

# Prospects and status of millennium development goals

**Lead Author:** Mohan Munasinghe (other articles)

**Content Partner:** Munasinghe Institute for Sustainable Development (other articles)

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*This article has been reviewed and approved by the following*

**Topic Editor:** Cutler J. Cleveland (other articles)

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**Note:** The author welcomes comments, which may be sent to MIND.

This section reviews recent trends and prospects in relation to the Millennium Development Goals (MDGs), as an appropriate backdrop for the subsequent chapters.

One yardstick for measuring the progress of civilization is the ability of humans to manipulate energy, **matter** and information. We may distinguish four eras <sup>[1]</sup>. The first was the nomadic hunter-gatherer phase starting several million years ago, including the domestication of fire and use of stone tools. Around 8000 BC a second transition to the agricultural period began, associated with farming settlements and **agricultural** implements. The advent of the industrial age in the 18th century was even more rapid, and characterized by increasingly crowded and polluted urban centers, and machines. The 20th century marks the fourth transition to a planetary civilization, increasingly linked together by fast communications, rapid transportation, information technology and computers. During this process, both extensive and intensive development took place. With each transition, extensive development and growth in the scale of activities, expanded the footprint of humanity (see Figure 2.8). At the same time, intensive development increased the internal complexity, inter-linkages and ability to process information within society. Nevertheless, human beings are still utterly dependent on the biogeosphere for their existence and thus, extensive growth makes us more vulnerable to environmental degradation. Meanwhile, intensive development improves resilience due to greater complexity, interconnections and redundancy, but also increases vulnerability to harmful disturbances that are quickly transmitted to all parts of the globe (e.g., financial and market instabilities, or new diseases).

Many recent books have set out key sustainable development problems and potential remedies – taking optimistic, pessimistic or intermediate viewpoints <sup>[2]</sup>. While it is difficult to generalize, environmentalists and natural scientists have tended to see the glass half empty, while economists and technological optimists have perceived the glass half full – reflecting a range of opinions. This book takes the middle path, arguing that the problems are serious enough to warrant urgent attention, while existing and emerging remedies could provide adequate solutions if early action is taken.

Below, we summarize the disappointing progress on the **MDGs** – the most widely accepted set of global sustainable development targets today.

## Poverty and Hunger

More than 1 billion people survive on less than \$1 a day. More than 800 million people have too little to eat to meet their daily energy needs. Over 25 percent of children under the age of 5 in developing countries are malnourished, retarding their physical and mental development and threatening their survival. In Asia, the number of people living on less than \$1 a day dropped by nearly a quarter of a billion from 1990 to 2001. In more than 30 countries, hunger was reduced by at least 25% during the last decade. Sub-Saharan Africa is the region hardest hit by hunger and malnutrition.

The proportion of people lacking the food needed to meet their daily needs is on the decline. The percentage of people with insufficient food was lower in 2000–2002 than in 1990–1992 in all regions except Western Asia. However, progress has slowed over the past several years, and the number of hungry people increased between 1997 and 2002, probably

due to growing populations and poor agricultural productivity. Hunger tends to be concentrated among the landless or among farmers whose plots are too small to provide for their needs.

Efforts to eradicate poverty and hunger are frequently set back by conflict and natural disasters. The average income of the extremely poor in sub-Saharan Africa declined. Reversing this negative trend requires faster **economic growth** that reaches the poor — a challenging task in the face of disease and armed conflicts. Hunger and poverty, in turn, can provide fertile ground for conflict, especially when combined with factors such as inequality, and make being prepared to cope with disasters more difficult. Strategies to combat child malnutrition include exclusive breastfeeding for the first six months, increasing the use of micronutrient supplements, reducing infectious diseases, and improving access to clean water and sanitation.

## Primary education

More than 115 million children of primary school age do not go through proper schooling. These are mostly children from poor households, whose mothers often have no formal education either. Education, especially for girls, has social and economic benefits for society as a whole. Achieving this goal will require dramatically scaled-up efforts in sub-Saharan Africa, Southern Asia and Oceania. In these regions and elsewhere, increased enrollment needs to be accompanied by efforts to ensure that all children remain in school and receive a high-quality education.

In five regions, 90% of children or more are enrolled in primary school. Sub-Saharan Africa has made progress, but still has over a third of its children out of school. In Southern Asia, Oceania and Western Asia, enrollment is also lagging, with about 20% of children out of school.

