Cutting world hunger by half – it can be done

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The U.N. Millennium Project was commissioned by the United Nations Secretary-General to recommend the best strategies for meeting the Millennium Development Goals (MDGs). The MDGs are the world’s targets for dramatically reducing extreme poverty in its many dimensions by 2015, while promoting gender equality, education, health, and environmental sustainability (1). The UN Millennium Project’s Task Force on Hunger was established to determine how to meet the MDG 1 for reducing by half the proportion of hungry people by 2015 (2). The Task Force produced its report “Halving Hunger – It can be done” (3), which is summarized below.

Background

There are 854 million people in the world who are chronically or acutely hungry. Most of these people reside in Asia. However, Sub-Saharan Africa is the only region where hunger prevalence is over 30%, and under current trends will fail to achieve the hunger MDG (4). There are three different forms of hunger: acute, chronic, and hidden. Over 90% of the hungry are chronically hungry, caused by a constant or recurrent lack of access to a sufficient quality and quantity of food, good health care and appropriate infant caring practices (5). Acute hunger – the wasting and starvation resulting from famines, war and natural disasters – represent 10% of the hungry worldwide. Hidden hunger, caused by lack of essential vitamins and minerals, affects more than 2 billion people worldwide. Presently, most of the world’s attention has been to help the victims of acute hunger, while the majority of the world’s hungry, those who suffer from chronic and hidden hunger, receive disproportionately less global attention and support.

The majority of the hungry are in smallholder farming households, representing roughly 50% of the total population of hungry people. Other important target groups include the landless rural (20%) and the urban hungry (20%); while pastoralists, fishers and forest dwellers make up 10% of the world’s hungry population. This provides useful guidance on who to target and what types of interventions may have the greatest impacts.

Poverty is a major cause of hunger. Despite the lower food prices associated with the increases in food production brought about by the Green Revolution (6), many poor people still cannot afford to buy sufficient food. Despite gains in the yields of major food crops, low food production persists in rural areas, especially in Africa where production is dependent on rainfed agriculture. The worst affected areas are those most remote from markets
and/or where agricultural production is risky due to high climatic variability. Poor access to markets means that many farmers are unable to diversify into higher value commodities or add value through processing.

The Hunger Task Force has identified places where chronic hunger is most persistent and severe. These hunger hotspots are defined as the sub-national units where the prevalence of underweight children less than five years of age is at least 20%. The 313 hunger hotspots – out of a total of 605 sub-national units in Asia, Africa and Latin America – contain 79% of the world’s total (Figure 1). Low agricultural productivity is likely to be the primary reason for hunger in tropical Africa and remote parts of Asia and Latin America, while poverty and unemployment is considered to be the primary reason for hunger in most of Southern and Eastern Asia, Latin America, Central Asia and the Middle East.

The negative economic impact of hunger is dramatic, with annual losses of 6-10% in foregone GDP due to losses in labor productivity. Economic growth alone is insufficient for eliminating hunger because so many hungry people live in deep poverty traps, beyond the reach of markets (7). At the same time, degradation of natural resources, associated with reduced biodiversity, directly threatens the food security and incomes of poor people. Reversing degradation requires both community and national interventions, supported by the international community.

Recommendations

Hungry people are highly vulnerable to crises and hazards they cannot control. The crises may be caused by such natural disasters as major droughts or floods or man-made disasters such as war and environmental degradation. The hazards include insecure rights to land and other natural resources, lack of access to agriculture inputs, variations in the weather, poor health and lack of income-earning potentials. These elements of vulnerability are the starting point for the seven recommendations by the Hunger Task Force covering three scales: global, national and community levels (Figure 2), as part of an overall strategy to achieve all MDGs at the country level. Following is a brief outline of the seven recommendations.

1. Move from political commitment to action. Political commitments to end hunger have repeatedly been made by all member countries of the United Nations at the World Food Summits of 1996 and 2001, the Millennium Summit of 2000, the 2002 World Summit on Sustainable Development, and the 2002 Monterrey Summit on Development Finance. The key message for political leaders is that halving hunger is well within our means; what has been lacking is action to implement and scale up known solutions. The Hunger Task Force recommends taking the next step: political action at all levels of society through activities such as advocating political action to meet hunger agreements, strengthening contributions of donor countries, improving public awareness on hunger issues, and strengthening developing-country organizations that deal with hunger.

