*The Pakistan Development Review* 34:4 Part I (Winter 1995) pp. 333–372

The Quaid-i-Azam Lecture

# **Human Development: Means and Ends**

#### PAUL P. STREETEN

# FROM GROWTH TO BASIC NEEDS

Sometimes the change in the fashions of thinking about development appears like a comedy of errors, a lurching from one fad to another. Economic growth, employment creation, jobs and justice, redistribution with growth, basic needs, bottom-up development, participatory development, sustainable development, market-friendly development, liberation, liberalisation, human development; thus goes the carousel of the slogans. But this would not be a correct record. There has been an evolution in our thinking about development. Both internal logic and new evidence have led to the revision of our views. Previous and partly discarded approaches have taught us much that is still valuable, and our current approach will surely be subject to criticisms. A brief survey of the evolution of our thinking may be helpful.

The discussion started in the 1950s, influenced by Arthur Lewis (1955) and others, who emphasised economic growth as the key to poverty eradication. Even at this early stage, sensible economists and development planners were quite clear (in spite of what is now often said in caricature of past thought) that economic growth is not an end in itself, but a performance test of development. Arthur Lewis defined the purpose of development as widening our range of choice, exactly as the Human Development Reports of the United Nations Development Programme do today.

Three justifications were given for the emphasis on growth as the principal performance test. One justification assumed that through market forces–such as the rising demand for labour, rising productivity, rising wages, lower prices of the goods bought by the people–economic growth would spread its benefits widely and speedily, and that these benefits are best achieved through growth. Even in the early days some sceptics said that growth is not necessarily so benign. They maintained that in certain conditions (such as increasing returns, restrictions to entry, monopoly power, unequal distribution of income and assets), growth gives to those who already have; it tends to concentrate income and wealth in the hands of the few.

This is where the second assumption came in. It was that governments, especially democratic ones, are concerned with the fate of the poor. Therefore progressive taxation, social services and other government interventions would

Paul P. Streeten is Professor Emeritus, Department of Economics, Boston University, USA.

spread the benefits downwards. The reduction of poverty would not be automatic (as under the first assumption), but governments would take action to correct situations in which market forces concentrated benefits in the hands of the few.

The third assumption was more hard-headed than the previous two. It said that the fate of the poor should not be a concern at the early stages of development. It was thought necessary first to build up the capital, infrastructure, and productive capacity of an economy, so that it can improve the lot of the poor later. For a time– and it could be quite a long period–the poor would have to tighten their belts and the rich would receive most of the benefits. But if the rewards of the rich are used to provide incentives to innovate, to save, and to accumulate capital which could eventually be used to benefit the poor, the early hungry years would turn out to have been justified. Classical, neoclassical, and palaeo-Marxist economists all agreed on this. Some radical egalitarian philosophers such as John Rawls (1971, p. 302) would sanction such a strategy. Inequalities, in their view, are justified if they are a necessary condition for improving the lot of the poor.

Another powerful influence was the so-called Kuznets curve [(1955), pp.1-28; (1963), pp.1-80]. It relates average income levels to an index of equality and suggests that the early stages of growth are accompanied by growing inequality. Only at an income per head of about \$ 1,000 (in 1979 dollars) is further growth associated with reduced inequality. One measure of inequality is the share of the bottom 40 percent of the population in total national income. This association has been suggested by tracing the course of the same country over time, and of different countries, with different incomes per head, at the same time. In the early stages of development, as income per head increases, inequality tends to grow. This may mean that absolute poverty for some groups also increases. But eventually the turning-point, the bottom of the U-curve, is reached, after which growing income is accompanied by greater equality and, of course, reduced poverty. The golden age is ushered in.

None of the assumptions underlying these three justifications turned out to be universally true. Except for a very few countries, with special initial conditions, such as a radical land reform, and special policies, such as heavy emphasis on mass education and health measures, there was no automatic tendency for income to be spread widely. Nor did governments often take corrective action to reduce poverty. Governments were themselves often formed by people who had close psychological, social, economic, and political links with the beneficiaries of the process of concentrated growth, even though their motives were often mixed. And it certainly was not true that a period of enduring mass poverty was needed to accumulate savings and investment and to raise productivity. It was found that small farmers saved at least as high a proportion of their incomes as big landowners; that they were more productive, in terms of yield per acre; that entrepreneurial talent was widespread and not confined to large firms; and that some forms of consumption by the poor make them more productive. Prolonged mass poverty was therefore not needed to accumulate capital and to stimulate entrepreneurship.

To judge by the growth of the gross national product (GNP), the development process since World War II has been a spectacular, unprecedented, and unexpected success. Between 1965 and 1973 the average annual growth of the GNP per head for the low-income countries was 2.4 percent, between 1973 and 1980 2.1 percent, and between 1980 and 1989 4.1 percent; for the middle-income countries 1965-73 5.2 percent, 1973-80 2.3 percent, and 1980-89 0.5 percent. But at the same time there was increasing diversity of growth between different developing countries, and increasing dualism within many of them. Despite high rates of growth of industrial production and continued general economic growth, not enough employment was created for the rapidly growing labour force. Nor were the benefits of growth always widely spread to the lower income groups.

In a much-quoted, classical article Arthur Lewis (1954, pp. 139-91) had predicted that poor and low-productivity subsistence farmers and landless labourers would move from the countryside to the high-income, urban, modern industries. This move would increase inequality in the early stages (so long as rural inequalities were not substantially greater than urban inequalities), but when more than a critical number of rural poor had been absorbed in modern industry, the golden age would be ushered in, when growth is married to greater equality. In this way, one explanation for the statistical association of the Kuznets curve was provided.

It became evident, however, that the Lewis model, which strongly dominated not only academic thought but also political action, did not always work in reality. It did not apply for four reasons. First, the rural-urban differentials were much higher than had been assumed, owing to trade union action on urban wages, minimum wage legislation, differentials inherited from colonial days, and other causes. This produced an excess of migrants and, at the same time, impeded the rapid growth of the rural labour force. Second, the rate of growth of the population and with it that of the labour force were much larger than expected: between 2 and 3 percent per year. Third, the technology transferred from the industrial countries to the urban industrial sector of the developing countries was labour-saving, and although it raised labour productivity it did not create many jobs. Fourth, in many developing countries a productivity-raising revolution in agriculture was a precondition for substantial and widespread progress in industry, and this revolution did not occur.

It was not surprising, then, that attention turned away from the GNP and its growth. Some even wanted to "dethrone the GNP", not for the currently fashionable reason of environmental protection, but because it neglected employment and income distribution, jobs and justice. Since 1969 the International Labour Organisation had attempted to promote jobs in the developing countries. It had organised employment missions to several countries–Colombia, Kenya, the Philippines, Iran, Sri Lanka, the Dominican Republic, the Sudan, and Egypt-to explore ways of creating more productive and remunerative employment. While this was an extremely useful learning exercise, it soon became evident that unemployment was not really the main problem. In *Asian Drama*, Gunnar Myrdal (1968) devoted many pages to criticising the concepts of employment, unemployment, and underemployment in the context of underdeveloped Asia. "Employment" and "unemployment" make sense only in an industrialised society where there are employment exchanges, organised and informed labour markets, and social security benefits for the unemployed, who are trained workers, willing and able to work but temporarily without a job. Much of this does not apply to the poorest developing countries, in which livelihoods are more important than wage employment. It is an instance of the transfer of an inappropriate intellectual technology from modern societies to the entirely different social, economic, and cultural setting of developing countries.

Myrdal talked about "labour utilisation", which has numerous dimensions when applied to self-employed subsistence farmers, landless labourers, artisans, traders, educated young people, saffron-clad monks, beggars, caste-conscious Brahmins, or women, in societies without organised labour markets. "Employment" as interpreted in industrial countries is not the appropriate concept. The ILO employment mission discovered or rediscovered this and they also discovered that, to afford to be unemployed, a worker has to be fairly well off. To survive, an unemployed person must have an income from another source. The root problem, it was found, is poverty, or low-productivity employment, not unemployment. Many of the moderately poor are not unemployed but work very hard and long hours in unremunerative, unproductive forms of activity. True, among the poorest of the poor, unemployment can be a common form of suffering, but its roots are quite different from those of unemployment in industrial countries.

The discovery that the problem is often unremunerative work of low productivity drew attention to the informal sector: the street traders, garbagecollectors, and casual workers, as well as many in small-scale production such as blacksmiths, carpenters, sandal-makers, builders and lamp-makers. These people often work extremely hard and long hours, are self-employed or employed by their family, and are sometimes very poor. Attention was also directed to the women who, in some cultures, perform hard tasks without being counted as members of the labour force because their production is not sold for cash. The problem was then redefined as that of the "working poor".

Labour utilisation covers more dimensions than the demand for labour (the lack of which gives rise to Keynesian unemployment) and the need for cooperating factors of production such as machinery and raw materials (the lack of which gives rise to what may be called Marxian non-employment). There is a good deal of evidence that not only labour but also capital is grossly under-utilised in many developing countries. This suggests other causes for under-utilisation than surplus labour in relation to scarce capital. More specifically, the causes of low labour utilisation can be classified under three headings: consumption and level of living (including education and health), attitudes, and institutions.

Nutrition, health, and education are elements of the level of living that are important for fuller labour utilisation. They have been neglected because in advanced societies they count as consumption that has no effect on human productivity (though possibly a negative one, as do four-martini lunches). The only exceptions that have been admitted in the literature in recent decades are some forms of education. In poor countries, however, better nutrition, health, education and training can be very productive forms of investment in human resources. This is one thread that goes into the later fabric of basic needs.

The second dimension, the attitudes, make a difference in the kinds of job people will accept. In Sri Lanka a large part of unemployment is the result of the high aspirations of the educated, who are no longer prepared to accept "dirty" manual jobs. Caste attitudes in India also present obstacles to fuller labour utilisation. In Africa those with primary education wish to leave the land and become clerks in government offices. In many societies manual work or rural work is held in contempt.

The third dimension is the absence or weakness of such institutions as labour exchanges, credit facilities, marketing organisations or a system of landownership or tenancy that provides incentives and ability to till the soil. As a result, labour is under-utilised.

In addition, the wrong policies for fuller labour utilisation are often adopted: labour is over-priced, capital is under-priced, food is under-priced for the small growers, the exchange rate is overvalued, making labour-intensive exports difficult, etc.

For reasons such as these the concepts of unemployment and underemployment as understood in the North are not applicable, and an approach to poverty that assumes levels of living, skills, attitudes, and institutions adapted to full labour utilisation has turned out to be largely a dead end. Unemployment can coexist with considerable labour shortages and capital under-utilisation.

Inappropriate attitudes and institutions can also frustrate some approaches to meeting basic needs. Focusing on the needs of men, women, and children draws attention to the appropriate institutions (such as public services and credit facilities) to which households need access, and to the attitudes (such as those towards women's welfare) that need changing to secure better distribution within the household. These issues will be more fully discussed later.

The employment concept was questioned for other reasons too. Far from reducing unemployment, the creation of more employment opportunities actually increases unemployment. Those who come from the countryside to the towns in search of jobs balance the expectation of high earnings against the probability of getting a job [John R. Harris and Michael P. Todaro (1970), pp. 126-142]. As job opportunities increase, they attract more people. The influx of migrants in turn contributes to the high rate of urban drift and the growth of shanty towns. The employed urban workers, though poor by Western standards, are among the better-off when measured against the distribution of income in their own countries.

