



Millennium Development Goals Needs Assessments

Methodology

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Comments are welcome and should be sent to
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Additional information on MDG needs assessments
and the Millennium Project is available at
www.unmillenniumproject.org

Methodology

A. The Context: MDG-Based Poverty Reduction Strategies

Although dozens of countries are off-track, there is still time for countries to meet the MDGs. By adopting a 2015 time horizon, countries can significantly expand human resources and basic infrastructure, both of which are often considered short-term “capacity constraints.” However, this 10- or 12-year horizon will require both strong national policy planning and sufficient international support to enable the implementation of ambitious, comprehensive plans.

To align policy with the MDGs, low-income country governments should follow a four-stage planning process.

First, each country should conduct a needs assessment that compares its current situation with MDG targets and identifies the combination of public investments that would enable the country to achieve the MDGs by 2015. This needs assessment should identify the particular barriers that prevent faster economic development and greater progress towards poverty reduction, and establish a set of specific interventions that to address and remove these obstacles.

As a first approximation of what a national MDG needs assessment would look like, the Millennium Project has recently worked with local partners to conduct such MDG faevaluations for five countries: Bangladesh, Cambodia, Ghana, Tanzania and Uganda (working draft available on-line at www.unmillenniumproject.org). In each of these countries, the Project and local research partners built upon international best practices to identify, in as much detail as possible, the input targets that would be needed for the country to achieve the MDGs by 2015. These estimates cover hundreds of interventions, defined as the goods, services and infrastructure that need to be provided to meet the Goals. Examples include the provision of medicines, textbooks and school uniforms; the expansion and operation of rural medical clinics and sanitation services; the training and employment of skilled professionals; and the construction and maintenance of physical infrastructure.

The Millennium Project’s needs assessment framework provides a template methodology for identifying the scale-up of activities needed through 2015. By working with local partners to identify local unit costs and by proposing a simple financing model, the framework also estimates the total domestic and external resource mobilization needed to achieve the Goals.

Note that a needs assessment is a key input to, rather than a substitute for, a policy plan with institutional design. The second stage of the planning process will be for each country to develop a long-term (10-12 year) framework for action for achieving the MDGs, building upon the results of the MDG needs assessment. In many instances this stage will require countries to align their long-range policy plans with the MDGs much more concretely than is currently the case. This MDG framework should include a policy

and public sector management framework to scale up public spending and services, as well as a broadly defined financing strategy to underpin the plan.

The third stage of the planning process will be for each country to construct its medium term (3-5 year) poverty reduction strategy (PRS) and, where appropriate, its Poverty Reduction Strategy Paper (PRSP) based on the long term MDG plan. The PRS is a more detailed, operational document, and should be attached to a Medium Term Expenditure Framework (MTEF), which translates the PRS into budgetary terms.

Fourth, both the 10-year framework and three-year PRS should include a public sector management strategy, with a key focus on transparency, accountability, and results-based management.

Both the long-term and short-term plans will then need to be periodically reviewed and revised as countries learn from their scale-up experiences and fine-tune policies toward achieving the MDGs.

To be clear, this approach of working backwards from 2015-based plans does not suggest creating new poverty reduction processes. Instead, it implies re-formulating the content of current approaches so that they are based on MDG horizons and transparent needs assessments. For instance, PRSs are typically 3-year financing frameworks that are not embedded in a long-term planning horizon. In a 3-year plan, a country is likely subject to financial, administrative, and human resource capacity constraints. In a 12-year framework, a country can identify means of building financial, administrative and human resource capacity (such as training health care professionals and managers). A schematic diagram outlining the novelty of the MDG-based planning approach is presented in Figure 1.