The Secretary-General of the United Nations, reinforced this message when, in July 2004, he called for a “uniquely African green revolution for the 21st Century” (8) that would capitalize on existing knowledge to transform the region’s agriculture, nutrition and markets using the pro-poor, pro-women and pro-environment interventions embedded in the Hunger Task Force report. Unlike the Green Revolution of the 60’s, which saw crop yields soar in India, China and Latin America, enabling them to break free of extreme hunger and recurrent famine, an African Green Revolution does not have to be based on technologies and practices that could potentially hurt the environment. Land can be reclaimed not only through appropriate fertilization, but instead through more environmentally sensitive techniques. For starters, there’s agro forestry, which involves planting trees that replenish the soil with nutrients like nitrogen (9). Farmers could also learn low-till or no-till farming techniques and be encouraged to plant pest-tolerant varieties of crops, which would cut down on insecticide and pesticide use.
2. Reform policy and create an enabling environment for hunger reduction. Government policies in poor countries can make or break efforts to end hunger. Good governance, including the rule of law, low corruption, and respect for human rights is essential for achieving food security. Policies conducive to ending hunger and poverty need to be put in place at all levels, from the local to the national.

The Hunger Task Force proposes that poor countries should integrate hunger reduction action plans into their Poverty Reduction Strategy (PRSP) or equivalent national planning process, based on what is needed to accomplish all of the MDGs. African governments should invest at least 10% of their national budget specifically in agriculture and nutrition, in addition to making necessary investments in rural energy, infrastructure, health, education, and other sectors. Building capacity at all levels of government should be the central goal of both national government and donor-funded activities.

Clearly assigned and enforceable rights for women to own, inherit and trade land must be established.

Women and girls need better access to services such as credit, health care and education, as well as being introduced to technologies that will ease the workload of those who live in a rural environment.

The task force recommends linking nutritional and agricultural interventions, so often implemented separately, as a powerful means of creating more effective hunger reduction programs. In addition, funding for agricultural research, which has been a major driver of hunger reduction, should be doubled to at least 2% of agricultural GDP by 2010. The task force recommends that donors increase funding to the Consultative Group on International Agricultural Research to US$1 billion by 2010.

3. Increase agricultural productivity of food-insecure farmers. Raising the productivity of their crops, livestock and trees is a major priority in the fight against hunger. Restoring health to the soil is often the first entry point for increasing agricultural productivity in most parts where smallholder farming is practiced in Africa (9). Applying appropriate combinations of mineral and organic fertilizers, using leguminous green manures and agro forestry fertilizer trees, returning crop residues to the soil and using improved methods of soil conservation, can restore soil health. However, making mineral fertilizers available at affordable prices and using them efficiently remain major challenges. As an emergency short-term measure, targeted investment programs should be designed to supply both mineral and organic fertilizers (as seeds) to highly food-insecure farmers.

In the sub-humid and semi-arid areas, improving water availability can be just as important as improving soil fertility, if not more so. Various water harvesting and small-scale irrigation techniques can be used to transform crop and livestock production in these zones. Investments in small-scale water management can also be financed with targeted subsidies.

The provision of genetically superior crop, pasture and tree varieties can also greatly increase the productivity of small-scale farms. The Task Force supports both conventional breeding and transgenic research with appropriate biosafety measures. Tolerance to stresses as drought, salinity, poor soil fertility, pests and diseases are the main traits that will benefit farmers in the more marginal areas.

After farmers attain food security they can begin to diversify their farming systems towards the production of high-value products. Livestock, farm trees, aquaculture, and vegetables are attractive options for diversifying their diets and sources of income. Increases in milk production, for example, can reduce malnutrition in both rural and urban settings.

In conjunction with this, breathing new life into the moribund extension services of many poor countries is vital if the benefits of new knowledge and improved technology are to reach farmers. Despite the many shortcomings
of conventional extension services, there are good extension practices and practitioners from whom others can learn. The Task Force recommends that every village in a hunger hotspot have paraprofessional extension workers trained in agriculture and nutrition, together with counterparts in health and energy.

4. Improve nutrition for the chronically hungry vulnerable groups. Adequate nutrition lies at the heart of the fight against hunger. As the primary care providers for children and families, women are particularly important in improving nutrition for vulnerable groups. Particular attention should be focused on children under the age of two, and on supplemental feeding for pregnant and lactating mothers. The Task Force recommends all feeding programs be sourced, where possible, from locally produced foods rather than imported food aid.

