

# Agriculture, Food Security, Nutrition and the Millennium Development Goals

In 2000, the member states of the United Nations committed themselves to creating a "more peaceful, prosperous and just world," to "free[ing] our fellow men, women and children from the abject and dehumanizing conditions of extreme poverty," to making "the right to development a reality for everyone," and to ridding "the entire human race from want."

Are these just more well-meaning words? Perhaps this time they will make a difference, because the joint declaration

also set out eight goals—the Millennium Development Goals (MDGs)—and each goal has specific, measurable targets that should be met by 2015. These goals aim to make definite improvements in the lives of the world's poor people, judged, in most cases, against their situation in 1990.

The need for accomplishing these 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 succumb to early death. Moreover, another 1.6 billion people live on between one and two dollars per day, often sliding temporarily below the one dollar per day threshold. To enable all these people to live in dignity, the eight goals to achieve by 2015 are:

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria, and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development.

These goals are all indispensable and they require complex, coordinated action. But with such an enormous yet essential mandate at hand, how best can we proceed to 2015?



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# Conceiving a Foundation Built on Agriculture and Food and Nutrition Security

The most effective strategy for making steady, sustainable progress on the Millennium Development Goals is to serve all the goals in an integrated way. However, each goal will need a well-defined package of technologies and services for success at the field level. The Task Force on Hunger (which advises on how to meet the target of cutting hunger in half by 2015) is providing appropriate guidance for developing these packages in the case of hunger. Pursuing each goal separately without acknowledging its interlinkages with others will reduce the complex process of human and economic development to a series of fragmented, conflicting, and unsustainable interventions. A comprehensive and harmonious development approach is in order.

Given that the majority of poor people live in villages or rely on agriculture, and that agriculture paves the way for economic growth in the poorer nations, agricultural and rural development will underlie progress on the broad array of economic and social indicators that the MDGs emphasize.

In pursuing the MDGs, we should seek ultimately the elimination of hunger, poverty, and maternal and child malnutrition. In this regard, particular attention should be paid to averting maternal and fetal under- and malnutrition, which lead to the low birth weight that damages health, reduces cognitive ability, and robs nations of healthy and productive adults. Micronutrient malnutrition is a part of these larger, devastating “hunger” problems.

An emphasis on healthy, productive individuals means that we must attend not simply to food security at the aggregate level, but to nutrition security (economic, physical, social, and environmental access to a



balanced diet and clean drinking water) at the individual level of child, woman, and man. Our interpretation of the MDGs must therefore be modified to promote a reduction in the absolute number of people living in unsuitable conditions across all countries, rather than a reduction in global proportions. The World Food Summit goal, for example, aims to reduce the absolute number, rather than the proportion, of people suffering from hunger.

Despite these limitations in framing the task at hand, the MDGs can be used to set a powerful agenda for developing countries and the international community, because they offer a guide for planning and implementing a broad range of development efforts.

## How Can Improving Agriculture and Food and Nutrition Security Help?

We need to achieve faster, sustainable human and economic development—that is the bottom line that will serve all the MDGs. Environmentally friendly agriculture and rural development are key to this effort. What are the pathways that link agriculture, food and nutrition security, and the MDGs—both directly and indirectly—and how can these favorable linkages be reinforced?

## MDG 1. Eradicate extreme hunger and poverty

Of the eight Millennium Development Goals, eradicating extreme hunger and poverty depends on agriculture the most. (MDG 1 calls for halving hunger and poverty by 2015 in relation to 1990.)

### *The agriculture-hunger-poverty nexus*

Eradicating hunger and poverty requires an understanding of the ways in which these two injustices interconnect. Hunger, and the malnourishment that accompanies it, prevents poor people from escaping poverty because it diminishes their ability to learn, work, and care for themselves and their family members. If left unaddressed, hunger sets in motion an array of outcomes that perpetuates malnutrition, reduces the ability of adults to work and to give birth to healthy children, and erodes children's ability to learn and lead productive, healthy, and happy lives. This truncation of human development undermines a country's potential for economic development—for generations to come.

There are strong, direct relationships between agricultural productivity, hunger, and poverty. Three-quarters of the world's poor live in rural areas and make their living from agriculture. Hunger and child malnutrition are greater in these areas than in urban areas. Moreover, the higher the proportion of the rural population that obtains its income solely from subsistence farming (without the benefit of pro-poor technologies and access to markets), the higher the incidence of malnutrition. Therefore, improvements in agricultural productivity aimed at small-scale farmers will benefit the rural poor first.