## Gender Equality

Achieving parity in education is critical if women are to engage fully in society and the **global economy**. Although women have increased their share in paid non-**agricultural** employment, they remain a small minority in salaried jobs and are overrepresented in the informal economy. Having an equal voice in decisions is a key element of women's empowerment.

Countries with the widest gender gap in primary education have made progress in increasing the proportion of girls enrolled in school. This gap still remains a serious concern in Southern Asia, sub-Saharan Africa and Western Asia. In countries where resources and school facilities are lacking, only boys are sent to school. However, in countries where overall enrollments are high, girls are well represented in both primary and secondary education (e.g., in Latin America).

Women's access to paid employment is lower than men's in most of the developing world. Women in Southern Asia, Western Asia and **Northern Africa** still hold only about 20% of paying jobs in sectors outside of **agriculture**. In Latin America and the Caribbean women now hold over 40% of paying jobs. Over 60% of people working in family enterprises without pay are women.

## Child Mortality

Every year, almost 11 million children below the age of 5 die (about 30,000 children a day). Most live in developing countries and die from a disease or a combination of diseases that can be prevented or treated by existing inexpensive means. Malnutrition contributes to over half these deaths. Improvements in public-health services are key, including safe water and better sanitation. Education, especially for girls and mothers, saves children's lives. Raising incomes can help, but little will be achieved unless services reach those who need them most.

In 1960, more than 1 child in 5 died before age 5 in the developing regions. By 1990, the rate decreased to 1 in 10. Only in **Northern Africa**, Latin America and the Caribbean and South-Eastern Asia has maintained this pace. In these regions, **economic growth**, better nutrition and access to health care have spurred improvements in child survival.

Almost half of all deaths among children under age 5 occur in sub-Saharan Africa, where progress has slowed owing to weak health systems, conflicts and AIDS. More than one third of all deaths occur in Southern Asia, despite the reduction

in poverty. Countries that have experienced conflict, including Cambodia and Iraq, have seen sharp increases or no improvement in child mortality since 1990. Countries reeling from AIDS, especially in Southern Africa, have also seen rises in child mortality.

Most of these lives could be saved by expanding low-cost prevention and treatment measures. These include exclusive breastfeeding of infants, **antibiotics** for acute respiratory infections, oral re-hydration for diarrhea, immunization, and the use of insecticide-treated mosquito nets and appropriate drugs for **malaria**. Proper nutrition is part of prevention, because malnutrition increases the risk of dying from these diseases. Better care for mothers and babies before and after birth would reduce the one third of these deaths that occur in the first days of life.

## Maternal Health

Currently, 200 million women have an unmet need for safe and effective contraceptive services. Twenty times as many women suffer serious injuries or disabilities. Countries with already low levels of maternal mortality have made progress. Reductions in the worst-affected countries will require additional resources to ensure that the majority of births are attended by doctors, nurses or midwives who are able to prevent, detect and manage obstetric complications. When problems do arise, women must be able to reach a fully equipped medical facility in time. Universal access to reproductive health care, including family planning, is the starting point for maternal health.

In 2000, the average risk of dying during pregnancy or childbirth in the developing world was 450 per 100,000 live births. The chances of dying during pregnancy or childbirth over a lifetime are as high as 1 in 16 in sub-Saharan Africa, compared with 1 in 3,800 in the developed world. This risk could be substantially reduced if women had adequate family planning services, good medical care and access to emergency obstetric-care facilities in case of unexpected complications.

Advances were made in most developing regions between 1990 and 2003 in providing medically skilled attendants at birth. Major improvements were achieved in South-Eastern Asia, **Northern Africa** and Eastern Asia, but there was no change in sub-Saharan Africa, where maternal mortality is highest.

## HIV/AIDS, malaria and other diseases

More than 20 million people have died around the world since the epidemic began, being the leading cause of premature death in sub-Saharan Africa and the fourth largest killer worldwide. And by the end of 2004, an estimated 39 million people were living with HIV. Thailand and **Uganda** have shown that infection rates can be reversed with vision and leadership. Historically, **malaria** has been a far greater scourge. It currently claims the lives of a million people a year and is estimated to have slowed **economic growth** in African countries by 1.3% a year. Tuberculosis, once thought defeated, is making a comeback, helped by the emergence of drug-resistant strains and the vulnerabilities created by HIV and AIDS. Not surprisingly, all three of these diseases are concentrated in the poorest countries. And they can be largely controlled through education, prevention and, when illness strikes, treatment and care.

