

Child Malnutrition: An Overview of Trends, Issues, and Policy Prescriptions

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Executive Summary

Child malnutrition is the most neglected form of human deprivation and is one important cause of more than half of all child deaths worldwide. For nearly half of the 2.2 billion children in the world, childhood is starkly and brutally different from what we all aspire. With the childhood of so many under threat, our collective future is compromised damaging the children and the nations. The cost of hunger is extremely high, costing the poor countries up to 3 per cent of their yearly GDP. Improving nutrition could add 2 to 3 per cent a year to a poor nation's GDP. Only if we move closer to realizing the rights of all children will we move closer to our goals of development and peace.

The optimistic scenario projects Latin America as completely eliminating child malnutrition, West Asia and North Africa experiencing a decline to 1 million malnourished children, and China reducing the number of malnourished children to 3 million in 2020. The progress in the optimistic scenario is significant, yet, 94 million children would be malnourished by 2020. The pessimistic scenario reveals devastating results. Under all the scenarios, South Asia will continue to be the region with the highest prevalence and number. South Asia is also the only region in which girls are more likely to be underweight than boys. There will be very little progress in reducing the prevalence of child malnutrition in Sub-Saharan Africa.

Unless action is taken within the first two years of a child's life to improve nutrition, the children will suffer irreparable damage. Given the magnitude of the problem and its consequences for economic development, there is a need for immediate and large-scale action. Significant reduction in child malnutrition is possible but will require renewed efforts from various quarters.

The world must alter its priorities so that the problem of child malnutrition is placed at the centre stage. A concerted effort to eliminate childhood malnutrition would require policy reform and more public investment producing dramatic long-term gains in income growth, agricultural productivity, and social indicators.

Understanding the plight of excluded and invisible children and the factors behind their marginalization, efforts to focus initiatives on these children must form an integral part of national strategies on child rights and development such as:

- child-focused budgets
- capacity building
- encouraging children to participate.

If national capacities are not built up and processes are not driven by national governments and local communities, even those interventions that are initially successful risk failure when international assistance diminishes or political priorities change. ▼

KEY WORDS

Child Malnutrition

Regional Variation

Women's Status

**Global and Collective
Efforts**

**Millennium Development
Goal**

The most neglected form of human deprivation is malnutrition particularly among children. Malnourished children are almost certainly excluded from essential goods and services — vaccines, micronutrients, schools, healthcare facilities, water and sanitation, among others — and denied protection from exploitation, violence, abuse, and neglect, and thus deprived of the ability to participate fully in society which is their right. Compared with the risks facing a well-nourished child, the risk of death from common childhood diseases is doubled for a mildly malnourished child, tripled for a moderately malnourished child, and may be even as high as eight times for a severely malnourished child (Sen, 2005). For nearly half of the 2.2 billion children in the world, childhood is starkly and brutally different from what we all aspire. With the childhood of so many under threat, our collective future is compromised. Only if we move closer to realizing the rights of all children will we move closer to our goals of development and peace (Annan, 2005).

The lack of progress to combat malnutrition is damaging the children and the nations (Veneman, 2006). Adults who survive malnutrition as children are physically and intellectually less productive and suffer from more chronic illness and disability (UNICEF, 1998). As adults, their ability to assure good nutrition for their children could be compromised perpetuating a vicious cycle. Malnutrition is associated with more than half of all deaths of children worldwide (Pelletier, *et al.*, 1995) and is a major waste of human energy. It causes a great deal of human suffering — both physical and emotional. Also, it is a violation of a child's human rights (Oshaug, Eide and Eide, 1994). The personal and social costs of continued malnutrition in its current scale are enormous. Unless action is taken within the first two years of a child's life to improve nutrition, the children will suffer irreparable damage ultimately affecting the country's economic growth.

SCOPE OF THE STUDY

This paper sheds light on lives in a world that is often hidden or neglected — a world of vulnerability and exclusion. The focus here is on the children who are the poorest, the most vulnerable, exploited, and abused. An assessment of the capacities, vulnerabilities, and needs is the first step in formulating appropriate responses targeted at reaching the excluded and invisible children. Why have some countries and regions done better than

others in combating child malnutrition? Why are child malnutrition rates in South Asia so much higher than other regions? What is the explanation for 'Asian enigma' (Ramalingaswami, Jonsson and Rohde, 1996; Osmani, 1997) What will it take to eradicate child malnutrition in South Asia? We must first understand the causes of malnutrition and delineate the most important ones before we can identify and act upon those areas of intervention that will be most successful in reducing malnutrition. The overall objective of this study is to address these questions which would help the policy makers use resources wisely to reduce child malnutrition as quickly as possible between now and 2020.

HOW SERIOUS IS MALNUTRITION?

