

Basic Needs in the Year 2000

PAUL STREETEN*

The paper distills the main lessons of recent country and sector work on basic-needs approaches to development. It argues that, drawing on this experience and adopting appropriate policies, the basic needs of the world's poor can be met in a shorter period of time, and with fewer resources—i.e. by the year 2000—than if the more conventional approach of relying solely on rising incomes is chosen. Raising the earning opportunities of the poor remains a central thrust of the strategy, but it has to be supplemented by actions in the public sector and within households.

It has been customary to construct alternative scenarios and to derive from them the number of the poor in the year 2000. On the most optimistic assumptions about growth in the industrial countries, about the expansion of aid, loans and trade, and about the price of energy, the World Bank's *World Development Report, 1979* [5] estimates 470 million persons (or 13 percent) as "absolute poor". The base scenario yields 600 million and the pessimistic scenario 710 million "absolute poor".

The optimistic scenario is based on certain assumptions about the links between income growth and accompanying income distribution. The projections assume that, in line with observed historical trends, 75 percent of increases in income would accrue to the top 40 percent of income recipients. With strong redistributive policies, the share of this group might be reduced to 60 percent. If these assumptions are combined with the rapid growth of the optimistic scenario, the figure can be brought down to between 300 and 350 million, or less than 10 percent of the population of developing countries. If such improvements in the incomes of the poor reduce fertility rates, this would lower the number in absolute poverty further. The conclusion of these exercises is that, even on the most optimistic assumptions, absolute poverty cannot be eliminated by the year 2000.

A basic-needs approach to eliminating the worst aspects of poverty by the year 2000 seeks to look deeper than the aggregate income figures and their distribution by deciles and, by more precisely targeted measures, to achieve fulfilment of basic needs at levels of income per head below those indicated by a poverty line, that is to say in a shorter period.

*The author is Professor of Economics, Oxford University, Oxford (England).

¹This essay is a chapter in [2].

The objective of a basic-human-needs approach to development is to ensure that all human beings should have the opportunity to live full lives. To this end, the approach focuses on securing access to minimum levels of consumption of certain basic goods and services. The basic-needs approach, like other poverty-oriented approaches, attaches fundamental importance to poverty eradication within a short period as one of the main objectives of development. It defines poverty not on terms of income, poverty lines and deciles of the income distribution, but as the inability to meet certain basic human needs on the part of identifiable groups of human beings. Poverty is characterized by hunger and malnutrition, by ill health, and by lack of education, safe water, sanitation, and decent shelter. A vital aspect of the elimination of poverty, then, consists in securing access to these goods and services by the poor so that people have the opportunity of leading decent and full human lives, free from hunger, and in good health.

The belief that basic-needs achievement is possible earlier than indicated by income projections rests on several pieces of evidence. Firstly, a comparison of basic-needs indicators like life expectancy and literacy rates with figures of national income per head shows that, although there is a general correlation between income and basic-needs achievement, there are important exceptions to this. This shows that critical levels of income per head are neither a necessary nor a sufficient condition for meeting basic needs. The objective can be achieved, without excessive costs, at income levels considerably below those that would be indicated by a poverty-line approach based on income growth and the "Kuznets curve", which relates income distribution to income per head, and suggests that at the early phases of development distribution tends to get more unequal.

Secondly, the necessary changes have been implemented by a number of countries, with a wide variety of political regimes, size, history, and tradition. Among these are market economies like Taiwan and South Korea, mixed economies like Sri Lanka, centrally planned economies like China and Cuba, and decentralized planned economies like Yugoslavia. What these countries have in common is a fairly equal distribution of land, a degree of decentralization of decision-making with adequate central support, and attention to what goes on within the household, particularly to the role of women.

Thirdly, a concerted attack on several sectors simultaneously can substantially improve the impact on basic needs and reduce costs.

Fourthly, there is considerable scope for the reallocation within sector expenditure in favour of the poor, without mobilizing additional resources. This may run into political obstacles and inhibitions, but it is not constrained by lack of resources.

