomplish, growth of imports at a much faster rate nullified all the good effects of this accomplishment, while earnings from invisible items were also somewhat smaller than what the planners envisaged at the stage of formulation of the Plan. Accordingly, the current account deficit excluding official donations was nearly Rs. 800 crores larger than the Plan estimate. In the first two years the draft on foreign exchange reserves was more than double of what had been anticipated for the entire five-year period. Beginning from the third year (i.e. 1958-59) foreign aid began

to play a more important part in financing the net deficit, the inflow of such aid over the period of the Plan being Rs. 1,475 crores as compared with Rs. 800 crores with which the planners had hoped to finance the foreign currency expenditure of the period. The danger of treating the question of export growth in a cavalier fashion was gradually getting clearer and clearer. It should also be noted that the improvement in exports noted during this period was the result not so much of any marked expansion in export volumes as of an improvement in the unit values of exports. The proportion of exports to domestic production actually declined in respect of most commodities.

2.33. The Third Plan attempted a firmer forecast of import requirements than what the previous Plans had done. The amount of payments liability involved was seen as increasing over time. The net inflow of special official funds necessary to offset current deficits in the balance of payments was estimated as Rs. 2,600 crores over the period of the Plan, assuming that export earnings over the period would be about 10 per cent higher than during the period covered by the Second Plan. This meant that the foreign exchange gap would rise by nearly Rs. 800 crores between the two Plans — a figure which was in itself not very large when we consider that the step-up in Plan expenditure between the Second and the Third Plans was to be more than $3\frac{1}{2}$ times this figure.

2.34. The performance in respect of exports was, in fact, somewhat more satisfactory than what the planners had looked forward to. On an average exports increased by nearly 4 per cent per annum, quite a creditable rate of performance in view of the comparatively poor expansion in agricultural and industrial production. Imports also probably increased less rapidly than what the planners had allowed for. But this time earnings from invisibles registered a sharp decline, with the result that the balance of payments situation did not materially improve. On the contrary, since towards the end of the period foreign capital inflow tended to fall off, the pressure on the country's foreign exchange reserves was accentuated. Difficulty was particularly felt in respect of maintenance imports, since exchange

funds earmarked for specific projects could not be diverted to meet the cost of these types of imports. It was obvious that the expansion in exports that had been brought about after more than ten years of expansion in agricultural and industrial capacity was not really adequate for meeting the import bill, since maintenance imports depended primarily on export earnings for their financing. In fact, it was only by having recourse to the temporary accommodation provided by the I.M.F. that the country could fulfil its import programme. It is even likely that the real content of the import programme was less than fulfilled, since import prices had in the meantime gone up by about 8 per cent.

2.35. Except in the year 1963-64 export quantities generally increased less than proportionately to the increase in domestic industrial production. In such important exportables as tea, cotton piece-goods, jute manufactures except jute carpets, and iron and steel exports expanded rather slowly as compared with the rate of growth of domestic production. There was however marked improvement in respect of exports of iron ore, machinery and transport equipments and sugar. On the whole it appears that over the five years 1961-66 while industrial production increased by over 30 per cent, the quantum of industrial exports increased by only 22 per cent. The newly developed industrial capacity was not yet yielding adequate returns in the form of exportable products.

2.36. The comparative sluggishness of our exports during the entire 15-year period of planning cannot be attributed to a failure of planning because it is a fact that until very recently the planners did not show much awareness at all of the necessity of having an export plan as an integral part of the national plan. The foreign exchange gap left by an expanded volume of imports was left to be taken care of by domestic reserves and by foreign aid-giving agencies. It appears that our foreign benefactors were also not too much worried by this lack of an export plan, largely because the aid received was not purely commercial in character. From the point of view of long-run economic balance, however, greater attention ought to have been paid to

the external accounts of the country with the objective of shortening the period of imbalance and keeping down the quantum of extraordinary assistance as much as possible. In this context we may remark in passing that the strategic importance of exports in a development plan had to be realised at a much earlier stage by the Soviet policy-makers, since the alternative of relying on foreign assistance was not available to them. Before the Soviet Five Year Plans were taken up the export trade of the country had been carefully reconstructed, no doubt at great cost to the domestic levels of living. According to Soviet trade records the volume of exports in Soviet Russia on the eve of the country's First Five-Year Plan was about four times the level to which it had fallen in 1923. Beginning from 1924 both imports and exports increased and the trade balance up to the end of the First Plan remained negative. But by the beginning of the Second Plan the balance of trade began to show surpluses which more or less wiped out the deficits in the earlier period. It is true that drastic cuts were effected in imports after 1931, but the very fact that export volumes could be maintained at relatively high levels even after the drastic import cuts represents an achievement of no mean order. This necessarily called for a prolonged period of denial of consumption to the Russian people, but looking at the matter purely from the point of view of the re-structuring of economic activities within the country the success achieved by the Russian planners was indeed very great. There is some evidence to show that in her eagerness to pay her way in trade, Russia had to sell her exports at prices which would normally have been regarded as unremunerative. From this aspect of Russian planning as well as from the fact that over 70 per cent of Russian investment during 1929-52 was directed towards heavy industry, the restraints which the Russian planners were able to impose on the growth of consumer spending will be self-evident. In India, on the other hand, consumer spending has grown at rates for exceeding what the planners initially thought of allowing although, as we have seen, Government's draft on private incomes also increased substantially over the years. Yet at the present stage of development, at any rate,

a greater degree of restraint on consumption would probably have contributed towards speeding up the rate of growth and permitting quicker attainment of a viable state in our foreign economic relations.