Malnutrition remains the world's most serious health problem and the single biggest contributor to child mortality. Nearly one-third of the children in the developing world are either underweight or stunted and more than 30 per cent of the developing world's population suffers from micronutrient deficiencies. The poor obviously are the most affected. The malnutrition divide between the developed and the developing world is very wide and the inequities are further increasing. Asia continues to have both the highest rates and the largest numbers of malnourished children in the world. Africa is the only continent seeing an increasing rate of under-nutrition. Twenty-seven per cent (more than 147 million) of the children under the age of five years are stunted and 23 per cent (more than 126 million) are underweight in the developing countries. Comparable figures for the developed world are 2.6 per cent of stunted and 1.1 per cent of underweight children. In Africa, about 24 per cent of the children are underweight and 35 per cent are stunted; between 35 million and 50 million children under the age of five are affected. Less well known is the fact that in Asia, average underweight rates are somewhat higher than in Africa (26%) and in several large South Asian countries, both underweight and stunting rates are nearly double of those in Africa (38 to 51%). Under-nutrition is, therefore, the worst in Asia which has 92 million stunted and 89 million underweight children (*World Bank Report*, 2006).

Regional Variation in Underweight Prevalence

Significant variation in underweight prevalence exists among children under five of the developing world. The highest levels of underweight prevalence are found in

South Asia where almost half (46%) of all children under five are underweight. Three countries in this region drive these high levels — India, Bangladesh, and Pakistan (Table 1) — which alone account for half the world's total underweight children. In Sub-Saharan Africa, more than one-quarter (28%) of all the children under five are underweight. The lowest levels are found in Latin America, the Caribbean (7%), and the CEE/CIS countries (5%) (Table 2). Contrary to popular belief, the rates of malnutrition in South Asia are almost double of that in Sub-Saharan Africa. The problem is much more severe in South Asia than in Sub-Saharan Africa. It is not often recognized that the regular level of undernourishment in India is higher than that of Sub-Saharan Africa where about 29 per cent of the children are chronically

undernourished. In India, the figure is 47 per cent, a very high proportion indeed. India's level of anaemia and maternal undernourishment is also much higher (Sen, 2005).

As indicated in Figure 1, 146 million children (0-59 months) in the developing world are underweight and more than half of these children live in South Asia.

INDICATORS OF MALNUTRITION

Low Birth-weight

More than 20 million infants are born each year weighing less than 2,500 grams (5.5 pounds) accounting for 17 per cent of all births in the developing world which is double of that in the industrialized countries (7%). More than

Table 1: Current Status of Malnutrition: South Asian Region

Countries/ Territories	Under- weight	Stunted	Wasting	% of Infants with Low Birth-weight 1998-2004	% of Children Exclusively Breastfed (<6 months) 1996-2004	Vitamin A Supplementation (6-59 months) 2003	% of Households Consuming Iodized Salt 1998-2004*
Afghanistan	39	54	7	-	—	86 T	28
Bangladesh	48	43	13	36	36	87 T	70
Bhutan	19	40	3	15	—	—	95
India	47	46	16	30	37 K	45 W	50
Maldives	30	25	13	22	10	—	44
Nepal	48	51	10	21	68	96 T	63
Pakistan	38	37	13	19 X	16 X,K	95 T	17
Sri Lanka	29	14	14	22	84	—	88

Source: *Progress for Children, A Report Card on Nutrition*, May 2006, UNICEF.

T: The country has achieved a second round of Vitamin A coverage greater than or equal to 70 per cent.

K: Data refer to exclusive breastfeeding for less than four months.

X: Data refer to years or periods other than those specified in the column heading, differ from the standard definition or refer to only part of a country.

W: The country's Vitamin A supplementation programme does not target children up to 59 months of age.

