Hunger, Malnutrition and Millennium Development Goals: What Can Be Done?

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Abstract

Malnutrition causes a great deal of human suffering, and it is a violation of a child's human rights. Even today 46 per cent of all children in the country continue to be underweight and a very high proportion of women suffer from anaemia, India is one of the countries with the highest proportion of malnourished children in the world, along with Bangladesh, Ethiopia, and Nepal. In spite of its remarkable economic growth in the past decade, India's progress in reducing child malnutrition has been excessively slow. The care of young children cannot be left to the family alone – it is also a social responsibility. United Nations agreed to work toward eight Millennium Development Goals (MDGs)—specific, measurable targets to be met by 2015 that will make definite improvements in the lives of the world's poor and hungry people. Without appropriate policy interventions, the hope of achieving the Millennium Development Goals (MDGs) is bleak. This is because adequate nutrition is a fundamental requirement for children healthy living and development. The present study carried out with three objectives in view; to examine the current trends and determinants of hunger and malnutrition among children in India, to examine the progress regarding some health and nutrition related MDGs and to suggest the cross-cutting strategic approaches to reducing hunger and malnutrition .The main findings of this study, under-five Children are nutritionally the most vulnerable and series of interrelated factors of hunger and malnutrition from rooted in poverty, including a lack of access to food, health care, safe water, sanitation services, and appropriate child feeding and caring practices. This paper argues for cross-cutting strategies for their nutritional needs, even though there is a close relationship between health, growth, nutrition and development in this age group and these dimensions need to be considered holistically.

Key words: Malnutrition, Food intake, Hunger index

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1. Introduction

Hunger and malnutrition remain among the most devastating problems currently facing the majority of the world's poor (WHO, 2000). Malnutrition causes a great deal of human suffering, and it is a violation of a child's human rights. Conventionally, the nutritional status of under-five children is one of the acceptable indicators of households' well-being (Thomas et al, 1990). However, child malnutrition has worsened significantly over the past few decades in many developing countries (ACC/SCN, 2000). Although hunger is most directly manifested in inadequate food intake, over time inadequate food intake and lack of a proper diet, especially in combination with low birth weights and high rates of infections, can result in stunted and underweight children. The most extreme manifestation of continued hunger and malnutrition is mortality. Even today 46 percent of all children in India continue to be underweight and a very high proportion of women suffer from anaemia, India is one of the countries with the highest proportion of malnourished children in the world, along with Bangladesh, Ethiopia, and Nepal. In spite of its remarkable economic growth in the past decade, India's progress in reducing child malnutrition has been excessively slow. The care of young children cannot be left to the family alone – it is also a social responsibility. Social intervention is required, both in the form of enabling parents to take better care of their children at home, and in the form of direct provision of health, nutrition, pre-school education and related services. In 2000, the member states of the United Nations agreed to work toward eight Millennium Development Goals (MDGs)—specific, measurable targets to be met by 2015 that will make definite improvements in the lives of the world's poor and hungry people. Without appropriate policy interventions, the hope of achieving the Millennium Development

Goals (MDGs) is bleak. This is because adequate nutrition is a fundamental requirement for children healthy living and development (WHO, 2000).

The need for accomplishing millennium development goals is immense. Today, 1.1 billion people live on less than one US dollar per day (the internationally recognized poverty threshold)- 430 million in South Asia, 325 million in Sub-Saharan Africa, 260 million in East Asia and the Pacific, and 55 million in Latin America. Too many children live lives characterized by hunger and illness, and all too often give way to early death. The present paper focus on the specific issues related to the hunger and malnutrition among Indian children. The study carried out with three objectives in view. The first intention is to have an examination of current trends and causes of hunger and malnutrition among children in India. Secondly, to examine the progress regarding some health and nutrition related MDGs and lastly to suggest the cross-cutting strategic approaches to reducing hunger and malnutrition.

2. Data Sources

Data from hunger and malnourishment in India are available from different sources. They are National Nutrition Monitoring Bureau (NNMB) reports, National Centre for Health Statistics (NCHS), various issues of National Family Health Survey (NFHS), Government of India publications, District level on Household Survey on Reproductive and Child Health survey, WHO, UNDP, World Bank and UNICEF publications, National Sample Survey Organization (NSSO) reports, various articles and other publications are used for this investigation. Three anthropometric measurements are used for measuring the nutritional status of children. These are height-for-age, weight-for-height and weight-for-age. Height-for age is taken as indicative of long term or

chronic undernourishment, weight-for-height gives body mass in relation to body length and indicates acute but short-term undernourishment due to failure to receive adequate nourishment immediately before measurement. Weight-for-age reflects both the long-term and short-term effects of nourishment and is considered indicative of both chronic and acute undernourishment.