VIII

2.37. When the first Five-Year Plan was drawn up it was thought both desirable and feasible that while in the First Plan only 20 per cent of additional income would go towards capital formation, from the Second Plan onwards something like 50 per cent of the additional income would be used for capital formation rather than for satisfying additional consumption needs. With the population estimates then available which have since been found to err on the low side and a comparatively low capital-output ratio than was subsequently found realisable, the growth of national income attainable on the basis of the above estimate of domestic saving was found sufficient to double per capita income in 27 years and raise per capita consumption by 70 per cent in the same period. Aggregate saving was expected to reach 20 per cent of the national income by 1968-69 and thereafter maintain this ratio with the growing national income.

2.38. By the time the Second Five-Year Plan came to be drawn up, the previous optimism regarding the likely growth of saving in the country had disappeared. The Second Plan, in fact, did not attach much importance to the problem of augmenting domestic saving capacity and confined its attention almost exclusively to the growth of investment apparently counting on larger amounts of foreign assistance for investment in subsequent years. The general feeling in the Report seemed to be that additional saving from additional income could hardly be raised above 20 per cent. An aggregate saving level of 16-17 per cent of the national income was the best that could be hoped for and even this could be attained only after the first four Five-Year Plans. Compared with the First Plan document the Second Plan showed distinct signs of apathy

towards the vital problem of saving mobilisation from larger incomes. However, the Second Plan showed its optimism in other ways. Assuming a lower capital-output ratio the planners could get per capita income doubled in 1973-74, although the rate of population growth was expected to be slightly higher than the rate adopted in the First Plan projection.

2.39. The perspective further changed in the Third Plan when it was discovered that the population growth rate was seriously under-estimated in the earlier projections. But even though the difficulties of attaining the per capita income goals of earlier Plans were stressed, the need for stepping up domestic saving out of additional incomes being generated was not stressed as much as it should have been; the additional investment contemplated was to be financed almost to the same extent as hitherto by external financial assistance. Although the ideal of a self-generating economy was now being held up by the planners, the implications of this ideal for the growth of saving in the economy were not squarely faced. The task of saving more out of larger incomes was relegated as far as possible to the future Plans. In marked contrast to the earlier resolve to raise this marginal rate to 50 per cent, even the issue of raising this rate to 25 per cent began to cause misgiving and was given only cursory attention by the planners.

2.40. It is very difficult to say what the actual course of saving has been since the Plans were adopted. The available evidence only indicates that the marginal saving rate in the Second Plan may have been somewhat lower than what had occasionally been attained in the First Plan and the situation in this particular respect was not getting any better in the first few years of the Third Plan. It is heartening to observe that the Draft Fourth Plan addresses itself once more to the important question of external viability and studies its implications for the domestic rate of saving. According to present calculations the marginal rate of saving must reach a level of 28 per cent of additional income for the entire period 1968-69 to 1980-81 if the aim of dispensing with net aid after that period is to be realised. The saving target, it may be noted, is now related to

the goal of reaching external viability in the next 10 years. Per capita income is not going to increase by more than 55 per cent if saving and investment rates cannot be stepped up further. Even this newly accepted goal is unlikely to be realised if marginal rates of saving observed in the last ten years can be taken as a guide for the future.

2.41. We thus come to the rather self-evident proposition that if the goal of attaining a more satisfactory rate of growth in per capita incomes is to be made the central objective in our planning, the present levels of saving and investment — and those that seem likely of attainment in the near future if present policies continue — will be entirely inadequate for that purpose. Although in absolute terms investment went up nearly five-fold over the first three Plans the resultant growth in income has not been utilised for further growth to the extent desirable. Moreover, as we saw earlier, the increased capital resources of the country have not been on the whole utilised as intensively as is desirable in a situation of extreme capital-scarcity. Add to this the fact that up till now very little progress has been made to harness the potential capital-creating power of excess labour in the vast Indian countryside, a subject to which we recur in the next chapter, and the predicaments of Indian planning will be at once obvious. We do not want to give the impression, however, that the deficiencies in our planning and plan implementation which have thus been brought to light detract in any way from the great achievements of the three Five-Year Plans. But they do underline the need for re-thinking our planning strategies if the realisation of important national goals is not to be deferred beyond a generally acceptable time-limit and if the available resources of the economy are to be used more effectively for the realisation of those goals.