These difficulties turned the development debate to the question of income distribution. One of the landmarks was the book published in 1974 for the Development Research Centre of the World Bank and the Sussex Institute of Development Studies, entitled Redistribution with Growth [Hollis Chenery and others (1974)]. Among many questions about the relations between growth and redistribution,<sup>1</sup> it raised two sets of interest in the present context: (1) What can be done to increase the productivity of the small-scale, labour-intensive, informal sector "discovered" by the ILO employment mission to Kenya? How can we remove discrimination against this sector and improve its access to information, credit, and markets? The question is, how does redistribution affect efficiency and growth? Does helping the "working poor" mean sacrificing productivity; is it an efficient way of promoting growth? (2) To turn the question the other way around, how does economic growth affect distribution? It was quite clearly seen that in low-income countries growth is (almost) a necessary condition for eradicating poverty, but it also seemed that economic growth sometimes reinforced and entrenched inequalities in the distribution of incomes, assets, and power. Not surprisingly, when growth began with an unequal distribution of assets and power it was more difficult to redistribute incomes and to eradicate poverty.

Although it was recognised that under these conditions it would be difficult to redistribute existing assets, it was thought that the redistribution of increments of income would be politically easier. (It can be seen that this approach is an elaboration of the second justification for the emphasis on growth mentioned above.) A proportion of incremental income would be taxed and channelled into public services intended to raise the productivity of the poor. This is "redistribution with growth". But it was discovered that the results of such redistribution are very modest, at any rate for low-income countries. According to one simulation exercise, an annual transfer of 2 percent of the GNP over twenty-five years into public investment to build up the stock of capital available to the poor–thought to be a very "dynamic" policy–would, after forty years, raise the consumption of the poorest 40 percent of the population by only 23 percent; that is to say, their rate of consumption growth would accelerate by 0.5 percent a year: \$1 for a \$200 income [Chenery and others (1974)]. The model excludes, however, the human capital aspects of some

<sup>&</sup>lt;sup>1</sup>These questions include: Do conventional measures of growth involve a bias against the poor, and how can this be changed? How can strategies of redistribution be combined with strategies of growth? Is it possible to identify groups whose members have common characteristics and to direct strategies towards those groups? What are the principal instruments of policy?

forms of consumption and the impact on labour utilisation, which are stressed by both the basic needs and the human development approach.

In spite of its title, most of *Redistribution with Growth* is concerned not with relative income shares but with the level and growth of income in low-income groups. Much of the redistribution literature measures inequality by the Gini coefficient, which runs through the whole range of incomes, from the richest to the poorest. It measures somewhat meaningless percentiles instead of socially, regionally, or ethnically significant deprived groups. It does not tell who is in these decile groups, for how long, or for what reasons. Nor does it indicate the scope for mobility or the degree of equality of opportunity. Normally, there is no particular interest in redistribution to the middle, which would reduce inequality but leave poverty untouched. Nor is the fate of income deciles as such of much interest, for these are not sociologically, politically, or humanly interesting groups.

An empirical question is how economic growth affects the reduction of inequality and poverty, and how these reductions in turn affect efficiency and economic growth. The answers to these questions will depend on the initial distribution of assets, the policies pursued by the government, the available technologies, the scope for labour-intensive exports (which enlarges the application of labour-intensive technologies), and the rate of population growth. Another empirical question is how policies to reduce inequalities and to meet basic needs affect freedom and human rights.

Is it more important to reduce inequality or to meet basic needs? Is egalitarianism to be preferred to humanitarianism? In societies with very low levels of living, meeting basic needs is more important than reducing inequality for three reasons.<sup>2</sup> First, equality as such is probably not an objective of great importance to most people other than utilitarian philosophers and ideologues. Second, this lack of concern is justified, because meeting basic needs is morally more important than reducing inequality. Third, reducing inequality is a highly complex, abstract objective open to many different interpretations, and is operationally ambiguous.

It has been argued that because no group ever asks to be paid *less* in the interest of social justice, people are not really concerned with equality as such [Beckerman (1979), p. 11]. Against this, it could be said that in democracies better-off people *do* vote for progressive taxes, and a lack of clamour to be paid less may have something to do with the fear that the benefits might go to the fat cats rather than to the underdogs. Nevertheless, most well-paid people so rarely perceive that they are overpaid that equality as such does not seem to figure prominently among their objectives. And it is fairly plain that many claims for greater social justice are only thinly disguised claims for getting more for oneself.

Removing malnutrition in children, eradicating disease, or educating girls are <sup>2</sup>The following discussion is indebted to Wilfred Beckerman (1979), pp. 9-22.

concrete, specific achievements that meet the basic needs of deprived groups, whereas reducing inequality is abstract. There is, of course, nothing wrong with an abstract moral objective, but if policies are judged by the evident reduction of human suffering, meeting basic needs scores better than reducing inequality. Internationally, also, there is more concern with ameliorating blatant deprivation than with bringing developing countries up to Western living standards or "reducing the gap".

It is true that we do not have a production function for meeting adequate standards of nutrition, health, and education. It is not known precisely which financial, fiscal, and human resources and policies produce these desirable results. The causes are multiple and interact in a complex and still partly unknown manner. But at least it is fairly clear when the objective has been attained, and the criteria by which it is judged are also clear.

In the case of equality, however, no one knows how to achieve (and maintain) it, or even how precisely to define it, or by what criteria to judge it. To have no clear-cut criteria for defining the optimal degree of equality does not imply ignorance as to whether inequality is too great or too small. We may be able to judge improvements in income distribution without a clear idea of the optimal distribution, as we may judge whether water in a well is higher or lower without knowing its depth. But the uncertainties surrounding differences in income and assets that are acceptable because of differences in age, sex, location, needs, merit, and so on, and the question as to how to resolve conflicts between, for example, merit and need, make it difficult to give a precise operational meaning to the objective of redistributive policies: they make "equality" conceptually elusive. A rule is regarded as inegalitarian by Aristotle when equals are awarded unequal shares or unequals are awarded equal shares [Aristotle (1911), p. 107]. But what then defines "equality"? As Robert Nozick has written, "to fill in the blank in 'to each according to his…'" has been the concern of theories of distributive justice [Nozick (1974), p. 159].

It might be objected that poverty necessarily contains a relative component, that it is measured against a standard set by the norms of a society, and that it is therefore closely related to inequality. "Poverty is a relative concept. Saying who is in poverty is to make a relative statement rather like saying who is short or heavy."<sup>3</sup> Without rejecting this view, it must be asserted that an absolute core of absolute deprivation can be determined by medical and physiological criteria, without recourse to reference groups, averages, or other criteria of comparison. In addition to

<sup>&</sup>lt;sup>3</sup>Brian Abel-Smith and Peter Townsend (1965), p. 63. Peter Townsend defines poverty as the absence or inadequacy of those diets, amenities, standards, services, and activities which are common or customary in a society. People are deprived of the conditions of life which ordinarily define membership of society. If they lack or are denied resources to obtain access to these conditions of life, and so fulfil membership of society, they are in poverty. [Townsend (1979), p. 915]. This leads to the paradoxical conclusion that there is no poverty in societies where nearly everyone lives in conditions of deprivation which "ordinarily define membership of society".

this core of absolute poverty, it has been recognised at least since Adam Smith<sup>4</sup> and Karl Marx<sup>5</sup> that poverty contains a relative component. Whatever doctors, nutritionists, and other scientists may say about the objective conditions of deprivation, how the poor themselves perceive their deprivation is also relevant. This perception is partly a function of the reference group from which the poor take their standards of what comprises the necessities for a decent minimum level of living. Such a view need not be based on envy. The poverty norm moves up with average income because the desire to belong is an almost biological basic need and is expressed as a desire to live at a standard that is regarded by the society as decent. This standard is different in the United States from what it is in Sri Lanka. But it may be questioned whether poverty should be defined in such a way that it can never be reduced, however much absolute income levels rise, if the measure of inequality remains unchanged. This would make poverty eradication rather like the attempt to catch the electric hare used to spur on greyhounds at dog races.<sup>6</sup> It is, however, an empirical fact that the only societies that have been successful in meeting basic needs are those that have also reduced inequalities.<sup>7</sup>

After the dead end of "employment" as interpreted in industrial countries and after the limitation and irrelevance of egalitarianism and redistribution, basic human needs were the next logical step in development thinking. The basic needs approach emphasised that income increases are not enough to reduce poverty. Mass education, safe water, family planning, health services, and others depend on public action. Some poor people are incapable of earning income. Basic needs have also always called for participatory community involvement and self-governing institutions in the design and implementation of projects and programmes. The best short-hand way of describing basic needs is: incomes + public services + participation.

<sup>4</sup>By necessities I understand not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lower order, to be without". [Adam Smith (1776), bk.5, ch. 2, pt2.] A. K. Sen has argued, to me convincingly, that the shame felt by these people is absolute deprivation, it is not more shame than others feel, though relative in the space of commodities.

<sup>5</sup>A house may be large or small: as long as the surrounding houses are equally small, it satisfies all social demands for a dwelling. But let a palace arise beside the little house, and it shrinks from a little house to a hut...however high it [the little house] may shoot up in the course of civilisation, if the neighbouring palace grows to an equal or even greater extent, the occupant of the relatively small house will feel more and more uncomfortable, dissatisfied and cramped within its four walls." [Karl Marx and Frederick Engels (1958), pp. 93-94].

<sup>6</sup>A. K. Sen concluded his discussion of relative deprivation: "It is, however, worth noting that the approach of relative deprivation–even including all its variants–cannot really be the only basis for poverty. There is an irreducible core of *absolute* deprivation in our idea of poverty which translates reports of starvation, malnutrition, and visible hardship into a diagnosis of poverty without having to ascertain first the relative picture. The approach of relative deprivation supplements rather than competes with this concern with absolute dispossession". [Sen (1978), p. 11.]

<sup>7</sup>Kuwait may seem an exception to this, but only if we exclude the foreigners who work there. In view of the removal of resource constraints as a result of oil exports and the confinement of the benefits to Kuwaiti citizens, this may be the exception that tests the rule.

The basic needs approach had at least four advantages over previous approaches to growth, employment, income redistribution, and poverty eradication. First, the basic needs concept is a reminder that the objective of development is to provide all human beings with the opportunity for a full life. However a "full life" is interpreted, the opportunity for achieving it presupposes meeting basic needs. In the previous decades, those concerned with development have sometimes got lost in the technical intricacies of means-growth rates, production, productivity, savings ratios, export ratios, capital-output ratios, tax ratios, and so on-and lost sight of the end. They came near to being guilty, to borrow a term from Marx, of "commodity fetishism". Being clear about the end obviously must not imply neglecting the means: on the contrary, it means efforts are directed at choosing the right means for the ultimate ends that are desired. In the past, planners have moved away from one aim of development, which is meeting basic needs, to some conglomeration of commodities and services valued at market prices, irrespective of whether they are air-conditioners or bicycles, luxury houses or rural shelters, whether they benefit the rich or the poor, and irrespective of other costs and benefits. The basic needs approach recalled the fundamental concern of development, which is human beings and their needs.

Second, the approach went beyond abstractions such as money, income, or employment. These aggregates have their place and function; they are important concepts and, though in need of revision, should not be abandoned; but they are useless if they conceal the specific, concrete objectives that people themselves seek. To consider basic needs is to move from the abstract to the concrete, from the aggregate to the specific.

