

Framing Child Nutrition in Developing Countries: A Human Security Perspective

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Child deaths due to the insidious malnutrition epidemic are a seminal challenge to human security in low and middle-income countries. In addition to hunger interfering with human potential, poor nutritional status leads to long-term health inequalities and disabling conditions. Reducing child mortality is one of the Millennium Developmental Goals, and one of the primordial processes to achieve it is through improving child nutrition. However, the nutrition intervention programs as a part of the broader development framework have scarcely percolated in the deprived communities. With changing agendas in global health it is time that child nutrition is embedded in the inclusive and evolving framework of human security. This will also have a futuristic bearing on development of the human security metrics. National initiatives have been limited to vertically systematized nutrition alleviation programs. The policy direction developed here suggests that child nutrition policies be integrated into comprehensive approaches like that of human security. Such integration shall provide an opportunity to research the issues in policy congruence when implementing newer frameworks.

INTRODUCTION

Five decades subsequent to the Green Revolution and the developments in food research, an estimated one in five children are undernourished in the developing world.¹ Concurrently, international agencies like Food and Agricultural Organization (FAO) and UNICEF recognized that nutrition activities in developing countries, mainly nutrition education and supplementary feeding programs had not brought the expected improvements since 1960s.² In recent years, the concept of human security has become a dynamic and practical policy framework for addressing widespread and cross-cutting threats facing both governments and populations.³ Human security is a multi-lateral approach, which fundamentally includes access to food and adequate nutrition.

Poor nutrition is one of the most pervasive, yet preventable, underlying causes of child mortality. Children with inadequate nutrition are

extremely susceptible to infection and disease. Furthermore, they are largely dependent upon their caregivers, establishing a power hierarchy. The adult nutritional decision influence child morbidity, long-term human security risks, and mortality, which are a threat to ‘right to life’. Undernourishment during infancy perpetuates the cycle of poverty; it leads to poor cognitive and immunity development, which are impediments to education and employment in future. In addition to interfering with attaining employment, undernourishment increases inflates an individual’s healthcare costs that can add to impoverishment. The disability adjusted life years (DALYs) due to poor nourishment causes a huge paralysis to the gross domestic product (GDP) of most developing countries.⁴

The life-cycle dynamics of causes and consequences of malnutrition, and more specifically under-nutrition demand a holistic and all inclusive approach to remediate the underlying inequity.⁵ While preventing fetal and early childhood, malnutrition deserves attention. Intervening at critical points in the life cycle will accelerate and consolidate positive changes. Since under-nutrition sets in the first two years of life Much of this early damage is irreversible and any interventions after this age will be too late, too little, and too expensive. The cost of treating under-nutrition is 27 times more than the investment required for its prevention.⁶ Thus, investment in programs intervening in the first 1000-days (also known as the “window of opportunity” from pregnancy through age two years) is being encouraged. ⁶

Despite the economic and social loss associated with under-nutrition, government and institutionalized response to malnutrition is limited in scope. There is an urgent need for redefining how communities in the low and middle-income countries (LMICs) address the issues of child nutrition through a comprehensive development approach. Most of the LMICs have vertically driven nutritional programs for children. To improve child nutrition status, more resources should be engaged at a local level while concurrently supported by food-health systems expertise, innovation, infrastructure and governance at a global level.⁷ The evidences build upon to underscore the seminal change is needed in the ways in which child nutrition is currently addressed. The purview and intent of this research is to unfold the opportunities to link child nutrition with broader human security initiatives. This perspective attempts to transcend institutional constraints and regional politics that often interfere with distributive programs. As currently structured, nutrition programs will continue to result in limited public health outcomes. Embedding the programs into the emerging holistic framework of human security expands the scope for

learning in policy coherence and governance synergies when such concept is implemented.