If we accept the objective of meeting basic needs by 2000, how do we translate this into action? For operational purposes, we must distinguish between three different aspects of the basic-needs approach: supply, demand, and institutions. There must be adequate production (or imports) of the goods in question; there must be adequate purchasing power by the poor to buy them; and the organizational arrangements must facilitate access and delivery.

The institutional framework has tended to be ignored in many conventional approaches. In the basic-needs approach, it is, however, of crucial importance. Basic needs are met by the market, by public services and transfers, through community action and voluntary organizations, and in households. The activities of the household are particularly relevant to the basic-needs approach. The household allocates among its members incomes earned by members who are employed for wages, and it produces goods and services for its own use. While its own production may account for as much as 40 percent of income in developing countries, it forms a much more substantial proportion of basic-needs sector activity. Moreover, household activities play a crucial role in converting education, health, nutrition, etc. into improvements in the quality of life of individuals.

The public sector is also important in a basic-needs approach, as a producer, as a maker of rules, and as a source of finance. Health, education, sanitation, etc. are commonly concentrated in the public sector. Transfer payments and subsidies are paid out of public revenues, and the government makes and enforces the laws to which private transactions are subject. One reason why the basic-needs approach is necessary to supplement the previous emphasis on minimum incomes and poverty lines is that the income approach has tended to neglect the household and the public sector, which has led to the neglect of basic needs where these sectors figure prominently. An analysis of the public sector must cover administrative and political arrangements, such as the combination of participation and central support, the forms of democratic participation, and social structure.

A basic-needs approach requires combined emphasis on the supply of basic-needs goods, and the appropriate institutional arrangements for access and delivery. Failure of any of these can lead to failure of basic-needs performance. In order to explore how to meet basic needs in the year 2000, it is helpful to distinguish between different types of countries, and different sectoral approaches.

The basic-needs success stories fall into three types of economies, from an institutional and political point of view: the socialist-planned economies, like Cuba and the People's Republic of China; some market-oriented economies with special initial conditions with respect to land distribution, and special policies, such as Taiwan and South Korea; and the "mixed" economies, of which Sri Lanka is the outstanding success story.

The main component in Cuba's success (life expectancy of 72 years and almost universal literacy) is a high level of public expenditure on education and possibly also health, the benefits of which are widely spread. Cuba spends about twice as much of its national income on health and education as other countries with similar income levels. Besides the education and health services, basic needs are met by full employment, subsidies and rationing of essential items such as food, and supply management. The food ration guarantees a well-balanced diet to everybody, and shelter is provided by housing subsidies. In this way, a basic-needs package of free education and health services, rationed and subsidized food plus institutional feeding, and

housing subsidies guarantee the satisfaction of basic needs to all. Participation in the process is achieved through a massive political organization. With the possible exception of China, in most socialist, centrally planned economies the satisfaction of basic needs was bought at the expense of some economic growth (and some political rights). Cuban growth over the last fifteen years has been slow.

China's achievement in providing adequate food, shelter, health care and other basic necessities to its entire population, including the poorest, within a short time was achieved with rapid economic growth. An aggregate annual growth rate between 1952 and 1978 of 6.2 percent and of income per head of 4 percent exceeds substantially the average performance of developing countries. The most important aspect of this achievement is a radical transformation of the institutions on which production is based.

Figures for life expectancy are not available, but crude mortality rates of 27 per 1000 population in the 1930s had fallen to 18 per thousand in 1952 and 11 per thousand in 1956. The most well-known aspect of China's basic-needs efforts is its health-delivery system. In Ding Xian, a system of village auxiliaries and paramedics, supported at the top by trained doctors, had brought effective medical care to remote villages at very low costs long before 1949, and these efforts had had some impact on the post-1949 policies. But this and similar experiments remained isolated examples [4].

After the revolution, the emphasis was first on full political mobilization for preventive medicine and the campaign against the four pests: flies, mosquitoes, rats and sparrows. Later, strikingly successful campaigns were those for the elimination of schistosomiasis and for family planning. In the mid-Fifties and late Fifties, emphasis shifted to cover curative activities. The best-known innovations are the 1.6 million barefoot doctors, rural paramedics with 3-month to 1-year formal training who came from and lived and worked within the production brigades. But China is now turning away from the barefoot doctors.