The evolution sketched above shows that the concepts have become decreasingly abstract and increasingly disaggregated, concrete, and centred on people. Starting with the GNP and its growth, a highly abstract and unspecified conglomerate of goods and services, irrespective of what and for whom, development thinking then turned to employment, a somewhat more specific goal. The discussion was then narrowed down to particular groups of unemployed: school-leavers, recent migrants to the city, landless labourers, small-scale farmers without secure water supply, and so forth. But "employment" also was seen to have serious limitations. Ideas were next further narrowed to identify deprived groups of individuals and families–women, children under five, the elderly, youths with specific needs, ethnic groups discriminated against, communities in distant and neglected regions. Economic growth is no longer the objective of economic development, but an incidental result of aiming at the right composition and distribution for the present and future generations.

Third, the basic needs approach appealed to members of the national and international community and was therefore capable of mobilising resources, unlike vaguer (though important) objectives, such as raising growth rates to 6 percent, contributing 0.7 percent of the GNP to development assistance, redistributing for greater equality, or narrowing income gaps. People do not share normally lottery prizes or other gains in wealth with their adult brothers and sisters, but they do help when their siblings are ill, or their children need education, or some other basic need has to be met. The same is true in the wider human family [Harberger (1987), pp. S87-S120]. Meeting basic needs has some of the characteristics of a public good. My satisfaction from knowing that a hungry child is fed does not detract from your satisfaction. The basic needs approach therefore has the power to mobilise support for policies that more abstract notions lack.

Fourth, the basic needs approach has great organising and integrating power intellectually, as well as politically. It provides a key to the solution of problems that are at first sight separate, but, on inspection, prove to be related. If basic needs are made the starting-point, these otherwise recalcitrant problems fall into place and become solvable [Streeten (1975, 1976), pp. 1-9].

In one sense, this was a homecoming. For when the world embarked on development fifty years ago, it was primarily with the needs of the poor in mind. Third World leaders wanted economic as well as political independence, but independence was to be used for people's self-fulfilment. The process got sidetracked, but many important discoveries about development were made: the importance of making small-scale farmers and members of the informal urban sector more productive and raising their earning power; the scope for "efficient" redistribution, that is, redistribution that contributes to more equitable economic growth; the numerous dimensions of labour markets; and the importance of creating demand for certain types of product and for the labour producing them.

A common minimum formulation of the objectives of development is sustainable growth (of consumption) with equity, or, better, with rapid poverty reduction. Equity means that there should not be unfair discrimination between equals. Some poverty reduction may have to be inequitable, in the sense that not all the poor can become better off at the same time, so that some groups, or some regions, may have to be favoured, at least for a time. This is particularly important if the selective policy favouring unfairly one group eventually helps to eradicate more speedily the poverty of those left behind.

There is also a distinction between inequality and inequity. If A, whose situation is in all relevant respects the same as B's, has more than B, that is inequality; if he or she has more *because B has less*, or if B has less *because A has more*, that is inequitable or iniquitous. But even where exploitative and iniquitous inequality is absent, we should still be concerned with the fate of the poor.

Raising production and productivity of the poor, although important, is not enough. Many productivity gains in the Third World have been passed on to foreign buyers (e.g., in lower prices of export crops) or to large multinational corporations, or to the better-off groups at home. The gains must also be remunerative for the poor, as well as productive.

But basic needs comprises more. We may also wish to add the objective of security and stability: economic, political, and legal. Greatly fluctuating gains and insecure jobs are discounted, even if their average is larger than a more stable, though lower, level. So, as a first approximation, the objective is productive, remunerative, sustainable, stable, and equitable growth of consumption (or, to remove the ambiguities in "equity", growth with rapid reduction of absolute poverty).

But this does not exhaust the range of objectives. Some of the most important contributions to poverty reduction, reflected in what poor people actually want, do not show up in growth figures, and are not achieved by economic growth. Poverty is multi-dimentional and cannot be subsumed under one or two or a few indicators. Adequate nutrition and safe water, better medical services, more and better schooling, cheap transport, decent shelter, available cheap fuel, better access to public goods and to common property, continuing employment, and secure livelihoods do not register in higher income per head, at least not for some time. Some of these are provided free or at subsidised prices by the government; others by private voluntary societies; others again by groups of poor people themselves. They tend to be evaluated by national income accountants at the cost of the social services ministering to basic needs, or (as in the case of secure livelihoods or shorter queues at clinics) they are benefits that are not recorded at all in money income measures. In addition, poor people certainly also want a higher and rising level of measured real income, but this is not their only or even principal basic need. And narrowly economic development can itself interfere with fully human and cultural development.

There are other non-material benefits, often more highly valued by the people than material improvements, especially by poor, inarticulate, powerless people, benefits which only indirectly and after a time lag may or may not contribute to growing production. Some of these partake in the characteristics of rights, either positive or negative, others in those of states of mind. Some express the need to *do* certain things, others the need to achieve certain states of *being*. These aspects are obviously related. Among these objectives are good working conditions, freedom to choose jobs and livelihoods, self-determination and self-respect, independence, mobility but not having to migrate in search of work, liberation from oppression, patronage, violence and exploitation by patrons or landlords, security from persecution and arbitrary arrest, the assertion of traditional cultural and religious values (often the only thing a poor man or woman can assert), access to power, or empowerment, recognition, status, adequate leisure time and satisfying forms of its use, a sense of purpose in life and work, the opportunity to join and participate actively in the activities of a pluralistic civil society, including social life, ceremonies, and celebrations, and in decisions that affect people's life and work, with institutions that are layered between the individual and the central government, and the opportunities to develop fully the personality of every human being born into this world.<sup>8</sup>

All of these are important objectives, valued both in their own right and as means to satisfying and productive work. Many of these can be achieved in ways that do not increase the measured production of commodities, while a high and growing national income, even if fairly distributed, can leave these basic needs unsatisfied. No policy-maker can guarantee the achievement of all, or even a majority of these aspirations, but policies can create the *opportunities* for their fulfilment, can offer the choices to the people.

As early as the 1950s pioneers like Pitambar Pant<sup>9</sup> in India and Lauchlin Currie, who led the first World Bank mission to a developing country (Colombia), said that development must be concerned with meeting minimum or basic human needs (though their strategies were strongly growth-orientated). Now there is a deeper understanding of the issues, of many of the inhibitions, obstacles, and constraints, and also a clearer vision of the path.

As the basic needs concept entered the North-South dialogue, all sorts of misconceptions and misinterpretations grew around it.<sup>10</sup> Opposition in developing countries grew, particularly to the use of the concept by donor countries, and basic needs became two five-letter words. Some of the objections raised by the developing countries were justified, such as its use as an excuse to reduce development aid and to put up protectionist measures, or its use to divert attention from the need to reform the international system; others reflected the vested interests of the rich in the poor countries who resist attempts to reduce their power and wealth. Similarly, the rich countries raised both legitimate and illegitimate objections. The result was that the concept faded away, although it has still adherents among many of the drafters of development plans in the developing countries and among private voluntary organisations.

<sup>8</sup>N. S. Jodha asked people in two villages in Rajasthan, India, to define their own criteria of wellbeing. He then compared the results with data he had collected twenty years earlier. The 36 households whose incomes had declined significantly in real terms were, on average, better off according to the criteria they had expressed themselves. Although their real income per head was lower, other improvements had more than made up for this: better housing, wearing shoes regularly, less dependence on patrons and landlords, not having to move in search of work. See Jodha (1988).

<sup>9</sup>Pant (1974). In a paper that was circulated in August 1962 by the Perspective Planning Division of the Planning Commission, part of which is reprinted in the above book, Pitambar Pant anticipated many features of the basic needs approach. But, since he believed with Pareto in the similarity of income distributions in all societies, minimum needs had to be met by general economic growth. He postulated this growth to be much higher than the five-year-plan target, which, in turn, was higher than actual growth. Moreover, he regarded the poorest 20 percent as unreachable by economic growth.

<sup>10</sup>For a discussion of these, see Paul Streeten and others (1981), Chapter 8.

At the same time, new concerns were incorporated in the development dialogue: the role of women (and children), the physical environment, population, habitation, human rights, political freedom and governance, corruption, the waste of military expenditure and the "peace dividend", and the role of culture among them. Basic Needs was regarded as too narrowly focused, and it had to carry the ballast of past misinterpretations. The time had come for a wider approach to improving the human condition that would cover all aspects of human development, in both industrial and developing countries.

#### HUMAN DEVELOPMENT

Human development is defined as the enlargement of the range of people's choices in the UNDP's Human Development Reports. This definition is an extension, enlargement, and deepening of the now somewhat unpopular basic needs approach. Thinking about poverty has evolved from economic growth as the performance criterion of development to employment, income distribution, the informal sector, and via basic needs to human development.

Some basic needs interpretations have run in terms of commodity bundles or specific needs satisfactions, and it has been said that human development gets away from this. In our book *First Things First* [Streeten *et al.* (1981)] we say: "First, and most important, the basic needs concept is a reminder that the objective of the development effort is to provide all human beings with the *opportunity* for a full life. In the past two decades, those concerned with development have sometimes got lost in the intricacies of means...and lost sight of the end. They came near to being guilty, to borrow a term from Marx, of 'commodity fetishism' ". "Opportunity" is near in meaning to Amartya Sen's "functioning" and "capability". We tried hard to get away from the detached objects people happen to possess<sup>11</sup> and to emphasise the end: people's full lives.

Amartya Sen's analysis has been in terms of "capabilities" and "functionings", and of neither satisfactions nor happiness nor commodities [Amartya Sen (1984, 1985, 1987)]. Sen goes beyond the analysis of the commodities or their characteristics (a shirt serves warmth and decoration, and if drip-dry saves ironing), which consumers value, and analyses the characteristics of the consumers; whether they have the capability to make use of commodities. The same amount of food has a different significance according to whether the consumer is healthy or has parasites in her stomach (in which case the basic needs of the worms rather than of the consumer are met); according to the rate of metabolism, the age, sex, size, and workload of the consumer; according to the climate, according to whether she is pregnant or lactating, according to whether the consumer has acquired thorough education the

<sup>11</sup>Sudhir Anand and Martin Ravallion (1993) criticise the basic need approach for being still "firmly centred on commodity possession" (pp. 135-136).

knowledge of how to prepare the food nutritiously, and according to whether she needs the food for other uses than her own consumption, such as entertainment or ceremonies.

Sen also argues that human development cannot be judged only by end-states, and that the freedom to choose between different options is an important component of well-being. A given commodity bundle has a different significance to the consumer according to whether she has other options, though she does not exercise them, or whether that same bundle is the only one available. There is a difference between a starving pauper, a fasting monk, and Gandhi on hunger strike, which is not reflected in the low-calorie intake of all three. Only the starving pauper lacks capability. But Sen's capabilities cannot be observed, while achievements can. If failure of achievement is voluntary, it is acceptable. But some authors (like Frances Stewart, 1993) have argued that it is better to separate freedom of choice and look at poverty in terms of observable achievements. In this sense, all three are deprived. Sen lumps achievement and freedom of choice together in "capability", which may or may not be exercised by the person.

Happiness, as experienced by the individual, is not what human development can aim at or is mainly about. Not only can happiness not be delivered by the government;<sup>12</sup> people may be miserably poor and yet be contented. Anita Brookner (1989) in one of her novels tells of a woman who was so modest, she did not even presume to be unhappy. And Susan Minot in her novel *Folly* (1994) writes "not only did she not think of making certain choices herself, she was completely unaware of having the desire to do so". Indian women report much less being ill than Indian men.<sup>13</sup>

Human development goes beyond basic needs in that it is concerned with all human beings, not only the poor, not only poor countries, not only basic needs. Human development applies to people in the advanced, industrial countries, as much as to middle-income and low-income countries.