HUMAN SECURITY- AS AN INCLUSIVE CONCEPT

The Commission on Human Security (CHS) defines human security as the protection of "*the vital core of all human lives in ways that enhance human freedoms and fulfillment*". Human security covers a broad scope, including the protection of fundamental freedoms and protecting people from critical and pervasive threats and situations. It entails using processes to encourage individual agency by building upon peoples' strengths and aspirations. It develops socio-political, cultural and environmental systems that amalgamate to provide people their basics for survival, livelihood and dignity.⁸

As a people-centered concept, human security places the individual at the 'center of analysis.' Consequently, it considers a broad range of conditions that threaten survival, livelihood and dignity, and identifies the threshold below which human life is intolerably threatened. It is important to underscore that, in the vast issues that are encompassed by human security, child nutrition intersects predominantly. Thus the rationale to integrate rather than to dissect is elucidated. Studies further supports that while medical interventions help prevent child deaths, they cannot remove the underlying cause of deprivation and social inequalities. Ostensibly, the idea of human security and health are interrelated, both of these concepts emphasize the development of an individual's milieu.

The perspective of human security is progressing and can be potentially framed as a through policy alternative. The earlier reports- *Human Security Now, A More Secure World* and *In Larger Freedom* explicitly underscore the institutionalization of the human security agenda through policy developments.⁹ Political commitment, allied research and advocacy are prerequisites to promotion and implementation of such a framework. The UN Secretary-General, Kofi Annan at the Cairo Consultation (2002) precisely mentioned health as one of the key building blocks of society which is pivotal to poverty reduction and social justice.¹⁰ A few key points are adapted from the deliberation (on considering human security in development areas) of the Member States at the 66th UN-General Assembly (2011) in Box 1.³

Box 1: Human security approach perspective

- Human security offers a comprehensive approach that combines top-down norms, processes and institutions, including the establishment of early warning mechanisms, good governance and social protection instruments, with a bottom-up focus, in which participatory processes support the important role of people as actors.
- Human security builds upon the existing capacities of Governments and people through integrated and comprehensive responses that capitalize on the comparative advantages of a wide range of actors. This ensures coherence in the allocation of resources, goals and responsibilities across and among actors at all levels, thereby eliminating duplication and advancing targeted, coordinated and cost-effective responses that bring together the different components of human security.

Concerns in Child Nutrition

Improving child health, in alignment with the Millennium Development Goals (MDGs), calls for a new set of prioritized and systematic actions. This includes learning from and deploying global best practices as well as developing inclusive implementation frameworks.¹¹ In recent years there has been considerable economic growth in developing countries without a corresponding decline in poverty rates. However for LMICs, the MDG 2012 reports considerable progress in the under-five mortality rate, which has a significant correlation to poverty. Although the mortality rates have reduced, 7.6 million under-five children died in 2010. It is estimated that more than one-third of these were directly related to poor nutrition.¹ Despite adequate food availability at affordable cost, there has been reduction in food/energy intake. Furthermore, sustained interventions aimed at preventing and combating child under-nutrition have failed to substantially reduce child under-nutrition rates.¹² It is noted that five countries; India, Nigeria, Democratic Republic of Congo, Pakistan, and China are responsible for approximately one-half of all under-five deaths. One-third of these deaths occur in India (24 percent) and Nigeria (11 percent) put together.¹³ Poor childhood nutrition adversely affects cognitive and physical development which causes an intuitive inability to compete for a better living and increase susceptibility to non-communicable diseases.¹⁴ The concept of under-nutrition has further evolved to underscore the concern of “hidden hunger”; which states that the accepted norms of calorie consumption for overcoming under-nutrition might not ensure required nutrition intake. Three quarters of those suffering from such insufficient

consumption of micro-nutrients are from Asia.¹⁵ Such deficiency is more attributable to the lower socio-economic populations, implying LMICs. More than 50 percent of deaths in these children can be attributed to under-nutrition, often in conjunction with serious infection.

Child survival initiatives and programs have accomplished much to save the lives of children from common and preventable illnesses. However, the quality of the survivors' health needs to be improved and much more attention needs to be paid to the nutritional status of preschool and school-aged children. As an intervention to long-term health outcomes, nutritional health must be integrated into primary health services, especially for infants, preschoolers, and schoolchildren, as well as pregnant and lactating women and adolescent girls. Promotion of three key infant and young child feeding (IYCF) practices i.e., initiation of breastfeeding within one hour of birth, exclusive breastfeeding without even water up to six months and timely initiation and maintenance of age-appropriate complementary feeding practices are essential inputs.

