THE HUMAN ELEMENT IN INDIA'S ECONOMIC DEVELOPMENT

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The Human Element in India's Economic Development

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Paradoxes of Indian Development

News items about India's recent advances in nuclear energy technology or space research jostle for space with stories of drought and hunger. Statistics about the vast numbers of students graduating from scores of Indian universities, institutes of technology, medical schools and management schools come along with statistics about high levels of unemployment, low per capita availability of food or the abnormally low average calorie consumption. India today has a very large and diversified industrial economy, along with the third largest stock of scientists and engineers in the world, after the United States and the Soviet Union. But it also has millions of people surviving below the poverty line in a state of permanent hunger and gradual starvation.

These paradoxes of India's development experience force us to ask how we should view the human element in our perceptions of development. Should it be viewed merely as an input to be used more efficiently, a means to an end, or should it be viewed as an end in itself? The question is not purely rhetorical, for our assessment of the Indian experience could be very different depending on which view we choose to adopt. By one reckoning, planned development in India is, on the whole, an impressive success. By the other reckoning, it is a sad failure.

India's planners were, of course, as sensitive to the problems of stark poverty and severe unemployment as their colleagues elsewhere. Indeed, raising the level of per capita income and reducing unemployment have always been the central objectives of India's five-year plans. It was assumed that if suitable strategies could be devised for ensuring a high rate of real per capita income growth, this would automatically take care of both unemployment and poverty. Accordingly, plan strategies were worked out aimed at achieving particular

Source: Khadija Haq & Uner Kirdar (ed.)(1986), Human Development: The Neglected Dimension, North South Roundtable, Islamabad, Pakistan, Sep. 2-4, 1985. target rates of growth. In the technical planning exercise, the human element came to be treated by and large as an input, a means to an end. This was consistent with the main traditions of modern analytical economics, i.e., neoclassical production theory, or Leontief's input-output analysis and Von Neumann's balanced growth theory. Unfortunately, the assumption that the benefits of growth would "trickle down" to all sections of the population turned out to be not entirely warranted.

With regard to overall growth, it is always possible to quibble about this or that plan target not being achieved. But, in fact, India's growth performance has been reasonably good by international standards. The World Bank's World Development Report 1985 indicates that India's GDP grew at an average rate of 4 per cent per annum for the decade 1973-83. This is lower than the growth rate for middle-income countries and high-income oil exporters, but it is well above the 2.4 per cent average growth rate of industrial market economies or the 3.3 per cent average growth rate of low-income countries — the group to which India belongs.¹

After allowing for a deplorably high population growth rate of 2.3 per cent and other adjustments, the per capita real income growth over the whole period 1965-83 works out to only 1.5 per cent per annum. However, this is still much better than the group average of 0.7 per cent for low-income countries. Moreover, this trend rate of growth of 1.5 per cent in per capita real income, maintained now for a period of over thirty years, should normally have eliminated the most intense layers of poverty — or at least curbed it. But this has not happened. By conservative estimates, well over 200 million Indian people, roughly comparable to the total population of the United States or twice the population of Brazil, survive below the poverty line, in conditions of chronic hunger and wretchedness.

Quality of Life and Basic Needs

Clearly, growth alone cannot serve as a proxy for development. If we agree, as we surely must, that human well-being is the goal of development, then we must abandon a functionalist view of the human element, which tends to see it merely as an input and goes on to calibrate development performance by the achieved rate of growth. Instead, we must follow the now well established tradition of evaluating development by variables which more directly reflect the material quality of the life of ordinary people.²

Hunger and longevity would appear to be the most appropriate measures of development from this point of view. Of the two, the measurement of undernourishment is extremely complicated.³ Longevity, the expectation of life at birth, is more easily measurable, but unfortunately, it does not reflect suffering from hunger in the same way that it reflects suffering on account of early death.⁴ We must, therefore, retain both these indicators of development and along with them consider other basic needs, such as access to education, health services and housing. Together, they serve as a reasonable set of reference variables to measure how the human element itself has been developed in the process of development.

Longevity and Hunger

Between the mid-1960s and the mid-1980s, infant mortality (age under 1) in India declined from 151 to 93, while the child death rate (age 1 to 4) declined from 23 to 11. There has been a corresponding improvement in life expectancy at birth, from 46 to 56 in the case of males and 44 to 54 in the case of females. These are significant improvements, and the average life expectation of Indians in 1983, at 55 years, is somewhat better than the group average of 51 for the World Bank group of low-income countries. On the other hand, it compares rather poorly with a host of other developing Asian countries, led by Sri Lanka and China, where life expectancy is now approaching 70 years.