The indicators for the advanced countries are, of course, different though, alas, poverty has been globalised. To John Kenneth Galbraith's complaint about private affluence amid public squalor has been added in many advanced countries that of private affluence amid private squalor. A walk through the streets of New York or London provides plenty of evidence. But once nearly 100 percent literacy and average life expectancy of 80 years are reached, there is not much to distinguish one advanced country from another. Years of schooling have been included in the

<sup>&</sup>lt;sup>12</sup>Keynes proposed the toast to the Royal Economic Society: "to economics and economists, who are the trustees, not of civilisation, but of the possibility of civilisation".

<sup>&</sup>lt;sup>13</sup>In the film of Edith Wharton's *The Age of Innocence*, Newland Archer, seeing the futility of creating a soul-mate of his wife, says, "There's no point in liberating someone who does not realise she is not free". Not everyone would agree. Against people's self-perception being above their real situation, Jodha (1988) found that people whose income had declined, felt themselves better off by criteria of independence, especially from patrons, mobility, security, and self-respect.

indicator for education of the Human Development Reports as a differentiating characteristic between, say, Britain and the USA.

Sudhir Anand and Amartya Sen have suggested the division of all countries into three groups: low, medium, and high levels of human development [Anand and Sen (1993)]. For countries with a low value of human development, the basic HDI can be used to rank their performance. For countries with a medium value of human development, Anand and Sen add one supplementary indicator to each of the three basic variables, life expectancy, literacy, and log of the GDP per head. In the longevity category, they add infant and child mortality (under age 5); in the education category, they add secondary school enrolment; and in the income category, they add the incidence of income poverty in the country.

For countries with a high level of human development, they add a further supplementary indicator to the two already existing in each category in the medium group. To the survival (longevity) category, they add the maternal mortality rate; to the education category, they add tertiary enrolment; and to the income category, they add Gini coefficient-corrected mean national income, i.e., the GDP per head multiplied by (1-G). The following table illustrates the new additions.

Human			
Development			
Level	Low	Medium	High
Human Development Indicators	1.1. Life expectancy	1.1. Life expectancy 1.2. Under-5 mortality	<ol> <li>1.1. Life expect.</li> <li>1.2. Under-5 m.</li> <li>1.3. Maternal mort.</li> </ol>
	2.1. Adult literacy	2.1. Adult literacy 2.2. Secondary school enrolment	<ul><li>2.1. Adult literacy</li><li>2.2. Sec sch. enrol.</li><li>2.3. Tertiary enrol.</li></ul>
	3.1. Log of GDP per head up to international pov.	3.1. Log of GDP per head up to international pov.	3.1. Log of GDP per head up to international pov.
Line	Line	Line	
		3.2. Incidence of poverty	<ul><li>3.2. Incid of pov.</li><li>3.3 Gini-corr. mean N.I.</li></ul>

Additional indicators of shortfalls from human development should be looked for elsewhere in the high human development countries: in homelessness, drug addiction, crime rates. Divorce rates and suicide rates are more controversial. We have come to accept divorce as a normal feature of life, though one can debate whether it should be bracketed with cancer and AIDS as a curse of our times or celebrated along with aspirin and anaesthetics as a welcome liberation from past miseries. Divorce and suicide can be regarded as indicating more options and therefore positive achievements, particularly suicides of terminally ill elderly patients. On the other hand, they may be regarded as signs of the breakdown of the social fabric of a society, a failure of upholding what some regard as the moral values of the family and the sanctity of life. For divorce, there is also the problem of the impact on the choices and welfare of the children, if there are any.

A shorthand way of describing human development is a variation of Abraham Lincoln's definition of government. It is development *of* the people, *for* the people, *by* the people. *Of* the people implies adequate income generation through jobs and the generation of primary incomes from work, *for* the people implies social services for those who need help and the generation of secondary or transfer incomes, and *by* the people means participation. It could also be interpreted as the economic, social, and political dimensions of development. It will be seen that the framework is the same as that of Basic Needs, the shortest definition of which was: incomes + public services + participation.

The move from income to welfare or utility, to chosen bundles of goods and services, to characteristics of these goods and services, to needs that they meet, and finally to the enlargement of choices (with Arthur Lewis's anticipation), has enriched our understanding. The enlargement of choices of one section of the community should not be at the expense of the legitimate choices of another. This has two important implications: first in equity, so that one person's enlargement does not encroach on that of others; and second over time, so that our present choices do not encroach on the choices of future generations, or what has come to be known as sustainability, about which more in the final section. This concern for the future should cover not only the physical environment–raw material exhaustion without technical substitution and pollution–but also cultural values, resilience to outside shocks, debt, and political sustainability. A separate section at the end is devoted to a discussion of these problems.

A human development strategy stresses the importance of institutions for improving the human condition. Among these are, first, the government, central and local (1) to make markets work efficiently, (2) to step in where they fail, and (3) to correct for maldistribution where markets succeed at the expense of human needs. Secondly, there is the market, thirdly, the civil society and, fourthly, global institutions. Civil society refers to democratic political processes, NGOs, grassroots organisations, religious and professional associations, action groups, the news media, and the public at large. It is in the interaction between the state and civil society that the conditions for the good life should be found. Global institutions are needed in order to curb the occasionally destructive and self-destructive tendencies of the state and to assert the values shared by all humanity. They in turn are kept in check by international or global private, voluntary organisations.

## THE HUMAN DEVELOPMENT INDEX

The item in the UNDP's *Human Development Reports* (1990, 1991, 1992, 1993, and 1994) that has caught the media's and the public's eye and caused most controversy is perhaps analytically the weakest: it is the Human Development Index. It is clear that the concept of human development is much wider and richer than what can be caught in *any* index or set of indicators. This is true of other indicators, such as those of temperature, also. But, it might be asked, why try to catch a vector in a single number? Why not present many single indicators separately?

Yet, such single indexes are useful in focusing attention and simplifying the problem. They have considerable political appeal. They have a stronger impact on the mind, draw more powerfully public attention, than a long list of many indicators, combined with a qualitative discussion. They are eye-catching. The strongest argument in their favour is that they show up the inadequacies of other indexes, such as the GNP, and thereby contribute to an intellectual muscle therapy that helps us to avoid analytical cramps. They can serve as mental finger exercises. They refocus our attention from one set of items to others, in the case of the HDI to the social sectors: nutrition, education, and health. But it should always be remembered and is worth repeating that human development is a much richer concept than what can be caught in any index, whether the GNP or the HDI.

The Human Development Index comprises (1) the logarithm of the GDP per head, calculated at the real purchasing power, not at exchange rates, up to the international poverty line; (in subsequent *Reports* after that of 1990 this was modified in various ways); (2) literacy rates (and, since the 1991 *Report*, mean years of schooling); and (3) life expectancy at birth. These disparate items are brought to a common denominator by counting the distance between the best and the worst performers and thereby achieving a ranking of countries. Critics have said that not only are the weights of the three components arbitrary, but also what is excluded, and what is included.

As we have seen, one of the great drawbacks of average income per head is that it is an average that can conceal great inequalities. But, it may be objected, the components of the Human Development Index, namely, life expectancy and literacy, are also averages. They can conceal vast discrepancies between men and women, boys and girls, rich and poor, urban and rural residents, different ethnic or religious groups. The HDI has in fact been illuminatingly disaggregated by sex, region, and ethnic groups for a few countries, where data were available. The HDI has also been adjusted for sex-disparities. This is done in the following way. First, the HDI ranking is adjusted by expressing the female values of each component of the index as a percentage of the male value. These percentages are calculated separately for income, educational attainment, and life expectancy and then averaged. The country's general HDI is then multiplied by this factor to yield a sex-disparity-adjusted HDI figure. (*The Human Development Report* calls this the Gender-Related Development Index or GDI.) This procedure makes a considerable difference to the rankings of countries. Japan moves down from 3 to 19, Canada from 1 to 9, Switzerland from 2 to 17, and Hong Kong from 22 to 30. On the other hand, Sweden moves up from 4 to 1, Denmark from 15 to 4, Finland from 16 to 3, and New Zealand from 18 to 8.

One problem with the GDI is that we have to decide on the trade-off between male-female equality against greater, though unequal, achievement. Assume two countries, A and B. In country A, male literacy is 80 percent and female literacy is 70 percent. In country B, male literacy is 50 percent and female literacy is also 50 percent. The ranking of these two countries will depend on how much we value equality *per se* against higher, though unequal, achievements of both groups.

The 1995 *Human Development Report* proposes also a Gender Empowerment Measure (GEM), It contains three variables that reflect the economic, political, and managerial participation by women and men: the share in the national income, the share of professional jobs and managerial positions, and the share of parliamentary seats and Cabinet ministries. Percentages bring the three dimensions to a common denominator. The index gives a picture of the participation of women in publicly recognised activities.

Disaggregation by other categories is also possible. Disaggregation by income groups, by residence (urban, rural), by ethnic groups, by region, and by continent can all be done and was done. Where data were available, the HDI was adjusted for income distribution either by using the Gini coefficient or the share of the bottom and top 20 percent of the population in total income. *The Human Development Report 1993* disaggregated the HDI for a small group of countries by ethnic groups and regions. One of the results was that it predicted the troubles in Mexico in the southern state of Chiapas.

There are, however, several reasons why even non-disaggregated and nonsex-disparity-adjusted human indicators are less misleading than income per head.

First, the distribution of literacy and life expectancy is much less skewed than that of income. There is a maximum of 100 percent literacy. In spite of all the achievements of modern medicine, the maximum life span has not been extended. The recorded oldest woman in the world is 120 years. For income, on the other hand, the sky is the limit. A very few very high income earners can raise the average substantially. (The median or the mode would eliminate some of the distortions, but they are not normally available.)

Second, therefore, the average of the human indicators tells us something about the distribution. There cannot be high averages with too many people not participating. Since the non-poor have access to public services before the poor, reductions in infant mortality, etc., are indications of improvements for the poor.

As Sudhir Anand and Amartya Sen (1993) have shown, for life expectancy the average may actually be better than a figure corrected for unequal distribution for the following reason. An equal life expectancy for males and females may indicate a systematic anti-female bias in the distribution of health care, food, education, and other ingredients of life. A correction for distribution in life expectancies can then be *inegalitarian* in its impact on equality of treatment. Since it is easier to extend the life expectancy of females than that of males if we start from the *same* level of life expectancy, concentrating on the *average* life expectancy would in this case be fairer than the use of life expectancy corrected for distribution.

Third, any upward move in a human indicator can be regarded as an improvement. Some might object if *only* the literacy of boys or the life expectancy of men is increased for a certain period, but unless it can be shown that such increases worsen the fate of girls and women, by, for example, increasing the ability and desire to oppress them or to discriminate against them, to object would smack of envy and bitch-in-the-manager attitudes. (The social and economic returns on educating girls are, however, likely to be greater than those on educating boys. Educated girls grow into mothers who reduce the drop-out rate of children from schools, whose children, including, of course, boys, are better fed, educated and healthier, and grow up into a more productive labour force, and who desire smaller-sized families.)

There is evidence that discrimination against women is greater, the lower their level of education. In this case, an equal improvement in everybody's education reduces anti-female bias.