A conspicuous example of such program is the Integrated Management of Neonatal and Childhood Illness (IMNCI) initiated by the World Health Organization (WHO). This program model integrates nutrition into the care of both sick and healthy children. Likewise, the Early Child Development Program initiated by the World Bank and UNICEF has taken hold in many developing countries like India, Africa, Indonesia, Bolivia and many other Asian, Sub-Saharan African countries. Nutrition outcomes are closely linked with health and education counseling and activities starting in the preconception period through pregnancy, lactation, and childhood. Investment in human capital early in life will optimize the growth and social and economic development of children, families, and communities.¹⁶

However, many of the region's most serious hunger problems involving food access within the household and social groups, in remote regions, and at the level of micro-nutrients aren't well tracked by existing statistical reporting systems that are commonly used to track poverty and household food consumption. Finally, the efficiency and effectiveness of public distribution programs for basic food items requires continuous monitoring and assessment, to ensure that these systems are sufficiently robust and effective to withstand the stresses to food availability and access that can arise from various shocks.¹⁵

Experiences From Child Nutrition Programs

Introducing nutrition-rich foods through vertical programs is an obvious and immediate solution to address the issue of poor nutrition as well as food security. There is enough scientific evidence to comprehend that the underlying challenges like poverty and unskilled human resource, are a deterrent to development. The foods being introduced in a community needs to be pre-assessed for its need, cultural acceptance, local availability and its bioavailability. One of such innovative approaches by the Rwanda Government, in response to children and women who were severely anemic, was to introduce five new iron-rich bean varieties that could provide more iron in the diets of millions of Rwandese, whose staple diet constituted of beans.¹⁷ Ultimately, the sustainability of such programs is ensured when their availability is adequate through the public distribution system (PDS). Another argument for shifting nutrition programs to align with development is the need for a comprehensive, multi-sectoral approach to the problem. Presently, only the health sector is predominantly addressing nutritional issues and most interventions are reactive rather than proactive. Through alignment, allied sectors (e.g., agriculture, education, cultural institutions) can contribute to the remediation and alleviation of under-nutrition. Currently, the involvement of these sectors is largely inadequate to address the complex nature of the problem.¹⁸ Another pervasive practice in designing nutritional programs is ‘targeting’. The geographic scope, biological group, socio-economic criteria or anthropometric criteria are some of the parameters according to which the programs are tailored. This explicitly ensures the efficient use of scarce resources.¹⁹ Yet this majorly suggests a beneficiary approach whereas human security encourages participatory approach. Such programs, which ignore an underlying cause of the challenge, should be only used as a scaling up effort and not a long-term solution.

To integrate child nutrition programs into human security and to ensure governance sufficiency it is essential to adapt the seminal cues of the framework. (Table1)

Table1: Parameters to Integrate Child Nutrition Policy in Human Security Premise

| Human Security Premise | Implementation principles |
|---|---|
| People-centered | <p>Vulnerable populations: Increased focus on marginalized and poor populations in countries where majority of the child deaths occur.</p> <p>Assess existing programs: The ongoing programs need to be evaluated for their impact on child nutrition and how they can be reached to more children. More points of disbursing nutrition services and information support should be provided through developing parallel linkages of programs.</p> <p>Local governance: Involving local elected representative, village heads, community champions and self-help groups in decentralized program planning and decision-making.</p> <p>Revitalize cultures: Inclusion of locally available foods, breast feeding should be emphasized.</p> |
| Comprehensive and Multi-sectoral | <p>Policy congruence: Objectives and agenda of Ministries of agriculture, rural development, industry and commerce, health, environment should develop specific policies with similar nutritional goals embedded in overall development of poor.</p> <p>Policy space: The frame of nutritional policy implementation is rigidly strategized and mostly implemented by health, women and child development. More technical and programmatic support and consensus could be drawn from education, rural development, agriculture, forests, and horticulture sectors on improving regional nutrition status.</p> <p>Social reform: Transitions in social structures are pivotal to integration of nutrition programs in the development stream.</p> <p>Multi-lateral platforms: Involving higher education systems, social media, and informal youth groups to implement and monitor programs at local</p> |

| | |
|----------------------------|--|
| | level. |
| Context-specific | Local resources and strategies: Dietary habits vary immensely across countries and within them. Mapping resources (for nutrition and livelihood) which locally available and aligning their goals at regional levels. Decentralized governance systems (ensuring transparency and accountability) should be pervasively developed. |
| Prevention-oriented | Pedagogy: Educating communities on nutritional availability and right foods is vital. Such knowledge needs to be provided as a part of livelihood program. Strengthening systems: Reforms like capacity building and developing implementation mechanisms should be holistically inculcated in all allied sectors of child nutrition. |

