OVERCOMING CHILD MALNUTRITION IN DEVELOPING COUNTRIES: PAST ACHIEVEMENTS AND FUTURE CHOICES

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2020 BRIEF 64 A 2020 Vision for Food, Agriculture, and the Environment REVISED: FEBRUARY 28, 2000

In 1995, 167 million children under five years old almost one-third of developing-country children were malnourished. Malnutrition causes a great deal of human suffering, and it is a violation of a child s human rights. It is associated with more than half of all deaths of children worldwide. People who survive a malnourished childhood are less physically and intellectually productive and suffer from more chronic illness and disability. The costs to society are enormous. Eradicating malnutrition remains a tremendous public policy challenge. Which types of interventions will have the greatest impact in reducing child malnutrition? The study on which this brief is based uses national data for 63 countries over 1970 96 to explore this question.

DETERMINANTS OF CHILD NUTRITIONAL STATUS

In order to reduce malnutrition, one must understand its causes. The *immediate* determinants of a child s nutritional status are the child s dietary intake and health. These, in turn, are influenced by three household-level *underlying* determinants: food security, adequate care for mothers and children, and a proper health environment. Finally, the underlying determinants are influenced by the *basic* determinants: the potential resources available to a country or community, and a host of political, cultural, and social factors that affect their utilization. The study focuses on the underlying determinants, using four variables to represent them: national food availability (for food security), women s education and women s status relative to men s (for the quality of care), and access to safe water (for the quality of the health environment). It also explores two basic determinants, using per capita national income to capture the availability of resources in a country and democracy as an indicator of the political context that influences malnutrition.

REDUCTIONS IN CHILD MALNUTRITION DURING 1970 95

Between 1970 and 1995, the number of malnourished children declined by 37 million, from 204 million to 167 million, while the prevalence of malnutrition (as measured by weight below the norm) in the developing world as a whole fell from 46.5 percent to 31 percent, about 15 percentage points in all (see the table). Progress in reducing malnutrition has varied greatly from one region to another. The prevalence of malnutrition has declined the fastest in South Asia (by 23 percentage points) and slowest in Sub-Saharan Africa (4 percentage points). The number of malnourished children has declined most sharply in East Asia (from 78 to 38 million). The situation is particularly troubling in Sub-Saharan Africa where the number of malnourished children has increased by 70 percent. Since 1970, the prevalence has decreased in 35 developing countries, held steady in 15, and increased in 12, with most of the countries with increases in Sub-Saharan Africa.

All four of the underlying-determinant factors the study considers are found to have made substantial contributions to the reductions in the developing-country prevalence of child malnutrition over 1970 95. Improvements in care as represented by women s education have contributed by far the most, being responsible for 43 percent of the total reduction. Improvements in per capita food availability contributed about 26 percent and improvements in health environments 19 percent. The lowest contribution (12 percent) came from improvements in women s status. While this factor has a potentially strong impact, its potential has not been realized because women s status has improved little over 1970 95.

Together the care-related measures women s education and relative status have contributed to more than half of the 1970 95 reduction in the prevalence of malnutrition in developing countries. Education of women is a powerful weapon against malnutrition: increased knowledge and skills enable women to earn higher incomes, and thus enhance household food security, and education improves the quality of day-to-day care women give to their children. Women s status relative to men s influences children s nutritional status through its effects on the mental and physical condition of the women themselves and through women s autonomy and ability to influence how household resources are allocated. In short, low status restricts women s capacity to act in their own and their children s best interests.

Per capita national income and democracy the basic-determinant factors influence the nutritional status of children only indirectly through public and private investments in the underlying factors. Increases in per capita national income have accounted for roughly 50 percent of the total reduction in child malnutrition. Democracy is a potentially powerful influence because it gives people a voice in how government resources are allocated, but democracy has not improved over the period for the developing countries as a whole. Thus no overall contribution could be measured.