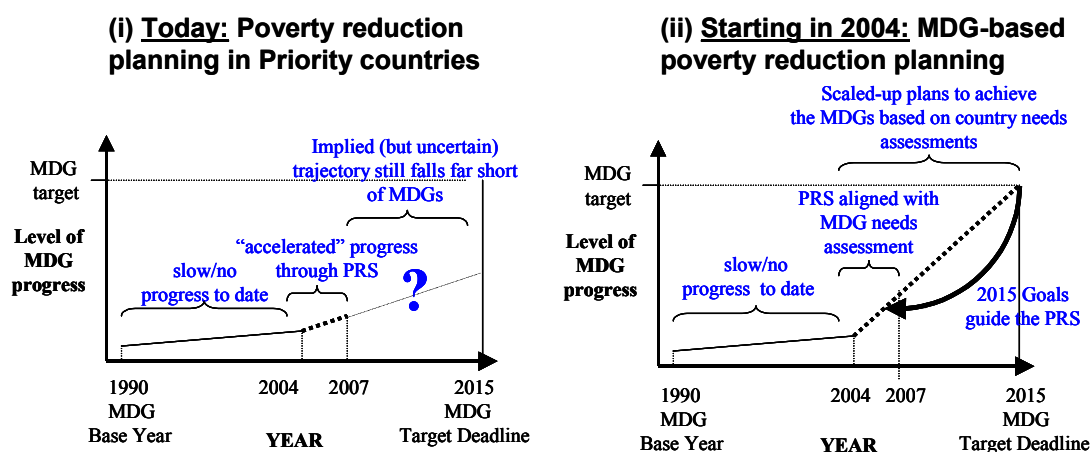


Figure 1: Principles of MDG-based Poverty Reduction Strategies

Part (i) of the diagram captures how current poverty reduction strategies in most low-income countries relate to the MDGs. A short-term PRS tends to support a slight acceleration in progress, but the implied trajectory is uncertain and far short of reaching the MDGs. Graph (ii) shows how country-level planning needs to work in order to

achieve the MDGs. Countries that have made slow progress since 1990 need to draft 2015-based plans for scale-up to achieve the MDGs. The 2015-based plans need to guide the shorter-term PRS and resource allocations.

The remainder of this document describes a methodology for carrying out MDG needs assessments as the first of four stages in developing MDG-based poverty reduction strategies.

Bringing together a wide variety of inputs from expert resources, the Millennium Project secretariat has been coordinating a multi-step process to develop a methodology for country-level MDG needs assessments. The methodology and needs assessment tools were developed as part of the preliminary country case studies carried out by the Millennium Project in conjunction with the following research organizations: Bangladesh Institute of Development Studies; Cambodian Institute of Cooperation and Peace, in cooperation with the University of Cambodia; Institute of Statistical, Social and Economic Research (Ghana); Economic and Social Research Foundation (Tanzania); and Economic Policy Research Center (Uganda).

This methodology as well as the needs assessment tools available at www.unmillenniumproject.org/html/needsassessment.shtm are still evolving. All comments and suggestions on how to improve the analysis are welcome and should be sent to modelquery@unmillenniumproject.org.

B. Objectives of an MDG Needs Assessment

An MDG needs assessment aims to quantify the “needs” for meeting the MDGs in terms of human resources, financial resources, and infrastructure. For example, a health sector needs assessment will estimate the number of doctors, nurses, lab technicians and other health professionals required to meet the MDGs. It will also quantify the country’s needs in terms of health infrastructure, such as health posts and clinics, and assess, of course, the cost of meeting the health MDGs. The terms “costing” and “needs assessment” are often used interchangeably in the policy discussion even though they describe different methodologies. We use the term “needs assessments” to underscore the importance of not focusing exclusively on the financial cost of achieving the MDGs when assessing a country’s needs.

The results of MDG needs assessments provide detailed information required for planning and budgeting for public expenditures, such as

- Comprehensive lists of specific interventions required to meet the MDGs;
- Coverage targets for each intervention to be achieved by 2015 together with interim milestones;
- Infrastructure needs to meet the MDGs (e.g. schools, health centers, and roads);
- Human resource needs to achieve the Goals (e.g. doctors, nurses, and teachers);
- Detailed costs for each set of interventions that differentiate between capital and recurrent costs; and
- A financing analysis for meeting the MDGs, distinguishing between household and government expenditures as well as external finance.

A transparent analysis of a country's needs is critical for MDG-based planning and serves a number of closely related objectives, which we summarize below:

Translate the MDGs into operational targets

Several of the MDGs, such as Target 7, “Have halted by 2015 and begun to reverse the spread of HIV/AIDS,” need to be translated into quantitative national targets together with interim milestones to be achieved before 2015. For example, countries need to decide the HIV/AIDS prevalence or incidence rate they want to achieve by 2015. MDG needs assessments provide a framework for developing operational targets, and linking them to intermediate objectives.

“Localize” the MDGs

Many MDG interventions can be delivered either by community-based organizations, local governments or other sub-national institutions. For this reason, MDGs need to be “localized” and translated into operational targets that, say, the city of Dar-es-Salaam or Kampala can work towards. Of course this needs to be done without lowering the level of ambition of the Goals. Sufficiently disaggregated MDG needs assessments provide the tools for carrying out these analyses.