It may also be said that extending the life expectancy of a 90-year old man by five years is less important than extending that of a 30-year old by 5 years, or of extending the life expectancy of five babies by one year. There may be diminishing returns to life-span as a means for enjoying or doing other things. But life expectancy is an average for a group of people, not something you own, like income. Its distribution must therefore take the form of being a member of a group. [See Anand and Sen (1994).]

Fourth, whereas high incomes of some can cause relative deprivation in others, this is not true for human indicators. If anything, improvements in the health and education of anybody benefit the whole community.

Fifth, international income gaps, whether relative or absolute, may be inevitably widening, but to aim at reducing international gaps in human indicators is both sensible and feasible. In fact, looking at development in human terms presents a more cheerful picture than in income terms. Since 1960 average life expectancy has increased by 16 years, adult literacy by 40 percent, nutritional levels by over 40 percent, and child mortality rates have been halved. The international gap, unlike that in income per head, has closed. While average income per head in the South is 6 percent of that in the North, life expectancy is 80 percent, literacy 66 percent and nutrition 85 percent.

Sixth, human indicators show the troubles of over-development or, better, mal-development, as well as those of under-development. Diseases of affluence can kill, just as the diseases of poverty. Income, on the other hand, does not show up the destructive aspects of wealth.

Seventh, indicators that measure impact rather than inputs distinguish between goods and anti-bads (regrettable necessities) which, though requiring effort and production, do not add anything net to human welfare. Examples are unnecessary food requirements arising from unwanted pregnancies and feeding children that die; or from long walks to collect water and fuel; or from excess work; or from efforts to walk between unconsolidated plots; or looking for work; or for urban dwellers high housing and transport costs. For advanced countries such costs as those incurred in treating the victims of car accidents or of clearing up oil spillages are part of net national income, but do not show up as benefits in human indicators.

Eighth, and most important, there is, as already mentioned, considerable political appeal in a simple indicator that identifies important objectives and contrasts them with other indicators. It draws the attention of policy-makers to the social sectors and the need for public action.

### WHY HUMAN DEVELOPMENT?

The great philosopher Immanuel Kant wrote in his *Fundamental Principles of the Metaphysics of Morals* (1785): "So act as to treat humanity, whether in thine own person or in that of any other, in every case as an end, never as means only".

This is not a very clear guideline. We certainly have to use others as means, and do so all the time. How else would we get our mail delivered, our food cooked, our cars serviced, our articles published? The whole division of labour is based on using other human beings as means. But Kant said "never as means *only*". This may be regarded as too minimal a requirement. If we occasionally nod or smile at our otherwise ruthlessly exploited slave, does that fulfil the condition of treating her not as means only? Still, in spite of the imprecision, we know what Kant was driving at. It might serve as the motto for those concerned with human development.

Human development puts people back at centre stage, after decades in which a maze of technical concepts had obscured this fundamental vision. This is not to say that technical analysis should be abandoned. Far from it. But we should never lose sight of the ultimate purpose of the exercise, to treat men and women as ends, to improve the human condition, to enlarge people's choices.

Human beings are both ends in themselves and means of production. There are six reasons why we should promote human development and, its first condition, poverty eradication.

First, and above all, it is an end in itself, that needs no further justification.

Second, it is a means to higher productivity. A well-nourished, healthy, educated, skilled, alert labour force is the most important productive asset. This has

been widely recognised, though it is odd that Hondas, beer, and television are often accepted without questioning as final consumption goods, while nutrition, education, and health services have to be justified on grounds of their productivity.

Third, it reduces human reproductivity, by lowering the desired family size. This is generally regarded as desirable. It is paradoxical that a policy that reduces infant mortality and raises health standards generally should lead to lower population growth. One might think that more survivors mean more mouths to feed. But evidence shows that poor people try to over-insure themselves against infant deaths, and that reduced child deaths lead to lower desired family size. It is true that there is a time lag of about two decades between falling child mortality and lower fertility rates. But other components of the human development strategy, such as better and longer education of girls, pay off sooner in smaller families.

Partha Dasgupta (1993, p. 157) quotes May and Heer (1968) who estimated that parents in India, in order to have a 95 percent probability that they will have a surviving son at age 60, must have 6.3 children, which was about the Indian fertility rate in the 1950s. Educating girls would mean that the same old-age insurance can be obtained by a surviving daughter, which would halve the fertility rate.

Fourth, human development is good for the physical environment. The poor are both a cause (though not as large a cause as the rich) and the main victim of environmental degradation. Deforestation, desertification and soil erosion are reduced with poverty reduction. The impact of population growth and population density on the environment is more controversial. The conventional view is that it is detrimental. The argument is that population growth increases the demand for land for uses other than crops. Fewer trees adversely affect the environment. Overcultivation, over-grazing by cattle, deforestation lead to desertification. In addition, bad cultivation practices strip vegetation from the topsoil and deprive it of nutrients, thereby exposing it to erosion from sun and wind.

However, recent research has shown that rapid population growth and high population density (particularly if combined with secure land rights) can be good for terracing, soil conservation, and forests. More people in Guinea have meant more, not fewer trees. In Nepal increased erosion was the result of depopulation; terraces could not be maintained for lack of people. In the Kakagema District in Kenya the density of trees varies with the density of population. A study of the Machakos District in Kenya found a fivefold increase in population associated with a shift from a highly degrading to a much more sustainable agriculture.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup>I am indebted to Robert Chambers (1993) for this information. His paper also contains a list of sources on this subject. The World Bank's Africa Region's *Findings* (1995) confirms that in the Machakos District in Kenya, which is mainly inhabited by the Akamba people, increasing population was good for the environment. These findings confirm the hypothesis advanced by Easter Boserup that increases in population density induce favourable technological change. There is, clearly, a maximum of population beyond which the unfavourable factors make themselves felt.

Fifth, reduced poverty contributes to a healthy civil society, democracy, and greater social stability. China has witnessed a rapid reduction in poverty, while maintaining an autocracy, but the call for freedom cannot be suppressed for long.

Sixth, it has political appeal, for it may reduce civil disturbances and increase political stability, though this will depend on the relation between aspirations and material improvements. If aspirations move too far ahead of improvements, this may lead to political instability.

### HUMANITARIANS VERSUS HUMAN RESOURCE DEVELOPERS

Looking at the first two reasons, I shall call those who stress the means or productivity aspect, with a strong emphasis on income and production, the human resource developers (an extreme form of whom are the human capitalists who adopt the human capital approach), and I shall call those who stress the end aspect the human resource developers and the humanitarians. At first blush, there appears to be a unity of interest between the human resource developers and the humanitarians. Although their motives are different, both have the same cause at heart, and they should embrace each other, for example, when it comes to promoting education. Means are means towards ends, which presumably are the same ends in both camps. This harmony of interests is reinforced by the widespread notion that "all good things go together".<sup>15</sup>

Indeed, it may be thought that the two positions reinforce each other in a virtuous spiral: public and private action for health and education, for example, by increasing productivity and innovative capacity, raises production and generates more resources for achieving desirable ends, including higher savings and investment. Having achieved these, accelerated economic growth is made possible. Higher economic growth, in turn, provides the resources for improvements in human development by raising the incomes of families and the supply of various types of public good. And so on in a virtuous spiral. The relationship between inputs of human development and achievements in human development in any specified time period has been called the meta-production function.

This unity of interests would exist if there were rigid links between economic production (as measured by income per head) and human development (reflected by human indicators such as life expectancy or literacy, or by achievements such as self-respect, not easily measured). But these two sets of indicators are not very closely related. Sri Lanka with an income per head of \$500 enjoys a life expectancy of 71 years, while Oman, with an income of \$6,700 has a life expectancy of only 66 years. South Africa's income is \$2,010 but her life expectancy only 55 years. Adult literacy is lower in Saudi Arabia than in Sri Lanka, in spite of an income per head fifteen times as high. Jamaica's infant mortality rate is one-quarter that of Brazil,

<sup>&</sup>lt;sup>15</sup>Thus Jere R. Behrman writes about better nutrition among the poorer members of society: "That productivity and equity concerns are in harmony is an important plus" [Behrman (1993), p. 1749].

while its income is only one-half. Life expectancy in Costa Rica is 75 years at an income of \$1,600. A child born in Harlem in New York City has a lower life expectancy than one born in Bangladesh; one born in the District of Columbia, the capital city of one of the richest countries in the world, than one born in Sri Lanka. There are many other similar discrepancies, even though the correlation between economic and human indicators is quite high for all, nearly 200 countries.

A lot of these discrepancies are, of course, due to different income distributions. A high average income per head can conceal great inequalities. But there are other reasons too. The content and access to social services vary, particularly in poor countries, and different ratios devoted to basic education, preventive primary health services, improved nutrition and family planning are also important.

Nor is there agreement on policies between human resource developers and humanitarians. Means have a way of acquiring the characteristics of ends to which those who sponsored the initial ends do not subscribe.<sup>16</sup> The following seven points of difference are not based on the unity of logic but are comparable to the unity of psychological traits in a personality.

First, humanitarians are concerned also with the unproductive, the lame ducks, the unemployables: the old, infirm, disabled, handicapped, chronically sick. As Sudhir Anand and Amartya Sen (1993, 1993a) have pointed out, these people suffer from a double disadvantage: they face greater difficulties in earning income, and in converting income into well-being, because they need, for example, wheel chairs.

There may be a bonus for the community looking after them, if not on account of higher productivity, at least for reduced reproductivity. If parents know that the community will care for them if they become disabled or infirm, an important cause of the desire for large families, and particularly many sons, disappears. This will also reduce the discrimination against females; but these benefits are incidental.

Second, the ability to convert means into ends, resources into worthwhile or satisfying activities, varies widely between different people. As we have seen, even such a basic good as food meets the needs of nutrition differently according to different circumstances.

Third, the resource or means approach lends itself to treating individuals as passive "targets", whereas the approach that sees them as ends regards them as active, participating agents. Adherents of the latter approach would be more reluctant to talk of "target groups" for policies, and would appeal more to people's full, active participation.

Fourth, the content of their educational curriculum (and health programme) is

<sup>&</sup>lt;sup>16</sup>Some of the differences are due to the fact that one group attaches end values to what for the other group are pure means, and therefore worth sacrificing for some of the other ends. The humanitarians may attach such value to participation.

different. One will aim at general education and learning for its own sake, and for understanding the world, while the other will be more vocational, aiming at training (including training for flexibility) rather than education.

Fifth, the emphasis of the resource approach will be on quantity and rates of return to financial expenditure on health or education, whereas the other approach will stress the qualitative aspects of education.

Sixth, their views on the role of women will differ, one stressing the equity and social justice aspects, the other the efficiency or productivity aspects of removing discrimination against women. The former will advocate access to the labour market, the latter will stress the nurturing functions: breast-feeding, preparing meals, and looking after the family. Martha Nussbaum (1986) cites a story told by Plutarch. Three Spartan women were being sold as slaves. Their captors asked them what they had learned to do. The first replied, "How to manage a household well". The second said, "How to be loyal". The third said, "How to be free". The replies raise the question whether there is a separate women's sphere or whether freedom and autonomy are to be aimed at. But all three are slaves, anyway. And the third, Plutarch reports, commits suicide.

Those who advocate women's freedom and the abolition of discrimination on grounds of efficiency and productivity will welcome the benefits for men also, because they are engaged in a positive-sum game. On the other hand, those who are concerned with women's rights as an end, as equity and social justice, will advocate policies that reduce the benefits to men and involve sacrifices by them. Men's or at least selfish men's support for the policies will tend to be different according to which aspect is stressed.