THE 'CRISIS': CAUSES AND CURES

3.1. Despite the various deviations from the originally envisaged pattern, the Five-Year Plans were productive of some beneficial results right up to the period when planning for periods of five years at a stretch was abandoned in 1966. It is true that by the time the Third Plan had been taken up for implementation, planning was already on the point of ceasing to be an evocative word and had come to be regarded as something of a ritualistic exercise indulged in by the country's political arbiters to give an impression of purposiveness where none existed in reality. The Planning Commission was already being regarded as a redundant organ of government, particularly because of the hard bargains it was generally found capable of driving with the Ministries, both Central and State, specially the latter. The plan-executing organs were themselves failing to get attuned to the purpose of the plans and to subject themselves to the discipline so essential for effective planning. The planning exercise was coming to be considered as simply a duplicated set of financial control measures over the spending departments of government, with little to show by way of purposive control over the resources used and results achieved. But these criticisms notwithstanding, the Planning Commission did maintain a hold over economic affairs which could be turned to good account if other circumstances so permitted and if sympathy with the objectives of the Plan did not completely reach vanishing point among the executive organs and the people at large.

3.2. The common impression that planning was only serving the interests of the rich, making the rich richer and the poor poorer, will not be completely borne out by facts.⁸ There was, it

⁸ Even if it is true that the disparity between some narrowly defined U-sector and a correspondingly narrowly defined lowest-income

is true, no ceiling on incomes and only a moderate tax on wealth and capital gains. But at the same time there were many aspects of the plans which served to bring about an improvement in the conditions of the small peasant proprietor, the small artisan and the small traders and construction supervisors. Employment opportunities were expanding, though not at a rate high enough to eliminate or even reduce unemployment. Educational opportunities were spreading and more students received study concessions of one form or another than at any previous time. Yet the feeling was gaining ground that social differences — income differences and differences of status — were both on the increase. One reason for this was the failure on the part of the government to impose a wages and salaries policy on the private sector. As this sector expanded, it offered to the limited stock of qualified personnel a scale of salaries which could not be sustained in the long run when training opportunities would expand. Here international standards were applied not so much because international mobility existed on a large enough scale (which could be checked if necessary), but because of a failure to distinguish between the phenomena of quasi-rent and long-period supply price. The expansion of employment at the high salariat level in the very early stages of the plans must be regarded as a factor contributing to the general feeling that the plans have increased the gulf between the haves and the have-nots. A positive incomes policy which would help the emergence of a reasonable scale of wage differentials and modify it according to needs and the productivity of the economy did not accompany our plans and could not therefore create a sense of participation and personal involvement among many sections of the population. To the extent that planning is not merely an exercise in investment-and-income arithmetic, such general involvement must be given a pride of place among the factors that contribute to the success of planning.

segment has increased, this need not be accepted as a proper measure of inequality of incomes. Besides, inequality may increase although at the same time the absolute level of living of the poor can improve.

3.3 Frustration was further increased when the Census of 1961 disclosed that growth of population in the country was actually taking place at a rate much faster than what the plans had taken account of and the economic structure was not changing rapidly enough to accommodate these growing numbers. Normally this disclosure should have redoubled efforts and called for more carefully prepared plans. But the inadequacy of the existing plans came to be realised with a sharpness that produced almost exactly the opposite reaction. In certain quarters there was a misgiving that planning, by putting curbs on the operation of private enterprise, was actually making things worse for all and more rapid growth would be attained if these curbs were removed. Of course, neither in Indian economic history nor in the existing pattern of inter-relation between the private and public sectors was there any evidence to establish that this was in fact the case. But dissatisfaction with the pace of growth made possible by the first ten or twelve years of planning was increasingly being voiced in the early 'sixties.

3.4. Such was the situation of disillusionment and lack of proper discipline in execution into which the Third Five Year Plan was born. The planners were not unaware of the need for a bigger effort, but the direction and magnitude of that effort were by no means very clear. The mechanism of plan formulation was considerably improved in the 'sixties; the internal balances were checked and re-checked. The vulnerable agricultural front was sought to be strengthened as far as practicable. In other words, almost every precaution prescribed in planning methodology was taken. But issues over which disenchantment had grown and the types of indisciplined action which were interfering with plan execution were not spotted out in detail. Even so, the Plan might not have reached a state of fiasco if a number of extraneous factors had not supervened. It is to these factors that we now turn before we attempt a probe into the deeper troubles that assailed our planning.

II

3.5. From the very beginning the Third Plan struck a patch of unfavourable agricultural seasons which considerably brought down the rate of growth of agricultural production. While agricultural production was growing at rates of 3 and 3.4 per cent per annum during the First and Second Plans respectively, it registered small negative rates of growth during the first two years of the Third Plan. Initially this produced no adverse effect on food prices, thanks to larger imports of food-grains under agreement with the U.S.A. But by the beginning of 1963 prices of food articles were going up sharply. The inadequacy of some agricultural raw materials and the difficulties relating to the external accounts of the country prevented full utilisation of installed capacity in many industries with the result that the rate of growth of manufacturing output also slackened in the first two years of the Third Plan. National income figures indicate that the growth rate during 1961-63 was only about 2.5 per cent per annum as compared with average rates of 3.4 per cent and 4 per cent respectively attained during the First and the Second Plan periods.