Develop a strategy for increasing “absorptive capacity”

Absorptive capacity constraints, defined as limited human resources, managerial skills, monitoring and evaluation systems, infrastructure, and so forth, can pose binding constraints on countries' ability to scale up interventions in the short term. However, each of these constraints can be substantially relaxed over the medium-term through systematic investments in human resources, management systems, administrative capacity, and infrastructure. For example, Africa will need to train, hire, and retain large numbers of teachers, nurses, doctors, agricultural extension officers, infrastructure specialists, scientists, and so forth—experts who are in very short supply across the continent. Hence each of the intervention areas relies on a substantial scaling up of specialized human resources, as well as vocational training and short-term training courses and facilities. In most countries professionals need to receive substantially higher salaries to be able to feed their families and have an incentive to stay in the public sector and the country. This is particularly important in a globalizing world where international markets exist for doctors, nurses, engineers and other professionals. Finally, countries will also need to invest in management systems that enable national-scale implementation and monitoring of programs. Needs assessments are critical for systematically thinking through the question of how absorptive capacity can be built up.

Support the national policy dialogue and negotiations with development partners

A consistent shortcoming of PRS processes is insufficient government consultations with national stakeholders. To permit an open national dialogue about policy priorities, intervention strategies, intermediate milestones, target groups, and so forth, MDG needs assessments need to be fully transparent and should be shared with all key stakeholders. Similarly, transparent needs assessments can help focus negotiations with donors away

from aggregate financing envelopes towards countries' needs and ways in which they can best be met.

Strengthen coherence between planning and budget processes

Poor coordination between strategic planning and budgeting processes presents a major problem in most low-income countries. Often the two are carried out in parallel under the responsibility of different ministries. Unsurprisingly, the resulting plans and budgets are often not combined in a single strategy framework and may be misaligned. For example, Poverty Reduction Strategy Papers (PRSPs) rarely contain detailed expenditure frameworks. This makes outcome-oriented budgeting very difficult. Since a detailed needs assessment using transparent investment models combines the core elements of strategic planning with a detailed financial analysis, it provides an integrated framework for improving the coherence between planning and budget processes.

Provide a monitoring and accountability framework

Finally, detailed investment models derived from an MDG needs assessment provide input and output targets that can form the basis for a monitoring and accountability framework to track the country's progress towards achieving the MDGs.

C. Building the Country Models

The Millennium Project MDG needs assessments build on the contributions of a large number of individuals and organizations. First, they build on the ongoing work of the Project's ten Task Forces and their respective Task Force Coordinators. These Task Forces have played a critical role in developing the lists of interventions and investment models used to project resource requirements. Second, the Millennium Project secretariat has collaborated closely with three leading research institutions: the Institute of Statistical, Social and Economic Research in Ghana; the Economic and Social Research Foundation in Tanzania; and the Economic Policy Research Center in Uganda. Third, in an effort to build as much as possible on existing studies and research, the MP works closely with specialized UN agencies, the World Bank, NGOs, and research institutions that have conducted similar sector-specific investment studies.

The Millennium Project needs assessment methodology aims to separate the complex question of "What will it take to achieve the MDGs" into five distinct analytical pieces, as outlined in Figure 2. These steps are designed to be an iterative process. For example, following an estimate of synergies across interventions, coverage targets and unit costs for the affected sectors can be revised. In this way the results of the needs assessment can be gradually refined.

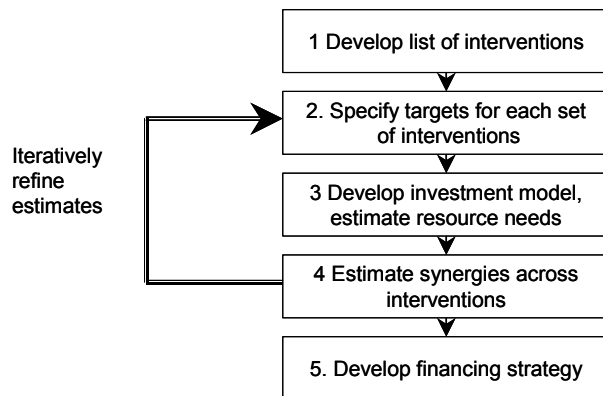


Figure 2: Schematic outline of MDG Needs Assessment Methodology

Step 1: Develop List of Interventions

Based on the work of the Millennium Project Task Forces as well as existing studies, the Millennium Project secretariat has created lists of the interventions required to meet the Goals. Interventions are defined broadly as goods, services and infrastructure. It is important to note the distinction between *interventions* and *policies*. Whereas interventions, such as the provision of anti-retroviral drugs to treat HIV/AIDS or the construction of new schools to achieve the primary education goal, are crucial for developing an MDG investment plan, they are quite distinct from the policies that need to underpin and deliver them, such as regulatory changes, decentralization of the health system, or legislation to combat stigma. A simplified distinction between interventions and policies is that interventions describe “what to do” and allow us to specify “how much” of each activity is needed, while policies describe “how to do it.” Since many different policies can conceivably deliver or complement an intervention, and strategies can differ significantly across countries, policy design can only be addressed in the context of the detailed national planning processes that should take place *after* an MDG needs assessment. Of course, policy choices can in turn affect the types of interventions used for meeting the MDGs and change the estimated amount of resources required to deliver them. If this is the case, the needs assessment can be iteratively revised in the light of the policy choices countries make.