Increased agricultural productivity enables farmers to grow more food, which translates into better diets and, under market conditions that offer a level playing field, into higher farm incomes. With more money, farmers are more likely to diversify production and grow higher-value crops, benefiting not only themselves but the economy as a whole.



A larger supply of agricultural products also brings prices down, allowing both the rural and urban poor to purchase essential foods for less money. Smaller food bills mean that landless poor people will have more money to invest in assets, which will help them increase income and survive future economic shocks. This income and asset security helps build a solid foundation for economic growth, by enabling people to work free from the debilitating effects of hunger and undernutrition. A flourishing agriculture sector also facilitates job creation in other areas, such as the food processing and marketing sectors, and creates secondary economic effects in the nonfarm economy.

By increasing food availability and incomes and contributing to asset diversity and economic growth, higher agricultural productivity and supportive pro-poor policies allow people to break out of the poverty-hunger-malnutrition trap.

Empirical research provides stark evidence of the benefits of agricultural productivity. In Africa, for example, a 10 percent increase in the level of agricultural productivity is associated with a 7.2 percent reduction in poverty. In India, a similar increase in productivity has been estimated to decrease poverty by 4 percent in the short run and 12 percent in the long run.

### *Progress in and prospects for reducing poverty and hunger*

The indissoluble links between a growing agriculture sector and declining levels of poverty and hunger merit serious attention at the highest levels of decisionmaking, given that recent trends in meeting MDG 1 targets have been mixed. The trends point to a pressing need to step up efforts in reducing child malnutrition and at a minimum to stay vigilantly on course in the overall effort to reduce hunger and poverty.

In the last decade, both the proportion and the absolute number of people suffering from poverty and hunger worldwide have declined.

There were 126 million fewer people living on less than a dollar a day in 2001 compared to 1990, reflecting a drop in the world's share of poor people from 28 to 21 percent.

According to the latest data (for 1999-2001) from the Food and Agriculture Organization of the United Nations (FAO), the proportion of people who suffer from hunger has decreased from 20 to 17 percent since 1990, which means 19 million fewer food-insecure people. Similarly, the global prevalence of malnutrition among preschool children (the proportion of underweight preschool children is one of the MDG indicators of hunger) has declined from 30 to 25 percent between 1990 and 2000. In absolute terms, 27 million fewer children now are malnourished compared to 1990.

Aggregate trends, however, conceal the fact that at the regional and country levels, progress in the 1990s was not distributed equally. While Asia and Latin America saw declining rates and absolute numbers of poor, hungry, and malnourished people (except for the unchanged number of poor in Latin America), the situation in Sub-Saharan Africa and Eastern Europe deteriorated. In comparison with 1990, Sub-Saharan Africa now has 89 million more people living on less than a dollar per day, 33 million more people suffering from hunger, and an additional 6 million preschool children who are underweight. In Eastern Europe, the numbers are less staggering given the initial conditions, but the general trends suggest serious problems with the region's development processes.

If current trends persist, the world will stop just short of meeting the modest MDG targets for cutting the



proportions of hunger and poverty, but miss by a wide margin the target for cutting the number of undernourished people in half (between 1996 and 2015), as stipulated by the World Food Summit. The proportion of hungry people in 2015 is expected to drop to 11 percent, but the MDGs specify 9.9 percent. Estimates vary on meeting the poverty goal, with

an estimated 13 percent to 15 percent of people expected to remain under the poverty line in 2015, compared to the MDG target of halving poverty from 27.9 percent. With business as usual, the percent of malnourished preschool children will drop to only 24 percent, in comparison with the 15 percent needed. At the regional level, large disparities will exist in the gains made. China will remain the major force driving aggregate progress toward the MDG goals. At the other extreme, Sub-Saharan Africa will either stagnate or lose ground.

All in all, barring a major paradigm shift, projections show that 600 million people in the developing world will suffer from hunger in 2015, 900 million people will continue to live in absolute poverty, and 128 million preschool children will be malnourished.