The successful market-oriented countries are exemplified by Taiwan and South Korea. They combine a relatively equal asset (land) and income distribution with rapid economic growth. This growth has been based on fairly industrial activities. The prime agent in meeting basic needs in these countries has been a growth of personal incomes that permitted expenditure on basic-needs goods. The public sector played a supporting role in providing virtually universal primary-education and health services. But levels of public expenditure have not been conspicuously high. Whereas in the socialist economies planned production was the driving force in meeting basic needs, in the market-oriented economies it was income generation.

For those interested in eradicating the worst aspects of poverty by the year 2000 in non-socialist, low-income societies, Sri Lanka has some important lessons to teach. Its remarkable performance was initiated in the colonial era. But Sri Lanka has made very substantial progress in the rapid improvement of many social indicators since the last war, at levels of income per head below \$200. Life expectancy is

69 years and 75 percent of the population is literate. A major factor has been high levels of public expenditure on primary education, health, and food subsidies. These services have, until recently, been available to the whole population. The food ration accounted for about 20 percent of calorific intake among families with very low incomes. In 1973 the subsidies amounted to about 14 percent of the income of these families. A cutback in the availability of food rations in 1974 and a sharp rise in food prices was accompanied by a sharp rise in the death rate. The literacy rate, the access to health services, and the quality of the water supply had not changed in that year. This evidence shows the importance of the food ration for health. Social programmes and food subsidies account for about one-half of current government expenditure and 10 percent of the GDP. Expenditure per head amounts to about \$15 p.a. but total public expenditure is not remarkably high because of the very low expenditure on defence.

It is commonly believed that Sri Lanka's economy is not viable in the long run because the high levels of expenditure cannot be sustained and because these expenditures reduce economic growth. However, the programmes were in fact sustained, with a respectable growth rate, for over 20 years following the last war. Poor economic management, adverse movement in the terms of trade and poor monsoon led to severe problems in the 1970s. But with economic reforms and more selective programmes for the lower income groups, it appears that Sri Lanka is again able to combine successful performance on basic needs with economic growth. The Sri Lankan case shows the importance, for a mixed economy, of consistent and reinforcing efforts on the side of supply (through public sector and production planning), on the side of demand (i.e. income generation and transfer), and institutions (especially public services) for success in basic needs to be achieved.

ADMINISTRATION AND MANAGEMENT OF BASIC NEEDS

Institutional, organizational, and administrative problems are encountered in countries that have failed to meet basic needs at all stages of the policy process. *Formulation* of policies is heavily affected by political considerations, with insufficient understanding of the relations among the administrative and bureaucratic structure, the economy, and the society. It is also often distorted by the excessive standards imposed by the professionals, whether engineers, doctors or teachers. *Policy implementation* suffers from inefficient bureaucratic procedures, lack of qualified managerial staff, lack of coordination between and among national and local units, and poorly motivated civil servants. *Policy evaluation* is virtually nonexistent, because information is inadequate and research and experimentation virtually absent. Basic-needs programmes impose special administrative requirements (though these are not of a high order) because they are often somewhat experimental, extending to new areas and involving different procedures.

There is no panacea for the host of institutional problems faced by the developing countries. Most of these issues cannot be disentangled from their social, politi-

cal, and economic context. In addition to management training for basic needs, two changes may contribute to the efficiency of basic-needs programmes. One is to restructure organizations so as to make them fit the functional requirements of the programmes. In many cases, this is likely to involve decentralization, but with appropriate links with higher levels and national organization (as in the organization of health services, for example). If administrative procedures are developed to increase staff participation in decision-making, this may increase staff commitment and also the responsiveness of the programme to local needs.

Secondly, participation by the poor, for whom the projects are organized, in decision-making and service delivery, may increase the efficiency of basic-needs programmes. The major beneficiaries are often willing to supply labour, materials, and finance to establish the services. Most basic-needs programmes require participation for their success. In education or health, the cooperation of the public or patient is essential to the effectiveness of the programmes. The same goes for sanitation, where the choice of technology is closely linked to the degree of local responsibility. Hence achieving a high degree of participation is far more important in these programmes than in more conventional types of economic activity. In many cases, the participation of women is especially important. This may lead to some conflict with traditional organizational forms which are generally male-oriented. Experimenting with organizational structures and decision-making is an important element in developing an effective basic-needs approach.