Table 2: Current Status of Malnutrition: Region-wise

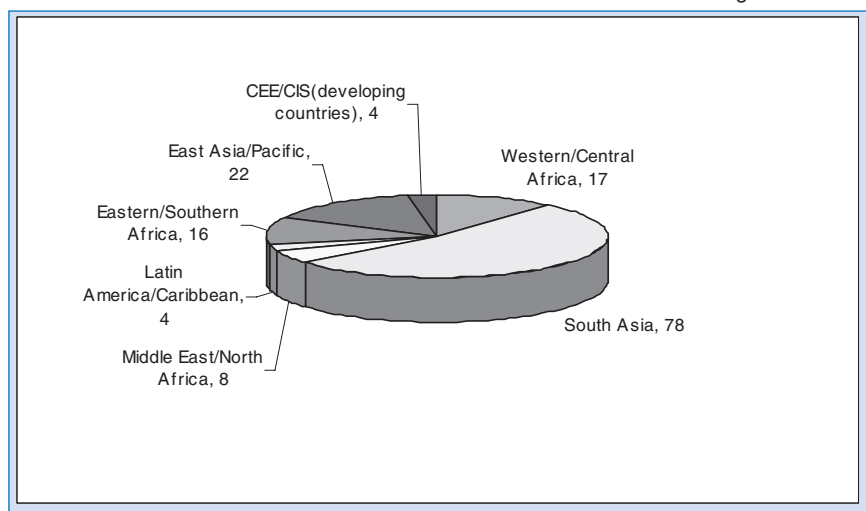
Region	Under- weight	Stunted	Wasting	% of Infants with Low Birth-weight 1998-2004	% of Children Exclusively Breastfed (<6 months) 1996-2004	Vitamin A Supplementation (6-59 months) 2003	% of Households Consuming Iodized Salt 1998-2004
South Asia	46	44	15	31	38	58	49
Sub-Saharan Africa	28	38	9	14	30	64	64
Eastern/Southern Africa	29	41	7	14	41	68	60
West/Central Africa	28	35	10	15	20	60	68
Middle East/North Africa	17	23	8	15	29	—	58
East Asia/Pacific	15	19	-	7	43	73 **	85
Latin America/Caribbean	7	16	2	9	—	—	86
CEE/CIS	5	14	3	9	22	—	47
Developing countries	27	31	10	17	36	61 **	69
World	26	30	10	16	36	61 **	68

Source: *Progress for Children, A Report Card on Nutrition*, May 2006, UNICEF.

** This figure does not include China.

Figure 1: Analysis of Number of Underweight Children in the Developing World

Figure in Million



Source: UNICEF, 2006.

half of it occurs in South Asia and more than one-third in India. India is home to nearly 40 per cent of all low birth-weight babies in the developing world. There is significant variation in the incidence of low birth-weight across regions. South Asia has the highest incidence with 31 per cent of all infants with low birth-weight while East Asia/Pacific has the lowest at 7 per cent. In Sub-Saharan Africa, 14 per cent and in the Middle East/North Africa, 15 per cent of the infants are born with low weight. Contributing to the problem is the fact that 58 per cent of the infants in the developing world are not weighed at birth. This proportion is the highest in South Asia (74 %) making it the region with the largest proportion of under-weighted births.

Micronutrient Malnutrition

Deficiencies of key vitamins and minerals continue to be pervasive and overlap considerably with problems of general under-nutrition (underweight and stunting). A recent global progress report states that 35 per cent of the people in the world lack adequate iodine, 40 per cent of the people in the developing world suffer from iron deficiency, and more than 40 per cent of the children are Vitamin A deficient which increases the risk of early death (*World Bank Report*, 2006).

Vitamin 'A' Supplementation to Children

Anaemic children perform less well in school, are more likely to drop out, and have lower intellectual and physical productivity as adults. According to the *World Bank Report* (2006), 65 per cent of the richest and 88 per

cent of the poorest children are anaemic. South Asia has the lowest rate of supplementation at 58 per cent while East Asia/Pacific (excluding China) has the highest at 73 per cent. West/Central Africa has a coverage rate of 60 per cent while Eastern/Southern Africa reaches 68 per cent of the children targeted. Although many countries have not been able to assess the true level of Vitamin A deficiency due to technical and financial constraints, an estimated 100 million to 140 million children are affected. Most of these children live in the least developed areas of South Asia and Sub-Saharan Africa.