3. Discussion : How serious is Hunger and Malnutrition?

Hunger and malnutrition remains the world's most serious health problem and the single biggest contributor to child mortality. Over 150 million children under-five in the developing world are underweight – a factor contributing to over half of all child deaths worldwide. Three countries in this region drive these high levels - India, Bangladesh and Pakistan - which alone account for half the world's total underweight children. Note that these three countries together constitute just 29% of the developing world's under-five population. Globally, the proportion of children under age five who are underweight has fallen only slightly since 1990 - proof that the world is failing to address children's issues (UNICEF 2006, Human Development Report, 2006). Malnourished children have lowered resistance to infection. Consequently, they are more likely to die from common childhood ailments such as diarrhoeal diseases and respiratory infections. For those who survive, frequent illness saps their nutritional status, locking them into a vicious cycle of recurring illness and faltering growth.

In the developing regions, the proportion of underweight children dropped from 33 per cent in 1990 to 28 per cent in 2003, with significant advances in some very poor countries. Still, progress is too slow to meet the MDG target or to restore normal lives to the millions of children who are currently undernourished. The largest advances were

achieved in Eastern Asia, where the proportion of underweight children was nearly cut in half. This accomplishment was mainly due to advances made by China. Substantial improvements were also made in Latin America and the Caribbean – a region with already low levels of underweight prevalence – where rates declined by more than a quarter (from 11 per cent to 7 per cent). South-Eastern Asia also experienced substantial improvements, with rates declining from 38 per cent to 29 percent.

South Asia, where the largest number of malnourished children resides, made substantial progress in reducing malnutrition by decreasing the share from well over 70 percent to 46 percent between 1970 and 2005. However this cannot be rates as satisfactory performance (see table.1). The most impressive developments took place in East Asia where the number of malnourished children decreased from 39.5 percent to 15 percent between 1970 and 2005 (Rosegrant and Meijer 2002). 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 vary low levels in West Asia and North Africa and will almost be eliminated in Latin America and the Caribbean (Smith and Haddad 2000).

Table.1: Trends in Malnourished Children

Region (% underweight)	1970	1995	2005
South Asia	72.3	49.3	46.0
Sub-Saharan Africa	35.0	31.1	28.0
East Asia	39.5	22.9	15.0
Near East and North Africa	20.7	14.6	17.0
Latin America and the Caribbean	21.0	9.5	7.0
All developing countries	46.5	31.0	27

Source: UNICEF, The State of World Children 2006.

4. Current trends of Hunger and Malnourished Indian children

With over 200 million people who are food insecure, India is home to the largest number of hungry people in the world. India has consistently ranked poorly on the Global Hunger Index. The Global Hunger Index 2008 (Von Grebmer et al. 2008) reveals India's continued lackluster performance at eradicating hunger; India ranks 66th out of the 88 developing countries. The India State Hunger Index (ISHI-2008) is computed by averaging the three underlying components of the hunger index – viz., the proportion of underweight children, the under-five mortality rate (expressed as a percentage of live births), and the prevalence of calorie undernutrition in the population. After India became independent in 1947, several steps were taken for the improvement of the health situation and well-being of its citizens. The Supreme Court of India in 2006 passed an order, which requires the budget allocation of the central and stat government to increase funding for supplementary nutrition for severely malnourished children, pregnant women, nursing mothers and adolescent girls. Further more, given the large share of underweight children and the high proportion of the population living minimum consumption level, the Supreme Court of India reiterated the low prospect of India

reaching the MDG target on hunger. Resources required for the implementation of hunger and malnutrition intervention programmes is considerably higher than the current budget allocation of the government.