But we need not resign ourselves to this fate. An alternative set of projections indicates that with the proper investments and policies we can certainly reduce malnutrition at a faster rate. Under an "MDG scenario"—reasonably higher agricultural and economic growth rates; more investment in the social sectors, including health and education; and a halving of the proportion of people without sustainable access to safe drinking water and basic sanitation, as MDG 7 prescribes—the global level of malnutrition is slashed to 16 percent, almost on target (see box on page 9).

# WHAT WILL HALVING CHILD MALNUTRITION COST?

What are the implications for investment if we are to cut child malnutrition in half by 2015, consistent with the Millennium Development Goal of halving, between 1990 and 2015, the proportion of people who suffer from hunger?

IFPRI's global food model, IMPACT-WATER, allows us to project outcomes under different policy and investment scenarios. The model assumes that investment in five areas—rural road construction, education, clean water provision, agricultural research, and irrigation—is the most effective way to reduce hunger, poverty, and malnutrition. The cost of improvements in these five areas between 1995 and 2015 are estimated at country and regional levels based on the available data on cost of delivery of these key investments, and are shown in Figure 1 for two scenarios: the baseline scenario (where it's business as usual) and the MDG-compatible scenario (where the proportion of child malnutrition is reduced by half for nearly all developing countries).

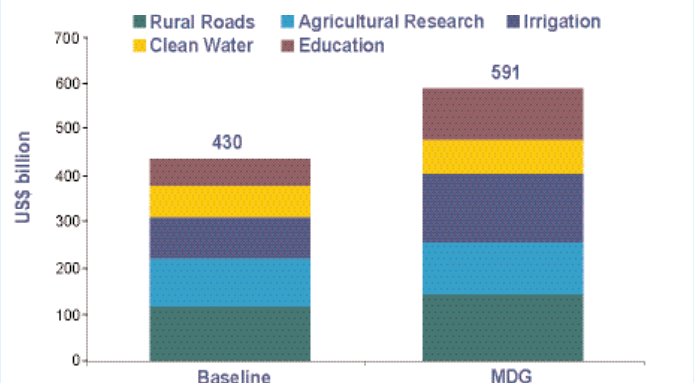
As expected, the MDG scenario envisions increases in investment in the five key drivers of food and nutrition security. Business as usual during 1995–2015 will cost US\$430 billion for all developing countries. Halving child malnutrition will cost \$591 billion—only \$161 billion more than current trends.

With business as usual, rural roads will account for 28 percent of total investment, followed by agricultural research and irrigation at 24 and 21 percent, and clean water and education at 15 and 12 percent, respectively. In the MDG scenario, education's share of investments increases to 20 percent, due to a rapid expansion in female secondary schooling, particularly in parts of Asia and Sub-Saharan Africa. The dollar amount for education more than doubles, from US\$51 to US\$119 billion. Investments in rural roads, irrigation infrastructure, and agricultural research increase as well, in order to achieve the much higher yields assumed under this scenario. Investment in clean water does not change much, given the relatively high levels of access to clean drinking

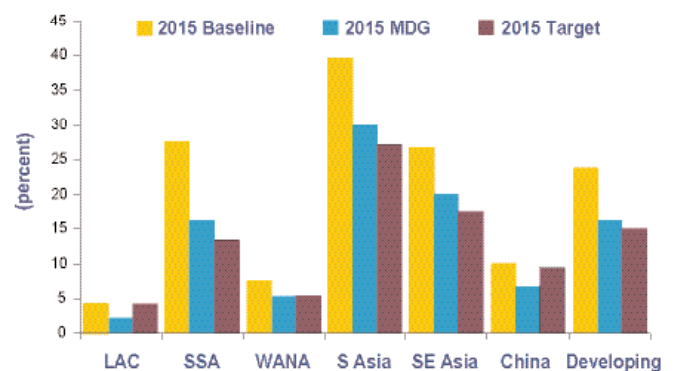
water already achieved in the baseline scenario; the MDG scenario requires only \$1.5 billion more, but most of this is in Sub-Saharan Africa, where it will make a significant impact. Due to the long lag time between investment in agricultural research and impact on crop production, relatively small increases in research expenditures are needed to achieve the 2015 MDGs, but greater increases will be essential to meet crop and animal production needs beyond 2015.

It bears repeating that the total estimated increase in investments needed to bring the world, particularly South Asia and Sub-Saharan Africa, within reach of the MDG target for malnourished children (see Figure 2) comes to only \$161 billion—about \$16 billion a year more than current expenditures from this point forward.