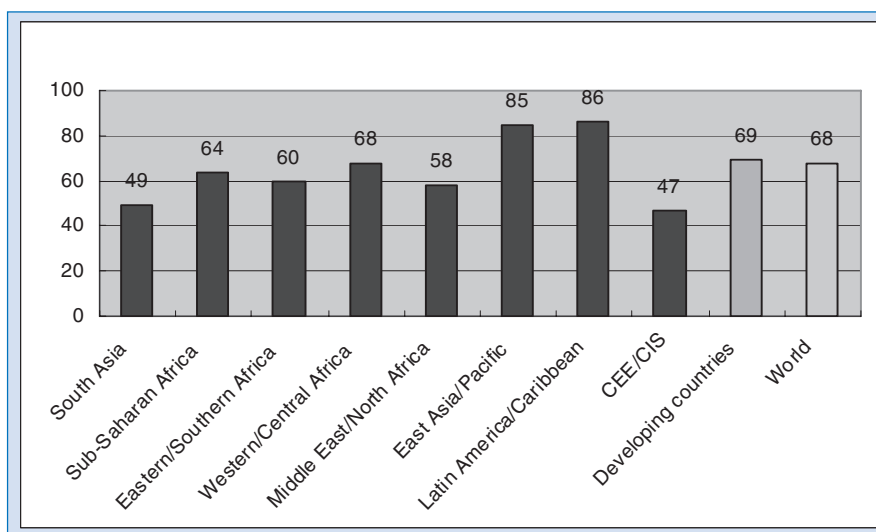
Consumption of Iodized Salt

Two out of three households consume iodized salt in the developing world. The regions of Latin America/Caribbean and East Asia/Pacific have nearly achieved the goal of universal salt iodization. Yet, only half of the households in the CEE/CIS and South Asia regions consume iodized salt. The virtual elimination of iodine deficiency has boosted the brainpower of China's children. Examples of progress include Bhutan which has become the first country in the region to attain the goal of universal salt iodization. Significant efforts have also been made in Bangladesh, Nepal, and Sri Lanka (Figure 2).

Gender Differences

Children from the rural and the urban poor areas often face a high risk of exclusion. Large disparities exist in the underweight prevalence among urban and rural

Figure 2: Percentage of Households Consuming Iodized Salt



Source: *Progress for Children, A Report Card on Nutrition*, May 2006, UNICEF.

children in the developing world. On an average, children's underweight prevalence in rural areas is almost double that of their urban counterparts. Rural-urban disparities are highest in the Latin America/Caribbean and East Asia/Pacific regions where children living in rural areas are, respectively, 2.6 times and 2.1 times as likely to be underweight as children living in urban areas. Boys and girls have a similar underweight prevalence in every region except South Asia where 47 per cent of the girls are underweight compared to 44 per cent of the boys (Table 3). According to the *World Bank Report* (2006), girls are more likely to be the victims of a poor diet than boys.

DETERMINANTS OF NUTRITIONAL STATUS OF CHILDREN

The determinants of the nutritional status of children can be classified into three levels of causality: the immediate determinants at the most proximate level; dietary intake

Table 3: Underweight Prevalence by Gender and Residence (%)

Region	Gender		Residence	
	Male	Female	Urban	Rural
Sub-Saharan Africa	29	28	20	31
Eastern and Southern Africa	30	28	20	31
Western and Central Africa	29	27	20	32
Middle East and North Africa	18	16	13	22
South Asia	44	47	38	48
East Asia and Pacific	17	17	9	19
Latin America and Caribbean	8	7	5	13
CEE/CIS	5	5	4	6

Source: UNICEF, May 2006.

including energy, protein, fat, and micronutrients; and health status. The underlying determinants are food security, adequate care for mothers and children, and a proper health environment including access to health services. Finally, the underlying determinants of child nutrition (and poverty) are, in turn, influenced by the basic determinants which include the potential resources available to a country (Smith and Haddad, 2000a).

It seems obvious that a child will be underweight if he or she does not have enough food but the causes are much more complex and inter-related than that. Policy makers and researchers endlessly debate which of the many causes of malnutrition are most important and which areas of intervention will be most successful in reducing it. They range from factors as broad as political instability to those as specific as diarrhoeal disease. We have well-documented research to understand the causes such as significance of food availability in child malnutrition (Smith and Haddad, 2000c); importance of women's status and education (Quisumbing, *et al.*, 1995; Subbarao and Raney, 1995; Osmani, 1997); importance of national political factors such as democracy and national income and how different factors affect child malnutrition (Anand and Ravallion, 1993; Pritchett and Summers, 1996).