Increasing Focus on Regional Foods

There has been an increasing awakening of interest and concern about the lack of documentation of traditional and indigenous food cultures which are important not only for communities, but also for the legacy of food knowledge which they can confer on future generations, provided they are not lost.²⁰ The local food culture may have its strengths and weaknesses as far as its ability to meet nutritional and health needs is concerned. Yet, its production may be restricted because of geographical or socio-economic conditions that preclude food diversity; this can be compensated by trade. Where food adequacy and diversity is compromised, and soil is poor, various macronutrient, micronutrient (from animals and plants) and phytonutrient (nutritionally-advantageous food component from plants) deficiencies may be in evidence. When communities open themselves to highly processed food, they also expose themselves to the long term adverse effects of these products. Most processed foods contain high percentages of fat, salt, and preservatives that augment existing health problems. While popular and symbolic of progress, these present additional risk to places where under-nutrition is experienced. The challenge is to respect and retain traditional food knowledge and sustainable food systems, with good governance for food security.

Obfuscation of scientific facts and intensive marketing of highly refined food by the industry has been a key deterrent in promoting locally

available nutritious foods. For example, the draft WHO Global Strategy on Diet, Physical Activity and Health, endorsed by the World Health Assembly in 2004, faced strong opposition against stringent regulations in the United States where dietary consumption is considered an element of lifestyle choice. Influenced by the political and industrial lobby, a milder report was presented. The power of food industry lobbyists and marketing dollars must be countered by policy and programmatic interventions. The industry lobbying to promote products with unnecessary and high levels of salt, sugar and fat is an additional challenge to developing nutrition programs. In fact, there is a global concern among public health agencies over how developing countries can and will combat the profit-driven promotion of highly refined foods. Campaigns using pedagogy to generate awareness have been deployed but have lost the spotlight to international food companies using complimentary attractions to promote their products.²¹

Research has also shown changing dietary patterns towards more “westernized” diets and away from traditional ones. This has proliferated through unregulated, substantial and rapid changes in food production, retailing and distribution systems. These conditions pose adverse implications for rural poverty and food security, food safety and quality but also for diet-related non-communicable diseases. Ongoing food policy debates in the developed world are reflecting a rapid relevance for developing world as well.⁹ The malnourishment and diarrheal cases resulting in deaths among children are increasing according to the Annual Health Survey, 2011 in parts of India.²² One of the key reasons for rise in deaths is plausibly wrong complimentary feeding practices, which is aggravated by the ready availability of processed milk powders and child feeds.²³ The global recommendation is to initiate complementary feeding only after attaining the age of six months.²⁴

Linkages For Development: Human Security And Child Nutrition

“The role of nutrition in development goes far beyond providing an indicator of progress towards the MDGs. A nutrition perspective can strengthen key development mechanisms and instruments such as poverty reduction strategies, health sector reform, improved governance and human rights, and trade liberalization. Nutrition can be engaged in a practical program and policy context in each of these areas.”²⁵ While it is promoted that there needs to be more specific vertical programs addressing the micronutrient deficiencies and related health issues, it is necessary to

deliberate the opportunities provided when nutrition programs are mainstreamed into development.²⁶