FINANCE

The question of finance is peculiarly difficult for three reasons. Firstly, because for many basic-needs projects recurrent costs are quite heavy in relation to capital costs. This means that any system must allow for continuing financial support, rather than a once-for-all commitment to capital costs. Secondly, the obvious solution to the recurrent cost problem—levying charges to cover these costs—may be both difficult to administer and undesirable because the social benefits of the projects very often far exceed the private benefits to the individual consumer. This is clearly true, for example, of vaccination programmes, programmes of health education, or sanitation projects, where the main beneficiaries are the community at large as well as the participating individuals involved in the programme. In other cases, it may be difficult to charge for the services because they are provided communally and the benefits are not appropriable. Thirdly, since a major objective of basic-needs programmes is to provide universal access—especially to provide access for the very poor—any system of charges is likely to debar the very people for whom the programmes are most essential. Yet, despite these problems, unless some system of generating finance on a continual basis forms an intrinsic part of the programmes, they are liable to be limited in coverage and duration, as the central government becomes overburdened with the fiscal load.

Experience of the individual sectors' financial problems suggests the following conclusions:

1. In some areas, charges to cover recurrent costs are reasonable from the point of view of social and economic efficiency. In these cases, which include shelter, water, sanitation, and some recurrent medical costs, charges probably offer the best solution. But charges should not be levied—or should be levied at much-reduced rates—on the poorest consumers. The poorest consumers may be financed by cross-subsidization from richer consumers or from general government revenues.

2. For programmes where user charges are not desirable or feasible as a system of finance—much of education and health—planning for finance of recurrent costs should form an intrinsic part of initiating the projects. If the local community takes on (as it often does) responsibility for some proportion of the capital costs, it may also be able and prepared to undertake a similar commitment for recurrent costs. The same goes for aid donors. It should not be assumed that the central government automatically will undertake 100 percent of the recurrent costs of this type of project.

3. Central-government financing is likely to be required for subsidy programmes—e.g. for nutrition and for other services for poorer consumers. To limit the government's financial responsibility while enabling the poorer consumers to partake in the programmes requires careful targeting, so as to confine the subsidies to those most in need. Such targeting is very difficult to achieve for administrative and political reasons. It may be easier to target effectively for some types of programmes than for others—e.g. providing subsidies on foods primarily consumed by the very poor. Where this is so, larger subsidies to this type of product might be used in preference to smaller subsidies on a number of types of product, each requiring complex administrative procedures.

Difficult though it is in many countries to raise the real resources and the fiscal resources for the social sectors, expenditure is not the main constraint. Egypt's education budget is now about ten percent of the GDP, yet average literacy rates are only 44 percent and primary school enrollment 76 percent. Mali is spending about five percent of its GDP on health services—a proportion much larger than that of other countries with similar incomes—but the health of its people is below the average. In Sri Lanka, on the other hand, and the state of Kerala in India, very good basic-needs achievement is not the result of particularly high levels of public expenditure on social services. Sri Lanka's total expenditure on social programmes, including rice subsidies, averaged 11 percent of the GDP in the Sixties. Kerala spends less on health than many other Indian states.

Developing countries as a group already spend large sums on health and education and have ambitious plans for the extension of water and sanitation. In many developing countries, educational expenditure per head has doubled during the last 25 years, a growth rate twice or three times that of the GDP. Education typically accounts for four percent of the GDP and for 18–25 percent of the budget.

Most developing countries have publicly financed healthcare systems and programmes of investment in sanitation, water supply and health education. Fragmentary evidence suggests that public-sector expenditure on health services amounts to 3-4 percent of the GDP. Total expenditure on health care is 5-8 percent of the GDP. Additional sums are spent on such health-related activities as family planning, water supply and sanitation. There appears, therefore, scope for reforms within the present totals of expenditure.