3.6. On October 20, 1962 India found herself at war with Communist China. Although this one-month long conflict did not take a heavy toll of lives, its repercussions on the economy were of long duration. These arose not so much from the diversion of financial resources to meet defence needs; in fact, this additional expenditure was met by larger mobilisation of taxes and other fiscal devices and the Government's development expenditure did not have to suffer a cut. Plan outlay, in fact, increased from year to year throughout the Third Plan period. But inflationary financing had to be resorted to in greater measure than was thought prudent at the time of formulation of the Plan. While the original scheme of financing of the Third Plan stipulated only Rs. 550 crores by way of deficit financing, in fact the extent of deficit financing was more than double this figure, viz. Rs. 1,133 crores. While this produced the inevitable effect on prices, producing a nearly 20 per cent rise in

two years during 1962-64, this did not mean any reduction in terms of real resources devoted to social and economic development. Even when price increases are taken into account, expenditure on the Plan got stepped up by about 20 per cent each year throughout the period. In fact, the conflict with China probably acted as a stimulus to industrial production and rescued the economy for the time being from the sluggishness which had affected it in 1961 and the early part of 1962. The adverse effects came mainly from the hastily devised emergency taxes and the excessive deficit financing that were found necessary to meet the twin burden of defence and development.

3.7. More detrimental to the progress of planning in the country was the departure from the scene in quick succession of two prominent personalities who represented as it were the very spirit of planning in the country and rendered yeoman's service to the cause of planning in the initial years. Mr. V. T. Krishnamachari, an able administrator picked up as the Deputy Chairman of the Planning Commission, had done a lot to set up the planning organisation and give it a definite shape in the first ten years. His death deprived the country of a person who could, by his position and experience, command respect throughout the administrative network. The sudden incapacity and subsequent death of Prime Minister Nehru had disastrous effects on the tone of planning in the country by making it less acceptable to the politicians who banked more on local support than on records of national achievement. The forces that upheld the centrally conceived plan as against various local interests and aberrations were now definitely on the defensive as subsequent deliberations in the National Development Council tend to show. The decision to defer the Fourth Five Year Plan was at least in part a result of this change in the country's political stewardship at a crucial moment when economic difficulties were also growing more and more formidable.

3.8. These economic difficulties which finally led to the decision to abandon medium-term planning and frame only annual plans of development expenditure arose primarily out of the balance of payments situation. As already noted, with the

growth in productive capacity in the industrial sector the problem of maintenance imports was assuming unmanageable proportions. The major aid-giving countries were beginning to change their attitudes towards foreign capital assistance schemes, as cold war tensions were yielding place to a relaxed atmosphere of live and let live. The International Bank was looking askance at the Indian Planning Commission's emphasis on public enterprises and clearly hinting at curtailment of its loans to India unless loans were used for stimulating the private sector in industry. The Soviet Union had considerably curtailed her loans to India during the Third Plan years and after the Indo-Pakistan conflict in September, 1965 aid previously pledged by the U.S.A. and I.B.R.D. was also withheld. Agricultural production suffered a serious reverse in the last year of the Third Plan and the rate of growth of manufacturing output also slowed down. Export earnings once again began to drop and prospects for recovery in export earnings were regarded as gloomy in the then existing conditions of international competition. Pressure began to mount for a suitable revision of the par value of the Indian Rupee, although nobody was very clear about the extent of improvement in the balance of payments which such revision would bring about. This uncertainty about future exchange rate policy and its repercussions on the external accounts of the country made the preparation of a new Five-Year Plan a rather pointless exercise at that stage and encouraged a policy of make-shift until the general outlines of the external accounts situation were more clearly visible.

3.9. The devaluation of the Rupee actually took place in June, 1966. If the decision to devalue had been taken earlier, the uncertainty which prevented the taking up of the Fourth Five Year Plan as scheduled would not perhaps have loomed so large as to require a deferment of the plan. The course of events, however, was such that the task of drawing up a more or less firm plan for five years appeared too injudicious and only Annual Plans came to be prepared. In certain quarters this has been construed as a deliberate anti-planning measure, but obviously this is not the correct way of

looking at the events of the years 1966-69. The apparatus of planning was not dismantled, nor was there any evidence that the importance of public sector economic activities was being whittled down. It was only the prevailing foggy atmosphere that enjoined looking ahead for only one year at a time.

3.10. The Annual Plans, however, had to be cut down in size as compared with the levels reached during the last two years of the Third Plan. The decline in offers of foreign aid as well as the necessity of non-inflationary financing made this reduction in size unavoidable. The actual Plan outlay in 1966-67 was Rs. 2,137 crores, and in 1967-68 Rs. 2,205 crores. In 1968-69 the outlay on the Plan was probably not much higher than in the previous year. The inflow of foreign aid has in fact been somewhat larger than was assumed in early 1966. But owing to the grant of more liberal dearness allowances to government employees and other cost-raising factors, expenditure on non-development items has been larger than originally estimated with the result that domestic resources for planned development have become even scarcer than before. It needs some amount of optimism to announce in these circumstances any plan of action that will make Indian economic development less reliant on foreign aid than it so far has been. About 28 per cent of Third Plan expenditure was financed with the help of resources made available by foreign countries and international institutions. The latest draft of the Fourth Five-Year Plan suggests that this proportion can be reduced to about 17.5 per cent if certain anticipations about domestic resources being adequately available come true. But if the experience of the Annual Plans for the three years 1966-69 is any guide in this respect, the hope held out about a drastic reduction in the requirements of foreign aid is unlikely to be realised. The resumption of Five-Year Plans is unlikely by itself to improve the resources position of the economy to this extent.