Seventh, their sectoral priorities will be different, housing being the least connected with raising production,<sup>17</sup> education the most,<sup>18</sup> with nutrition and health somewhere in the middle.

Eighth, the constituencies to which they appeal for political and moral support will also be different. The human resource developers appeal to mainstream economists, bankers,<sup>19</sup> including the World Bank,<sup>20</sup> and technocrats; the humanitarians to the churches, NGOs, action groups, idealists, and moral

<sup>&</sup>lt;sup>17</sup>The Soviet Union, however, did keep housing scarce and used its allocation to attract workers to areas where they were needed for the plan.

<sup>&</sup>lt;sup>18</sup>The importance of basic education for economic growth has been widely stressed. However, the tribal state of Manipur in India has an average life expectancy that is higher than Kerala's, which in turn has as high a rate as advanced countries, at a quite low level of income per head. Manipur's literacy rate, however, is very low. The answer may lie in the fact that Manipur is a matriarchy. This brings out the importance of the role of women, even apart from education.

<sup>&</sup>lt;sup>19</sup>Keynes (1931) said of bankers: "Lifelong practices...make them the most romantic and least realistic of men". But this does not seem to apply to this area.

<sup>&</sup>lt;sup>20</sup>The World Bank's *World Development Report 1993* on health has the sub-title "Investing in Health", as if good health had to show economic returns higher than the cost of capital. What if the returns to investment in health were zero?

philosophers; the former to hard heads, the latter to soft hearts.

The approach that sees nutrition, education, and health as ends in themselves rather than means to higher productivity will argue for projects and programmes that enhance these ends, even when conventionally measured rates of return on these investments turn out to be zero. It amounts to standing the conventional approach on its head, or rather, to paraphrase Marx, back on its feet again.

### FREEDOM

A separate index covers aspects of human freedom and human rights, clearly an important aspect of human development. For life expectancy and literacy could be quite high in a well-managed prison. Basic physical needs are satisfied in a zoo. Indeed, the ex-communist countries have shown a transition from the zoo to the jungle. China shows remarkable progress on human development, but without freedom and human rights.

Should the freedom index be integrated into the Human Development Index? There are some arguments in favour. What use are all the other goods and services if people are not free? But the balance of arguments is probably against. First, it may be said that freedom is so important (and, opportunity costs apart, costless) that no trade-off should be possible between its loss and gains in some of the other indicators.<sup>21</sup> Secondly, political conditions are much more volatile than changes in education and health. Once a mother knows the importance of education for her children, or of hygienic behaviour, this knowledge is not lost even when her income drops. So human indicators tend to be fairly stable. Political indicators, on the other hand, can change overnight with a political coup. A third argument against aggregating freedom with the positive aspects of human development is that grading is more subjective and less reliable than measuring life expectancy or literacy.

Finally, one of the most interesting questions is how freedom is related to human development more narrowly interpreted, or how negative and positive rights or liberties are associated. This can be done only if they are recorded by separate indexes, not components of the same.<sup>22</sup> Thus we might formulate a hypothesis, to be tested by the separate figures, that freedom, though not a necessary condition of human development, is entirely consistent with it even at quite low levels; and that human development, once it has reached a certain stage, leads inevitably to the call for freedom by the people.<sup>23</sup> Here is a message of hope.

<sup>&</sup>lt;sup>21</sup>This objection could be mitigated by using a geometrical rather than an arithmetic average. With a zero weight for freedom, the total index becomes zero, however high the other components.

<sup>&</sup>lt;sup>22</sup>It could be said that the same argument applies to the relation between, e.g. literacy and life expectancy, and that they should therefore not be lumped together in a single HDI. Pioneering attempts to discuss related problems and to measure freedom and human rights have been made by Partha Dasgupta (1993).

<sup>&</sup>lt;sup>23</sup>Even Hitler lasted for only twelve years.

#### SUSTAINABLE HUMAN DEVELOPMENT

Environmental concerns also raise questions of means and ends. A concern for environmental protection for developing countries is often met with hostility. It is felt that the industrialised countries have achieved high levels of living and now wish to prevent or slow down the same process of industrialisation in the developing countries, for the sake of preserving values that are mainly the concern of the rich. Sceptics of environmental protection can also say that preserving the environment has many of the ingredients beloved of women's magazines–animals, a strong medical interest, and a readily identifiable villain. It is a cause that appears to appeal to the most advanced sociologists and to those who detest change in any form, to old women of both sexes and to the revolting young of unidentifiable sex, to the silent majority and the screaming minority, to the young swingers and to the old danglers.

The majority of respondents in a Louis Harris poll in the USA rated a clean environment more important than a satisfactory sex life.<sup>24</sup> No wonder, then, that some spokesmen for the developing countries have said to those from the developed countries: "You have enriched yourselves by rapacious exhaustion of scarce raw materials and polluting the environment, and now you want to stop the world and want us to get off. We shall worry about the environment when we have become as rich as you".

If I wanted to be the devil's advocate, and even more the advocates' devil (and environmental protection is full of passionate advocates, sometimes dismissed as ecofreaks, who need demons), I would say that "human development" is logically redundant, and, with Wilfred Beckerman (1955), that sustainable development is either logically redundant or morally repugnant, depending on its interpretation.

Development as used in development studies clearly does not refer to the development of animals, vegetables, or minerals. Even when the emphasis in the discussion has been on productivity, savings, investment, capital, incremental capital/output ratios, etc., these have always been regarded as means towards the end of a better human life. Some may say that "human" is contrasted with narrowly economic development, but, first, "development" has always been interpreted much more broadly than economic growth, and, second, every self-respecting economist has always known that he is a poor economist who is only an economist, and that economic welfare comprises only a small part of all human concerns–to wit only that part of human welfare "that can be brought into a relationship with the measuring rod of money [Pigou (1924), pp. 10-11].

How about "sustainable"? If it were to mean that the total stock of natural and environmental capital must be preserved and conserved, that all exhaustible raw materials must be handed on to future generations in their present quantity and form,

<sup>24</sup>*The Atlantic Monthly*, October 1990, p. 46.

then the answer is not zero growth but zero consumption and zero production. Mankind would then quickly die out, while oil and iron ore would survive. If, on the other hand, we should be concerned not with sustaining the ingredients of well-being but its constituents, so that we are allowed to exhaust raw materials as long as we substitute other inputs for them, then there is nothing new in "sustainable development" if it means optimising well-being into the indefinite future, or for a specified time-period. This has always been the aim of economists. These other inputs involve investing in knowledge, techniques, and institutions. But "sustainable" is open to misinterpretation: assume there is a choice between a fluctuating path of future well-being which consistently lies above a steady path of expansion, or a plateau, and this lower path, surely the former should be preferred. But sustainability may suggest that the latter is better. An example for a society would be high though unsustainable growth rates in wartime, when capital assets are not fully replaced. It is still optimal, for otherwise the war may be lost. Or assume a choice between a lower-cost unsustainable mining project and a higher-cost sustainable forestry project. Again, the sensible choice is the former, while sustainability may point to the latter [see Wilfred Beckerman (1995)].

Sustainable development, in the words of the Report of the World Commission on Environment and Development, chaired by Gro Harlem Brundtland, is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".<sup>25</sup> This definition is sufficiently vague to cover many contingencies. J. R. Hicks [(1946), p. 172] similarly wrote that "the purpose of income calculation in practical affairs is to give people an indication of the amount which they can consume without impoverishing themselves". Even this definition is elusive, because the maximum amount of consumption that an individual can expect to maintain while keeping the initial level of wealth intact depends on his expectations of future prices and interest rates.<sup>26</sup> Current values, according to economic doctrine, reflect the best estimates that economic agents can make of this uncertain future. But "income", properly defined and measured, is by definition sustainable. Unsustainable income is simply wrongly measured or wrongly estimated income.

Sustainable development has come to mean much more than maintaining intact the physical capital that produces an income stream (or increasing it in line

<sup>&</sup>lt;sup>25</sup>Our Common Future, Report of the World Commission on Environment and Development (1987). Another definition in the same Report defines sustainable development as "a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations" (p. 46).

<sup>&</sup>lt;sup>26</sup>Whether the current high levels of real interest rates lead to premature raw material exhaustion, or whether they choke off investment sufficiently to avoid this, is an important subject for sustainable development. It is, however, not explored in this paper. I have argued elsewhere that there is no case for a positive pure time discount rate. See Paul Streeten (1986).

with population growth, technological developments, intertemporal preferences, etc.). Maintenance, replacement, and growth of capital assets is certainly one aspect of sustainability. Physical wear and tear, technical obsolescence, and the depreciation of capital have to be taken into account.

Secondly, not only physical but also human capital has to be maintained. Technical, managerial, and administrative knowledge and its dissemination through education can be substitutes for physical and environmental capital or they can be complementary to it. In the ability of human inventiveness to substitute for exhaustible resources lies the hope for sustainability.

A third aspect, to which much attention has been paid recently, is maintaining the physical environmental conditions for the constituents of well-being. Unless the environmental resources serving as inputs are valued in themselves (as some of them certainly are), it is the results, not the means, that must be sustained. This implies two distinct things: first, avoiding polluting the water, air, and land on which our lives and our work depend, and, second, avoiding the exhaustion of renewable resources that are essential for production, unless adequate replacement is provided.<sup>27</sup> (It may imply increasing these environmental resources, again depending on population growth, technology, preferences, etc.) As to non-renewable resources, the implication is that investment in substitutes should take place, so that the productive base for sustaining well-being is maintained.

A fourth aspect is social capital, a concept explored by Robert Putnam (1993). It refers to civic engagements, going back into history, that make local communities and their institutions work.

A fifth dimension of sustainability, emphasised by geographers and anthropologists, is the preservation of social and cultural systems, such as aboriginal and traditional knowledge and skills.

Related to this is a sixth aspect of sustainability, which is resilience. The system must be able to adjust to shocks and crises, to be sufficiently flexible and diverse, with respect to resources (including biological diversity) and practices (including approaches to knowledge), to maintain itself in the face of an uncertain future.

A seventh aspect is avoiding burdening future generations with internal and external debts. Although to anybody burdened with a debt liability there corresponds an equivalent asset holder, this does not mean that the net debt burden is zero. Tax liabilities, and the ability to enjoy interest receipts, have important effects on incentives to work, save, and risk, in addition to the distributional impact.

An eighth aspect of sustainable development is fiscal, administrative, and

<sup>&</sup>lt;sup>27</sup>Accounting for the depletion of exhaustible natural resources is easier than for environmental values like clean air and water, or the aesthetic value of a lovely countryside, for the former have market prices, a useful starting-point, while the latter do not.

political sustainability. A policy must be credible and acceptable to the citizens, so that there is sufficient consent to carry it out. Fear of popular protest in the form of mass demonstrations or riots can frustrate reforms. In order to be sustainable politically, the course of opposition and resistance has to be traced and measures to overcome it have to be designed. The administrative apparatus must be capable of carrying it out on a continuing basis, and revenue must be available to meet the needs of public expenditure. International peace and domestic security are important dimensions of political sustainability.

A ninth aspect is the ability of foreigners to hand over projects to the management by citizens of the developing country in which they are, so that foreign experts can withdraw without jeopardising their success. This implies training local counterparts and helping to create and strengthen local technological, managerial, and administrative capacity.