Globally, 4.9 million people were newly infected with HIV in 2004 and 3.1 million died. HIV is spreading fastest in the European countries of CIS and in parts of Asia. In countries where the epidemic is still at an early stage, programs targeted at the most vulnerable are effective.

Because there is no cure for AIDS, prevention is essential. But millions of young people know too little about HIV to protect themselves. Surveys in sub-Saharan Africa and South-Eastern Asia show low knowledge about the basics about how to avoid infection. During the second half of 2004, the number of people receiving antiretroviral therapy in developing regions increased from 440,000 to 700,000, but that figure is only about 12% of those who would benefit from these medications. Treatment and care need to be expanded to reach millions more.

Malaria is endemic in many of the world's poorest countries, affecting 350–500 million people a year. Ninety percent of the 1 million **malaria** deaths each year occur in sub-Saharan Africa. In sub-Saharan Africa alone, more than 2,000 children a day die from malaria.

Tuberculosis kills 1.7 million people a year, most of them in their prime productive years. The number of new

tuberculosis cases has been growing by about 1% a year, with the fastest increases in sub-Saharan Africa and CIS. In 2003, there were nearly 9 million new cases, including 674,000 among people living with HIV.

## Environmental Sustainability

Land is becoming degraded at an alarming rate. Plant and animal species are being lost in record numbers. The climate is changing, bringing with it threats of rising sea levels and worsening droughts and floods. **Fisheries** and other marine resources are being overexploited. The rural poor are most immediately affected because their day-to-day subsistence and livelihoods more often depend on the natural resources around them. Though the exodus to urban areas has reduced pressure on rural lands, it has increased the number of people living in unsafe and overcrowded urban slums. In both urban and rural areas, billions of people lack safe drinking water and basic sanitation. Overcoming these and other environmental problems will require greater attention to the plight of the poor and an unprecedented level of global cooperation.

Forests cover one third of the Earth's surface and constitute one of the richest **ecosystems**. In the last decade alone, 940,000 square kilometers of forest were converted into **farmland**, logged or lost to other uses. Some 19 million square kilometers (over 13% of the Earth's land surface), have been designated as protected areas. This represents an increase of 15% since 1994. Loss of habitats and **biological diversity** continues, with more than 10,000 species considered to be under threat.

The transfer of new energy-efficient technologies to developing countries is not happening fast enough. In poor nations, the lack of clean fuels has a direct impact on rural households which depend on wood, dung, crop residues and charcoal for cooking and heating. Indoor air pollution caused by these fuels is estimated to cause more than 1.6 million deaths per year, mostly among women and children.

The fraction of population using safe sources of drinking water in the developing world increased from 71% in 1990 to 79% in 2002. However, over a billion people have yet to benefit, with lowest coverage in rural areas and urban slums. In sub-Saharan Africa, 42% of the population is still unserved. The obstacles to progress (which include conflict, political instability and low priority for investments in water and sanitation) are especially daunting, because of high population growth rates.

Much slower progress has been made globally in improving sanitation. About 2.6 billion people (representing half the developing world) lack toilets and other forms of improved sanitation. Sanitation coverage in the developing world rose from 34% in 1990 to 49% in 2002. If present trends continue, close to 2.4 billion people worldwide will still be without improved sanitation in 2015. A dramatic increase in investment is needed to meet the sanitation target.

The urban population of developing countries is growing at a rate of more than 3% per year, three times faster than in rural areas. This means that, because of migration to the cities and additional births, about 100 million people are added to urban communities of the developing world each year. By 2007, the number of people living in cities is expected to exceed the rural population in developing regions. Nearly one in three city dwellers — almost 1 billion people — lives in slums, in conditions characterized by overcrowding, little employment or security of tenure, poor water, sanitation and health services, and widespread insecurity, including violence against women. Not surprisingly, disease, mortality and unemployment are considerably higher in slums than in planned urban settlements. Surveys suggest that in some African cities, the death rate of children under age 5 who live in slums is about twice as high as that of children in other urban communities.

## Notes

1. <sup>▲</sup>Munasinghe 1987. "Computer and informatics issues and policy for third world development", Information Technology for Development, Vol.2, No.4, p.303-35.  
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2. <sup>▲</sup>Easterbrook 1995.

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This is a chapter from *Making Development More Sustainable: Sustainomics Framework and Applications (e-book)*.

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