

Annex: Millennium Development Goals and the Environment in Nepal

Background

The Government of Nepal endorsed the United Nations Millennium Development Goals (MDGs) in September 2000 together with 188 other nations. However, the “MDG Progress Report 2002” points out that only two targets—improving safe drinking water and reducing child mortality—are likely to be met by the 2015 deadline.

This weak performance, not only of Nepal but also of many other developing countries, led to the introduction of an MDG needs assessment in the individual countries. The Needs Assessment looks at the time-bound targets, determines their implications for resources, examines linkages with ongoing development plans, for example in Nepal the Tenth Plan and the Poverty Reduction Strategy Plan. This exercise has been carried out in a number of countries already, and a methodology has been developed that has permitted a more realistic identification of the interventions and investments required to achieve the goals.

Environment and the MDGs

Millennium Development Goal 7

Millennium Development Goal 7 is to ensure environmental sustainability. According to Task Force 6 on Environmental Sustainability, this means the ability of communities of plants, animals, microorganisms, and their nonliving surroundings to sustain themselves and people far into the future. It includes providing critical ecosystem goods and services to people and other species.

There are three targets under Goal 7: Targets 9, 10 and 11.

Target 9: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.

The indicators for monitoring progress are:

- (i) proportion of land area covered by forest,
- (ii) ratio of area protected to maintain biological diversity to surface area,
- (iii) energy use (kilogram oil equivalent) per \$1 GDP in purchasing power parity dollars,
- (iv) carbon dioxide emission per capita and consumption of ozone depleting CFCs in tons, and
- (v) proportion of population using solid fuels.

Target 10: Halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation.

The indicators for monitoring progress are:

- (i) proportion of population with sustainable access to an improved water source, urban and rural, and
- (ii) proportion of population with access to improved sanitation, urban and rural.

Target 11: Achieve a significant improvement in the lives of slum dwellers by 2020.

The indicator for monitoring progress is:

- (i) proportion of households with access to secure tenure.

Other Millennium Development Goals

In addition to the targets directly related to environmental sustainability, there are a number of targets under each of the other goals that have direct or indirect environmental implications.

Goal 1: Eradicate extreme poverty and hunger

Most of the poor live in environmentally fragile areas: erosion-prone hillsides, semiarid lands, and tropical forest. In most instances the poor lack control over and access to natural resources. Many environments are already highly degraded, making it difficult to meet increasing demands for fuelwood, food, fiber, fodder, and others. Any strategy to reduce poverty and hunger cannot overlook these environmental concerns. The environmental dimensions of the Poverty Reduction Strategy Plan in Nepal need to be reexamined.

Goal 2: Achieve universal primary education

This goal has no negative impact on the environment. Including environmental awareness in primary education could have strong benefits for the environment in the long run.

Goal 3: Promote gender equality and empower women

It is critical to make women knowledgeable about the environment and conservation of biodiversity. Limited availability of natural resources adversely impacts women's work. Birth rates tend to be higher, children less healthy, and population growth more rapid where environments are degraded, leading to further pressures on basic natural resources for livelihood.

Goal 4: Reduce child mortality

Awareness of environmental sanitation may be critical. Better kept environments lead to better conditions of natural resources like water.

Goal 5: Improve maternal health

Sanitation is critical. Improved biodiversity may enhance nutrition and local availability of natural remedies.

Goal 6: Combat HIV/AIDS, malaria, and other diseases

Underlying environmental conditions—particularly waterborne and other infectious diseases—affect health. Good watershed management and pollution control are important. The relationship between infectious disease and changing environmental conditions needs to be studied more carefully. Availability of medicinal herbs for treating local health problems requires conserving biodiversity.

Other Key Points

In addition, a number of other key points may be noted:

- (i) Activities with short-term benefits could have negative long-term environmental impacts that are not easy to mitigate. These impacts could lead to other consequences in terms of time (future), space (downstream), and sector (industry's impact on water or land).
- (ii) It can be very difficult to motivate people to make environmental investments, as effects may occur somewhere else and not be felt immediately. By their very nature as public goods, the use of ecological services cannot be restricted to some and excluded to others.
- (iii) Environmental sustainability requires dealing with immediate problems as well as taking a long-term perspective.
- (iv) Environmental problems have various spatial dimensions (upstream–downstream), which need to be understood and approached appropriately.
- (v) There are many global aspects to environmental change that should be dealt with at the global level.