PROGRESS TOWARDS MILLENNIUM DEVELOPMENT GOAL

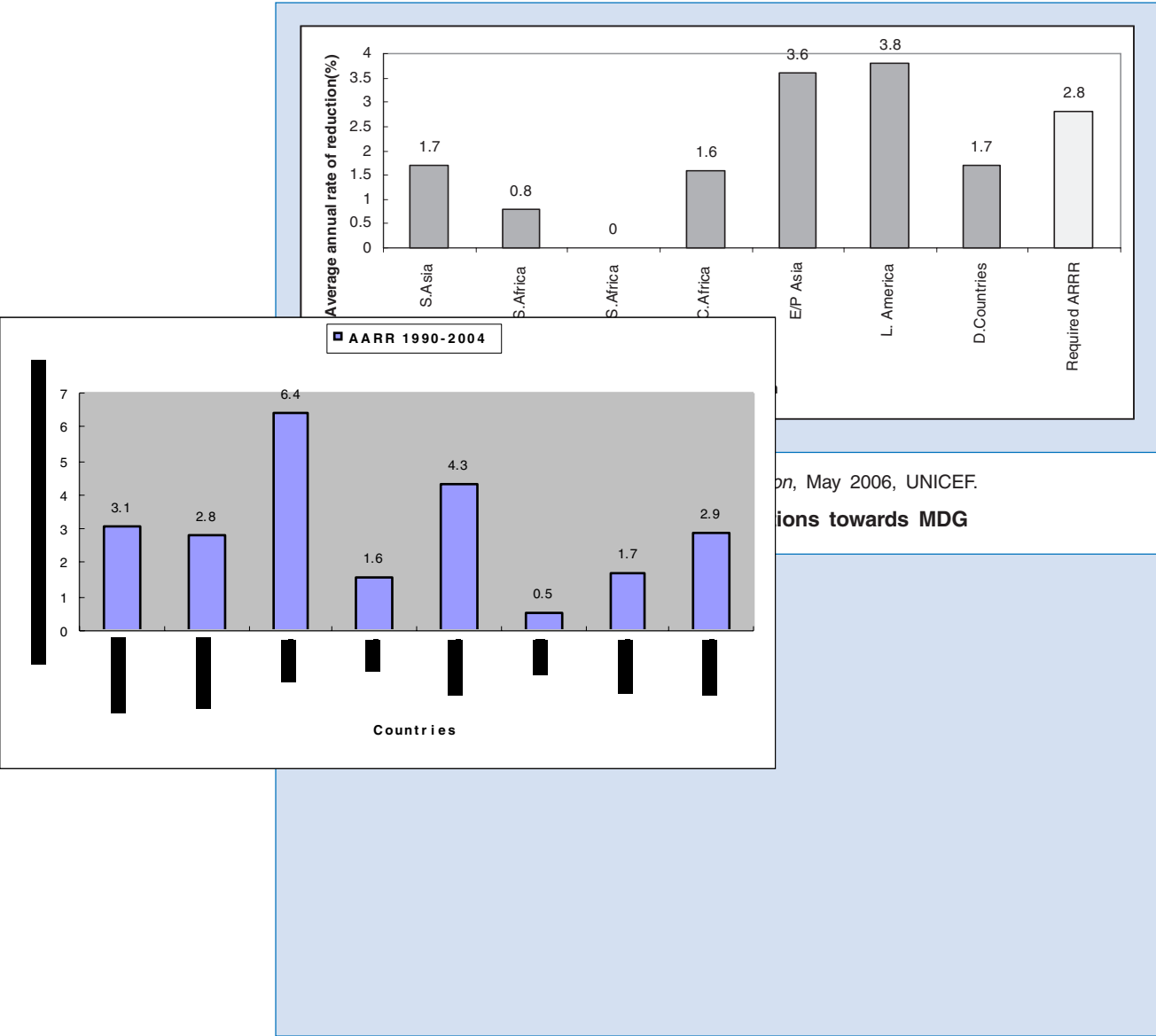
Millennium Development Goal (MDG) is the reduction of severe and moderate malnutrition among children under the age of five by half. Underweight prevalence

among children under five is the indicator used to measure the progress towards MDG. The progress is calculated by comparing the average annual rate of reduction (AARR) based on available trend data for the period 1990–2004 with the AARR needed to achieve a 50 per cent reduction over a 25-year period (1990–2015). The rate of change required to achieve the goal is a constant of 2.8 per cent per year for all countries. The AARR of the developing world stands at 1.7 per cent and unless their rate improves, 50 million children who could have benefited from adequate nutrition by 2015 will stand to lose. Latin America/Caribbean with an AARR of 3.8 per cent is on track to reach the target and

East Asia/Pacific with an AARR of 3.6 per cent has for all practical purposes already achieved it. The region’s progress is primarily driven by China where underweight prevalence declined from 19 per cent in 1990 to 8 per cent in 2002, (Patton, 2006). Both West/Central Africa (1.6 % AARR) and South Asia (1.7 % AARR) have made progress though not sufficient to reach the target (Figures 3 and 4).

In South Asia, the following countries are on track to reach MDG: Afghanistan (the rate of improvement, however, refers only to the period 1996-2004), Bangladesh (where prevalence is still high), Bhutan, Maldives, and Sri Lanka.

Figure 3: Tracking Progress towards MDG



Source: As cited in Table 3.

Implications of Not Reaching MDG

Meeting the MDG is, therefore, a matter of life or death, of development or regression, for millions of children. It will also be crucial to the progress of their countries and societies. The cost of hunger is extremely high. The present discounted value of the combined cost of protein energy malnutrition (PEM), low birth-weight (LBW), and micronutrient deficiencies would add up to at least 5 to 10 per cent of GDP in the developing world — roughly \$500 billion to 1 trillion. A thorough review of the available evidence indicates that switching one LBW infant to non-LBW status could yield almost US\$ 1,000 in benefits over a lifetime. With about 20 million LBW children born every year in the developing countries, the costs of doing nothing for one more year add up to around US\$20 billion (FAO, 2004). In other words, malnutrition is costing the poor countries up to 3 per cent of their yearly GDP. Improving nutrition could add 2 to 3 per cent a year to a poor nation's GDP as children would be less likely to drop out of school and would absorb more education and boost their future income potential. Moreover, with the economies of many developing countries growing at a rate of 2 to 3 per cent annually, improving nutrition could potentially double those rates (*World Bank Report*, 2006).

