

# Children as human capital?

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## Editor's note

*It is often suggested that nutrition and child-survival programmes should be undertaken as investments in human capital that contribute to national economic growth. But what if the social system does not permit an increase in productivity large enough to compensate for the cost of these programmes? Moreover, such an argument treats people as if their function were to serve the economy, rather than the reverse. The following paper makes the point that alleviating human suffering and realizing human potential are intrinsically important and should not have to be justified in economic terms.*

## The human-capital argument

Why should any society allocate limited national resources to alleviating malnutrition or to child survival and development? One major line of argument is that it is a sound economic investment for national economic growth. Ruth Leger Sivard, for example, asserts:

Health protection, like education, is both the instrument and product of economic development. The preservation of health makes a difference in the quality of life people can have. As a social investment, it also has a positive multiplier effect on the world economy, reducing absenteeism and increasing the productive years of men and women. Inadequate health protection wastes human resources and adds to the burden on the whole of society, through the cost of treating illness and the loss of working capacity. [1]

James Grant, the director of UNICEF, has suggested that some of the newly industrialized countries achieved their extraordinarily rapid growth partly be-

cause they invested substantial resources in looking after the poor, and particularly their children. According to UNICEF's Richard Jolly:

Much evidence already exists of the economic returns to investment in human resources. To fail to protect young children at the critical stages of their growth and development is to wreak lasting damage on a whole generation, the results of which may well have effects on economic development and welfare for decades ahead. [2]

In the United States, Marian Wright Edelman, the president of the Children's Defense Fund, argues:

Our future prosperity now depends in large part on our ability to enhance the prospects and productivity of a new generation of employees that is disproportionately poor, minority, undereducated, and untrained. [3]

If it could be demonstrated that public investment in nutrition and child survival accelerates national economic growth, that would attract the support of growth-oriented leaders for such programmes.

## Empirically questionable

Whether for poor countries or rich countries, these arguments are ultimately unconvincing. Governments that already face high levels of unemployment and spend little on treating illness would have difficulty in taking them seriously.

Hakim and Solimano conclude that the argument that investments to improve nutritional standards or child-survival rates can be justified as stimulants to economic growth "is based on the faulty presumption that increasing a person's capacity or potential will necessarily result in growth in both his and his country's productivity. The translation of improved individual capacities into greater individual and national productivity is by no means automatic. It is largely dependent on the ability of the society to make effective use of such capacities" [4].

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The human-capital rhetoric may have tactical value. When the president of the Children's Defense Fund argues that our prosperity depends on looking after our children, we know that she is using this argument more as a way of winning support for children than as a way of promoting national prosperity. If someone made a convincing argument that we would achieve greater prosperity by investing our money in machines rather than in children, surely she would forgo prosperity and continue to defend children. She knows that there is intrinsic value in children: they need to be saved for their own sakes and not merely as an investment toward achieving something else. Her rationale for advancing the human-capital argument would be that emphasizing material benefits can help to persuade policy makers to support child-survival programmes.

The point has merit. The risk is that it could prove to be factually wrong. It may not be generally true that healthier, better-nourished people are necessarily more productive. One study concedes, "The most persuasive criticism of the contention that nutrition interventions lead to economic growth is the weakness of the empirical evidence to date" [5]. One careful empirical study of the question found that "no positive and consistent effect on the productivity in market production activities of the supplemented workers can be demonstrated" [6].

There is abundant evidence that, over broad ranges, improved nutrition and larger body size increase work *capacity* [7]. But that should not be confused with increased *productivity*. Productivity requires motivation and opportunity as well as capacity. There are many circumstances in which work performance improves with improved nutrition, but globally the dominant pattern seems to be just the opposite. People who are well fed or overfed often are reluctant to do any hard physical work at all. With better diets people are likely to have more capacity but to be less motivated to work. It is obvious that many people who are poor and badly nourished work very hard. Even more important, they work cheaply.

One can look at poor workers in fields and factories anywhere in the world and see that people can be badly nourished and still be highly productive. These people may sleep a great deal, fall ill very often, and live short lives, but they definitely are workers. They are efficient "machines," generating a great deal of output with little input. Indeed, there is evidence that, within broad limits, those who eat less are more efficient in that they produce more output for the same energy input [8, 9].