This longevity data also has to be seen alongside the evidence on hunger. Of the more than 200 million hungry Indians who live below the poverty line (2,435 calories), the large majority belong to rural households dependent on agriculture. Studies show that in both dynamic agrarian regions such as Punjab-Haryana and backward regions such as Bihar, the incidence of poverty does go down with a rise in agricultural output. Nevertheless, an analysis across fifteen states shows that barring such exceptional cases as Punjab and Haryana, there is no trend decline in rural poverty despite sustained agricultural growth.6 This peculiar situation is explained by an amazing balance between agricultural growth and population growth which has left the per capita availability of grain static at a little under 450 grams per head per day for nearly thirty years! Between 1973 and 1983, for instance, agricultural output grew at an average rate of 2.2 per cent per annum, according to World Bank estimates. This was offset by population growth of the order of 2.3 per cent.

The phenomenon of agricultural output growth being offset by extra labor absorption in agriculture is again reflected in productivity trends. According to a recent study, aggregate labor productivity in Indian agriculture has tended to decline over time. However, the same study also highlights significant interregional variations which have major welfare implications for the future. The disaggregated analysis shows that out of 281 districts, there are 109 slow or negative-growth districts, where labor productivity has declined significantly, and another 72 medium-growth districts without much change in productivity. As against this, there are 100 high-growth districts where labor productivity has improved significantly, i.e., output growth has outpaced extra labor absorption. In view of the earlier cited evidence that poverty incidence in Indian agriculture does decline with per capita output growth, it would appear that the question of eliminating hunger in India turns largely on the question of whether or not the performance of the hundred high-growth districts can be replicated in the rest of India.

Expenditure on Basic Needs

In our welfarist view of the human element in development, longevity and hunger are followed closely by a range of other basic needs, such as health, education and housing. These variables are themselves strongly correlated with longevity, even more so than per capita income, as indicated by the estimates for a sample of sixteen major Asian economies presented in table 1.

TABLE 1
Coefficient of Correlation with Expectation of Life at
Birth for Sixteen Major Asian Economies

Infant mortality	-0.976
Percentage enrollme	ent of primary
school age childre	n 0.792
Population per med	
(doctor and nurse	-
Daily calorie availat	ollity 0.749
Share of governmen	it expenditure on
health, education	and housing 0.680
Per capita income	0.631

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In a state-controlled economy such as that of India, public expenditure gives a fair measure of the emphasis laid on such basic needs program. Data for a succession of five-year plans covering thirty-five years since the inception of planning are presented in table 2.

TABLE 2
Plan Outlay on Selected Items 1951-85

Five-Year Plan Period			Share		
	Total Plan Outlay (Rs. millions)	Education	Housing, Urban Development and Water Supply	Health, Family Planning, Nutrition	All Basic Needs (2 + 3 + 4)
(0)	(1)	(2)	(3)	(4)	(5)
1st Plan	· · · · · · · · · · · · · · · · · · ·				
(1950-51)	23,560	5.7	2.1	5.9	13.7
2nd Plan					
(1956-61)	48,000	4.3	2.5	4.7	11.5
3rd Plan					
(1961-66)	75,000	5.9	2.7	4.6	13.2
4th Plan	160.000		1.0		140
(1969-74)	159,020	5.2	1.5	7.3	14.0
5th Plan (1974-79)	202.020	3.3	5.2	3.3	11.8
6th Plan	393,030	3.3	3.2	3.3	11.0
(1980-85)	975,000	2.6	6.6	5.2	14.4

SOURCE: Five-Year Plan documents, Planning Commission, Government of India.

From the First to the Fifth Five-Year Plan, the total plan outlay increased from about 20 billion rupees to 970 billion in nominal terms. This represents an increase of over five times in real terms after allowing for the rise in prices. The outlay on basic needs also increased over five times, having maintained its share at about 14 per cent of total outlay. Since population doubled during the period from 363 million in 1957 to 733 million in 1983, it follows that the per capita investment on basic needs has actually tripled in real terms during the period of planned development. In absolute terms, there thus appears to be an increasing emphasis on the human element in

India's development plans. This general proposition must, however, be qualified by a more disaggregated examination of the allocation of basic needs expenditures.

Housing, Urban Development and Water Supply

The allocation of plan outlay on housing and related expenditures has tended to increase over time, not only in absolute terms, but also as a proportion of total outlay. Its share has tripled from a little over 2 per cent in the early 1950s to over 6.5 per cent in the early 1980s. However, it is the allocation of resources within this general category which leaves room for considerable improvement. Breakdowns available for the just-ended Sixth Plan period show that out of this, a mere 3.5 billion rupees, or 5.5 per cent, was made available for rural housing. In this particular plan, another 21 billion rupees was allocated to a very major rural water supply program. But this still meant that over 60 per cent of the funds have been allocated to urban housing and urban development programs, which cater to just one-quarter of the total Indian population. This continuing urban bias in the delivery of basic services such as housing and water supply is clearly a serious impediment to the development of the human element in a society which is still predominantly rural.

