

Cutting World Hunger in Half

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The Millennium Project was commissioned by the United Nations Secretary-General to recommend the best strategies for meeting the Millennium Development Goals (MDGs) (1). In October 2002, the Hunger Task Force was established to determine how to meet the hunger MDG—to reduce the proportion of hungry people in half from 1990 to 2015. Task Force members came from diverse backgrounds in science, policy, the private sector, civil society, U.N. agencies, and government, with broad representation from developed and developing countries (2). After analysis, stakeholder consultations, and observation, the Task Force has just produced its report (2), which is summarized here.

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Diagnosis

There are 854 million people in the world (about 14% of our population) who are chronically or acutely malnourished. Most are in Asia, but sub-Saharan Africa is the only region where hunger prevalence is over 30%, and the absolute numbers of malnourished people are increasing (3). More than 90% are chronically malnourished (4), with a constant or recurrent lack of access to sufficient quality and quantity of food, good health care, and adequate maternal caring practices. Acute hunger (the wasting and starvation resulting from famines, war, and natural disaster) represents 10% of the hungry yet receives most of the media coverage and attention. In addition, hidden hunger from micronutrient deficiencies affects more than 2 billion people worldwide. Chronic and hidden hunger deserve much more global attention and support.

Roughly 50% of the hungry are in smallholder farming households; 20% are the landless rural; 10% are pastoralists, fishers, and forest dwellers; and 20% are the urban hungry. The Task Force has identified hunger hot spots, defined as the sub-

national units where the prevalence of underweight children (4) less than 5 years of age is at least 20%. The 313 hunger hot spots identified (see the figure on page 358) indicate priority regions, as they cover 79% of the hungry.

The importance of different causes of hunger varies among regions. Low agricultural productivity is likely to be the primary reason in tropical Africa and remote parts of Asia and Latin America, whereas poverty and unemployment are the main causes in most of South and East Asia, Latin America, Central Asia, and the Middle East.

Economically, hunger results in annual losses of 6 to 10% in foregone Gross Domestic Product (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 (5). People affected by HIV/AIDS become unable to grow food or work for a living. Malnourishment weakens their immunity and strength, making them succumb more quickly to disease (6). Similarly, nearly 57% of malaria deaths are attributable to malnutrition (7). The challenge of halving hunger is, therefore, closely linked with that of achieving other MDGs.

Recommendations

The Task Force calls for simultaneous action at global (recommendation 1), national (recommendation 2), and local levels (recommendations 3 to 7) (see the figure on page 359).

1. *Move from political commitment to action.* A commitment to halving world hunger was 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 message for political leaders is that halving hunger is within our means; what has been lacking is action to implement and scale up known solutions.

The Secretary-General of the United Nations reinforced this message when he called for a “uniquely African green revolution for the 21st century” (8).

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 levels of 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 Task Force proposes that poor countries integrate hunger reduction action plans into their Poverty Reduction Strategies or equivalent national planning process. Poor countries need to adopt a multisectoral approach to hunger reduction. African governments should invest at least 10% of their national budgets specifically in agriculture and nutrition, in addition to making investments in rural energy, infrastructure, health, education, and other sectors. Building capacity at all levels should be the central goal of national government and donor-funded activities. Linking nutritional and agricultural interventions, which are so often implemented separately, would be a powerful means of creating more effective hunger reduction programs.

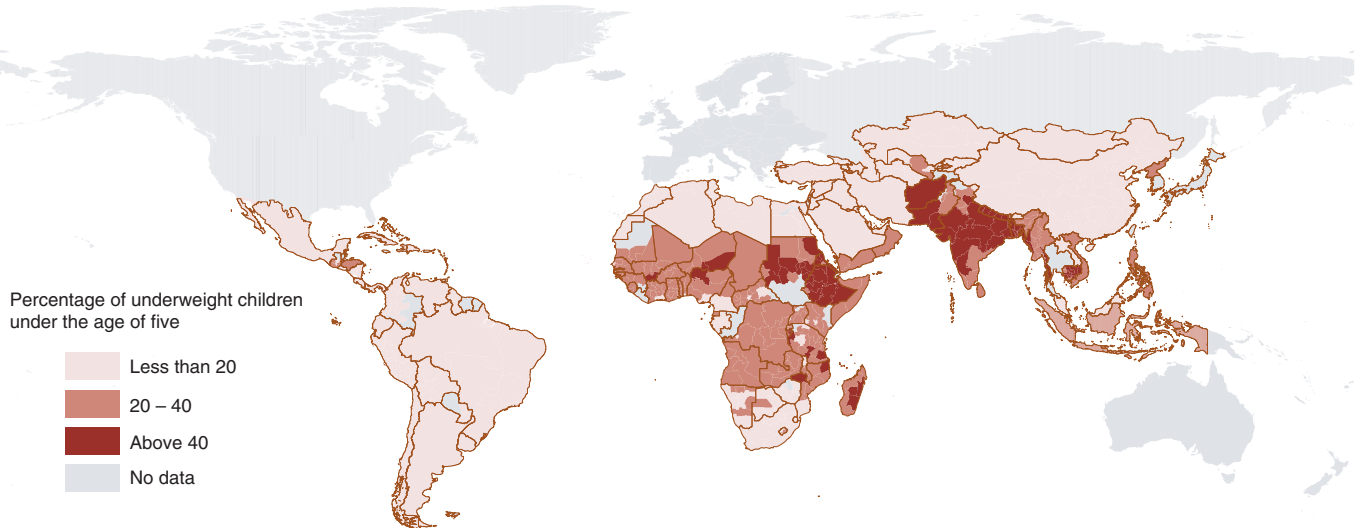
Clearly assigned and enforceable rights for women to own, inherit, and trade land must be guaranteed. Women and girls need better access to services such as credit, health care, and education, as well as to technologies that will ease the workload of rural women, such as rooftop water harvesting and growing trees for firewood close to home.