**Figure 1 Cost Estimates for Implementing the Baseline and MDG Scenarios, 2015, Developing Countries**



**Figure 2 Child Malnutrition, Developing Country Regions, 2015 Baseline, 2015 MDG Scenario, and 2015 Target**



Note: LAC = Latin America/Caribbean; SSA = Sub-Saharan Africa; WANA = West Asia/North Africa.



### *Raising agricultural productivity and benefiting from agriculture*

To obtain higher agricultural productivity will require seeds and other agricultural technologies matched to the local agroclimatic, labor, and market needs of small-scale farmers. These technologies, which must be environmentally friendly, will come from both conventional and newer scientific approaches, including scientifically sound and environmentally safe genetic modification. Agricultural innovation must raise yields and reduce environmental costs, and be affordable to small-scale farmers. In many regions, the land itself needs regeneration because soils have become less productive due to loss of nutrients. This problem requires research on methods for reducing nutrient loss and replenishing soils. To innovate on all these fronts in ways that serve poor farmers, national and international agricultural research systems must be strengthened.

How can the poor benefit most from higher agricultural productivity? Past experience has shown that a number of key conditions help maximize the benefits of a growing agriculture sector for poor

people. To achieve faster agriculture-based growth rates, favorable macroeconomic and trade policies, good infrastructure, and access to credit, land, and markets must be in place. These conditions create level playing fields and give farmers incentives to adopt new and sustainable technologies and diversify production into higher-value crops, actions that raise incomes and lift households out of poverty.

In addition to pro-poor economic and agricultural policies, agriculture, like other sectors, needs good governance, absence of conflict, and well-functioning markets and private enterprise to flourish.

In the case of the latter, the development and business communities increasingly recognize that the MDGs cannot be achieved and private enterprise cannot flourish without greater and more equitable involvement of poor people in markets. In many developing countries, small farmers face unfavorable terms of trade, paying more for inputs than they receive from the sale of their products. An improved domestic regulatory framework would intensify competition among suppliers of essential inputs, such as seeds and fertilizer. In addition, the elimination of



trade barriers for agricultural products, especially the high-value-added products, would encourage a greater number of private entrepreneurs to explore opportunities in agribusiness. A healthy market and private sector would provide value-added, skilled work to the landless poor and generate multiple livelihood opportunities in both the farm and nonfarm sectors.

The idea of enticing global private enterprise into developing-country markets is not new but the expectations are different this time around. In many respects they are driven by a greater understanding that just any kind of economic growth will not improve the lives of the poor.

It will take a particular kind of private-sector involvement to generate the necessary economic transformations. Private entrepreneurs are now increasingly held to environmental, social, and corporate governance principles that stress sustainable business practices and adherence to labor standards. Without these standards and practices, the private sector and disadvantaged groups cannot mutually benefit from consumer, employment, and entrepreneurial activities.

When good governance, equitable markets, and the other key conditions noted above are absent, poor farmers are unlikely to earn decent incomes and secure adequate diets for themselves and their families. If agriculture underperforms or fails, nonfarmers will also feel the negative effects. We need to keep uppermost in our minds that significant gains in agricultural

productivity have provided the critical first steps in economic development in many countries.

## MDG 2. Achieve universal primary education

Education is crucial to both human and economic development. To achieve the MDG goal for education we must take into account education's links to agriculture and food and nutrition security. Poor rural households often cannot afford to send their children to school. Education fees and the opportunity costs of educating children, rather than putting them to work to earn money or help at home or on the farm, can be prohibitive. It therefore takes a three-pronged strategy to address this huge trade-off the poor face: one, food for children in school; two, incentives (food or cash) for parents and support services (such as crèches) for working mothers so that they can send children to school and keep them there; and three, improvements in agricultural productivity and market functioning to assure adequate food supply and access.

Feeding children in school has paid significant educational dividends. A school feeding program in Bangladesh, for instance, has resulted in a 35 percent overall increase in enrollment (and a remarkable 44 percent increase for girls) in comparison with only a 7 percent increase in schools where the program was not available. Similar improvements in school enrollment, attendance, and retention rates have been observed in a number of other education-supporting food programs in the developing world. The scaling up of such programs in many developing countries would go a long way toward simultaneously achieving both the education and hunger MDGs.