But still hunger and malnutrition is a major problem in India, where 46 % of Indian children under-five are malnourished and 30% of new born are significantly underweight. India has made some significant commitments towards ensuring the basic rights of children. There has been progress in overall indicators; infant mortality rates are down, child survival is up, literacy rates have improved and school dropout rates have fallen. Over the last decade, countries across the world have been changing their existing economic models in favour of one driven by the free market, incorporating processes of liberalization, privatization and globalization. The direct impact of free trade on children may not leap to the eye, but we do know that globalized India is witnessing worsening levels of basic health, nutrition and shelter (Radhakrishna and Ravi 2004, Ranjan Ray 2005). According to a UNICEF report on the state of India's newborns, the health challenges faced by a newborn child in India are bigger than those experienced by any other country. Hunger and malnutrition one in every three malnourished children in the world lives in India. The major cause is lack of public health services in remote and interior regions of the country, poor access to subsidized healthcare facilities, declining State expenditure on public health, and lack of awareness about preventive child healthcare.

This is a serious problem through-out the country but with large disparities between states and groups. There is no single state in India falls in the 'low hunger' or 'moderate hunger' categories defined by the GHI 2008. Instead, most states fall in the

'alarming' category, with one state – Madhya Pradesh – falling in the 'extremely alarming' category. Four states – Punjab, Kerala, Andhra Pradesh and Assam – fall in the 'serious' category. The India State Hunger Index 2008 findings highlight the continued overall severity of the hunger situation in India, while revealing the variability in hunger across states within India. Similarly scheduled castes and tribes make up a relatively large portion of the population in extremely deprived and impoverished states of India, including Uttar Pradesh, Bihar, Orissa, Madhya Pradesh, Rajasthan, Chhattisgarh and Jharkhand (Purnima et al 2008).

5. Progress regarding some Health and Nutrition related MDGs

The reduction of proportion of people living below poverty line has been particularly sharp in the 1990s, when there has been a 10 percentage points decline between 1993-94 and 1999-2000. These trends indicate that India is on track with respect to the target of halving the proportion of people below poverty line. The infant mortality rate has also come down from 80 per thousand live births in 1990 to 57 per thousand in 2005 and the proportion of 1 year old children immunized against measles has increased from 42.2 percent in 1992-93 to 59 percent in 2002-03. The principal causes of infant mortality in India are prematurity, diarrhoeal diseases acute respiratory infections, vaccine preventable, Inadequate maternal and newborn care, malnutrition contributes to over 50 percent of child deaths, low birth weight and birth injury. However, the rural-urban disparity is still a prominent determinant of receiving basic health services. Schedule castes and tribes make up a relatively large portion of the population in extremely deprived and impoverished states of India, including Uttar Pradesh, Bihar, Orissa, Madhya Pradesh, Rajasthan, Chhattisgarh and Jharkhand. The state of Orissa has

the highest IMR of 96 deaths per thousand live births, whereas the state of Kerala has the lowest IMR of 14 deaths per thousand live births. Nevertheless, one-third of India's total population, approximately 340 million people, live in the states that have a high IMR of at least 70 deaths per thousand live births, particularly in Orissa, Madhya Pradesh, Uttar Pradesh, Rajasthan and Assam(Gangadharan and Vipin chandran 2008).

India must reduce maternal mortality rate from 437 deaths per100, 000 live births in 1990 to 109 by 2015. The fundamental risk of maternal deaths lies in the women's nutrition and health status. In rural India, particularly among Muslim communities, many girls aged 13-15 years are already married. As a result, they are highly associated with early fertility, which affects their health condition. This is the particular situation in the state of Uttar Pradesh, where young girls tend to have high-risk pregnancies due to their complicated health conditions, such as anaemia and other health problems related to chronic malnutrition, which threaten the natural course of birth delivery. Adequate housing, water and sanitation are major issues in urban and rural development and empowerment of the poor. These issues are closely related to the quality of life, affecting multiple dimensions including psychological, sociological, cultural and economic. In India, the lower-caste population is prohibited from using the local water resources, such as village wells.

Table.2 :Progress towards achieving MDGs in India

Indicators	1990	2000	2005	MDG target (2015)
Poverty and Hunger				
Population below minimum level of dietary energy consumption (%)	39	26	N.A	19
Under-weight (<2 S.D) children (%)	55	47	46	27
Child Mortality				
Infant mortality rate (per 1000 live births)	80	68	57	27
Under-five mortality rate (per 1000 live births)	125	98	85	41
One-year olds immunized against measles (%)	42	51	59	> 90
Maternal Health				
Maternal mortality rate(per 100,000 live births)	437	407	301	109
Safe deliveries (%)	34	42	54	84
Water and Sanitation				
Population with access to improved water source (%)	62	85	N.A	81
Population with access to improved sanitation (%)	37	52	N.A	68

Source: Millennium Development Goals: India Country report 2005.