Agricultural research has been a major driver of hunger reduction. The Task Force recommends doubling investments in national research to at least 2% of agricultural GDP by 2010. It also 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.* Small-scale farming families represent about half the hungry worldwide and probably three-quarters of the hungry in Africa. Raising the productivity of their crops, livestock, fish, and trees is a major priority.

Restoring soil health is often the first entry point for increasing agricultural productivity, because soil nutrient depletion is extreme in most areas where farmers have small holdings, as in Africa (9). Applying appropriate combinations of mineral and organic fertilizers, using leguminous green manures and agroforestry fertilizer trees, returning crop residues to the soil, and using improved methods of soil conservation can

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Hot spots of world hunger.

restore soil health and double or triple yields of the cereal staple crop. Making mineral fertilizers available at affordable prices and using them efficiently remain major challenges. As an emergency short-term measure, targeted subsidy programs should be designed to supply mineral and organic fertilizers (as seeds) to farmers. Tamper-proof “smart cards” redeemable at private agrodealers are one promising way of administering targeted subsidies, avoiding many of the pitfalls of past fertilizer subsidy schemes. When combined with similar vouchers for farmers to sell their products to school and community feeding programs, the demand side can be also addressed, avoiding price crashes when production increases.

In subhumid and semiarid areas, improving water management can be at least as important as improving soil fertility. Various water harvesting and small-scale irrigation techniques can be used to transform crop and livestock production in these regions. Investments in small-scale water management can also be financed with targeted subsidies.

The provision of genetically superior crop, pasture, tree, livestock, and fish germ plasm can greatly increase the productivity of small-scale farms. The Task Force supports both conventional breeding and transgenic research with appropriate biosafety measures. The traits that will benefit poor farmers in more marginal areas are tolerance to stresses (drought, salinity, poor soil fertility, pests, and diseases) and improved nutritional value.

After farmers attain food security, they can begin to diversify their farming systems to produce 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 malnu-

trition in rural and urban settings. In South Asia and Africa, farming systems integrating crops and livestock are very important in strengthening household nutrition and income. Small-scale farmers could emerge as major timber suppliers of the 21st century in many tropical regions.

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. The Task Force recommends that every village in a hunger hot spot have paraprofessional extension workers trained in agriculture and nutrition, with counterparts in health and energy. They should be supported by professional services and enhanced research institutions.

4. Improve nutrition for chronically hungry and 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 that, where possible, locally produced foods be used, rather than imported food aid.

To break the intergenerational cycle of undernutrition, the Task Force recommends supplemental feeding for underweight pregnant women and nursing mothers. Exclusive breastfeeding up to 6 months of age is the best way of ensuring optimum nutrition for babies, although the decision may be complicated by the risk of transmitting HIV through breast milk.

To reduce malnutrition in children under five, the Task Force recommends providing fortified or blended supplementary foods, clean drinking water, and therapeutic care

for all seriously malnourished children and women, especially in remote rural areas. Community extension workers should take the lead in raising awareness and implementation.

The Task Force recommends that malnutrition be reduced among school-age children and adolescents by providing free, nutritionally balanced school meals from locally produced foods for all poor children. This will improve learning, attract the 40% of primary school age children who are currently out of school in Africa (mostly girls), empower girls with good nutrition and knowledge before they become mothers, and create a steady demand for local foods. We estimate that if this is practiced in half of the primary schools in Africa, the local demand for maize alone could increase by as much as 25%. Systematic deworming; micronutrient supplementation; education about HIV/AIDS, health, nutrition, and hygiene; and provision of safe drinking water and take-home rations should be part of the program.