Health, Nutrition and Family Planning

Total expenditure on health and related programs has been maintained at about 5 per cent of the total plan outlay, as shown in table 2. Given the increase in plan outlay, this implies that per capita outlay on health services has tripled in real terms over the period covered. But once again, the detailed allocations are critical. As shown in table 3, India's family planning program, which initially had only a nominal claim, now claims about a fifth of all health service allocations without any clear evidence that the program has actually curbed population growth.

TABLE 3
Allocation of Plan Outlays on Health and Family Planning

	Health and Nutrition		Family Pla Family W	_	Total Outlay on Health, Nutrition and Family Planning		
	Rs. Millions	%	Rs. Millions	%	Rs. Millions	%	
1st Plan						_	
(1951-56)	1,393	(99)	7	(1)	1,400	(100)	
2nd Plan							
(1956-61)	2,220	(99)	30	(1)	2,250	(100)	
3rd Plan							
(1961-66)	3,148	(92)	270	(8)	3,418	(100)	
4th Plan							
(1969-74)	8,410	(73)	3,150	(27)	11,560	(100)	
5th Plan					-		
(1974-79)	7,974	(62)	4,974	(38)	12,948	(100)	
6th Plan							
(1980-85)	40,530	(80)	10,100	(20)	50,630	(100)	

SOURCE: Five-Year Plan documents, Planning Commission, Government of India.

The position was particularly serious during the Fifth Plan. The share of health services as a whole was reduced to only about 3 per cent of the total plan outlay, while the family planning program was very substantially expanded, with the result that the total allocation for health and nutrition programs was cut down even in nominal terms. After allowing for inflation and population growth, this entailed a significant cut in real per capita health expenditure.

Fortunately, this misallocation was later rectified. But the urban bias noted above in the case of housing also applies to health services: the large bulk of health expenditure is used to subsidize urban consumers, who account for only a quarter of the Indian population. A serious attempt to bring the major part of India's population under reasonable health service coverage would entail a very substantial reallocation of resources within the health sector from urban facilities to rural services.

Education

Finally, we turn to public expenditure on education. It is here, more than elsewhere, that prevailing biases in the treatment of the human element show up most sharply in India. The need for education is so basic that it is reasonable to consider it a fundamental

human right. Moreover, education is not only important to that perspective of development which sees the human element as an end in itself; it is also fundamental from the more technocratic viewpoint, which sees the human element merely as an input, and education as the activity of human capital formation. It is, therefore, quite disconcerting to find that the share of education in the total plan outlay has been as low as 5 to 6 per cent in India's five-year plans, and that even this percentage has been declining in recent plans. As indicated in table 1, the share of education has declined with every five-year plan following the peak share of 5.9 per cent in the Third Plan. It had fallen to less than half that share by the time of the Sixth Plan.

The changing pattern of resource allocation within the total outlay on education is even more disconcerting. Despite steady improvements recorded since political independence, there was only 36 per cent literacy in India in 1981. As such, it would be reasonable to expect that while the overall share of education in plan expenditure has been declining, at least allocations to basic education should have been protected. Instead, it is precisely the allocation to early and elementary education which has been most severely squeezed. In the First Five-Year Plan, 64 per cent of all educational expenditure was devoted to elementary education, while university and higher education got only around 10 per cent. As shown in table 4, the relative share of the latter category was more or less doubled from

TABLE 4
Allocation of Plan Outlays on Education

	Early and Elementary Education		Universit Higher Edi	•	Total Outlay on Education		
	Rs. Millions	%	Rs. Millions	%	Rs, Millions	%	
1 st Plan							
(1951-56)	850	(64).	140	(11)	1,330	(100)	
2nd Plan							
(1956-61)	870	(42)	450	(22)	2,080	(100)	
3rd Plan							
(1961-66)	2,090	(50)	820	(20)	4,180	(100)	
4th Plan	*		•		· ·		
(1969-74)	2,347	(29)	1,835	(22)	8,230	(100)	
5th Plan			•				
(1974-79)	4,100	(32)	2,920	(23)	12,850	(100)	
6th Plan	•		•		=		
(1980-85)	9,054	(36)	4,858	(19)	25,237	(100)	

SOURCE: Five-Year Plan documents, Planning Commission, Government of India.

the Second Plan onwards, while the share of elementary education has slowly declined over the different five-year plans. In the just-concluded Sixth Plan, the share of elementary education was brought down to only 36 per cent.

This unfortunate trend in plan fund allocations notwithstanding, the level of literacy has been improving. The most heartening feature in this is a certain equalizing trend, both across regions and between sexes. Table 5 gives a detailed breakdown of literacy rate changes by states, along with ranks. It will be noticed that generally, the rate of improvement in literacy is inversely related to the base literacy rate in a given state, such that interstate literacy rate disparities are declining. Similarly, it will be noticed that while female literacy is lower in every state, the improvement in female literacy between 1971 and 1981 is higher than the improvement in average literacy, such that literacy disparities between the sexes are now declining over time.