It has been long noted that isolated nutrition programs could not work and that nutrition activities should be integrated into agricultural, rural development and poverty alleviation programs. Discussions and analysis of nutrition improvement focused increasingly on the underlying causes of global malnutrition, and it was hoped that this problem could be tackled through national food and nutrition policy and multi-sectoral nutrition planning.² Countries like India have been incessantly involved in efforts to improve nutrition security yet recent reports have shown child under-nutrition levels to be significantly high. The Human Development Report has underscored that body mass index has remained low for the past twenty five years in the sub-continent. This is more startling because India has nation-wide innovative programs like mid-day meal, Integrated Child Development Scheme (ICDS) to combat poor nourishment in children. Alongside, there is a well-functioning public distribution system. While all the above-mentioned initiatives are well appreciated, being piecemeal initiatives, based on funds and manpower allotted, are resulting in duplication of efforts and sub-optimal coordination and not leading to achievement of set results. One of the key reasons pointed out has been the lack of convergence and synergy between programs and development platforms.²⁷ **Figure 1** suggests how human security can be improved by strengthening child nutrition through combined actions of the civil society and government.

Empowering Communities

Empowerment implies adopting a bottom-up approach to develop the capabilities of individuals and communities to make informed choices and to act on their own behalf. Engaging communities primarily means involving them in the transformation process as stakeholders and not as beneficiaries. Many solutions to local problems already exist within the community but have not had the support resources to be effective interventions. Furthermore, modernization has led to the decline of proven traditional practices that previously addressed community needs. A well-developed model of community engagement, one that incorporates respect for local culture and traditions, could serve to rejuvenate practices that could be interventional. Studies in developing country settings have shown decline in child deaths by prioritizing interventions that reach among the poorest quintiles and by strengthening community-based care.²⁸ In fact, the

role of community health workers in nutritional interventions has been studied extensively. Simple interventions deployed through them have resulted in improved nutritional status of both children and society as a whole.²⁹

To achieve sustainable reductions in under-nutrition and other forms of malnutrition, national policies and programs must be complemented by effective community-based actions. These actions must address and remove local causes of malnutrition, for example, chronic or seasonal shortages, lack of dietary diversity, or inappropriate feeding practices. At the community level, targeted and coordinated efforts focused on improving household food security, fostering people's participation and empowering women and marginal groups are needed to address local food and nutrition problems. Such efforts include: participatory appraisal and planning methods; expanding and diversifying food production and ensuring availability at the local market; improving food preservation and storage; improving water supplies; expanding and diversifying income-generating activities; providing nutrition education and training; and ensuring access to basic health care systems.³⁰ Empowering women, removing financial and social barriers to accessing basic services, developing innovations that make the supply of critical services more available to the poor and increasing local accountability of health systems are policy interventions that have allowed health systems to improve equity and reduce mortality. As evidenced by data, countries in Sub-Saharan Africa and Southern Asia, in particular, need to place high priority on reducing child mortality.¹³ For example, the Honorable Supreme Court of India recommends that a cooked hot meal be provided to all children three to six years old attending child development centers. Further recommendations include that these meals be prepared with the involvement of local help and mother support Groups to ensure preparation with locally available foods as per local taste, preference, and food customs.³¹ These groups, along with community health workers, should also conduct regular meetings with pregnant women, lactating mothers, and mothers of young children to promoting the regular consumption of locally available nutritious foods rather than highly refined and produced foods.³¹

Advocating for Action to Prioritize Child Nutrition

Advocacy, with regard to improving child nutrition, can be viewed as an amalgamation of efforts by the government departments, civil society and social groups to curb the ill-effects of undernourishment and bolster related

development policies. Improving child nutrition is a multifaceted challenge and upholds an evident confluence of neglect by the Government of developing countries, dilapidated governance and lack of accountability for child deaths and development as a whole. The nutrition community working in the developing world can contribute to program design and policy change through the legislative and judicial processes. Media can be utilized to demand and strengthen governmental accountability in terms of developing nutritional status improvement at the sub – and supra–national level.²⁵

There is an urgent need to advocate the importance of child nutrition and place it on the higher political agenda. Health and allied ministries need to be sensitized regarding the social impediment caused by poor nutrition and mechanisms to deal with it. This would help the cause garner political support and will to facilitate nutritional policy reforms. Challenges to organizing such advocacy efforts are - the need for good quality data, clear and simple messages, good evidence, findings from similar good practice programs, identification of champions at political level, alignment of policies, follow-up or implementation plans.³²

Inadequate nutrition is seldom treated as a breach of human rights. The governments of developing countries need more sensitization and political pressure to notice human and social loss due to malnutrition. Additionally, their systems are ill-equipped to address it directly or the bureaucrats choose to deal with more visible challenges. It is crucial that strong nutrition advocates and civil societies are engaged in convincing the government to take necessary action. While highlighting promotion of localized interventions, the role of government for distributing resources for programs and providing leadership is pivotal.