Vitamin and mineral deficiencies should be reduced by increasing consumption of micronutrient-rich foods such as fruits and vegetables; improving food fortification; and increasing micronutrient supplementation when necessary. Village extension workers should promote these mutually reinforcing actions.

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 provided 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. To address acute hunger, the Task Force recommends strengthening (i) national and local early warning systems to take advantage of advances in climate prediction; (ii) the capacity to respond to emergencies; and (iii) investments in productive safety nets (food for work; cash for work).

The Task Force recommends, whenever possible, the substitution of cash for program food aid, so that governments can invest more flexibly in reducing hunger. The additional resources needed to reduce vulnerability to shocks must not draw funds away from long-term development.

Safety nets should be both an effective protector of last resort during shocks and economically productive in years without crisis. This involves investing in community activities that reduce vulnerability while increasing productive potential. Large injections of cash or food aid can distort the local economy unless they are targeted toward development objectives.

6. *Increase incomes and make markets work for the poor.* Properly functioning markets are critical in ensuring that farmers are able to earn a decent income, obtain the inputs they need to raise crop yields, and sell their produce at fair prices.

The Task Force proposes that major investments be made in developing and maintaining market infrastructure. Markets will not develop without public investment in transport and communications. A major effort is needed to increase road building, including paved roads and all-weather feeder roads, in large parts of Africa where there is high prevalence of malnutrition. Every village should have a vehicle for transporting products to markets and health emergencies. Effective grain storage capacity at the local level would enable farmers to obtain fairer prices for their crop surpluses

and would reduce postharvest losses to pests. Investments in small-scale processing should quickly yield benefits in terms of increased employment opportunities.

Networks of trained rural agrodealers are needed to allow essential agricultural inputs to reach remote areas, especially in Africa. 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.

Lack of market information negatively affects the terms of trade for poor farmers. Governments and donors should continue investing in information technology, including combinations of mobile phones, radio, and the Internet to bring information to producers. For example, fishermen in India are now using mobile phones to seek the best price from dealers before deciding where to land their catch.

There are opportunities for increasing on-farm and off-farm income by encouraging farmers to switch part of their farms from staple food crops into higher value livestock, vegetable, and tree products and to add value through processing. Farmers can grow crops for large-scale producers. Supermarkets are becoming dominant buyers in much of the developing world. Governments should encourage them to pursue socially responsible policies and to stimulate local production.

7. *Restore and conserve natural resources essential for food security.* Degradation of natural resources directly threatens the food security and incomes of poor people. Reversing degradation requires both community- and national-level interventions. Local ownership, access, and management rights should be secured for forests, fisheries, and rangelands. Natural resource-based "green enterprises" should be developed. Poor farmers should be paid for environmental services they provide, including biodiversity protection, watershed stability, and carbon sequestration.

Entry Points

Community nutrition programs, homegrown school feeding programs, and investments in soils and water are local initiatives that can serve as "entry points" in the battle against hunger. A combination may constitute an attractive new integrated program in rural areas facing the dual challenge of high chronic malnutrition and low agricultural productivity. The increased local production will

have a ready market in the homegrown feeding programs, and the joint facilitation by community extension workers will create a virtuous cycle. The resulting synergies will open the way for other interventions.

Resources Needed

The Millennium Project estimates that hunger reduction interventions to increase agricultural productivity and address chronic malnutrition will cost about 6 to 10% of the additional development assistance envisioned for attaining all the MDGs (1). That amounts to about \$8 billion a year for 2005, between \$10 and \$11 billion a year for 2010–15, or an average of 60 U.S. cents per month for every person living in a developed country.

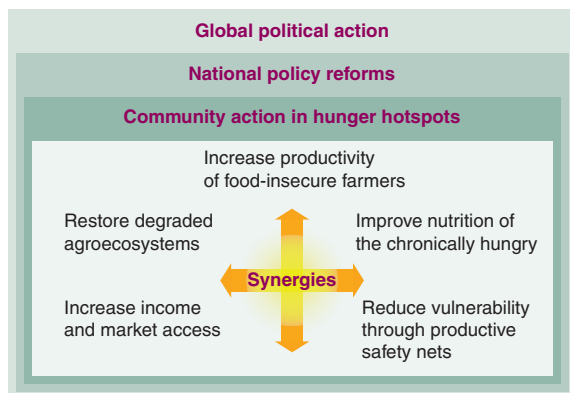
It Can Be Done

The Task Force concludes that the hunger MDG can be achieved by 2015 and hunger can eventually be eliminated. This will require focused and unprecedented levels of effort that are well within our financial and technological capability. Currently, more than 5.5 million children are dying of malnutrition-related causes each year. The actions outlined here, taken up by a broad coalition of stakeholders and applied in every poor country, can change that.

References and Notes

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Hunger Task Force recommendations (2).