A basic-needs orientation would call for a redistribution of public services to different beneficiaries, a change in the nature of the services, and their efficiency, and the adoption of an integrated approach.

Compared with education and health, nutrition and the production of food for domestic consumption have been neglected by many developing countries. Paradoxically, in terms of needs, though not in terms of power structures, it has been the rich countries with food surpluses which have tended to tax poor farmers (and, indirectly, landless labourers) to subsidize some relatively well-off urban consumers. With some exceptions, little attention has been paid to the needs of those suffering from persistent malnutrition, even in countries that could clearly have afforded it.

The required redesign of the public services from urban to rural, from middle class to deprived groups, from sophisticated to simple, with greater emphasis on the needs of women and small children, is not constrained by money but by political inhibitions, administrative obstacles and institutional barriers.

SECTORAL LINKAGES AND SECTORAL PRIORITIES

There are strong linkages and complementarities between the supply of various basic-needs goods and services. The efficacy of the output of one sector—in terms of its impact on the length and quality of life—depends largely on the availability of other basic-needs goods or services, and costs can often be reduced by joint supply. The impact of investment in sanitation facilities on health depends, for example, on education in personal hygiene; the effectiveness of expenditure on health depends critically on the nature of the output of other basic-needs goods. Thus curative medical services are likely to be rather ineffective if people are chronically malnourished, use germ-infested water, have no sanitation facilities, and follow poor health practices in their lives. In some cases, action on one front without simultaneous action on others can be actually counterproductive. To provide water without drainage can lead to stagnant pools that attract insects and spread disease. A few examples illustrate these linkages with respect to impact and costs.

Malnutrition leads to a high predisposition to disease and to fatalities from disease. In Mali, the high death rate among children who have contracted measles is more accurately attributable to a fatal combination of malnutrition, diarrhoea, often malaria and measles. A study covering Recife and parts of Sao Paulo State in Brazil showed that 50 percent to 70 percent of all child deaths under five were nutrition-

related and an even higher proportion for those under one year. The study also showed a strong interaction between malnutrition and infection; 50 percent to 70 percent of all deaths from infectious and parasitic diseases had nutrition deficiency as a related cause. In Indonesia, specific nutritional diseases are responsible for some major diseases: vitamin A deficiency is responsible for eye lesions and blindness; iodine deficiency for goiter and cretinism. Malnutrition among women leads to fatigue (and less attention to household health and nutrition practices), low birth-weights of their babies, and malnourishment among breast-fed infants.

Malnutrition, in turn, is partly the result of chronic ill health. A study in the Gambia showed that diarrhoea and vomiting, together with other serious infections, appeared to be common causes of clinic deterioration of nutrition status. Among children of below five years, nutritional status was found to be primarily a product of levels of infection, and only secondarily of diet. Parasites in the stomach prevent food absorption and their elimination can make a given amount of food give more nourishment.

Poor sanitation and unsafe water are major contributory factors to many infectious diseases. But in Sri Lanka, education, by having taught people when to boil the water, substitutes for safe water, which is not widely provided.

In Mali, Somalia, and Gambia, weaning practices affect health and nutrition. Health practices, particularly the provision of food and liquids during measles and liquids during diarrhoea, affect the recovery rates from these diseases. Education affects health through its impact on food preparation and personal hygiene. But if education has an impact on nutrition and health, health and nutrition in turn affect education. The health, including the nutritional status, of people affects their willingness and capacity to learn. Malnutrition in infants can affect their mental capacity permanently.

It is noted in a study in Gambia that in the absence of effective preventive health care, curative health services are nearly useless, since reinfection normally occurs soon after the patient has been released. Studies in Brazil and Sri Lanka found that female education progressively reduces fertility. The same is true of female participation in the labour force.