There are further favorable linkages between education and agriculture. By raising incomes and allowing farmers to hire labor or invest in labor-saving agricultural technologies, rising agricultural productivity will enable rural parents to send their children to school. Agriculture-led economic growth



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will also have a broader impact by creating nonfarm jobs in food-related industries for the skilled and educated. As agriculture develops, farmers will produce more high-value products, including animal products such as milk, thereby increasing the demand for skilled labor in this sector because these products have specialized production and marketing requirements. These sectoral changes will mean that investing in children's education will seem more worthwhile.

As a growing agriculture sector improves household incentives to educate children, more girls will become educated. This outcome will be particularly important for improving child welfare (MDGs 1 and 4). Research shows that girls' education and overall improvement in women's status contribute significantly to improving the nutritional status of children. But because girls constitute the majority of school "dropouts"— better referred to as "pushouts"— due in part to their role as caregivers for young children in the absence of child care services for poor working mothers, their continued enrollment will depend on the provision of child care. There is an urgent need for community or publicly funded child care, particularly crèches, for working women in rural areas, and for publicly and/or privately funded services in the case of women employed in the industrial sector.

### MDG 3. Promote gender equality and empower women



Many women are farmers. But unlike men, who have greater opportunities for nonagricultural work, women depend mainly on agriculture to secure food or earn money for their families. Improvements in agriculture, therefore, can contribute in a fundamental way to increasing incomes and economically empowering women. What's more, improvements in labor-saving technologies in agriculture that reduce the number of hours worked and enhance income per each hour of work (especially for high-value crops) will free up poor women's time, benefiting them and allowing them more time for child care. More time away from farming would also allow women the option of choosing skilled work in the nonagricultural sector.

The issue of time poverty for women is one of the main obstacles to achieving gender equality. Even in the case of educated working women, employers and communities often do not take account of the multiple time burdens women face: caring for children, running a household, and keeping gainful employment. Women and girls in poor rural households face an even greater time challenge, especially since their farm and household chores are made more difficult because of inadequate investments in water, sanitation, energy,





and transport infrastructure. Rural development strategies that invest in gender-based infrastructure needs would improve the prospects for agriculture and produce more equitable outcomes for men and women.

Successful women farmers will also require access to the same financial resources, such as credit, that are available to men. Otherwise they will continue to operate in the economic shadow of men. Without economic parity, women are also much more vulnerable than men to shocks and high-risk behaviors. For instance, women at an economic disadvantage are less likely to be able to negotiate the use of condoms and are more likely to stay in an abusive relationship. Women can be empowered by gaining secure access to the resources and property rights they need to make a living from agriculture, and by having control over the food or money they produce. The agrarian reforms in some Latin American countries in the late 1980s and early 1990s, for example, have allowed joint titling of land for men and women. These changes have led to significant improvements in women's position in rural communities.

Legal and economic rights that extend equality to women will ensure that they obtain the full welfare benefits of improved agriculture. Such equality will, in turn, boost agricultural productivity further.

## MDG 4. Reduce child mortality

The links between agriculture and child mortality are indirect but important. About half of all child deaths occur because of malnutrition, which prevents children from fighting off even common childhood ailments. Mildly underweight children are twice as likely to die prematurely as children who have normal weight. The risk of dying increases five- to eight-fold for children who are moderately or severely malnourished. The absence of essential micronutrients further exacerbates poor children's vulnerability to disease. Child mortality hits particularly hard in rural areas, where proportionately more children die before the age of five than in urban areas. Boosting food production and improving the quality of children's diets will help reduce child malnutrition and child mortality, especially in rural areas. Higher incomes from agriculture-led economic growth will allow households to spend more on food and medicine, thus also leading to lower child mortality rates.

Ultimately, the problem of child mortality is a result of some combination of poor living conditions, including a deficient diet, and the quality of and accessibility to the health system. It is no surprise that poverty

correlates with all of the health concerns specified in the MDGs. Pulling people out of poverty by expanding their earning opportunities would help resolve major health problems. Agriculture and rural growth contribute to that health effect at the earlier stages of economic development.

## MDG 5. Improve maternal health

To properly care for their children, women need to be healthy. Self-reliant, educated women with access to adequate resources are better able to care for themselves. Thus, meeting the MDGs for education and women's empowerment by improving agricultural productivity can indirectly improve women's health.