For all these reasons environment is truly a crosscutting theme and relevant actions cannot be limited to a few areas. Environmental issues must be consciously addressed at every level of decision making. Without environmental sustainability, MDGs—even if they are reached in the short run—may face problems in the long term. It is equally true that, without meeting the MDGs, environmental sustainability may not be feasible.

Environmental Mainstreaming in the MDGs for Nepal

Environmental diversity and fragility are two sides of the coin in Nepal. If diversity has endowed the country with an amazing variety of ecosystems and scenic environments, these are delicately balanced by strong linkages between the different components which are easily disrupted. Once disrupted, ecosystem degradation is swift and people have realized through bitter experience that livelihood disruptions can follow very quickly. While some disruptions are natural consequences of changing weather or natural cycles, human impacts are also becoming important. A rapidly growing population, increasing urbanization, transport links, industrial activities, and developmental activities are contributing to environmental damage. The Government is making efforts on several fronts to deal with these problems but, while some notable decisions and impacts are evident, the problems are serious and increasing.

Since the early 1980s, the Government of Nepal has made several efforts to integrate environmental concerns into national development plans and programs. The Environment Protection Council (EPC) was established in 1993 and the Ministry of Population and Environment (MOPE) in 1995 to further develop and implement environmental policies and programs. Since then, there has been some progress in developing legislation, introducing environmental impact assessments, promulgating the Nepal Environmental Policy and Action Plan, enacting the Environment Protection Act 1996 and the Environment Protection Regulations in 1997, and developing standards to minimize the adverse effects of development activities on environment and health.

In addition, the Government has made a commitment to pursue an integrated policy to achieve sustainable development objectives. To meet the goals of Agenda 21 and the MDGs, the Government of Nepal has established the National Commission for Sustainable Development under the chairmanship of the Prime Minister. New policies and strategies are emerging, such as the National Wetland Policy, Terai Arc Landscape Strategy, Code of Conduct for Biodiversity, and the Action Plan for Herbs.

Nepal is actively participating in the MDG program. The National Planning Commission (NPC) of HMG, with the support of United Nations Development Programme (UNDP), is monitoring the progress being made in implementing the MDGs.

Progress regarding the achievement of the MDGs is at best mixed. With increasing economic difficulties and the continuing conflict, there are serious doubts regarding the fulfilment of the MDGs. UNDP's *MDG Progress Report 2005* has assessed Nepal's progress towards the MDGs and indicated a generally weak but improving situation. The disruption in economic activities and service delivery because of the persisting conflict has made the scenario even grimmer, requiring a careful reassessment of the efforts to successfully implement the poverty reduction strategy plan and the Tenth Plan, and monitor the progress on the different MDGs. A special concern here is Goal 7, Ensure environmental sustainability. While the other MDGs directly relate to different sectors, some like poverty and environmental sustainability cut across them. Furthermore, environmental issues may often be in conflict with some of the proposed sectoral measures. UNDP has commenced an exercise to improve the monitoring of progress related to the MDGs. This is a critical exercise and, if integrated with the implementation of the Tenth Plan, could provide an excellent monitoring mechanism as well as a sounding board for appropriate policy responses. Better integration of environmental components in this continuing exercise is fundamental to ensuring environmental sustainability.

Although Goal 7 has been listed as ensuring environmental sustainability and some targets have been identified, this is clearly not enough for a number of reasons. First, there are environmental implications to other targets besides those indicated in Goal 7. For example, Indicator 25 deals with the proportion of land area covered by forest but, to meet Target 1, the share of forest area under community control may be important. The real challenge is to take each target and its indicators and to see if a realistic, measurable sub-indicator for ensuring environmental sustainability can be identified. This will assist in indicating the cost being imposed on the environment in fulfilling different MDGs. Goal 7 alone cannot ensure environmental sustainability if the environmental implications of the other MDGs are neither understood nor tracked over time. A systematic inter-sectoral review of all the different aspects will help to develop the environmental sub-indicators for each of the targets.