Linkages are important not only in improving impact, but also in reducing costs. It is generally agreed that nutrition, family planning and hygiene are best taught together, by the same basic health worker. Water supply, nutrition and health are cheaper if they are coordinated than if they are supplied by separate government agencies. But an illustration of the value of the concentrated attack is Daniel Benor's agricultural extension service [1]. Many field-level extension workers had been made responsible not only for all aspects of rural development, including health, nutrition, and family planning, but also for regulatory work, procurement, and the collection of statistics. This might have been justified on grounds of linkages and cost savings. But this is clearly too much to do for anyone, especially for a poorly paid and inadequately trained man. Both the agricultural and other

duties were poorly performed. Benor's approach is to concentrate the work and time of extension personnel exclusively on agricultural extension work, with a single and clear line of command (not split between several authorities), clear specification and close supervision. The success of this method is an illustration of the value of a concentrated attack.

The manifold linkages between sectors, with respect to both impact and costs, have led some observers to conclude that a basic-needs approach is essentially multi-sectoral and requires integrated projects covering a number of sectors. But in most countries (and at the international levels), organizational structures tend to be along sectoral lines. In some cases, the required sectoral collaboration may be achieved by establishing links between different projects; in others, integrated projects may be preferable.

The interdependence between the sectors raises the question of sectoral priorities: must all the basic-needs outputs be provided simultaneously — which would impose impossible administrative and financial costs in many countries; or can we establish a set of sensible sectoral priorities for meeting basic needs? Whatever the resource situation, a rational basic-needs programme should take into account the interactions between sectors. At this stage we know too little about the relationships to come to a definite conclusion about priorities and linkages. But there is enough evidence for some suggestions.

The causal linkages described above provide some pointers to priorities. For example, education, and especially *female education*, appears to be a likely priority area: even without additional output from other sectors, extra female education may improve nutrition and health practices and reduce fertility. But without education, improved sanitation and clean water are likely to be ineffective. Education can (as it appears to do in Sri Lanka) substitute for such improvements. Sri Lanka's high life-expectancy was achieved while only 20 percent of the people had access to safe water. In contrast, in Egypt over two-thirds of the population has access to safe water, yet child mortality rates remain high.

Improvements in *nutrition* are critical for improved health. But increases in food supply will not be sufficient to improve nutrition. Much depends on the distribution of food among and within families, in turn depending on the distribution of purchasing power, the relative prices of the various foods and spending patterns among families. Aggregate food-supply is in excess of requirements in Cuba, Brazil, Indonesia, and Egypt. Yet there is very considerable malnutrition in Brazil (37 percent of Brazilian children were estimated to be suffering from first-degree malnutrition; 20 percent from second-degree malnutrition); in Indonesia 20 percent to 30 percent of children were shown to be malnourished according to a survey of heights and weights; in Egypt chronic malnutrition is widespread in rural areas where one-quarter of the children are stunted. In contrast, in Sri Lanka, with a significantly lower supply of calories per head, a survey in 1969-70 showed that only 25 percent of the population earning less than 400 Rupees per month consumed less than 2,200

calories per day, and only five percent less than 1900. Child-mortality rates correspond closely to rates of malnutrition.

While *health* is a major objective according to a basic-needs approach, the evidence here suggests that health services, as *conventionally defined*, may not be an important input. Curative health services of a Western type are rendered more or less useless in the absence of the other conditions for improving health. For example, in a village in Gambia, the British Medical Research Council provided specific curative treatment to each child in need. There was only a small difference in child mortality between this village and a 'control' untreated village.

Much depends on the *content* as well as the area of particular basic-needs sectors' output. For example, the content and method (learning by rote or learning to think) of education is clearly important in determining its effects. The health sector may be largely confined to curative medicine or it may be extended to include a good deal of health education and nutrition.

Several country-studies provide some insights into sectoral linkages and priorities and the causal processes at work. But it is difficult to know whether the results can be generalized from one country to others. Taking data from a large number of countries an attempt has been made to see whether there are any systematic relationships, across countries, between achievements on basic needs—defined in terms of life expectancy—and performance on various basic-needs input indicators [3].² The 'inputs' examined include, in addition to income per head, primary-school enrollment, the ratio of female to total enrollment, access to clean water, availability of doctors and nurses, level of nutrition, public consumption as a proportion of the Gross Domestic Product, the degree of urbanization, and the income share of the lowest 40 percent of population.