To break the intergenerational cycle of malnutrition, the Hunger Task Force recommends promoting mother and children nutrition programs such as supplemental feeding for underweight, pregnant, and nursing mothers. Campaigns should also focus on messages, regarding the exclusive breastfeeding of babies, up to six months of age, as being the best way of ensuring optimum nutrition for them. To reduce malnutrition among malnourished children under five, the Task Force recommends providing fortified or blended complementary foods, clean drinking water, as well as therapeutic care for all seriously malnourished children and women, especially in remote rural areas.

For school-age children and adolescents, the task force recommends reducing malnutrition by providing free, nutritionally balanced school meals for all poor children using locally produced foods, with take–home rations where appropriate. Systematic de-worming, micronutrient supplementation, education on HIV/AIDS, health, nutrition, hygiene, provision of safe drinking water, and take home rations must be part of these school programs. For efforts to reduce vitamin and mineral deficiencies, interventions should focus on increasing the consumption of micronutrient-rich foods such as fruits and vegetables; improving food fortification and increasing micronutrient supplementation when necessary. These mutually reinforcing actions should be promoted by village agriculture and extension workers.

Parallel health measures are also needed to eliminate the diseases that rob people of nutrients. All children should be fully immunized and receive prompt treatment for common infections such as diarrhea, pneumonia, malaria and helminthes, as well as appropriate nutritional care for people living with or affected by HIV/AIDS.

5. Reduce vulnerability of the acutely hungry through productive safety nets. While investing in agriculture, education and health remains critical to long-term food security. Past gains can be threatened if people’s vulnerability to short-term disasters and shocks are not addressed. The Hunger Task Force recommends the substitution of cash for program food aid, so that governments can invest more flexibly in reducing hunger among people at risk. The additional resources needed to reduce vulnerability to shocks must not be found by drawing funds away from long-term development.

6. Increase incomes and make markets work for the poor. Properly functioning markets are critical in ensuring that people are able to earn a decent income, obtain the inputs they need to raise crop yields, and sell their produce at fair prices. Markets will not develop without public investment in transport and other infrastructure. A major campaign is needed to increase road building, including paved roads and all-weather feeder roads, in large parts of Africa with a high prevalence of malnutrition. Effective grain storage capacity at a local level would enable farmers to obtain fairer prices for their crop surpluses, and would reduce post-harvest losses to pests. Investments in small-scale processing should quickly yield benefits in terms of increased employment opportunities at the local level.
Networks of small rural input traders should be developed. These networks of trained rural agro dealers are needed to reach remote areas, especially in Africa. The three main drawbacks that must be overcome if this approach is to work include: a lack of working capital for traders, credit for farmers, and technical knowledge. A private-sector led program can be established where agro dealers would implement a targeted voucher scheme for soil health and water resources to the food-insecure farmers.

Access to credit and other financial services is particularly problematic for food-insecure farmers. Community groups established to take on loans on behalf of their members could mitigate risk and make lending more attractive to financial institutions.

Another intervention is to ensure access to market information for the poor. Lack of market information negatively affects the terms of trade for poor farmers. Governments and donors should invest in information technology, and a combination of mobile phones, radio and the Internet to bring information to producers.

In addition, programs should be established to promote alternative sources of rural employment and income. There are significant opportunities for increasing on and off-farm income by encouraging farmers to switch part of their farms from food crops to higher value outputs, such as livestock products, and to add value to their produce through processing. Out-grower schemes, whereby farmers grow crops for large-scale producers can provide important employment opportunities for the poor. Governments should encourage them to pursue socially responsible policies and stimulate local smallholder production.

7. Restore and conserve natural resources essential for food security. Reversing degradation requires both community and national interventions, supported by inputs from the international community.

The task force recommends that community-based initiatives for environmental restoration include rangeland rehabilitation, watershed restoration, the establishment of village ponds, the re-vegetation of stream banks, and the building of vegetative filters and barriers to protect water quality. Biodiversity can be protected by establishing reserves, reforesting degraded areas, and reconstituting fisheries.

The key principles for success include building ownership of initiatives among all community members, and ensuring short-term gains in food security in addition to long-term sustainability. The main interventions recommended in this domain include helping communities and households restore or enhance natural resources; securing local ownership, access, and management rights to forests, fisheries, and rangelands; and developing natural resource-based “green enterprises” and paying poor rural communities for environmental services.

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