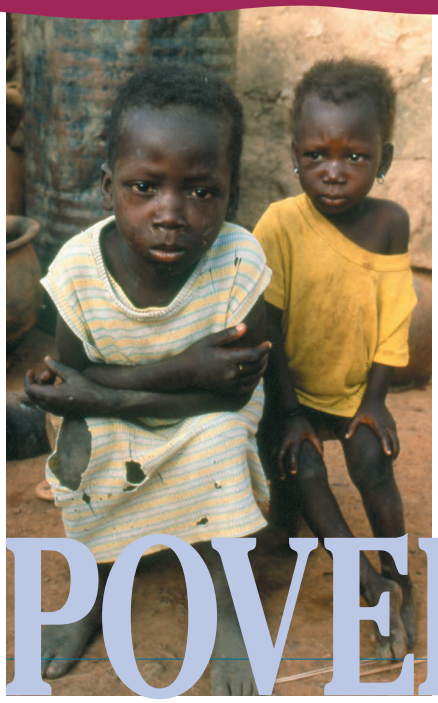


Nutrition and Poverty

LAWRENCE HADDAD

POVERTY

Brief 8 of 12

Malnutrition is responsible for much of the suffering of the peoples of the world. At least one-fifth of the worldwide loss of years of life to death and to disability is due to undernutrition. When more speculative estimates are made of the contributions of diet-related chronic diseases such as diabetes, obesity, and hypertension and the various components of undernutrition, some commentators place one half of global suffering at the door of malnutrition.

Why Is Public Action Needed?

The case for public action to eradicate malnutrition is a strong one, and one that can be forcefully made using either ethical or economic arguments. Public action to reduce malnutrition is a moral imperative. Food and nutrition are human rights, enshrined in various conventions (most recently the 1989 Convention on the Rights of the Child). Governments have a duty to ensure that these dimensions of human well-being are realized. On the economic side, private markets for health, education, sanitation, and other determinants of good nutrition are often thin and in any case are beyond the poor's reach. Moreover, access to whatever services are available is likely to be unequal, particularly along gender lines. Women—whose role is key to good nutrition throughout the life cycle—face discrimination in many parts of the world.

Nutrition is an excellent investment. Improved nutrition empowers people and it empowers communities. In doing so it fuels the development process and leads to poverty reduction.

Empowering People for Poverty Reduction

In a globalizing world, the premium on innovation and creativity is higher than ever, and malnutrition undercuts both in a most savage way. Better nutrition improves intellectual capacity, and improved intellectual capacity increases an adult's ability to access other types of assets that are essential for increases in labor productivity. An adult who is more productive has a larger set of available livelihood options, which raises lifetime private earnings in a way that is robust to external shocks such as disease, unemployment, or natural disaster. In addition, improved nutrition status from conception to 24 months of age reduces private and public health care expenditures in ways that reverberate throughout the life cycle. The intergenerational cycle of poverty is more likely to be broken when babies get an adequate nutritional head start.

No economic analysis can fully capture the benefits of such sustained mental, physical, and social development. At the micro level some cross-section studies have shown

that the ratio of the percentage improvement in adult wage rates over the percentage improvements in adult nutrition status is greater than one. Other studies over time have found that an increase in birth weight of one pound leads to a 7 percent increase in lifetime earnings for a sample of U.S. babies. How significant are these estimates at the macro level?

Some researchers have aggregated the literature on how fetal and infant undernutrition affects children's later school enrollment, educational attainment, cognitive ability, and lifetime earnings and the literature on how adults' nutrition status affects their labor productivity. In this way they have attempted to capture the economic costs of undernutrition in terms of gross domestic product (GDP) forgone. Estimates published in the 1990s for several Asian countries indicate that the losses to GDP from various components of undernutrition can be as high as 3 percent of national income (Figures 1 and 2). However, these estimates are undercounts: they omit some components of undernutrition such as vitamin A deficiency and some age groups such as adolescents; they are not aggregate estimates as we do not know how the various component estimates of undernutrition "add up" in terms of boosts to productivity; and they omit losses due to overnutrition.

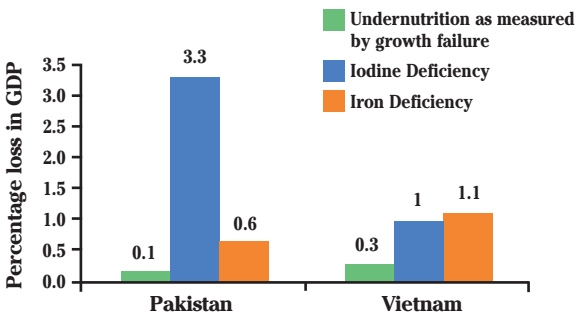
Diet-related chronic disease also has heavy costs. For China the costs amount to 2.4 percent of GDP (Figure 3). This, too, is a gross underestimate because it does not take into account the lost work due to illness, only death.