The data were analyzed in a variety of ways—which in some cases led to conflicting conclusions. But some conclusions were fairly firmly established:

- (i) Of the basic inputs for meeting basic needs, primary education consistently appears to be the most important according to all of the measures devised to test relative importance;
- (ii) Nutrition and health-care seem to be of significance, but less so than education, while water supply is of low priority;
- (iii) The distribution of income (measured by the share of the bottom 40 percent) appears to be an important additional factor influencing basic needs, as is the ratio of female to total primary-school enrollment; and
- (iv) The size of the public sector and the level of urbanization do not seem to be related to basic-needs fulfillment.

Naturally, all of these conclusions need appropriate qualifications — they are based on inexact and perhaps inadequate measures of basic-needs inputs and outputs, and it is difficult to separate cause from effect. However, one has to be impressed by

²Other econometric work supports these findings.

the consistent power of education (literacy) in explaining variations in life expectancy. Broadly, the priorities suggested by analysis of the country experience are borne out by the cross-country statistical exercise. But country examples indicate that basic needs can be met in a variety of ways—there are no iron laws that must be followed. Looking at deviations from what would be expected at different income levels, we find that Tanzania does extremely well for a country of its income level in terms of literacy and water supply, but does not rank high in terms of life expectancy. In fact, its actual life expectancy of 45 is about that expected for its income level (46), and roughly similar to such countries as Zambia and Ivory Coast, which have much lower literacy rates. Tanzania illustrates the point that despite the generally high association between education and life expectancy, not all countries that have done well in education (as measured by literacy) have necessarily done well on life expectancy. One possible explanation, however, is that Tanzania's gains in education have come recently, and there may be a lag with respect to their impact on life expectancy.

Another interesting case is Egypt, which comes near or at the top of the list of those countries doing above average in water supply, caloric supply, and health care. Its life expectancy of 53, however, is only slightly above its expected value of 49. The disappointing performance on basic needs might, in part, be explained by the lack of substantial progress in education; literacy in Egypt is estimated to be 40 per cent, only slightly above the expected level of 39. Egypt appears to be a case that confirms the importance of education in meeting basic needs.

An important aspect is the role of women in meeting basic needs. Strategies that improve the education, income, and access to basic needs of women may be more productive than other approaches, because of the role of women in child-care, food preparation, and education in the home. Water-supply projects provide safe water, but improper sanitation in the household can quickly lead to a loss of potential health benefits. The greater benefit of water supply projects may, in fact, be in their impact in reducing the workload of women who sometimes spend as much as half of their time in hauling water, a fact rarely taken into account in the shadow pricing of labour in cost-benefit analysis. Almost all countries which have done well in basic needs have also done well in making primary education available to women (or at least reducing the bias favouring boys). The reverse, however, is not necessarily true. This suggests that female education is necessary but not sufficient for making progress in meeting basic needs. Studies indicate, furthermore, that improving the employment and productivity of women can have an important impact on meeting basic needs, since it appears that women spend a larger share of their incomes on basic needs (foods, health care) than men.

The most difficult group to reach are the poorest 20 percent, the unemployables, the old, the disabled, the infirm, and the sick. Not only are their incomes very low but they also lack access to public services. Provisions intended for them are often diverted to benefit less needy groups. Of course, they constitute a problem

also for much more advanced countries and perhaps only the Scandinavian countries have succeeded in meeting their basic needs.

The general conclusion of this discussion is that if we are willing to learn the lessons from a great variety of experiences drawn from countries and sectoral programmes, and if there is a strong commitment to the necessary politics, the elimination of the worst aspects of poverty by the year 2000 and the fulfilment of basic human needs is, in spite of what the conventional economic approach says, within the range of the possible.

REFERENCES

1. Benor, Daniel, and James Q. Harrison. *Agricultural Extension: The Training and Visit System*. Washington, D. C. : World Bank. May 1977.
2. Haq, Khadija (ed.). *Dialogue for a New Order*. Oxford : Pergamon. 1980.
3. Hicks, Norman L. "Sector Priorities in Meeting Basic Needs: Some Statistical Evidence". 1979. (Mimeographed)
4. Perkins, Dwight. "Rural Health in China". (Mimeographed)
5. World Bank. *World Development Report, 1979*. Washington, D. C. 1979.