But agriculture can also benefit maternal health directly, by improving the quality of women's diets. Both the quality and the quantity of food available to women affect their health, and the impact of malnutrition on reproductive health is well documented. Women whose immune systems are weakened because of insufficient food intake have a higher likelihood of infections and adverse pregnancy outcomes. Maternal health also depends on having achieved food security in girlhood, well before conception.

In addition, micronutrients such as iron, zinc, and vitamin A are particularly important in women's diets, because women, along with young children, suffer most from deficiencies in this area. Anemia, caused by a lack of iron, is especially damaging, because it hits women hardest during pregnancy, delivery, and the first few months following childbirth. More than



65,000 women die of anemia each year. To overcome such health problems, we need to supplement diets and fortify

foods with micronutrients and breed staple crops rich in these nutrients. The CGIAR's HarvestPlus program is already breeding these kinds of crops, which will provide an agricultural contribution to solving the problem of "hidden hunger."

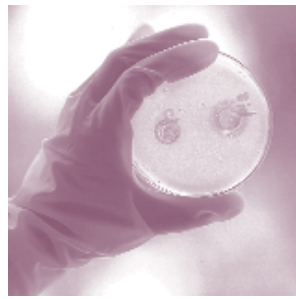
Improving food and nutrition security for poor households with the help of agriculture and ensuring that households allocate food equitably are critical steps in improving maternal health.

## MDG 6. Combat HIV/AIDS, malaria, and other diseases

Agriculture and food and nutrition security play important but still underrated roles in addressing HIV/AIDS. A holistic perspective is needed here. A dynamic agricultural sector can reduce risky economic behavior, increase the demand for education and good health care, and provide adequate food for leading a healthy life and fighting illness if the need arises. A sluggish agricultural sector, on the other hand, can seriously undermine attempts to curb the spread of HIV/AIDS and other diseases. Stagnating agriculture can lead poor people to take dangerous risks and engage in economic activities that imperil health. Moreover, without proper food and nutrition, people living with HIV will transition to AIDS more rapidly, because individuals with HIV require up to 50 percent more

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protein and up to 15 percent more calories than healthy individuals. Similarly, infected pregnant mothers are more likely to transmit the disease to children who are food insecure. The treatment of HIV/AIDS patients is also less effective in the absence of food security. In addition to direct links between diet quality and the severity of the illness, poverty and HIV/AIDS are closely correlated. People in marginalized groups are more vulnerable to the disease because of their limited access to coping mechanisms such as social networks and the sale of assets.

The incidence of tuberculosis is also associated with malnutrition and poverty. People who lack appropriate diets and access to essential micronutrients, such as iron, vitamin D, and zinc, are more likely both to contract TB and to progress faster from infection to active TB and early death.

With malaria, the previously mentioned links between disease on the one hand and income levels and diet quality on the other are compounded by the direct relationship between agriculture and the spread of disease. A recent initiative launched by CGIAR—a Systemwide Initiative on Malaria and Agriculture (SIMA)—aims to deepen our understanding of the linkages between agriculture and malaria and to seek new ways of controlling the spread of this disease by adopting favorable agricultural practices. Using new high-yielding rice strains and diversifying crop

production are two strategies suggested to help combat malaria.

Overall, to attain the MDGs for disease, the resources of the agricultural sector need to be coordinated with those of the health sector to meet the joint challenges of poverty reduction and disease eradication.

Combating HIV/AIDS is particularly important, as this disease is ravaging rural populations and wiping out the workforce in some countries.

## MDG 7. Ensure environmental sustainability

The Millennium Declaration targets a variety of environmental issues, including biodiversity, critical natural habitats, energy use, global climate change, safe water and sanitation, and urban slums. A productive agricultural sector can reduce pressure in all of these areas but that outcome is not automatic. In fact, many agricultural practices that push productivity tend to do so at the expense of the environment. Pressures to increase agricultural production with inappropriate policies in the past have resulted in soil degradation, greater concentration of greenhouse gases in the atmosphere, marine pollution, overexploitation of fisheries, and loss of valuable habitats. People who suffer from food and nutrition insecurity generally try to safeguard their environments, but often fail for lack of resources and the capacity to organize the needed collective action at the local level.

In addition, various market failures in agriculture have been known to contribute to environmental deterioration. Some of the most prominent examples have to do with overexploitation of natural resources where property rights are not clearly assigned and where subsidies encourage malpractice in resource management. Funds need to be diverted from eco-destructive subsidies to policies that strengthen the ecological foundations essential for sustainable agriculture.