The National Rural Health Mission (NRHM) 2005-2012 was initiated by the Government of India under the National Health Policy 2002 to improve the standard of health for the general population. This includes access to water, sanitation, immunization and nutrition. NRHM incorporates measures for achieving the health-related MDGs, such as reduction of child and maternal mortality as well as prevention and control of communicable and non-communicable diseases. The reproductive and child health (RCH) programme was launched in 2005 as a part of NRHM and is the principal vehicle for reducing infant mortality, maternal mortality and total fertility to meet the demands of the targeted population. In addition, the Integrated Child Development Services (ICDS) Programme, under the National Policy on Children, has attained some success over the past 30 years. However, it has not achieved significant reduction of child malnutrition in

India because the programme has focused on food supplementation rather than on nutrition and health education and has lacked targeted interventions. District level household survey (DLHS-2) has for the first time provided district level estimates on the magnitude of 'hidden hunger' or micro nutrition deficiencies and malnutrition. Severe malnutrition has decreased significantly in India and severe nutritional deficiencies have considerably declined.

Broader nutrition-related health problems remain insufficiently addressed. HIV/AIDS, tuberculosis, malaria, micronutrient deficiencies, and chronic diseases are all compromising food and nutrition security in India. Inadequate dietary intake and disease leads to malnutrition, which is often called 'hidden hunger'. Improvements in female education and women's overall social status relative to that of men help to reduce child malnutrition significantly.

6. Causes of hunger and malnutrition among children

Freedom from hunger and malnutrition is a basic human right and fundamental prerequisite for human and national development. Better nutrition means stronger immune systems, less illness and better health. More than half of the children in India are unable to grow to their full physical and metal potential owing to malnutrition. India has progressed dramatically in various fields but the levels of malnutrition in the country are not showing desired reduction rates. As a result the magnitude of the problem of hunger and malnutrition and poor health indicators like infant morality rate, under-five mortality rate and maternal mortality rate in India are higher than some of the developing countries of the South East Asia. Hunger and malnutrition among children, therefore, continues to be a cause for concern. Most common causes of hunger and malnutrition among Indian

children include faulty infant feeding practices, impaired utilization of nutrients due to infections, inadequate food and health security, poor environmental conditions, and lack of child care practices (see table.3).

Table 3 : Causes of Hunger and Malnutrition among Indian children
1. inadequate food intake • Improper infant feeding practices • Lack of exclusive breastfeeding • Poor caloric and nutritional content of food • Inequitable intra-familial distribution
2. illness • Poor environmental and housing conditions • Lack of hygiene and sanitation facilities • Inadequate access and utilization of health care • Poor food hygiene
3. Deleterious caring practices • Absence of knowledge regarding food requirements • Traditional beliefs • Paternal illiteracy • Poverty
4. Service issues • Lack of reach and co-ordination of public sector services • Inadequate training and supervision of service providers in nutritional counseling • Compromised efficiency of services and programmes(ICDS,PDS and others)

7. What does India stand?

Every year, UNICEF publishes the " State of the world's children', the most comprehensive report on the world's youngest citizens which examines the global realities of child survival and the prospects for meeting the health-related millennium development goals(MDGs) – the targets set by the world community for eradicating poverty and hunger, reducing child and maternal mortality, combating disease, ensuring environmental sustainability and providing access to affordable medicines in developing countries. UNICEF report on the state of the world's children under the title "Childhood Under Threat" , speaking about India, states that millions of Indian children are equally

deprived of the rights to survival, health, nutrition, education and safe drinking water. It is reported that 63 percent of them go to bed hungry and 53 percent suffer from chronic malnutrition. A girl child is the worst victim as she is often neglected and is discriminated against because of the preference for a boy child.

Major factors responsible for hunger and malnutrition among Indian children are low dietary intake because of poverty and low purchasing power, high prevalence of infection because of poor access to safe drinking water, sanitation and health care, poor access to health services, low utilization of available facilities due to low literacy and lack of awareness. Recognizing the importance of nutrition for health and human development, the country adopted multi-sectoral, multi-pronged strategy to combat hunger and malnutrition of children.