Investments in reducing fetal and infant malnutrition generate the ultimate positive spillover effect—well-nourished children who are less likely to get diet-related chronic diseases such as hypertension and diabetes in adulthood and well-nourished mothers who are less likely to give birth to undernourished children. Figure 4 shows the estimated link between fetal and childhood undernutrition and chronic diseases for China and Sri Lanka. For China, childhood undernutrition is estimated to be responsible for one-third of diabetes and about one-tenth of coronary heart disease and strokes.

Empowering Communities

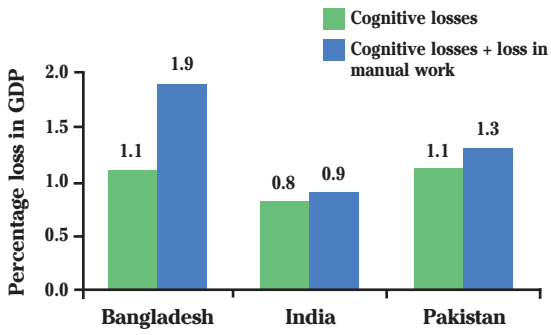
While better nutrition empowers people, the process through which malnutrition is reduced can also empower communities. Unlike most other types of human capital investment interventions, most nutrition programs are community based. As communities develop the capacity to undertake assessment, analysis,

FIGURE 1: GDP LOSS FROM REDUCED ADULT PRODUCTIVITY DUE TO SOME FORMS OF UNDERNUTRITION (1990S)



Source: Horton 1999

FIGURE 2: GDP LOSS DUE TO IRON DEFICIENCY (1990S)



Source: Horton 1999

and action for nutrition interventions, they can apply this capacity to other types of development intervention. Community-based nutrition programming can also build trust and a shared set of values and norms. These elements of "social capital" may well prove to be important for people's ability to generate income and manage risk. They may also help empower communities to hold increasingly decentralized governments to account and to empower the decentralized governments to hold the communities to their end of the bargain. Qualitative data from a number of studies suggest this is the case. Quantitative evidence from South Africa and elsewhere shows that social capital enhances people's ability to earn income and that community control helps improve the performance of poverty projects.

Moreover, empowered communities have more to lose from disruptions and conflict. Reductions in malnutrition serve to diminish one of the causes of conflict—particularly if those reductions are achieved through a community-led process. Conflict, whether civil or international, destroys people's lives, their asset base, and their livelihoods. Moreover, as countries become more connected than ever, instability in one country can quickly spill over to others.

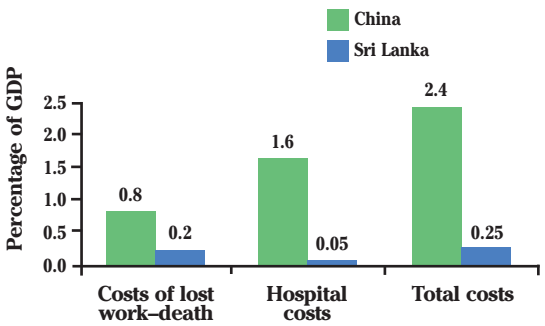
Conclusion

Improved nutrition is central to improved income generation, poverty reduction, and more rapid development.

Better-nourished individuals constitute the bedrock of a nation that respects human rights and strives for high labor productivity. Well-nourished mothers are more likely to give birth to well-nourished children who will attend school earlier, learn more, postpone dropping out, marry and have children later, give birth to fewer and healthier babies, earn more in their jobs, manage risk better, and be less likely to fall prey to diet-related chronic diseases in midlife.

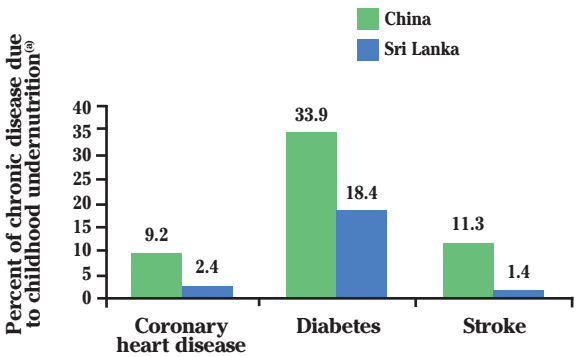
Communities that are strengthened through the community-based nutrition programming process are more likely to access central resources and are more

Figure 3: Economic Costs of Diet Related Chronic Disease, China and Sri Lanka, 1995



Source: Popkin, Horton and Kim 2000

Figure 4: Chronic Disease and Childhood Malnutrition China and Sri Lanka, 1995



Source: Popkin, Horton and Kim 2000

[a] Low birth weight and stunting

likely to use them efficiently in a wide range of activities while bringing their expertise to bear on the development process. Empowered and well-nourished communities are also less likely to be drawn into conflict with all its tragic consequences. In an increasingly interconnected world, the premium on good nutrition is higher than ever.

Suggested Reading

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Lawrence Haddad is director of the Food Consumption and Nutrition Division of the International Food Policy Research Institute (IFPRI), Washington, D.C. For additional information, contact l.haddad@cgiar.org.

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