For agricultural development programs to be environmentally sustainable, their long-term environmental costs and benefits have to be taken into account. Plus, policies and regulations need to be in place to encourage efficient—instead of excessive—energy, water, fertilizer, and pesticide use. Sound water management in agriculture is critical for safe drinking water, as well as for prevention of water-borne diseases and wasting of water. At the same time, agriculture-led economic growth will provide public revenues that governments can use to provide safe drinking water and better sanitation, as well as higher incomes that will allow individual farming households to invest in these basic needs.

The issue of better resource management arises in urban areas as well. Urban water subsidies, for example, go disproportionately to the better off in most developing countries because they are connected to the public system. The urban poor, who must rely on water vendors, pay many times more for water than better-off residents. Removing such subsidies and using the available money to finance wider distribution of piped water would benefit the poor.

## MDG 8. Develop a global partnership for development

Wrestling with the problems of development is going to require countries to work together closely at regional and international levels to address a wide range of issues. The final MDG attempts to capture this need and has many different targets. One of these involves creating jobs for young people. Jobs in rural areas and small towns are particularly important, and the economic, political, and institutional conditions that facilitate agricultural development can make a strong contribution here. Although initially the jobs created will be within agriculture, once general economic growth kicks in as a result of agricultural growth, employment opportunities will arise in other sectors.

Agriculture needs to be taken into account when addressing the other targets of MDG 8 as well. For example, when developing “an open, rule-based, predictable, nondiscriminatory trading and financial system” (one specific target), priority should be given to harmonizing and rationalizing global agricultural trade because of the direct, positive impact this will

have on poor farmers. At the same time, the special needs of poor agricultural producers should be considered to ensure that this vulnerable group benefits as much as possible from the trade generated. For example, decisionmakers need to make sure that poverty reduction strategies (such as those developed under the Heavily Indebted Poor Countries [HIPC] Initiative) are clearly linked to agricultural development because of the strong connection between poverty reduction and agriculture.

The creation of a global partnership for development will require increased commitments on the part of global and national actors to the pursuit of pro-poor growth. Reforming the international trade system is one example of such commitment. Higher and better-targeted levels of foreign aid financed on a sustained basis and promotion of sustainable inflows of foreign investment are other examples. Such efforts are essential for strengthening the domestic capacity of developing countries and achieving the MDGs.

Lastly, genuine collaboration between international organizations, international and local research institutions, and civil society to produce cohesive and usable research and policy recommendations, as well as the monitoring and evaluation of ongoing policy efforts, are crucial. The CGIAR is one such collaborative international effort that shows the power of partnerships in promoting public good in the farm sector.

## Policy Actions to Meet the MDGs

The progress made toward achieving the MDG targets is being monitored by many civil society organizations and reported on in the media. Countries are modifying policies and programs to bring about the changes needed to meet those targets. As these efforts get underway, any evaluation of progress should consider that participatory policy action takes time as the flow of developments unfolds from abstract goals to policy

change to investment, implementation, and outcome. Evaluating the progress along this spectrum would therefore involve keeping track of transitions from development-friendly rhetoric, to binding documents specifying commitments, to concrete policy designs backed up by appropriate budgetary allocations, and finally to implementation activities that have impact on the ground. Throughout the process, we must be cognizant of the political and economic realities that accompany major changes. Thus, expectations of rapid developments must be tempered by recognizing that policy change requires time, yet in the end real outcomes must be evident.

Since only a few years have elapsed after the declaration of MDGs, most associated actions currently fall between the "declarations" and "initiatives" stage (see figure). Policy actors have made suitable progress at these initial stages to promote the roles of agriculture and food and nutrition security in the development process. However, in terms of progress towards achieving the MDGs, we have yet to see concrete results and we may fail to reach a number of targets at the current pace of change. Transition to the "actions and investments" stage is now critical.



A comprehensive development strategy that addresses the whole set of goals is required for MDG-related efforts to be successful. These strategies differ by country due to resources and institutional conditions, so they must be tailored to the specific needs and circumstances of a given situation. Political and economic climate must be taken into account, along with historical, cultural, and geographic characteristics. At the same time, each of the goals needs to be reached and that requires specific action in the overall context. For instance for the goal of cutting hunger in half, the Task Force on Hunger that focuses on this goal has proposed seven concrete recommendations at the global, national, and community levels.