REDUCTION IN CHILD MALNUTRITION: A RETROSPECTIVE

South Asia, where the largest number of malnourished children resides, made substantial progress in reducing malnutrition by decreasing the share from well over 70 per cent to 46 per cent between 1970 and 2005. However, this cannot be rated as satisfactory performance. The most impressive developments took place in East Asia where the number of malnourished children decreased from 39.5 per cent to 15 per cent between 1970 and 2005. Latin America has also succeeded in reducing the number of malnourished children substantially and is on the right track (Table 4). The most problematic region, however, is Sub-Saharan Africa where the number of malnourished children increased by 12.9 million in the last 30 years (Rosegrant and Meijer, 2002).

FUTURE SCENARIO OF CHILD MALNUTRITION

Baseline Scenario

The number of malnourished children under the age of five in the developing world is projected to decline by

only 21 per cent — from 166.3 million in 1997 to 131.5 million in 2020. This means that, by 2020, nearly one-fourth of all the children younger than five years will still remain malnourished. The number of China's malnourished children will halve whereas South Asia will experience slower improvement and will remain home to nearly 50 per cent of all malnourished children in the developing world (Bobb 2006). Sub-Saharan Africa, with its combination of high population growth and lagging economic performance, will be caught in an increasingly perilous situation with the number of malnourished children projected to increase by 6 million compared to the 1997 level (Rosegrant, Meijer and Cline, 2002).

Pessimistic and Optimistic Scenarios

The pessimistic scenario reveals devastating results for child malnourishment. While global child malnutrition is projected to increase from 166 to 175 million, in Sub-Saharan Africa, the comparable projection is from 33 million in 1997 to 49 million in 2020. Latin America as well as West Asia/ North Africa increase their share and absolute numbers of malnourished children. Remarkably, Asia's figures declined compared to 1997, though by an almost negligible margin (Smith and Haddad, 2000b).

The optimistic scenario, on the other hand, projects significant improvements in child malnourishment with Latin America completely eliminating child malnutrition, West Asia/North Africa experiencing a decline to 1 million malnourished children, and China reducing the number of malnourished children to 3 million in 2020. Child malnutrition in South Asia is estimated to decrease by a projected 13 million in 2020 whereas in Sub-Saharan Africa, it would decline by a projected 8 million children compared with the baseline. The progress in the optimistic scenario is significant; yet, 94 million children would be malnourished by 2020, (Rosegrant, Meijer and Cline,

Table 4: Trends in Prevalence of Malnourished Children

Region (% Underweight)	1970	1995	2005
South Asia	72.3	49.3	46
Sub-Saharan Africa	35.0	31.1	28
East Asia	39.5	22.9	15
Near East and North Africa	20.7	14.6	17
Latin America and the Caribbean	21.0	9.5	7
All developing countries	46.5	31.0	27

Sources: 1. Smith and Haddad (2000d).

2. For 2005 figures, UNICEF, *The State of World Children 2006*.

2002). (Table 5).

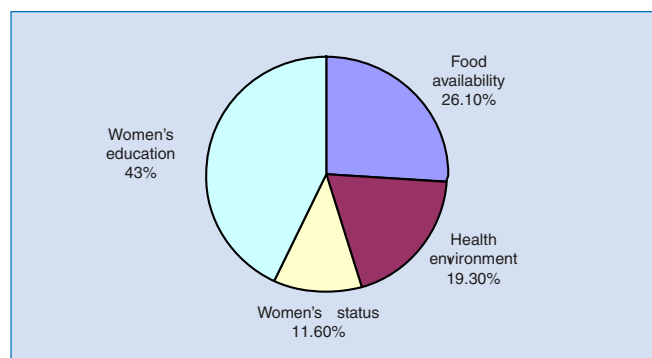
Under all the scenarios, South Asia will continue to be the region with the highest prevalence and number of malnourished although both will fall rapidly. There will be very little progress in reducing the prevalence of child malnutrition in Sub-Saharan Africa. The prevalence and the number of malnourished children are expected to decline the fastest in East Asia. Malnutrition will fall to very low levels in West Asia and North Africa and will almost be eliminated in Latin America and the Caribbean (Smith, and Haddad, 2000a).