The process of developing a list of interventions can be thought of as having three stages. The analysis starts by identifying all inputs or interventions required to meet a specific MDG. The resulting list of interventions will be broad and draw on a number of intervention areas or “sectors”. In some instances, inputs may be included that are not explicitly addressed in the MDG outcome targets. For example, countries require a minimum level of transport infrastructure and improved access to energy services to achieve the sustained economic growth that is necessary for halving poverty and hunger. Consequently, the corresponding interventions have to be included in MDG needs assessments. Similarly, interventions relating to reproductive health are included in the analysis because they are instrumental for meeting many of the other Goals.

The Millennium Project has drawn up summary lists of interventions for each of the MDG Targets. The purpose of these lists is to assist countries in developing their own lists of interventions for the MDGs.

Second, after developing a goal-by-goal list of inputs, we assign each set of interventions to a particular MDG Target. In areas such as education or health, interventions do not vary much across countries. In other cases, such as environmental sustainability, the interventions are country specific. In such instances the generic list of interventions provides less guidance to national policymakers.

Thus arranged, each set of interventions appears only once to avoid any double counting of interventions in the needs assessment. Moreover, this arrangement prevents gaps by mapping out the full set of interventions required to meet all MDGs.

We stress that concurrent investments are needed *across* many areas in order to achieve any particular MDG. In an effort to structure the analysis, we have separated the needs assessment into 14 categories listed below. The categories are based on MDG Targets and necessary facilitating investment areas. Some discretion is required in assigning interventions to specific Targets. For example, nutrition interventions can justifiably be listed under the hunger as well as some of the health Targets. The 14 areas are:

Hunger,

1. Education,
2. Gender equality,
3. Health systems,
4. Child health,
5. Maternal and reproductive health,
6. Infectious diseases (HIV/AIDS, TB and malaria),
7. Access to essential medicines,
8. Environmental sustainability,
9. Water and sanitation,
10. Improving the lives of slum dwellers,
11. Science and technology,
12. Energy services and energy infrastructure, and
13. Transport infrastructure.

In the third stage of the intervention analysis, which goes beyond the needs assessments described here, the interventions are arranged by area of programmatic activity, or “intervention area”. The suggested intervention areas are agricultural productivity and rural infrastructure; health, nutrition and family planning; education; slum upgrading and urban management; science, technology and innovation; gender equality; and cross-national infrastructure, trade integration, and government cooperation.

Step 2: Specify Targets for Each Set of Interventions

Next, quantitative input targets need to be defined for each intervention. Where possible, these targets should be based on the MDGs or other internationally agreed-upon targets. In cases where no international consensus on targets exists, the Millennium Project has derived targets and key parameters analytically. For example, we propose quantitative

targets for primary-school classroom size and pupil-teacher ratios based on best practice norms established by previous empirical studies.

Where relevant, targets and their corresponding interventions need to be disaggregated by age and gender as well as by urban and rural areas. To account for population growth and other changes in a country's demographic profile, the UN Population Division's 2002 revision (UN 2003) median population forecasts were used. In cases where more recent data is available at the country level, this has been used in lieu of the UN estimates.¹

Step 3: Develop Investment Models and Estimate Resource Requirements

Using the country-specific intervention lists and targets, the Millennium Project has designed Microsoft Excel-based investment models that allow countries to project the gradual scaling up of investments and resources required to meet the MDGs by 2015. Whenever possible, we have built on existing models – notably in the health sector, where we have used frameworks developed by the WHO and UNAIDS.

The Millennium Project investment models calculate capital as well as operating costs. Where possible, they also estimate infrastructure and human resource requirements. They have been designed to be as transparent and flexible as possible, and to explicitly map costs to planned interventions and subsets of the population to be reached. Preliminary versions of the models, along with more detailed user guides, are available online so that countries can adapt them to their own needs.²

Step 4: Estimate Synergies Across Interventions

It is likely that over time some interventions will either reduce the need for other interventions or lower their cost. The resulting cost savings can occur through reductions in the population in need (e.g. increased use of insecticide-treated bednets will reduce the number of malaria patients) or the lowering of unit costs (e.g. improved rural roads will reduce the cost of providing essential services in rural areas). While the qualitative link between two sets of interventions may be clear, quantifying this impact is often difficult, particularly for interventions that have many indirect effects, such as improved girls' education. Even where there is clear data, the magnitude of impact may not be known for different settings or for different delivery mechanisms.