Policy actions that improve agricultural productivity and food and nutrition security are essential components of a successful MDG strategy. In addition, a set of other domestic and international policies to stimulate the agriculture sector generally will be required. Supporting agriculture growth in low-income countries generally means supporting pro-poor growth, especially when combined with better access to markets by small farmers.

Because simulations show the vital importance of easy market access for farmers, more needs to be invested in infrastructure such as roads and bridges to meet MDG 1 targets. These investments are especially important for Sub-Saharan Africa. Public-private partnerships offer an efficient way of providing infrastructure and social services, where public sector efforts alone have proved inadequate. At the same time, investment in infrastructure should be linked to national poverty reduction and general development goals. Lack of coordination at the national, regional, and donor levels means that investment is being wasted. For example, building schools without building roads for access inevitably just means empty classrooms.



A sense of ownership is important to ensure investments are sustainable. Local communities, particularly those with women and men living in poverty, need to be integrated fully into any

investment plans by asking them what they need and how much they can do to maintain any new infrastructure. This requires us to shift our development paradigm so we think of partnerships, not "beneficiaries" and the patronage that implies.

These measures will increase overall economic growth, but economic growth alone will not ensure adequately fast reductions in malnutrition. Growth policies have to be supplemented by nutrition-focused interventions, such as community nutrition programs and comprehensive safety nets. In looking further into the future, beyond 2015, social safety nets and social protection policies will become more necessary to address the remaining hunger and poverty problems of developing countries. To finance these actions requires continued stimulation of growth and the development of new institutions—including insurance systems—that strengthen the capacities of the poor to address income and health risks.

Poor governance, however, can and often does thwart the implementation of appropriate policies and economic reforms. Stemming from corruption, lack of competence, or poor information, governance poses a major problem for achieving the MDGs. Many experts nowadays point particularly to lack of political will at the national and international levels as the reason that attempts to combat hunger and poverty stall. The precise ways to overcome this obstacle remain unclear, but undoubtedly have to do with giving voice to poor citizens and ensuring government accountability. Where poor people are able to exercise their political and civil rights, governments are more attuned to their needs and demands.



## ■ Policy action in the critical arenas of sustainable agriculture productivity and food and nutrition security will be essential for responding effectively and responsibly to reach the Millennium Development Goals.

Recent experiences in Brazil, China, Ethiopia, India, and Uganda with improved participation of the rural poor in public policy formulation and implementation point to new ways of developing and carrying out rural initiatives. A push toward decentralization and devolution of decisionmaking has resulted in the rural poor's increased participation in decisions regarding rural development.

Inter- and intranational conflicts also continue to pose threats to the effort to reduce hunger and poverty. Preventing or stopping violent conflict remains a necessary undertaking in many developing countries that hope to stabilize rural areas and improve the lives of their poor citizens. Where rampant violence and war persist, an agriculture- and rural-development-driven MDG strategy has no chance.

### For further reading:

[www.developmentgoals.org](http://www.developmentgoals.org)

[www.unmillenniumproject.org](http://www.unmillenniumproject.org)

Shaohua Chen and Martin Ravallion. 2004. "How Have the World's Poorest Fared Since the Early 1980s?," Washington, D.C.: World Bank Development Research Group.

[www.worldbank.org/research/povmonitor/MartinPapers/How\\_have\\_the\\_poorest\\_fared\\_since\\_the\\_early\\_1980s.pdf](http://www.worldbank.org/research/povmonitor/MartinPapers/How_have_the_poorest_fared_since_the_early_1980s.pdf)

Food and Agriculture Organization of the United Nations. 2003. *The State of Food Insecurity in the World*. Rome: FAO. [www.fao.org/sof/sofi/index\\_en.htm](http://www.fao.org/sof/sofi/index_en.htm)

UN System Standing Committee on Nutrition. 2004. *5th Report on the World Nutrition Situation*. Geneva: SCN. <http://www.unsystem.org/scn/Publications/AnnualMeeting>

It is a promising development that the review of progress—and lack thereof—in achieving the MDGs has reached global attention. Calls for accountability and action that has real impact on people are growing because of that attention. Governments, civil society organizations, and private business can no longer avoid the calls to respond. Policy action in the critical arenas of sustainable agriculture productivity and food and nutrition security will be essential for responding effectively and responsibly to reach the Millennium Development Goals.

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