Sustainability is therefore a multi-dimensional problem. It implies responsible behaviour towards future generations, despite the fact that they have no vote and cannot put direct pressures on policy-makers.

"Sustainability" presents additional difficulties. First, there is the problem, already mentioned, whether one should be concerned with sustaining the constituents of well-being or its determinants, whether with the means or the ends. Clearly, what ought to matter are the constituents, the health, welfare, and prosperity of the people, and not so many tons of minerals, so many trees, or so many animal species. Yet, some of the writings on the subject confuse the two.<sup>28</sup> If in the process of curing ovarian and other forms of cancer the Pacific yew trees (or even the Northern spotted owl, to whom the forests are home) had to be reduced in number, in order to produce the drug taxol, people's health must be given priority over trees.<sup>29</sup> Of course, some would want to attach end-values to many of the determinants, insofar as they are part of "nature"

<sup>28</sup>We have been, so far, remarkably successful in inventing substitutes for, or in economising in, exhaustible resources. The exhaustion of a natural resource cannot leave us worse off than we were before its discovery. Wilfred Beckerman once pointed out that the world had survived remarkably well without Beckermonium, a mineral named after an ancestor of his who failed to discover it in the 19th century.

<sup>29</sup>Taxol, used to fight advanced breast and ovarian cancer, can now be derived from the needles and twigs of the more common Himalayan variety of the yew tree instead of the bark of the endangered Pacific yew tree. The Himalayan variety is not only more common, but its twigs and needles do not kill the tree as stripping the bark of the Pacific yew tree does. There is now also a semi-synthetic version of Taxol. Researchers at the University of Kansas said a Himalayan relative of the Pacific yew tree could serve as an alternative source of taxol. From this tree, Taxus baccata, unlike the yew tree, taxol can be extracted without hurting the tree. See *Wall Street Journal*, Monday, April 20, 1992, B6. The *New York Times* reported on 31st January 1993 that the company that produces taxol, Bristol-Myers Squibb, says that synthetic production of the drug had made such rapid progress that it can stop harvesting the trees immediately. (It takes about 60 pounds of bark-the amount from four trees-to make enough taxol for the complete treatment of one ovarian cancer patient.) A total of 1.6 million pounds was harvested in 1992.

The name of the drug gave rise to an amusing correspondence in *The Times*. Apparently, taxol, which is mentioned in a riveting passage in Daphne du Maurier's *Rebecca*, was a well-known French laxative widely used in the first half of this century.

(such as the Grand Canyon or Yosemite Park). This view might be called ethical environmentalism (or hard sustainability) in contrast with prudential environmentalism (or soft sustainability).

Then there is the question as to sustainability at what level, or at what rate of growth or decline? There is nothing sacrosanct about the existing stock of resources. Population in Western Europe is stationary or may decline, but Kenya's population will be three times today's in 2025, and world population will be more than 8 billion people, compared with over 5 billion today. Sustaining income per head for mankind may imply increasing the stock of resources. On the other hand, substitution possibilities and technical innovation imply the ability to run some down. Population growth, technological innovations, and intertemporal preferences will determine whether the stock should be increased, kept constant or reduced, and at what rates, or whether its composition should be changed. But, as *The Economist* has put it, "sustainable development is still useful. Like many important ideas, it is better than nothing for as long as there is nothing better".<sup>30</sup>

#### REFERENCES

- Abel-Smith, Brian, and Peter Townsend (1965) *The Poor and the Poorest*. London: G. Bell and Sons.
- Anand, Sudhir, and Amartya Sen (1993) Technical Note 2. Human Development Index: A Survey of Recent Reviews. *Human Development Report*, 1993b. New York: UNDP. 104-114.
- Anand, Sudhir, and Amartya Sen (1994) Human Development Index: Methodology and Measurement. New York: UNDP. (UNDP Occasional Papers No. 12.)
- Anand, Sudhir, and Martin Ravallion (1993) Human Development in Poor Countries: On the Role of Private Incomes and Public Services. *The Journal of Economic Perspectives* 7:1.
- Aristotle (1911) *The Nicomachean Ethics*, bk 5, 113a, Ch.3. London and New York: Everyman's Library.
- Beckerman, Wilfred (1979) Presidential Address to the British Association for the Advancement of Science. In Wilfred Beckerman (ed) *Slow Growth in Britain; Causes and Consequences*. Oxford: Clarendon Press.
- Beckerman, Wilfred (1995) Small is Stupid: Blowing the Whistle on the Greens. London: Duckworth.
- Behrman, Jere (1993) The Economic Rationale for Investing in Nutrition in Developing Countries. *World Development* 21:11.

Brookner, Anita (1989) Latecomers. New York: Pantheon Books.

Chambers, Robert (1993) Summary of Points made to the Workshop on Ecoregional

<sup>30</sup>*The Economist*, September 16 1989, p. 77.

Approaches to International Research for Sustainable Agriculture Puerto Rico. (Mimeographed.)

- Chenery, Hollis B., Montek S. Ahluwalia, Clive L. G. Bell, John Duloy and Richard Jolly (1974) *Redistribution with Growth*. London, New York: Oxford University Press.
- Dasgupta, Partha (1993) An Inquiry into Well-being and Destitution. Oxford: Clarendon Press.
- *Findings* (1995) The World Bank, Africa Region, Number 31. Washington, D. C.: The World Bank.
- Harberger, Arnold C. (1987) On the Use of Distributional Weights in Social Costbenefit Analysis. *Journal of Political Economy* 86:2 Pt. 2. Supplement.
- Harris, John, R., and Michael P. Todaro (1970) Migration, Unemployment, and Development. A Two-Sector Analysis. *American Economic Review* 60:1.
- Hicks, J. R. (1946) Value and Capital, 2nd Edition. New York, Oxford: OUP.
- Jodha, N. S. (1988) Poverty Debate in India: A Minority View. Economic and Political Weekly. Special Number.
- Keynes, John Maynard (1931) Essays in Persuasion. London: Macmillan. p. 176.
- Kuznets, Simon (1955) Economic Growth and Income Inequality. American Economic Review 45:1 and Quantitative Aspects of Economic Growth of Nations, VIII: Distribution of Income by Size. Economic Development and Cultural Change 11:2 (January 1963).
- Lewis, W. Arthur (1954) Economic Development with Unlimited Supplies of Labour. *Manchester School of Economic and Social Studies* 22:2.
- Lewis, W. Arthur (1955) *The Theory of Economic Growth*. London: Allen and Unwin.
- Marx, Karl, and Frederick Engels (1958) *Selected Works.* 1. Moscow: Foreign Languages Publishing House.
- May, D. A., and D. M. Heer (1968) Son Survivorship Motivation and Family Size in India: A Computer Simulation. *Population Studies* 22.
- Myrdal, Gunnar (1968) Asian Drama, An Inquiry into the Poverty of Nations. New York: Twentieth Century Fund.
- Nozick, Robert (1974) Anarchy, State and Utopia. New York: Basic Books.
- Nussbaum, Martha (1986) Women's Lot. New York Review of Books 33:1 30.
- Pant, Pitambar (1974) Perspective of Development, India 1960-61 to 1975-76: Implications of Planning for a Minimum Level of Living. In T. N. Srinivasan and P. K. Bardhan (eds) *Poverty and Income Distribution in India*. Calcutta: Statistical Publishing Society.
- Pigou, A. C. (1924) The Economics of Welfare. London: Macmillan.
- Putnam, Robert D., Robert Leonardi and Raffaella Y. Nanetti (1993) Making Democracy Work: Civic Traditions in Modern Italy. Princeton, New Jersey: Princeton University Press.

- Rawls, John (1971) *The Theory of Justice*. Cambridge, Mass.: Harvard University Press.
- Sen, A. K. (1978) Three Notes on the Concept of Poverty. World Employment Programme Research Geneva: ILO. (Working Paper, WEP2-23/WP65.)
- Sen, Amartya (1984) *Resources, Values and Development*. Oxford: Basil Blackwell, and Cambridge, MA: Harvard University Press.
- Sen, Amartya (1985) Commodities and Capabilities. Amsterdam: North Holland.
- Sen, Amartya (1987) *The Standard of Living*. Edited by G. Hawthorn, Cambridge: Cambridge University Press.
- Smith, Adam (1776) The Wealth of Nations.
- Stewart, Frances (1993) *Strategies of Fight Poverty*. Revised Draft. Oxford: (Mimeographed.)
- Streeten, Paul (1976) Industrialisation in a Unified Development Strategy. In Sir Alec Cairncross and Mohinder Puri (eds) *Employment, Income Distribution and Development Strategy*. Essays in Honour of H. W. Singer. Basingstoke: Macmillan, and in *World Development* 3:1, 1975.
- Streeten Paul, Javed Shahid Burki, Mahbub ul Haq Norman Hicks and Frances Stewart (1981) First Things First; Meeting Basic Human Needs in Developing Countries. New York, Oxford: Oxford University Press.
- Streeten, Paul (1986) What Do We Owe the Future? Resources Policy.
- Townsend, Peter (1979) Poverty in the United Kingdom: A Survey of Household Resources and Standards of Living. Barkeley and Los Angeles: University of California Press.
- UNDP (1993) Human Development Report 1990, 1991, 1992, 1993, and 1994. New York, Oxford: Oxford University Press.
- World Bank (1993) World Development Report, 1993: Investing in Health. New York, Oxford: Oxford University Press.
- World Commission on Environment and Development (1987) *Our Common Future*. New York, Oxford: Oxford University Press.

# Comments

1.

Among development economists, Gunnar Myrdal was one of the first to propagate that social inquiry is value-laden, not value-free. He believed further that if value judgement is inevitable in the context of development research and advice, then let it be the human development perspective, rather than economic growth, income equality or others. The human development perspective can be described as a trajectory which aims at maximising the productivity and utilisation of each and every person. Equal opportunity is not only provided but is actively used by all.

Following the same tradition, Paul Streeten has written a stimulating paper, which surveys alternative development objectives starting with economic growth and proceeding to employment, income inequality, poverty reduction, basic needs, and human development. Advantages and disadvantages are neatly enumerated and weighed against each other, ending with the human development prospective as the contest-winner. Streeten goes further into defending the measurement of the human development perspective by the Human Development Index (HDI), as has been launched by the UNDP.

A large number of economists, including myself, sympathise with the same perspective. However, differences in analysis and results are natural once the discussion becomes more elaborate and alternate positions are taken. First, there are no grounds for describing the history of development thinking as an evolution of consensus towards a human development perspective. After all this perspective is as old as any other. Secondly, the construction of HD welfare indices with a content similar to the HDI date from the fifties, and they are all confronted with the same limitations-and in the case of UNDP's HDI the limitations are more severe-which have finally caused their termination as useful tools and their disappearance from the stage. Third, the human development perspective and its operationalisation in authoritative performance indicators have greater chances of acceptance and survival if they become more integrated with the body of modern welfare economics. In particular, modern welfare economics teaches us that the operationalisation of notions of overall welfare can command authority among economists and statisticians only if their theoretical foundations are consistent and valid. I shall make suggestions to that end.