For example, Uganda has successfully engaged influential academicians and community champions to raise the profile of nutrition in various policy forums. Through such stewardship they have innovatively and lucidly developed advocacy strategies to help non-professionals understand the ill effects of poor nutrition. This measure has been useful in influencing nutrition-related decision making and, importantly, in breaking the silence in the political arena on nutrition issues.³³

Good Governance

Research suggests that decentralized governance planning tools provide opportunities to address food and nutrition issues and contribute toward creating physical and policy environments that support healthy eating

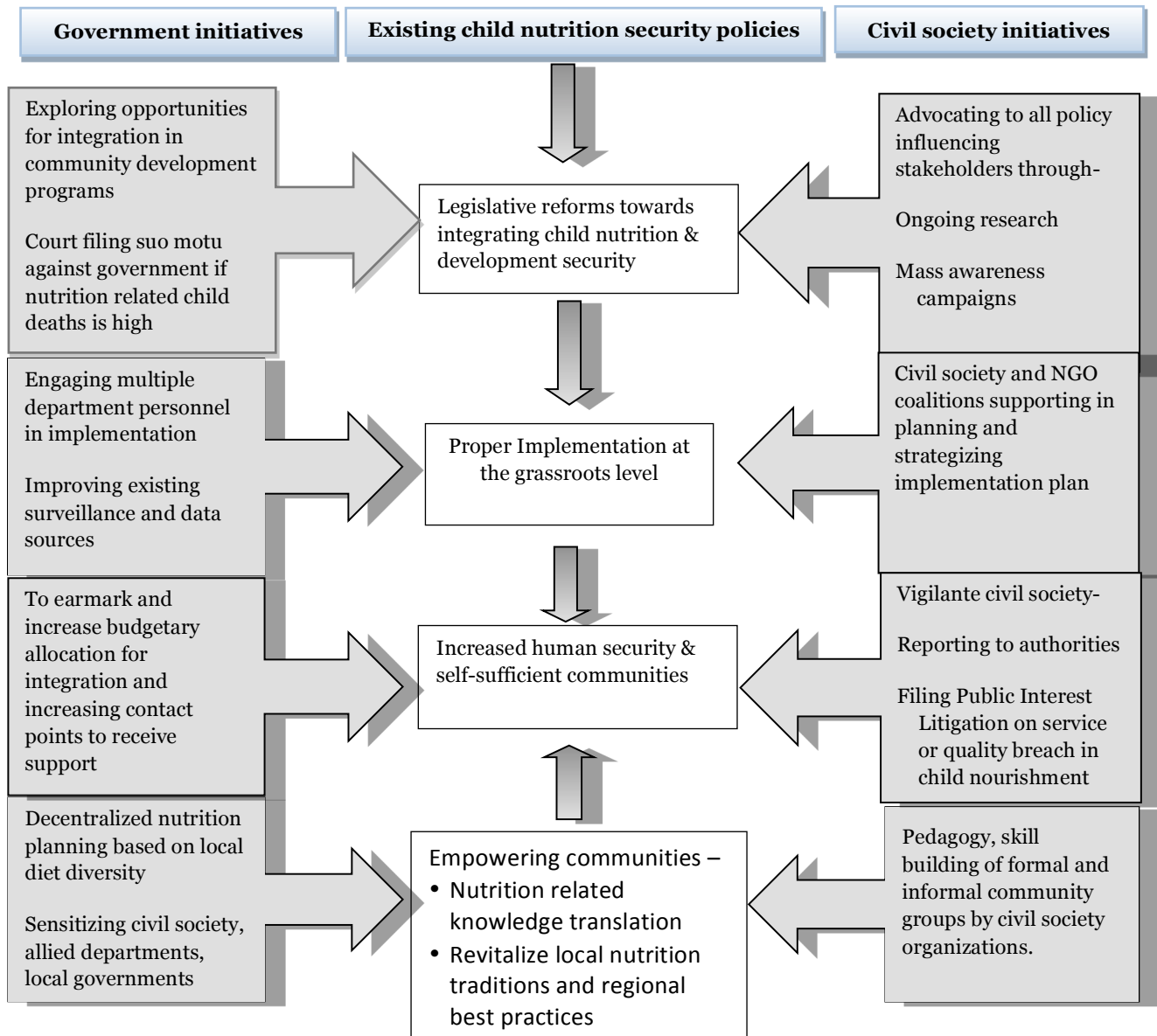
behavior.³⁴ A strong nutrition governance is established where governments are committed to having a national and state nutrition plan which is also a part of any national development strategy, setting up of the inter-sectoral coordination committees, maintaining regular survey and data collection and allocate budget lines for the nutrition strategies and plan.³⁵ Good nutrition governance indeed needs to be an integral part during the planning stage itself. The respective states need specific plans for effective and efficient implementation of the nutrition interventions and thereby achieving the envisioned goals of improving the nutritional status of the children, thereby leading to future development of the state.