III

3.11. Given the resources constraint, the only way out appears to be a plan of smaller dimensions concentrating only

on a limited number of objectives within a specified five-year span. As has already been suggested, the achievements of planning in India appear less impressive than they really are largely because the number of objectives stressed in any one plan has been legion. Industry and agriculture with all their subdivisions, the social services, transport facilities, communications, vertical social mobility — all these and several other objectives have been held up by our planners as worthy of simultaneous pursuit and funds have been allotted for their realisation within limits imposed by the availability of resources. The dispersal of resources in this very impartial manner among objectives all laudable in themselves has not been conducive to the strengthening of the productive base of the economy, but has on the other hand created an almost insatiable desire for improved social services which cannot be satisfied out of the existing productive capacity of the country. The priority of the more productive sectors of the economy in the economic development plan of a poor country is, of course, beyond dispute. But in a democratic set-up it becomes difficult to resist sectional demands for an immediate improvement of personal amenities and opportunities, with the result that the prime objectives of development on which concentration is essential in the earlier stages become mixed up with other objectives. In the current situation where prospects of finding additional resources are rather gloomy and it is safe to have a plan of only moderate dimensions, re-thinking on priorities has become all the more essential. Concentration on objectives that are not only considered worthy of pursuit in themselves, but also contain the potentiality for stimulating further growth with no more than a reasonable time-lag has become absolutely essential if current economic difficulties are not to be accentuated by the next instalment of planning in the country.

3.12. The idea that planning should in future be on a more moderate scale is not born of defeatism. The selection of relatively few targets is indicated not simply to reduce pressure on resources, but also to improve the quality of planning. As has been found from experience, too many targets pursued simul-

taneously have ended in loose interrelationship among the targets and caused a lack of balance in the plan. The careful selection of a smaller number of mutually linked targets should make possible the elimination of imbalances among different parts of the plan thus leading to fuller utilisation of capacity and a higher rate of returns for the investment made. This balanced growth within a carefully marked-out sector will, of course, generate pressures for the development of other sectors which did not receive equal attention in that particular plan. But this appears on the whole to be the course along which planning has proceeded in other countries including the U.S.S.R. The major argument in favour of balanced growth, namely, the creation of demand by several industries for one another's products, loses its relevance in a planned economic system dominated by the State. Technical or "material" balances become more significant in such a system. But if the canvas chosen is too large the working out of these material balances becomes difficult and certain parts of the plan are very likely to fall out of balance with the rest. A careful chalking out of the process of interrelated growth is possible only when the number of sectors taken into account at any time is manageably small.

3.13. Although inter-industry studies are known to have formed part of the preliminary processes of planning in India, the number of industries that could have been covered in this way was too small in relation to the number of sectors for which some target was loosely laid down or some allotment of expenditure was made. With the task so elaborately conceived it was not possible to build up an adequate framework of preliminary conceptual analysis that could ensure the mutual linking up of the numerous sectors. A smaller number of firm targets, with their implications worked out and checked against one another, is bound to improve the general workability of the plan and prevent the locking up of scarce capital in comparatively redundant sectors. The work 'redundant' is of course usable here purely in relation to the accepted targets of a single plan period; what is redundant in one period may become the very core of the plan in the next.

3.14. A small plan will not of course, spell success by itself if the advantages of smallness are not taken by the planners by a systematic tying up of loose ends. Our contention that by concentrating on a smaller number of mutually related important targets the plans can be made more potent instruments of development is of course based on the assumption that much greater attention can in this case be devoted to physical inter-relationships in production. This may not be true if physical aspects of the development business continue to be systematically ignored while financial aspects are regarded of sole importance. However, looking at the evolution of the planning administration in India over the years, one should recognise a gradual shift in the direction of physical planning — a shift which can be invested with greater meaningfulness only when the number of targets included in a specific plan can be adequately dealt with by the organisation in charge of physical planning. This organisation can then proceed beyond the somewhat unrealistic exercise of checking up only physical totals against one another and undertake a study of the time-profile of the output that is intended to emerge from the relatively limited sector which it takes up for special attention.

3.15. Obviously attention to these preliminary requirements will not be sufficient for the greater success of planning unless the administrative conveyor belt that translates planners' orders into action runs smoothly and sequentially. The necessity of continuous reporting on the plan's progress and of initiating corrective action without heavy loss of time will be apparent to anyone. The issue is primarily administrative. The planners' responsibility lies in anticipating such hitches as are likely to arise in the operation of the administrative agencies and in making constant efforts for the improvement of these agencies. For this the most urgent reform needed is in the direction of improving publicity — not in the sense of official panegyrics — but in the sense of ventilation of opinions by all concerned with the working of a certain development agency including, in particular, its workers and beneficiaries. The present system of reporting which is largely confined to the issue of annual reports by some

of the administrative agencies is clearly inadequate for a planned economy. Taking up corrective measures in the wake of adverse reports is of course considerably held up these days because of tardy administrative procedures. A single agency for the clearing of information relating to all aspects of planning and for launching prompt corrective measures in the light of the originally announced Plan targets yet remains to be set up in this country. Whatever controlling mechanism exists within the Planning Commission is more concerned to-day with the progress of expenditure in financial terms than with the resulting pattern of investment.