In an effort to bridge the gap between energy intake and requirement in children, food supplementation programmes were initiated; in the recent years, a range of strategies has been devised to address these issues. There are a host of such interventions, which cover a full-range of life-cycle vulnerabilities affecting the poor. The targeted public distribution system (TPDS) provides heavily subsidized cereals to the entire BPL families; the Antyodya Anna Yojana (AAY) targets the absolute destitute; the integrated child development scheme (ICDS) covers young children and mothers and the mid-day meal scheme (MMS) supports the school-going children. National Nutrition Policy 1993 and National Plan of Action for Nutrition 1995 have placed a special emphasis *interalia* on improving the nutritional status of children. The National Nutrition Mission has been set up under the chairmanship of the Prime Minister in 2003, the basic objective of addressing the problem of malnutrition in a holistic manner. All these

interventions did result in some improvement in hunger and nutritional status of children but the pace of improvement is slow. The interventions and programmes recommended for the 11th plan period should include improving the reach and quality of existing programmes and formulating new schemes to address hitherto unaddressed areas and issues based on National Policy for Children 1974. National Charter for Children 2004, which makes special mention of the importance of protecting the rights and dignity of girl children; National Common Minimum Programme; and the National Plan of Action for Children 2005.

8. Strategic approaches to combat hunger and malnutrition

The broad strategies that will be adopted to reduce malnutrition in India are as follows: Adopting Life- cycle and Rights based Approaches to nutrition interventions. The Supreme Court verdict also directs that the Nutritional requirements (calorie wise, protein wise and micronutrient wise) of children and pregnant mothers should be observed in all the feeding programmes carried out by Government and Public sector undertakings. The important cross-cutting strategies to combat hunger and malnutrition among the Indian children are listed below.

i) Strengthening food intervention approach

It is essential to reform the targeted public distribution system (TPDS) and simultaneously release some resources needed by the Integrated child development services (ICDS) and Mid-day meal scheme (MMS). In essence, all the current food-based interventions play a complementary role in justifying malnutrition over the life cycle of an individual.

ii) Social Marketing and Media based approach

Certain specific food supplements such as food mixes and multiple micronutrient premixes, and fortified food items such as iodized salt are essential for ensuring the nutrition security of individuals, families and the community. In order to support the family counselling and the peer group activities, the mass media will be utilized to promote the same messages and practices to provide an overall positive environment for behavioural change.

iii) Family based approach

Malnutrition occurs largely due to inappropriate family practices related to diet, health care and hygiene/sanitation. The primary focus would be to strengthen family practices related to Infant and young child feeding (exclusive breastfeeding, appropriate complementary feeding), sick childcare with appropriate medical treatment and nutrition management, prevention of illnesses through immunization and hygiene/sanitation, appropriate cooking and dietary practices in the family, appropriate use of nutritional supplements and micronutrient supplements and diarrhea management through ORT to be promoted within the family.

iv) Peer Group and local Community based approach

In order to support the family based counselling and behaviour, change communication, peer group activities will be taken up at the neighbourhood and community level to enable a positive environment to promote the appropriate family practices as acceptable social norms. All existing peer groups will be identified, such as mothers' groups; Neighbourhood Groups (NHGs), Small help Groups (SHGs), adolescent groups, youth groups, religious leaders and other community influencers. Peer

group education activities will be conducted for these groups periodically on a continuing basis so that peer pressure is built up for sustaining appropriate family and community practices.

9. Conclusion

Under five years children is nutritionally the most vulnerable and series of interrelated factors of hunger and malnutrition from rooted in poverty, including a lack of access to food, health care, safe water, sanitation services, and appropriate child feeding and caring practices. These interrelated factors are in turn exacerbated by poor households' and communities' lack of access to human, financial, social, natural, and physical capital, combined with social discrimination, lack of education, and gender inequality. Targeted programmes for vulnerable and marginalized groups are required with increased public investment, especially in the education and health sectors. Furthermore, domestic mobilization of resources and funding through pro-poor policies and public private partnerships are necessary to accelerate progress towards achieving MDGs. T The most serious obstacles to improving child nutrition do not relate directly to food availability, even at the household level. Distribution of food within the household, child-rearing practices, the nutritional quality of the food, clean water and reducing infections all require a much more comprehensive and integrated approach and implement all 'nutrition safety net schemes' in an integrated manner on a life-cycle basis.

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