In a study done in the early 1970s, cane cutters in Jamaica cut only 3.1 tons per day, while West Indian cutters in Florida cut 8.6 tons per day [10]. If those Jamaicans received food supplements and increased their productivity, who would benefit? The distribu-

tion of the benefits between the cutters and the enterprises would depend in part on whether the cutters were paid on an hourly or a piece-work basis; but, given their low wages, it is likely that either way most of the benefits would go to the enterprises. One of the major effects of increasing productivity could be that fewer cutters would be employed, a significant disadvantage from the societal perspective. Total production might not be increased, in which case wages to individuals might go up while at the same time the overall wage bill went down.

If I were a profit-maximizing plantation owner, it probably would not be worth while for me to spend money on improving the workers' diets in the hope of improving their productivity. If I could draw from a large pool of unemployed people ready to work at cheap rates, I wouldn't be much concerned about the marginal productivity of any particular individuals I hired [11]. In fact, "In labour-surplus economies, planners often conceptualise increased productivity not as an asset but as an additional problem which exacerbates unemployment problems" [12].

Even if there is no large labour surplus, the increment in productivity may not be sufficient to justify the plantation owner's paying the increased food cost. It may be cheaper to hire additional labour. The plantation owner's concern is overall production, not productivity per labourer.

In the Jamaican study, weight for height was chosen as the primary measure of nutritional status, with individuals who were low in weight in comparison to the standard for their height categorized as malnourished. Instead of providing nutrition supplements to bring up the workers' weight levels, an alternative strategy for the enterprise owners would be to hire only those whose weight was at or close to the standard for their height. A hiring policy that discriminated according to nutrition status would be a serious disadvantage to those who were undernourished.

Nutrition supplementation might improve nutrition status and thus improve productivity in some cases. Even so, it might not be economically efficient to provide supplements. The benefits might be small, and in addition they might not go to the enterprises. One empirical study of the effects of nutrition supplementation found that "after work the unsupplemented group spent most of their time resting or sleeping while the supplemented subjects remained active doing other tasks of their own or participating in recreational activities" [7]. The researchers pointed out that dietary supplementation would permit the workers to participate in their own development and that of their families and, therefore, their community by providing extra energy for leisure-time work and recreation. It would also be possible to look at it another way. An employer who is narrowly concerned with profit maximization might feel it would be

wasteful to pay for nutrition supplementation when much of the benefit goes to the workers and the community after work hours and not to the enterprise.

In asking whether the benefits of nutrition-supplementation or child-survival programmes would be worth the cost, it is important to ask not only what are the benefits and what are the costs, but also who benefits and who bears the costs.

Distinctions should be made not only between employer and employee but also between public and private interests. In the United States it is frequently claimed that the Special Supplemental Food Program for Women, Infants, and Children (WIC) saves three dollars for each dollar invested in the programme. Benefits were estimated in terms of the hospital costs that were averted by reducing the number of low-birth-weight babies with WIC food supplements [13]. Since the intention is to justify public expenditures on the WIC programme, the argument is clear if those hospital costs would have been borne at public expense. But what if hospital costs for the low-birth-weight babies were paid privately? Under a narrow economic analysis, it is not obvious that public expenses that yield only private benefits are warranted, no matter how positive the economic cost/benefit ratio appears to be.

Also, it should be noted that, according to this argument for WIC, if low-birth-weight children were not hospitalized, there would be no cost to be averted and thus no benefit from the WIC supplementation. Where public health care expenditures are low, so that little in the way of expenditures can be averted, the argument does not work.

The linkage between nutritional status and work output depends on the social context in which the work is performed. After the Sandinista victory over Somoza in Nicaragua, people were well fed for the first time in decades, so they were "much less anxious to earn wages by harvesting cash crops" [14, 15]. They reduced their effort on the plantations, but at the same time many tended their own garden plots.

If workers' incremental efforts benefit others more than themselves, the better-nourished workers may be inclined to work less. If they enjoy the full benefits of their own labour, however, as they do in their own vegetable gardens, better-nourished individuals are likely to work harder. This is why labour productivity on small holdings is regularly much higher than on large holdings.