The MDGs should not be seen as separate from the country's regular development plans. At present, the different line agencies that actually report on the progress of their sectoral activities do not appear to have internalized the MDGs.

Poor implementation of existing laws and regulations, virtually no monitoring of environmental problems and issues, lack of scientific data on some of the standards and site-specific parameters, and limited budgets for implementing environmental programs are continuing difficulties. Without addressing these issues, it is unlikely that environmental sustainability will improve.

Nepal's Progress Towards the MDGs: Status at a Glance

GOALS	WILL DEVELOPMENT GOAL BE REACHED				STATUS OF SUPPORTIVE ENVIRONMENT			
	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but Improving	Weak
1 A. Extreme Poverty Halve the proportion of people living below the national poverty line by 2015	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but Improving	Weak
1 B. Hunger Halve the proportion of people who suffer from hunger between 1990 and 2015	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak
2. Universal Primary Education Ensure the by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak
3. Gender and Equality Achieve equal access for boys and girls to primary and secondary education by 2005 and to all levels of education no later than 2015	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak
4. Child Mortality Reduce under-five mortality by two-thirds by 2015	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak
5. Maternal Health Reduce maternal mortality ratio by three-quarters by 2015	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak
6 A. HIV/AIDS Halt and reverse the spread of HIV/AIDS by 2015	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak
6 B. Malaria and Other Major Diseases Halt and reverse the incidence of malaria and other diseases by 2015	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak
6 C. Tuberculosis Halt and reverse the incidence of tuberculosis by 2015	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak
7 A. Environmental Sustainability Reverse loss of environmental resources	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak
7 B. Access to Safe Drinking Water Halve the proportion of people without access to safe drinking water	Likely	Potentially	Unlikely	Lack of data	Strong	Fair	Weak but improving	Weak

Source: UNDP (2005)

MDG Needs Assessment Module for Nepal

According to the Nepal team (Zahir et al. 2004), the first purpose of the review was to unfold the workings of the templates so that the information fed into these templates and the results generated could be mapped in transparent ways. The second purpose was to make the templates Nepal specific.

The needs assessment for Nepal covered five sectors: (i) agriculture, irrigation, and food security; (ii) roads and other rural infrastructure; (iii) drinking water and sanitation; (iv) health; and (v) education. Environment and gender were to be treated as crosscutting themes.

The study team revised the templates on education, water and sanitation, hunger, and agriculture; it also developed a costing template for roads and rural infrastructure, although not included in the original MDGs, infrastructure is considered critical for Nepal to progress in all the MDGs. A module has also been developed for costing the health system.

The entire exercise has gone through many rounds of interaction, especially with the concerned line agencies. The main objective has been to make the exercise as realistic and consistent as possible with respect to the MDGs as well as with the country development goals and the plans and programs being implemented.

The main problem has been the extremely poor information base for many of the parameters used in the templates. The exercise has highlighted many critical data gaps that hamper such an exercise. It also emphasizes the need to substantially improve regular reporting across sectors to carefully monitor progress in meeting the MDGs. Cost information is a variable that has to be treated very carefully. For many of the interventions, cost figures were lacking and estimates from other areas had to be used. In other cases, “reasonable” estimates have been used. This underscores the need to review these templates regularly whenever new facts or conditions make this necessary.

Wherever environmental parameters are already being measured and reported, these are easy to incorporate in the cost calculations. However, at present, only a few environmental parameters, such as pesticide use or aspects of water pollution (based on measurement of waterborne diseases for some areas), may be directly integrated in the cost calculations. In all other cases, the costs have to be part of feasibility studies, training, and monitoring activities. There appears to be broad agreement among the different sectoral teams regarding this approach. The main findings of the study team are highlighted below.

Eradicating Extreme Poverty and Hunger

Goal 1: Eradicate extreme poverty and hunger

- Target 1: Halve the proportion of people whose income is less than NRs 6,100 per capita per year at 2001 prices or NRs 16.71 per capita per day. The 2004 Nepal Living Standards Survey shows that only about 30% are below the poverty line, which is a significant improvement since 1995.
- Target 2: Halve between 1990 and 2015 the proportion of people who suffer from hunger. This includes reducing the percentage of underweight children from 57% in 1990 to 28% in 2015.