Priorities by Region for Future Child Malnutrition Reduction

The underlying causes of under-nutrition vary across regions (UNICEF, 2006). Smith and Haddad (2000a) identify and assess the contribution of each key determinant to reductions in child malnutrition over the past quarter century. The most important finding is that improvements in women's education have contributed by far the most accounting for 43 per cent of the reduction in child malnutrition between 1970 and 1995 while improvements in per capita food availability contributed about 26 per cent. Smith and Haddad (2000a) also evaluate the potential of these factors to further reduce malnutrition during the next two decades to 2020 and lay out the key policy priorities for each major developing region thus shedding light on which areas of intervention will be most successful in overcoming child malnutrition in the developing countries (Figure 5).

In Sub-Saharan Africa and South Asia, improvements in per capita food availability and women's education offer the best hope for future reduction in child malnutrition. In South Asia, promotion of improved status for women also needs to be prioritized. In East Asia, West Asia, North Africa, and Latin America and the Caribbean, women's education should be given top priority followed by women's status relative to men's.

Figure 5: Estimated Contribution of Major Determinants to Reductions in Child Malnutrition — 1970-95



Source: Smith and Haddad (2000d).

Additional secondary priorities are food availability for East Asia and health and environment improvements for Latin America and the Caribbean (Table 6). 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 (Smith and Haddad, 2000 a).

CONCLUSIONS AND POLICY IMPLICATIONS

The lack of progress to combat under-nutrition is affecting the children and the nations. Under-nutrition is one of the major causes in more than half of all child deaths worldwide. Given the magnitude of the problem and its consequences for economic development, there is a need for immediate and large scale action. Significant reduction in child malnutrition is possible but will require renewed efforts from national governments, international donors, research institutions, and civil society.

In South Asia, other forms of under-nutrition have persisted—44 per cent of under-fives are stunted and 15 per cent are wasted. In many countries, problems such as a chronically poor diet and lack of access to safe sanitation are compounded by gender discrimination. South Asia is the only region in which girls are more

Table 5: Number and Percentage of Malnourished Children: 1997 and 2020 Scenarios

Region	1997	Baseline	Optimistic	Pessimistic
South Asia	85.0 (51)	63.3 (41)	50.4 (35)	77.8 (47)
Sub-Saharan Africa	32.7 (33)	39.3 (29)	30.6 (24)	49.1 (35)
Southeast Asia	19.2 (34)	14.0 (27)	10.0 (21)	18.4 (33)
China	18.4 (17)	8.5 (9)	2.6 (3)	14.6 (16)
West Asia/North Africa	5.9 (13)	4.0 (9)	1.1 (2)	7.4 (15)
Latin America	5.1 (9)	2.5 (5)	0.0 (0)	7.3 (11)
World	166.3 (31)	131.5 (25)	94.6 (19)	174.7 (31)

Source: IMPACT projections, IFPRI, June 2001.

Note: Values given in absolute numbers are in million and percentage of total children under five years are in brackets.

Table 6: Priorities for Future Child Malnutrition Reduction

Region	Top Priorities
South Asia	1. Food availability 1. Women's education 2. Women's relative status
Sub-Saharan Africa	1. Food availability 1. Women's education
East Asia	1. Women's education 2. Food availability 2. Women's relative status
West Asia/ North Africa	1. Women's education 2..Women's relative status
Latin America and the Caribbean	1. Women's education 2. Womens relative status 2. Health environment

Source: Smith and Haddad (2000c).

likely to be underweight than boys. In India, one out of every three adult women is underweight (*International Institute for Population Science*, 2000). and, therefore, at risk of delivering low birth-weight babies.

The optimistic scenario shows that better policy and more rapid economic and agricultural growth can lead to substantial food security improvements but the pessimistic scenario indicates that significantly worse outcomes are also possible with relatively small declines in policy and investment efforts relative to the baseline. Despite slowly declining real food prices and rapidly expanding world trade, child malnutrition will improve only slowly in many regions and deteriorate in others.

The underlying causes of under-nutrition vary across regions. In many Asian countries, poverty, low status of women, poor care during pregnancy, high rates of low birth-weight, high population densities, unfavourable childcare practices, and poor access to healthcare are the major contributory factors. In Sub-Saharan Africa, extreme poverty, inadequate care for children, low levels of education, and poor access to health services are among the major factors causing under-nutrition. Conflicts and natural disasters in many countries have further exacerbated the situation. The increase in the number of undernourished children in Africa also reflects a rapid rate of population growth. In many countries in Africa, the devastating effects of HIV / AIDS, particularly in the second half of the decade, have reversed some of the gains made in the early years of the decade.

Strategies for Achieving MDG

Though global progress towards MDG has fallen below aspirations since 2000 in some regions and countries,

there is a broad consensus that it can still be achieved — in full and on time — provided the international community acts to deliver the commitments and resources it has promised, demonstrates the necessary political will and takes appropriate action. The world must alter its priorities so that the problem of child malnutrition is placed at the centre stage (*World Bank Report*, 2006). Individuals and communities, governments and the private sector, humanitarian agencies and health professionals, civil society and the media must all work together to ensure that children's nutrition rights are met and that care-givers and families are empowered to meet them (Rosegrant and Meijer, 2002; UNICEF, 2006).