Before dealing with the challenges of implementation, there are fundamental questions that need to be addressed. *(a) Does the Health Ministry or the Women and Child Development Ministry have the policy space and capacity to integrate nutrition into development?* ‘Policy space’ is the term frequently used to describe “the freedom, scope, and mechanisms that governments have to choose, design and implement public policies to fulfill their aims”.³⁶ Policy capacity³⁶ refers to the fiscal ability of states to enact those policies or regulations, which depends upon their ability to capture sufficient revenue through taxation for this purpose. Both space and capacity are influenced by the development of a nation, which in-turn depends on wellbeing of the human capital. Countries need to assess the scope for prioritizing nutrition in the development and political agenda. *(b) How to strengthen the policy capacity?* Most developing countries have rural development programs and water supply and sanitation programs. For example, the Mahatma Gandhi National Rural Employment Guarantee Act (MNAREGA) in India, which guarantee hundred days of wage-employment in a financial year to a rural household whose adult members volunteer to do unskilled manual work.³⁷ These are opportunities for convergence where in awareness and capacity building exercises can be integrated into the programs. The work is generally at the local level, where community health systems are also available for support, and weekly training programs can be undertaken.

Global support and technical involvement of organizations like WTO, the World Bank and the IMF is cardinal to the success of policy reforms. It needs to be reiterated and advocated at the global platform about the commitments made to improve child nutrition. Keeping in view the grim public health picture painted by malnutrition, which is responsible for 11 percent of the Global Burden of Disease, there have been ongoing discussions. The resolution – by delegates at the 63rd World Health Assembly in May 2010 – that all Member States should scale-up

interventions to improve infant and young child nutrition. WHO is requested (a) to strengthen collaboration with other United Nations agencies and international organizations and (b) to develop a comprehensive implementation plan on infant and young child nutrition as a critical component of a global multi-sectoral nutrition framework.¹¹

Figure1. Inclusive Implementation Framework: Child Nutrition and Human Security



Conclusion

Despite more than five decades of nutrition intervention programs, malnutrition among children remains a pervasive problem. Malnutrition is a major preventable and underlying cause of high child mortality. It further perpetuates the cycle of poverty in families where malnourished children survive. Thus, this insidious epidemic threatens human security in low and middle income countries. Presently, most nutrition programs are vertically-driven and have been shown to be of limited effectiveness. We conclude that to create a larger scope for research and understanding of the successes and challenges of major policy reforms the nutrition programs need a broader implementation and development framework, like that of human security. Undoubtedly, such inclusive frameworks will lessen the policy incongruence especially in developing countries where various government institutions can address allied issues of nutrition and food security since these two elements are the cornerstones to development of a society. Among academia, it shall add as a foundation for researchers and practitioners to examine and construct improved nutrition programs. Also, by developing a more comprehensive approach that corroborates top-down resources with a bottom-up focus, the communities become a participant in the process of alleviating childhood undernourishment. We recommend committed advocacy and in-depth research in order to develop a multi-sectoral approach for comprehensive nutritional programs. At the same time the importance of revitalizing appropriate local traditions to make these nutritional programs more culturally accepted by the target population should be considered.

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