Proposals to eradicate extreme poverty and hunger center around wider dissemination and adoption of agricultural technology, increased access to production inputs, commercialization and diversification within the sector, and market promotion and infrastructure development. At 2004 prices, the financial resources needed for 2005 were NRs 19,796 million, increasing to NRs 42,625 million in 2015. The total budget set aside for agriculture and irrigation was only NRs 6,026 million, which is 30% of the needed estimate for 2005.

Attaining Universal Primary Education

Goal 2: Achieve universal primary education

- Target 3: Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

The total cost of attaining the MDG on education for 2005–2015 amounts to NRs 334.5 billion at FY2005 prices. The average annual costs amount to NRs 30.4 billion at FY2005 prices, which is 20% higher than the Government primary education budget for FY2005.

Goal 4: Reduce child mortality

Reduce by two thirds between 1990 and 2015, the under-5 mortality rate and also immunize 1-year-olds against measles.

Nepal is on track to meet this goal, as in 1996 the under-5 mortality rate was 118 per 1,000, which decreased to 91 per 1,000 in 2000 and the target is to reduce this to less than 54 by 2015. Similarly, infant mortality stood at 78 per 1,000 in 1995, which is to be reduced to less than 25 by 2015. The cost per child was NRs 90 in 2005, increasing to NRs 327 in 2015.

Goal 5: Improve maternal health in Nepal

The target is to reduce by three fourths the maternal mortality ratio and expand deliveries attended by health care providers. Per capita cost is NRs 34 in 2005, increasing to NRs 86 by 2015.

Goal 6: Combat HIV/AIDS, malaria, and other diseases

Halting and reversing the incidence of HIV/AIDS, malaria, and other major diseases by 2015 to meet Goals 5 and 6 will require spending NRs 11,791 million in 2005 and NRs 24,192 million in 2015.

Water and Sanitation

Goal 7: Ensure environmental sustainability

Target 10: Halve by 2015 the proportion of people without sustainable access to safe drinking water and sanitation. The cost in 2005 was NRs 8,855 million, increasing to NRs 16,550 million in 2015. In FY2004, government expenditure in this sector was only NRs 2,025 million.

Rural Transport and Infrastructure

Although not a part of the MDGs, Nepal considers this area important for meeting MDGs. The target is to put in place rural infrastructure to ensure the necessary transport services and supply of energy resources to meet the MDGs.

Costs

The total cost to meet the needs for the years 2005–2015 amounts to NRs 1,130,439 million at FY2005 prices, or about \$16,149 million.

The total financing gap varies based on the assumptions made and ranges from NRs 599 billion to NRs 538 billion. The latter scenario is based on the assumption of reduced security expenses.

The financing gap under the third scenario is 34% for hunger, 24% for education, 15% for health, 14% for drinking water and sanitation, and 13% for rural transport and electricity.

Bibliography

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The environment plays a crucial role in enabling and sustaining poverty reduction—and the effect is magnified within mountainous ecosystems such as those found in Nepal. Including environmental considerations in planning is a must, but to do this we need the relevant environmental data. In Nepal, environmental data and information can be difficult to find. Many data sets are unpublished—held in reports, ministry files, and others—much is inconsistent, and there are big gaps, especially in terms of time series and reliable, verified data.

The Environment Assessment of Nepal attempts to bring together a large part of what is available to provide an analysis of environmental status and trends in the country; the policy, legal and institutional framework for environmental management; financing mechanisms; and major environmental issues and opportunities. The Assessment highlights data inconsistencies, gaps, and needs, and the extensive list of sources provides an excellent starting point for anyone attempting to locate relevant environmental data.

The book is a demonstration of ADB's and ICIMOD's strong commitment to developing south Asia's environment knowledge base further, disseminating the information widely, and providing much needed environment assessment information to policy makers, researchers and development practitioners for the development of economically and environmentally sound ecosystems while improving living standards.