TABLE 5
Interstate Variations in Literacy Rates

	Literacy Rate 1981		Literacy Rate 1971		% Change 1981/1971		Female Literacy Rate		Female Literacy % Change 1981/1971	
Kerala	69	(1)	60	(1)	14.5	(15)	64	(1)	18.7	(15)
Maharashtra	47	(2)	39	(2)	20.9	(13)	35	(2)	32.7	(9)
Tamil Nadu	46	(3)	39	(2)	16.0	(14)	34	(3)	27.0	(14)
Gujrat	44	(4)	36	(4)	22,2	(10)	32	(5)	30,6	(12)
Himachal Pradesh	42	(5)	32	(7)	31.2	(2)	31	(6)	55.7	(1)
West Bengal	41	(6)	33	(6)	23.1	(8)	30	(7)	35,3	(7)
Punjab	41	(7)	34	(5)	21.0	(12)	34	(3)	31.8	(11)
Karnataka	38	(8)	32	(7)	22,9	(9)	28	(8)	32.7	(9)
Haryana	36	(9)	27	(9)	33,3	(1)	22	(9)	49.3	(4)
Orissa	34	(10)	26	(10)	30.3	(4)	21	(10)	51.7	(3)
Andhra Pradesh	30	(11)	25	(11)	21.9	(11)	21	(10)	30.3	(13)
Madhya Pradesh	28	(12)	22	(12)	25.7	Ċή	16	(12)	42.3	(5)
Uttar Pradesh	27	(13)	22	(12)	26.1	(5)	14	(13)	36.7	(6)
Bihar	26	(14)	20	(14)	30.4	(3)	14	(13)	55.7	(1)
Rajasthan	24	(15)	19	(15)	26.1	(5)	11	(15)	33.8	(8)

SOURCE: Census of India (1981).

NOTE: Figures in parentheses indicate ranks.

Conclusion

Viewed from a "human capital" perspective, which sees the human element essentially as an input in the development process and not as an end in itself, the very large numbers of doctors, scientists, engineers, managers and lawyers in the country would lead us to believe that the human element has been central to India's development strategy. But this would be very misleading, for alongside this huge stock of highly skilled manpower, India also has what is perhaps the world's largest stock of chronically hungry and malnourished people — over 200 million, as we have seen. Under these circumstances, the human element in development can only legitimately be viewed from a humanistic perspective — as an end in itself.

Basic needs such as food, shelter, health and education are the crucial elements by which to measure India's development performance in this view. On the food front, the worst famines have been eliminated. Beyond that, it is a close race between output growth and population growth, the outcome hinging on whether or not the performance of the hundred high-growth districts can be replicated elsewhere. For the rest, we have the very real growth of per capita public expenditure on programs of housing and drinking water, health and education. However, we have also seen the various policy biases which persist — biases in favor of the elite against the rest, the urban sector against the rural, toward higher education and against elementary education and the like. These largely account for the miserable quality of everyday life that the majority of Indians have to suffer. Without a major change in these biases, the human element will remain incidental in India's economic development.

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Notes

- 1. Low-income countries implies all countries in this group other than India and China, which are also shown separately in this report.
- 2. M.D. Morris, Measuring the Condition of the World's Poor: The Physical Quality of Life Index (Oxford: Pergamon Press, 1979).
- 3. See F.V. Sukhatame, "Malnutrition and Poverty," Lal Bahadur Sastri Memorial Lecture, New Delhi, 1977; "Assessment of Adequacy of Diets at Different Income Levels," Economic and Political Weekly 13 (1978); and T.N. Srinivasan, "Malnutrition: Some Measurement and Policy Issues" (mimeo), World Bank and Yale University, 1979.
- 4. A K. Sen, "Levels of Poverty: Policy and Change," World Bank Staff Working Paper No. 401, July 1980.
- 5. See S. Mundle, "Land, Labour and the Level of Living in Rural Punjab" in A.R. Khan and E. Lee, eda., *Poverty in Rural Asia* (Bangkok: ILO, 1985), and "Recent Trends in the Condition of Children in India: A Statistical Profile," *World Development* 12:3 (1984).
- 6. See S. Mundle, "Effect of Agricultural Prices and Production on the Incidence of Rural Poverty: A Tentative Analysis of Intex-State Variations," *Economic and Political Weekly* 18 (1983).
- 7. See G.S. Bhalla and Y.K. Alagh, "Labor Productivity in Indian Agriculture," Economic and Political Weekly 18 (1983).
 - 8. See S. Mundle in Khan and Lee, Poverty in Rurel Asia.

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