3.16. Improvement of the reporting and controlling mechanism is also possible only if the number of sectors chosen for planning at any time is not unduly inflated. Planning for the economy as a whole appears to be an impossible task in a vast and unorganised economy like India's. Planning for strategic sectors, and altering the nature and number of these sectors at suitable intervals, must henceforth be the aim of Indian planning if resources are not to be too thinly dispersed over a myriad, often mutually incompatible, objectives. The sectors chosen for planned development during any specific period can then be conceived as an integrated whole and their development can be furthered by a balanced assignment of resources among them. This can be expected to give more impressive results in certain limited sectors, which can then be utilised as a springboard for further advance in subsequent periods. In trying to plan for the entire economy with the resources at our command we have both made our planning effort a very jumbled exercise and created enormous difficulties for simultaneous realisation of all the proclaimed ends. The crisis in our planning for the last few years warns us against the uncritical acceptance of the doctrine of balanced development. Strategic considerations rather than social value imperatives of a very general nature should now be allowed to play a more important part in our plans if planning is to bring about a better utilisation of our limited resources.

IV

3.17. Neglect of strategic considerations is evident also from the very inadequate attention given in the Indian Plans to studies of relative rates of return from investment. Inter-sectoral allocation of investment has of course been made with certain sectoral capital-output ratios in mind, but at the margin investments have not been re-allocated among sectors on marginal rate-of-return considerations. This implies that a sector expected to exhibit a high capital-output ratio is generally allocated a comparatively small fraction of the Plan's investible resources, although considerations of returns over cost might have favoured a larger allocation to that particular sector. Since the country does not have to plan for a fully balanced domestic production structure but can provide for both exports and imports in the Plan, there does not seem to be any justification for ignoring financial returns from investment as a guide to investment allocation, always remembering that certain bottleneck items like foreign exchange may have to be priced at special accounting prices if a feasible plan is to be built up. It is indeed some sort of a conundrum that while our Plans do not use physical figures for purposes of internal balancing and control, but allow financial figures to act as dummies for physical variables in this important task, in comparing the justifiability of different types of investment they regard financial comparisons as otiose, although commonsense suggests that financial yardsticks cannot be dispensed with when investment in widely different fields has to be compared. A simple study of physical outputs required and investments needed to bring those outputs into existence is no substitute for a full-fledged analysis of costs and returns, provided only that such analysis does not take all market prices as correctly reflecting the underlying scarcity situation. As already suggested, special accounting prices may have to be resorted to in such an analysis for certain extremely scarce items like foreign exchange.

3.18. We may note in this connection the following distribution of public development expenditure, since the begin-

ning of planning in the country. Not all of this expenditure is, strictly speaking, investment expenditure, but it will not be far wrong to assume that all of it had a beneficial effect on output and incomes. Between 1951 and 1966 something like Rs. 3,435 crores were spent on agricultural improvement schemes including irrigation schemes, major and minor. Between these years, again, the level of income from the primary sectors of the economy increased by nearly Rs. 22 crores in constant prices. Similarly development outlay in mining and manufacturing, including the small industries sector and the power generating industry, amounted to Rs. 5,068 crores. The increase in the value of output added in these sectors was less than Rs. 10 crores. In the transportation and communication sectors the aggregate public development expenditure during this period was Rs. 3,895 crores, the rise in the level of income from these sectors being nearly Rs. 15 crores. So far as the residual 'services' sector of the economy is concerned, public development outlay over the three Plans amounted to nearly Rs. 2,664 crores (excluding outlay on inventories generally lumped with the services sector). Incomes in this sector rose by over Rs. 17 crores during the same period. There can be no suggestion in these figures regarding rates of return to investment in the respective sectors. For one thing, private investment expenditure is completely left out of account and for another, the services sector must have benefited from the expansion of all other sectors so that public development expenditure on the various social services alone does not give any indication of the investment to which incomes in this sector correspond. When we sum up all the figures for development outlay and income increases we find that a total outlay of over Rs. 15,062 crores in fifteen years raised the level of incomes by over Rs. 64 crores and while agriculture absorbed only about 22 per cent of this outlay, more than one-third of income increase occurred in agriculture. This at least raises the important issue whether relative returns to investment are not sufficiently higher in agriculture to justify a larger allocation of investible resources in that sector. It is not the question of attaining self-sufficiency in food or having

a plentiful supply of raw materials for agriculture-based industries which should keep our planners absorbed all the time. If the general presumption in favour of higher returns to agricultural investment is not found to be false, the practical task for the planner would then be to identify those areas in agricultural development to which additional investment can be directed with greatest effect.