Studies of productivity in relation to nutrition status have been about wage labour such as cane cutting, coal mining, and ditch digging. The benefits have been measured primarily in terms of production output (e.g., amounts of cane cut) and not in terms of labourers' earnings where they are paid on a piece-work basis. Apparently the objective has been to increase productivity per worker without increasing

wages, thus benefiting employers, rather than to find ways to increase the incomes of the workers.

The effect of improved nutrition on productivity in various types of self-employment such as home vegetable gardening or on women's ability to work more effectively around the home have not been assessed. It seems the linkage between nutrition and productivity has been of interest only where someone other than the worker stands to benefit from increased productivity. The focus has been on the benefits to the employer, not the labourer.

If the payoff from nutrition supplementation for labourers is uncertain, it is even more uncertain for nutrition and other health programmes for children. As suggested in relation to WIC, there can be a benefit in terms of health care costs that are averted. It is clear that "children are the poor man's capital" [16] and that under many circumstances it is economically wise for the poor to invest in their children [17]. But the question posed here is whether investment in children is a practical strategy for national leaders whose primary concern is to accelerate national economic growth. Economic benefits from investment in child survival and development must be discounted because of long delays and considerable uncertainties. While investment in children may sometimes be associated with national economic growth, that is not the same as showing that it will regularly lead to *greater* returns than investment elsewhere in the economy. Governments have many other opportunities for investing the limited resources they have available, and they regularly view options such as industry as yielding larger, more certain, and quicker economic benefits.

### Morally questionable

There is real danger in the human-capital approach to justifying national nutrition and child-survival programmes. Where would this line of analysis lead with regard to nutrition programmes for the elderly? What would be done to save handicapped children? In this narrowly economic mode of dealing with welfare needs, there is little room for human dignity. The function of human life is to produce. The alleviation of malnutrition and the saving for children are seen as means toward and not the end objective of development. The argument has got it backwards, assuming that the function of people is to serve the economy rather than the reverse.

The stories of abuse in the employment of young children are so numerous and so grotesque that child labour is prohibited in many developed countries. Yet the human-capital approach implies that young children should be sent out to earn money as quickly as possible. If we would not want to take this approach

in developed countries, why should it be acceptable in less-developed countries?

There is something distasteful about designing programmes to make people into more efficient cane cutters and ditch diggers. Health and development programmes should be designed to liberate them from that sort of labour.

If UNICEF relied on the argument that investing in children leads to economic growth, and then found that investing in something else leads to a bit more economic growth, what rationale would remain for saving children?

The argument that nutrition or child-survival programmes can be justified in terms of improved productivity seems to be a bit of wishful thinking, an instrumentalist rationalization for something that should be treated as intrinsically desirable. If it does not stand the empirical test in most of the third world, those taking the human-capital approach would be left with no argument with which to defend their programmes.

Narrowly economic cost/benefit analysis fails to recognize that minimizing suffering is itself a social value, one for which there is a real public interest. Alan Berg argues:

Improved nutrition as a means of reducing deaths, lessening the severity of infections, and preventing various forms of retardation, blindness, anemia, and other malnutrition-related problems is, in itself, sufficient justification for investment in better nutrition. [18]

He seems overly optimistic, however, when he adds, "Adequate nutrition is now widely accepted as part of the purpose of development and need not be justified as a means to development." A survey of national development plans and budgets would show that rather small shares of national resources are devoted to alleviating malnutrition.

The human-capital argument is defective morally because it shows no consideration for the hungry or the children themselves. The best reason for ending hunger or saving children is that it is not right for people to remain hungry or for young children to die unnecessarily. No other reason should be necessary; any other reason is inadequate.

The appropriate reason for ending hunger and saving children is not calculation of instrumental values but compassion, or, more precisely, love. The linkage is not so much physical and mechanical; it is essentially spiritual. We should be concerned with the fact that some are harmed by existing social systems for its own sake. People should be able to live in dignity. No other reasons should be necessary.

Moral considerations *ought* to be sufficient to motivate nutrition and child-survival work, but we know that usually they are not. The argument that investments in improving the welfare of children can lead to national economic growth is weak on both empirical and moral grounds. But where a truthful and convincing instrumentalist argument can be made, it certainly should be used along with the moral argument.

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