Thus, reducing under-nutrition is attainable if the lessons of the past 15 years are applied. The UNICEF advocates raising the nutrition issues on the government agendas, using success stories like that of China's as models, and focusing nutrition efforts on mothers-to-be and children under two years. The governments emphasize economic growth and some social services while laying less stress on areas that are known to improve child nutrition levels such as preventive healthcare and women's education. (*World Bank Report*, 2006). The report proposes simple solutions for improving children's diets such as Vitamin A supplements and fortified foods. It also calls for child nutrition to be made a central component of the national policies and the budgets and promotion of exclusive breastfeeding. Nutrition is an investment issue. It is something that can drive economic growth (UNICEF, 2006).

The developing countries can achieve significant reduction in childhood malnutrition within the boundaries of plausible long-term economic performance. A concerted effort to eliminate childhood malnutrition would require policy reforms and more public investment producing dramatic long-term gains in income growth, agricultural productivity, and social indicators. Better policies and increased investments can lead to substantial food security improvements. But, significantly worse outcomes are also possible if key policies are not reformed or adequate investments are not made.

Any comprehensive strategy for resolving the problem of child malnutrition must include actions to address both its underlying and basic causes. The increased national income must actually be spent on improvements in the underlying determinants which would require knowledge of their roles in reducing malnutrition and political commitments to do so. Though

it is intimately linked with poor health and environmental factors, policy makers, politicians, and economists often fail to recognize these interlinkages. The governments and the agencies need to look at innovative ways of tackling the problem such as more community-based education on pre-natal care (*World Bank Report*, 2006).

The United Nations Millennium Project (2005) suggests a two-pronged strategy. First, a massive effort must be made to boost the access to essential services for those children and families who are currently not in a position to access them. This would provide a vital kick-start to human development and poverty reduction. Second, the immediate interventions have to be accompanied with long-term initiatives that are rooted in a human rights-based approach to development. This will help ensure that the immediate interventions are as effective as possible.

Priorities for the Future

Significant progress can be made toward reducing child malnutrition through accelerated action in sectors that have not been the traditional focus of nutrition. Efforts to improve women's education, raise food supplies (or reduce population growth or both), bolster women's status, and create healthy environments should be an integral part of strategies for reducing child malnutrition in the future (Smith and Haddad, 2000a). Gender disparities in health, issues of schooling, and nutritional outcomes of children tend to narrow with mother's education as mothers tend to invest more in their female children. There is evidence of strong association between female adult schooling and virtually every MDG indicator. Even additional year of mother's schooling is associated with a reduction of 4 per cent infant mortality and 3 per cent in child underweight rate and increases of 1-2 per cent in the net primary enrollment and primary completion rates. These initiatives should be seen as complementary to more direct nutrition interventions such as feeding programmes and nutrition education (Smith and Haddad, 2000c).

Suggested Multi-pronged Action Plan

- As indicated earlier, there is a need for a stronger focus on reaching those children currently excluded from essential services and denied protection and

participation. Experience has shown that top-down, supply-driven approaches to development, though often effective at increasing access to essential services and goods in the short-to medium-term are not sustainable in the longer term. If national capacities are not built up and processes are not driven by national governments and local communities, even those interventions that are initially successful risk failure when international assistance diminishes or political priorities change.

- Understanding the plight of excluded and invisible children and the factors behind their marginalization, efforts to focus initiatives on these children must form an integral part of the national strategy on child rights and development. The root causes of exclusion and the factors making children invisible must be directly addressed. Even well-funded, well-targeted initiatives for disadvantaged families and children may fail if the overall conditions that foster poverty, armed conflict, weak governance, the uncontained spread of HIV/AIDS, inequalities, and discrimination are not addressed.
- There is a growing worldwide interest in child-focused budgets. Reaching excluded and invisible children will require greater and more targeted financing for services to support them. Detailed and expert analysis of mainstream budget measures would be required in order to understand their specific impact on children and suggest methods for targeting the budget more accurately and effectively. Secondly, capacity building is warranted since it empowers marginalized children, families, and communities. Communities play a significant role in identifying their most vulnerable children — and, where possible, in distributing the goods and services to them. The involvement of civil society will help in broadening the scope of interventions. Local civil society organizations can perform many tasks to assist the excluded and invisible children. The participation of religious leaders and organizations is vital for addressing sensitive issues related to children. Encouraging children to participate will also help to empower them. Special programme interventions are no substitute for addressing the root causes of marginalization and discrimination or for creating a strong protective environment. ✓