3.19. Planning, in other words, has to be concerned with a balancing of outgos and incomes to a much greater extent than what we have hitherto been able to bring about. Our plan accounting has been concerned with outlays and outputs, no doubt, but to the important problem of effecting a balance between the two sides of this dual accounting system, our planners have remained on the whole insensitive. In the Soviet Plans, it may be observed, the output targets and the financial outlay targets are supplemented by certain important indices of performance such as labour productivity, yield per acre, gross traffic carried per day, amount of materials used per unit of finished product and so on. Indian Plans have failed to introduce such meaningful indices of performance into common use and thereby failed to keep a check on proper utilisation of investible resources. In spite of the planners' understandable concern with physical output goals on the one hand and the progress of financial expenditure on the other, there has been a curious neglect in this country of expenditure-output relations which should constitute the very essence of a meaningful economic plan. Technical relations, howsoever carefully studied, are by their nature unable to disclose the economic wisdom or otherwise of taking up a particular investment project for execution.

3.20. In order to devise methods of economising on Plan projects a Committee on Plan Projects had been set up in the Planning Commission in September 1956. The Committee has generally worked through *ad hoc* study teams carrying investigations in certain limited fields such as construction or irrigation projects. Even within these limited fields it has been more concerned with keeping down the absolute cost of investment than with the more important question of relative costs and returns.

More recently the Administrative Reforms Commission has suggested the creation of a Plan Appraisal and Evaluation wing inside the Planning Commission to make possible quicker appraisal and to call attention to the need for measures of re-adjustment. Such a wing, however, may not be able to effect much improvement in the working out of a plan if it is not provided with certain guidelines which will be useful for evaluation purposes. In the absence of such guidelines the findings of the appraisal wing are likely to be more in the nature of generalities than specific recommendations for the re-ordering of Plan priorities. If what is called 'efficiency audit' is to be properly organised, the planners themselves must be clear in their minds as to what constitutes efficiency. Naturally experts themselves may differ regarding the proper definition of efficiency in the Indian context, since neither a simple reduction in cost nor a rise in accounting profit will be acceptable as a good definition. The Planning Commission will therefore have to plan not only for targets of capacity and output, as they have so long done, but also for targets of labour efficiency and, what is even more important in our case, land efficiency and capital efficiency. A systematic search must be set on foot to identify areas where capital and organisation can, within reasonably short periods, bear the maximum fruit. In this task of subjecting the various projects to a systematic scrutiny our Plans have so far almost totally failed and this failure has become all the more conspicuous as planning has progressed. The First Five-Year Plan was at least followed by a Review, however unsatisfactory it might have been as an appraisal document. But even such a limited Review has not been made of the Second and Third Five-Year Plans. It appears that a good case can be made out for the view that the present crisis in Indian Planning was precipitated by the unpreparedness of the planners to subject their policies to the tests of a rigorous appraisal.

V

3.21. It is indeed a truism that the success of a plan will depend not simply on the path charted, but also on the willing-

ness and ability of the people to tread the charted path. To create the requisite resolve in the people the political leadership must convince the plan administrators as well as the people at large that there can be no better course for the moment than the plan being acted upon. One important reason for the present decline of faith in planning is that the basis of conviction has never been firm primarily because, like most other official documents, the Plan document has also been taken as an authoritative blue-print for all subsequent action. Courses of action different from those outlined in the Plan may have appeared more reasonable to the administrator on the spot, but except for only a handful of administrators working in direct touch with the Planning Commission, the rest of the administrators have not been encouraged to feel concerned. Consequently the Plan has not been altered to suit administrative convenience as frequently as would have been desirable in the interests of sound Plan administration itself. While firmness in respect of certain essentials, for example, regarding the total allowance for consumption, is a virtue in planning, flexibility in detailed operation is equally essential if the administration is not to feel alienated from the plan. A similar involvement on the part of workers, particularly in the administrative departments and the public enterprises, could also be encouraged to build up the conviction that the future of all groups is bound up with the successful implementation of the Plans. In Soviet Russia, although planning is essentially centralised, the facilities for two-way flow of ideas appear to be much more abundant than in India, with planning cells operating in every important ministry, industrial unit, regional administrative units and elsewhere. It is not to be inferred that top-level decisions transmitted in haste have never aroused displeasure or resistance in that country, but from all accounts the Soviet plans have retained a great measure of flexibility of response to lower-level administrative suggestions. In India the conviction that the Plan represents the best course of action at a certain moment is not very deep even among all sections of administrators, not to speak of the rank and file of the workers and of the people at large.

3.22. If a political dictatorship like Soviet Russia could build up among important sections of the people a sense of involvement in and dedication to the Plan, it was not difficult for a genuine democracy to build up the same sense in a more abundant measure. Unfortunately the Indian democracy inherited from its colonial past a rigidly defined social and administrative structure which stood in the way of creating general enthusiasm for planned economic development. More important than future construction became the issue of re-defining that structure in the immediate interests of certain social strata which had remained completely ineffective in the past. Once the gateway to such conflict of interests opens in a democracy, voices are freely raised and exaggerated claims come to be presented without sparing thought about long-run social interests. In such an overwhelming concern for the present, the delicate task of building bases for the future fails to receive sustenance. The tasks defined in the development plan appear as calculated to serve the interests of groups other than one's own. The essential inter-relationship of interests, which alone can inspire action for achieving tomorrow's targets, is overlooked in the heat of the moment.