In the first place, the review of development objectives on which Paul Streeten focuses forms but a minor, and often disputable, part of development thinking, which comprises the more significant contributions on theory formulation, the redirection of empirical research, and the elaboration of methods and instruments for policy-making. Comments

It is also important to observe that Streeten reports on specific themes of development objectives as they have been fervently advocated by specific international agencies which felt most attached to the particular theme. Thus, the United Nations Committee for Development Planning, led by J. Tinbergen, in the fifties and sixties posed growth of the GDP as a development target. In the early seventies, the ILO Employment Programme, under the enthusiastic direction of L. Emmerij, pushed forward with the employment objective. In the mid-seventies, the World Bank Research Division, under the leadership of H. B. Chenery, revived the issue of equality in income distribution, to be followed in later years by the reduction in absolute poverty. The involvement of other UN agencies, such as the FAO, WHO, and UNESCO, in defining development objectives became more noticeable with the opening of discussions on basic needs in the eighties. The involvement of the UNDP in the debate is more recent (1990-1994), and has taken the form of the annual *Human Development Report* and the HDI, an initiative headed by Mahbub ul Haq.

All these themes were common knowledge in the fifties and early sixties, and were the subject of analysis and publications by economists. So, between 1955-1965, Kuznets drew attention to equality, Lewis to employment, Harbison to human development, and Drewnowski to basic needs. The historical climax which each of these themes has experienced had to do with the prominence of individual persons in individual international organisations. There is hardly any evolution of development thinking in this respect. It is rather a series of short-lived races which somehow oscillate around the conventional objective of GDP per capita. An evolution in our value judgement as to what development means would mean that our values and norms as economists would have undergone an upgrading during the last 30 years, which is absurd.

Second, HDI as a measurement of human development performance has been preceded by a large number of similar attempts. None of these is mentioned in the paper. For instance, one of the earlier international comparisons of the combined social-economic situation among developing countries is by M. K. Bennet (1948). Soon afterwards, many international comparisons of standards of living were made, in which different computational techniques were used. The list of contributors includes, among others, N. Ginsberg (1960), C. Bertholet and B. Evers (1965), and I. Adelman and C. T. Morris (1967). Especially the United Nations Research Institute for Social Development was heavily involved in the search for internationally comparable social indicators. One UNRISD study by J. Drewnowski and W. Scott (1960) proceeded as follows. It (1) distinguished national human welfare into the basic needs of nutrition, housing, health, education, recreation, security, and higher needs, (2) selected a number of indicators to represent each component, (3) expressed these indicators in terms of the highest and lowest values achieved, and (4) summed up the indices for each component separately and for all components

together to obtain an aggregate index of the standard of living. The ranking of the index scores of countries for which the required data were available was found to agree in some respects with that obtained from the GDP per capita.

None of these attempts has survived for long. The HDI, which calculates an average of the three indicators of GDP per capita, literacy rate, and life expectancy, is not different from the other above-mentioned attempts, even though it is now backed by a stronger international organisation than the others. Academically, it falls in the same category. The index suffers from the lack of a theoretical foundation and the arbitrary choice of indicators, while the indicators chosen restrict its relevance to the earlier phases of development. It is further handicapped by the absence of an acceptable weighting system. Besides, combining the monetary indicator of GDP per capita with the non-monetary indicators dilutes the otherwise meaningful content of each of them taken separately.

Finally, the HDI does not reflect the essence of human development, as defined by the UNDP, following Harbison of the sixties, as the enlargement of the range of people's choices. Such an index, calculated for a 150 countries, shows sensitive variation only among the poorest countries, and becomes an index for an ugliness contest in which the poorest countries so categorised enjoy such a status as long as there are some donor agencies which eagerly approach them. In such circumstances, the index defeats its purpose and is doomed to play a negative role in the internal development process of poor countries.

Third, what can development thinking, as far as development objectives are concerned, learn from welfare economics? Welfare economics is concerned with the evaluation of economic alternatives from the perspective of the well-being of the whole society. It provides a coherent framework for appraising the desirability of economic alternatives.

It is essential to distinguish between *welfare criteria*, such as economic efficiency, equity, stability, and viability, and *performance indicators*, such as the economic growth rate and the indices of income distribution, poverty incidence, inflation, depletion, etc.

Working with multiple welfare criteria simultaneously is very difficult. For it can happen that while alternative A is preferable on efficiency grounds, alternative B is superior on equity grounds, and there is no objective way of weighing the two criteria. Besides, judgements on efficiency grounds can be objective, but those on equity grounds contain subjective elements, and are thus not conclusive. While the economist can set up generally acceptable standards of efficiency, this is hardly feasible for equity norms. Understandably, the economist was and is inclined in these circumstances to separate economic analysis based on efficiency grounds from that on equity grounds. While efficiency-statements are, in principle, objectively derivable and can be proved, equity-statements belong to another realm. But that economic analysis has to be conducted along *both* lines of efficiency and equity is *obvious* and *necessary*. A separation between these two criteria should not be misunderstood for placing one criterion above the other.

Taking first the efficiency criterion, as economists we tend to see the economy as consisting of thousands of economic agents who are motivated by selfinterest. Each agent pursues his/her own goals of maximisation and strives for his/her own equilibrium independently from others. The consumer maximises utility subject to a budget constraint. The producer maximises profits subject to technological constraints. If all agents behave competitively, there will be free entry and exit, there will be no barriers whatsoever to exchange, all agents will deal at the same price for the same commodity, and a simultaneous equilibrium will be obtained by all agents in all markets.

In such an economy, market prices carry significant information. Each commodity price would reflect consumers' marginal valuation relative to other commodities. Moreover, the price of a commodity must be equal to its marginal costs. Each price, therefore, expresses the lowest possible costs that the society is ready to sacrifice for the commodity or the factor concerned. Furthermore, the market prices are equilibrium prices which go with an equilibrium position, from which it is impossible to make a change without making someone worse off; hence competitive markets are Pareto-optimal.

Valued at these equilibrium prices, the sum of all commodities produced, i.e., the GDP, is an optimal production in the Paretian sense. A higher GDP per capita means that the economy is at a higher level of efficiency in the Paretian sense. The higher GDP per capita is by no means socially optimal in a distributional sense. Here starts an evaluation based on equity considerations.

GDP per capita is theoretically founded, but given the imperfections in the economy, a judgement on performance is impossible without bringing distribution in the picture.

Turning now to the equity criterion, it can be fairly stated that the distribution indices in use, such as the Gini coefficient, measure the distribution at a certain moment in time. They do not consider the equitability of the process over time which leads to that distribution. The theoretical foundations of such distribution indices are undermined if the shape of the income distribution in period t is not very different from that in t+n. The evidence is that persons do exchange positions, some rich become poor, and some poor become rich, but this occurs predominantly within the same distribution curve. Indices of the mobility of persons over time become more relevant in this context. The existence of *equal opportunity* and the ability to *make choices* for each and all members of a community–which are the essence of human development–are caught by mobility indicators. A high score on the mobility indicator will occur when the probability of a rich offspring becoming a poor adult

in a decade is equal to the probability of a poor offspring becoming a rich adult in the same decade. By way of an example, even though the Gini coefficient shows more income inequality in Brazil than in India, it is generally believed that intergenerational mobility is higher in Brazil than in India, and by this count Brazil would score higher than India on the dynamics of equity. The most severe obstacles to human development occur when most immobile persons belong to some population groups considered to be inferior by the rest.

Evaluations of the equity performance along the above lines are most relevant for the human development perspective, but the required data are hardly available for more than a bunch of countries. The search for proxies from available data, which reflect equal opportunities and unbiased mobility upwards and downwards, has to be opened.

Practically speaking, most of the attempts mentioned above to develop performance indices, including the HDI, are meant to correct the GDP per capita for equity considerations. Non-monetary indicators are devised to capture deprivation, unfairness or unequal opportunities. Bergson (1937) suggested to combine the monetary with the non-monetary criteria in the form of a social welfare function. But there is no easy method of constructing it objectively, apart from relying subjectively on the benevolent ruler–who can be democratically elected or not–or some top UNDP official.

Combining growth and equity in one digestible indicator is futile. But it is typical of many non-monetary indicators, such as the enrolment ratio, or the percentage of population with adequate nutrition, water, health, housing, etc., that they can tell something about the level achieved for the whole population and the extent achieved towards reaching the whole population, and hence the least privileged. Such performance indicators were earlier found to be promising compromises, and they continue to be so. If in addition there is a high degree of correlation between these indicators, the weighting problem would be a secondary one. Hopefully, the genuine attempts to review the world social situation in the UNDP *Human Development Reports* will create an interest in developing more solid performance indicators.

S. I. Cohen

Faculty of Economic Sciences, Erasmus University, Rotterdam, The Netherlands. I propose to make a short statement on the main theme of Professor Streeten's excellent paper, viz, an assault on poverty should be made through human resource development.

If one looks at the poverty map of the world, one finds that South Asia contains three-fourths of the world's poor people. Large segments of the population remain in absolute poverty. Many forms of deprivation have become permanent features in the life of the poor. Lack of adequate food, basic health facilities, education, and sanitation is causing deprivation and waste of human resources. The irony is that the new emphasis on market forces is aggravating the major sources of deprivation.

In Pakistan, according to UNICEF:

- 45 percent of the rural population has no access to safe drinking water;
- only 10 percent of the rural population has adequate sanitation;
- 30 percent of the total population lives in absolute poverty; and
- illiteracy is around 70 percent.

When the representatives of more than 130 nations started their poverty meeting recently in Copenhagen, i.e., "The World Summit on Social Development", the developing countries found that the representatives of the industrial countries were in no mood to pay for the anti-poverty programmes in the Third World. According to them, these programmes were ineffective, if not wasteful. They said that they had many social problems to solve in their own countries-including a high rate of unemployment-and that is where the resources should go. There is wariness about aid in the air. In the industrial world, international institutions, including the World Bank, the IMF, and the UNDP, have been advising the developing countries to put their internal financial house in order and invest in human resource development. Also that they should put less money in weapons and expensive projects that benefit only the élite. The Secretary-General of the UN, Boutros Boutros-Ghali warned: "You will not have profound change here because the international community will not be ready for it". There is the 20-20 proposal, to ask all the donors and institutions to earmark 20 percent of their expenditures for underfinanced social sector projects and programmes. It also urges the developing countries to earmark 20 percent for social development. As it is today, the rich nations spend 7 percent on average on social programmes abroad, and the poorer nations spend on average about 10 percent or less of their budgets on social development programmes.

In practical terms, the 20-20 proposal makes sense. I would request Professor Paul Streeten to please comment on it. I learnt a lot from his comprehensive paper on "Human Development", which should be studied carefully by economists and

2.

policy-makers. Recently, Professor Naqvi in "Development Economics: A New Paradigm" and the Indian economist, C. T. Kurien, in his book *The Economy 1992*, have also stressed the need for restructuring the existing unjust economic order.

Kurien's diagnosis of mass poverty is contained in his first book, *Poverty*, *Planning and Social Transformation* (1978). He is aware of the fact that the existing unjust economic order cannot be changed easily because its beneficiaries are also its strong defenders. Their power is immense. He writes: "Any attempt to bring about a radical transformation of society and the economy will certainly be resisted subtly or covertly where that is possible, bluntly and overtly when it becomes necessary".

The query to which Professor Streeten may like to respond is on the role of economists. It is not the duty of economists to tell us what to do, but to show us why what we are doing is in accord with proper principles. I find that in today's world of computers, economists have started emphasising mathematical equations. Economics has changed. Economists should come down from their heights and present their thoughts in non-technical language to share them with the people at large. Economists have become suspect in the minds of thinking people. Their tools of analysis have their uses to explain the working of the economy but they have limited value in changing social realities. What we need are studies which help us to solve real-life problems.

M. Rashid

Formerly Education Secretary, Government of the Punjab, Lahore.