Despite these data limitations, it is important to include potential cost savings from synergies across interventions. We have identified the links across and within intervention areas that are likely to have a large impact on the costs of meeting the MDGs by 2015. These are:

- Reduction in diarrhea morbidity through expanded access to improved water supply and sanitation, including improved hygiene behavior,

¹ These population forecasts are a starting point for analysis. They will not be realized unless commensurate investments are made in access to health services (including reproductive health/family planning services).

² Available at www.unmillenniumproject.org. Additional models and resources will be posted on this site as they become available. Feedback and suggestions are an essential component to our work, and can be directed to modelquery@unmillenniumproject.org.

- Reduced acute respiratory infections through increased use of improved cooking fuels,
- Reduction of HIV/AIDS incidence through increased condom use,
- Reduced malaria incidence through increased use of insecticide-treated bednets,
- Reduced rates of malnutrition resulting from interventions designed to reduce hunger,³ and
- Reduced child and maternal mortality rates as well as decelerated population growth through improved access to voluntary family planning and contraception.³

Based on this list and with the exception of the nutrition-related interventions, the most important direct cost savings are projected to occur within the health sector. Our needs assessment for the health sector addresses these synergies to account for the cost savings. For areas in which quantitative synergies were difficult to establish, we have indicated but not estimated the projected cost savings. We recognize that our treatment of synergies is not comprehensive, but we feel confident that our analysis captures some of the most important savings that can be realized by 2015 through implementing an integrated package of interventions.

Step 5: Develop an MDG Financing Strategy

On the basis of the calculated resource requirements for meeting the MDGs, our needs assessment develops a financing strategy for each country, distinguishing between three sources of funding: (i) out-of-pocket expenditure by households, (ii) domestic government resources, and (iii) external finance. Since households and governments are subject to budget constraints, investments in one intervention area cannot be increased without reducing resources available for others. For this reason we stress the importance of developing an overall financing strategy for all interventions relating to the MDGs, rather than pursuing a sector-by-sector approach.

Household contributions need to be estimated based on two considerations: (i) the incentive effects of user fees, and (ii) households' overall ability to pay. User fees can play a critical role in keeping the poor from accessing basic services. For example, the WHO's Commission on Macroeconomics and Health (CMH 2001),⁴ and the Education for All initiative lead by UNESCO (2000)⁵ have established a consensus that households should bear no direct cost for access to basic healthcare and primary education. The reason is that even modest user fees have been shown to have a strong impact on reducing effective access to these basic services – particularly for women, young girls

³ These synergies have not yet included in the quantitative needs assessments of the MP.

⁴ "Experience has taught repeatedly that user fees end up excluding the poor from essential health services, while at the same time recovering only a tiny fraction of costs", p. 61 CMH (2001)

⁵ "Ensuring that by 2015 all children, particularly girls, children in difficult circumstances, and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality", C.f. Dakar Framework for Action 2000, Education for All Dakar Goal 2:

www.unesco.org/education/efa/ed_for_all/dakfram_eng.

and other vulnerable groups. In some cases, however, user fees may be necessary to avoid wasting scarce resources. For example, a strong case can be made that users should pay the marginal cost of providing water and energy services beyond satisfying the most basic minimum needs. Lifeline tariffs, which ensure the free provision of water up to the minimum daily requirements for personal hygiene and cooking, but charge for higher consumption, have been used successfully in many parts of the world to avoid wastage while simultaneously improving access to clean drinking water.

In addition to the incentive (or disincentive) effects of user fees and other private out-of-pocket expenditures, households' overall ability to pay for the bundle of services they require needs to be considered in a sound financing strategy. One possible approach is to base the analysis of households' ability to pay on national poverty lines and income distributions.

A key determinant of an MDG financing strategy is the extent to which domestic government resource mobilization can be increased through 2015 to contribute to the cost of achieving the goals. The Millennium Project assumes that, in addition to the increase in domestic resource availability resulting from GDP growth alone, domestically-financed spending on MDG-related interventions will rise by 4 percentage points of GDP between 2006 and 2015. This is of course a very ambitious increase in domestic resource mobilization.

After accounting for the resources available through household and domestic government contributions, the analysis calculates the MDG "financing gap" between domestic resource mobilization and total needs for meeting the MDGs. This gap will need to be financed externally if low-income countries are to achieve the Goals by 2015.