3.23. In recent years the administrative agencies have been blamed all too often for the relatively poor performance of the plans. It has not, however, been always made clear whether the reference is to administrative competence or administrative morale. If the analysis presented above is correct, the more important aspect of the problem is that of making the administrative agencies genuinely involved in the task of plan implementation. The crisis in Indian planning is not so much the result of inadequacy in planning expertise, but of a strange reluctance to follow up the plan document with measures that help in its implementation. Of these measures none is more important than the task of rallying to the cause the various groups of people who matter in the administration of the plan. In the Indian context these groups embrace not only the public administrative cadres, but also private entrepreneurs in agriculture and industry alike. These latter, however, can be expected to respond to

appropriate financial incentives. But for the public administrative staff, including publicly employed industrial workers, for whom straight incentives may be difficult to devise, a sense of involvement in the work of planning is essential if faith in planning has to be re-built.

3.24. The Fourth Plan is now on the anvil. All available indications point to the immense care that is going into its preparation. But as urged several times in this paper, a careful totting up of resources and feasible projects will not make the Fourth Plan any more useful or more capable of dispelling the present atmosphere of crisis in the planning field unless, first, criteria of efficiency in plan implementation are formulated and steadfastly pursued and secondly, the plan administrators are made to look forward with genuine interest to the realisation of the assigned tasks. While the first of these desirable changes can be introduced by the Planning Commission if they are prepared to depart to a very small extent from hitherto accepted modes of thinking, the second is a matter of more far-reaching interference with general social and administrative norms at present prevailing in Indian society. One thing at least is clear. So long as the struggle for sharing today's small pie perverts the democratic political structure, no widespread interest can be created in the work of baking tomorrow's bigger pie and, in the absence of an imposed settlement, the disputant groups may always succeed in keeping the plans and the planners under a cloud, however correct the planners may be in their appreciation of the requirements for a brighter future.

VI

3.25. Another aspect of the current conflict of social interests is the inability of a sizeable section of the population to derive any benefit from the employment opportunities created in the period of planning. Although employment has grown at rates much faster than before, the employment-seeking population has grown even faster. It is very natural that with the

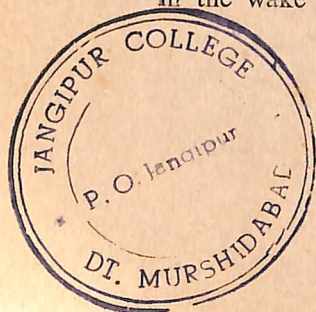
growth of educational opportunities a large fraction of the unemployed now consists of people with higher educational qualifications. Their intense dissatisfaction with a system that does not contain the promise of employment even after a long period of waiting and training is easily understandable. The opinion is, therefore, sometimes expressed that our future plans should give more stress to employment than what they have done so far and in this connection the role of "labour-intensive" industries is advocated, often without much understanding about the nature and effects of such industries. It is very unlikely that the labour-intensive industries which are spoken of in this connection will be able to put to use the training which the prospective employees have undergone. The employment of such people in industries where their skill is under-utilised will thus be a form of under-utilisation of capital. One has to realise that investment in training up a labour force and in productive equipment which will utilise that labour force must maintain a certain relation of complementarity. If the trained labour force has increased too fast, it can be absorbed into really useful employment only by stepping up the rate of productive investment. To avoid such imbalances in future, better co-ordination of programmes relating to training and investment is obviously called for.

3.26. Granted that the amount of investment in various kinds of training programmes has already proceeded too far out of step with the expansion in equipment investment, and, in future there should be a more regulated expansion of training facilities, the problem of absorbing the surplus labour force into some kind of productive employment will still remain. The problem, however, will change its character to some extent, since the earnings of labour need not in this case include a recompense for the investment in skill formation. Simpler industries, or even work-camps where work which is not very productive is still remunerated at a standard rate, can then look after the employment requirements of this section of the population. If society's productive power otherwise increases, it should not be too difficult to allot increasing amounts of finance

each year to secure the goal of "full employment" in this very special sense. The planners will thus have to accept "employment" as a separate policy target, but this need not be achieved by putting scarce capital resources to doubtful uses.

3.27. In practice, the greatest scope for utilising surplus labour without much draft on scarce capital resources will perhaps be found in various activities ancillary to agriculture. Afforestation, contour-bunding, road-building, composting, green manuring and similar other activities are all examples of what has been called 'primitive techniques of capital formation' which can turn labour unaccompanied by capital into an instrument of growth. It is only in the context of socialised agriculture, however, that one can think of landless labour being put to such uses; private property in land inhibits the use of one man's labour on another man's land unless the latter can appropriate to the fullest extent the benefit of the former's labour. It is reasonable to conclude, therefore, that the solution of the problem of unemployment and under-employment in the country is intimately connected with the question of replacing the existing agricultural organisation by a more purposive and hence a more socialised organisation.

3.28. If the crisis in Indian planning has to be properly resolved, one must therefore think in terms of major organisational changes in production and distribution and not simply in terms of plan size and priorities. Such organisational changes must usher in a general awareness that employment and incomes are not just chance outcomes of the economic process, but are regulated by a policy which is eminently fair. In the absence of reasonable chances about participation in the benefits of planning and development, most people are unlikely to acknowledge that planning has overcome its crisis, even when some of the indices of investment and output record unprecedented increases in the wake of the plan.



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