PROJECTIONS OF CHILD MALNUTRITION TO 2020

The future prevalence of child malnutrition obviously depends on the degree of effort exerted to reduce it. This study presents three scenarios based on the projected evolution of the underlying determinants of child malnutrition during

Trends and projections of the prevalence and number of malnourished children in developing countries, by region, to 2020

Region	1970	1995	2020 status quo
		(percent)	
Percent underweight			
South Asia	72.3	49.3	37.4
Sub-Saharan Africa	35.0	31.1	28.8
East Asia	39.5	22.9	12.8
Near East and North Africa	20.7	14.6	5.0
Latin America and the Caribbean	21.0	9.5	1.9
All developing countries	46.5	31.0	18.4
		(millions)	
Number underweight			
South Asia	92.2	86.0	66.0
Sub-Saharan Africa	18.5	31.4	48.7
East Asia	77.6	38.2	21.4
Near East and North Africa	5.9	6.3	3.2
Latin America and the Caribbean	9.5	5.2	1.1
All developing countries	203.8	167.1	140.3

1995 2020. In the status quo, or do-nothing-different scenario, per capita food availability rises about 9 percent, and safe water access,
female secondary school enrollment, and the female-to-male life expectancy ratio improve at the same rates as they did during 1985 95. The prevalence of underweight children falls from 31 percent in 1995 to 18 percent in 2020 (see the table). About 140 million children, roughly one-fifth of developing-country children, would remain malnourished under this scenario. Under the pessimistic scenario, in which the rate of improvement in the nonfood underlying determinants is assumed to decline by 25 percent and per capita food availability to be stagnant, the predicted percentage of malnourished children under five in developing countries is 22 percent. If this scenario were to prevail, only a slight decline in the number of malnourished children would be achieved by 2020: a reduction of 12 million. In the optimistic scenario, in which the rate of improvement in the nonfood underlying determinants is assumed to increase by 25 percent and per capita food availability by 16 percent, the prevalence of child malnutrition in the year 2020 would be cut in half, falling to 15 percent (leaving 128 million children malnourished).

The projections to 2020 for the developing countries as a whole mask wide variation across the regions. Under all scenarios, South Asia will continue to be the region with the highest prevalence and numbers of malnourished children, although both will fall rapidly. Little progress in reducing the prevalence of child malnutrition will be made in Sub-Saharan Africa. Given slow rates of decrease in prevalence and large expected increases in the total number of African children under five, the number of malnourished children will increase under all scenarios, rising as high as 55 million under the pessimistic scenario. The prevalence and number of malnourished children are expected to decline the fastest in East Asia. Malnutrition will fall to very low levels in the Near East and North Africa (NENA), and will almost be eliminated in Latin America and the Caribbean (LAC).

PRIORITIES FOR THE FUTURE

Even under the most optimistic of scenarios, as many as 128 million children would still be malnourished. What combinations of actions will lead to the greatest reductions in child malnutrition by 2020? Given resource constraints and knowledge of the costs of alternative interventions, how should policymakers prioritize investments to reduce child malnutrition most quickly in coming decades?

In Sub-Saharan Africa and South Asia, improvements in per capita food availability and the quality of care for women and children (as reprented by women s education) offer the best hope for future reductions in child malnutrition. In South Asia, promotion of improved status for women should also be prioritized. In East Asia, NENA, and LAC, women s education should be given top priority, followed by women s status relative to men s. Additional secondary priorities are food availability for East Asia and health environment improvements for LAC. To maintain the necessary resource base and political will for these investments, improvements in national income growth and democratic development must be accelerated as well.

Efforts to improve women s education, raise food supplies (or reduce population growth or both), bolster women s status, and create healthful environments should be an integral part of strategies for reducing child malnutrition in the future. These investments would support the crucial efforts of more direct nutrition interventions, such as micronutrient programs and community-based programs to improve home-based caring practices.

Any comprehensive strategy for resolving the problem of child malnutrition must include actions to address both its underlying and basic causes. This is the key message of the study underlying this brief. If the economic resources of the developing countries, as indicated by national incomes, cannot be raised, increased investment in health environments, women s education and relative status, food availability and other measures of underlying factors will not be forthcoming. Similarly, if a democratic government is not in place, people will not be able to bring pressure on governments to have their needs met. But just having sufficient income and a democratic government are not enough. Increased national income must actually be spent on improvements in the underlying determinants, which requires knowledge of their roles in reducing child malnutrition and political commitment to do so.

For further reading, see *Explaining Child Malnutrition in Developing Countries: A Cross-Country Analysis*, by Lisa C. Smith and Lawrence Haddad, Research Report 111 (Washington, D.C.: IFPRI, 2000).

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2020 VISION

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