
**Financing the
Millennium Development Goals:
The Philippines**
(Final Report)

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Abstract

The improving fiscal situation in the Philippines presents an opportune time for the government to re-assess the resource requirements of achieving the MDGs and to exercise greater vigilance in ensuring that the MDGs benefit from the fiscal space that has been created. In response, this study updated and expanded the earlier study on the financing of MDGs that was completed in 2002. In particular, it estimated the financial requirements needed to achieve Goals 1, 2, 4, 5, 6, and 7; compared the resource requirements with the funding level that is likely to be made available to determine the funding gap for each of these goals under alternative macro and sectoral policy scenarios; taking existing NG-LGU expenditure assignment into account, arrived at a consolidated estimate of total general government resource requirement and resource gap in financing the said MDGs; and proposed how resources can optimally be managed, referring to both operational efficiencies and institutional arrangements, so as to maximize their effectiveness.

The estimates obtained from this study highlight the fact that the Philippines cannot afford to be complacent and act as if it is “business as usual.” It cannot be denied that the policy thrusts embodied in the MTPDP are supportive of the attainment of the Millennium Development Goals. In addition, the government, in general, and many government agencies, in particular, have already started to implement many policies, strategies and programs that are to enhance the achievement of the MDGs. These policies, strategies and programs will have to be sustained or pursued with greater vigor. But beyond this, there is a need for further improvements in other policy areas and institutional arrangements.

Keywords: MDG, Millennium Development Goals, MDG Financing, MDG resource requirements, MDG resource gaps

FINANCING THE MILLENNIUM DEVELOPMENT GOALS: THE PHILIPPINES

Rosario G. Manasan

1. INTRODUCTION

In September 2000, member states of the United Nations, including the Philippines, gathered at the Millennium Summit and adopted the Millennium Declaration which affirmed their commitment to the Millennium Development Goals (MDGs):

- Goal 1:** Eradicate extreme poverty and hunger
- Halve the proportion of population living
 - below the food threshold between 1990 and 2015
 - below the overall poverty threshold between 1990 and 2015
 - Halve the proportion of households with per capita intake below 100% of the dietary energy requirement between 1990 and 2015
 - Halve the prevalence of malnutrition among 0-5 year old children between 1990 and 2015
- Goal 2:** Achieve universal primary education
- Achieve 100% participation rate by 2015
 - Achieve 100% cohort survival rate at the elementary level by 2015
- Goal 3:** Promote gender equality and empower women
- Achieve a 1:1 ratio of girls to boys
 - elementary level by 2015
 - secondary level by 2015
- Goal 4:** Reduce child mortality
- Reduce by two-thirds the infant mortality rate by 2015
 - Reduce by two-thirds the under-5 mortality rate by 2015
- Goal 5:** Improve maternal health
- Reduce the maternal mortality rate by three-quarters by 2015
 - Increase the prevalence of couples practicing responsible parenthood to 70% by 2015
- Goal 6:** Combat HIV/ AIDS, malaria and other diseases
- Maintain prevalence of HIV/ AIDS at less than 1 up to 2015
 - Reduce malaria morbidity rate from 123 per 100,000 population in 1990 to 24 per 100,000 in 2015

Goal 7: Ensure environmental sustainability

- Halve the proportion of households with no access to safe drinking water and basic sanitation from 26% in 1991 to 13% in 2015

Goal 8: Develop a global partnership for development

- Develop further an open, rules-based, predictable, non-discriminatory trading and financial system, including a commitment to good governance
- Deal comprehensively with debt problems of developing countries through national and international measures in order to make debts sustainable in the long-term

1.1. The Context

Table 1 summarizes the rate of progress toward the achievement of the MDGs and compares average rate of progress to date (1990-2002/3) with the rate of progress that is required in 2002/3-2015 if the MDG targets are to be met. A comparison of the average rate of progress in 1990-202/3 with the rate needed to achieve the MDGs for the reduction of poverty, the reduction in the infant and under-5 mortality rates, and the increase in the access to safe water and sanitation indicates that maintaining the current rate of progress is adequate to bring about the achievement of said goals by 2015. In contrast, **Table 1** shows that the rate of progress required to meet the MDG targets with respect to under-5 malnutrition rate, the per capita dietary energy requirement, elementary participation rate, the cohort survival rate at the elementary level, maternal mortality rate and the contraceptive prevalence rate are all higher than the actual rate of progress to date. In other words, the country has to do better than its historical performance to date in certain aspects of three out of the seven quantifiable goals,

At the same time, the severe fiscal constraints that the Philippines has had to contend in the years following the Asian financial crisis had constricted the flow of resources aimed at meeting the MDGs. **Table 2** shows the weakening of national government's fiscal position as a result of the deterioration of tax effort in 1998-2004. Some fiscal consolidation is evident in 2003-2006.¹ However, most of the improvement in the national government's fiscal position, particularly in 2003-2005, came about at the expense of productive expenditures. Also, the size of the national government's debt stock and debt service continue to be a major cause of concern.

Table 3 shows how the social services (including education and health) and the infrastructure sectors bore the burden of the adjustment. Total social sector spending of the national government declined from 5.5% of GDP in 1998 to 3.4% in 2004 and 3.7% in 2006 while infrastructure spending went down from 2.8% in 1994 to 1.4% in 2006. Also, the national government's real per capita spending on social services fell from PhP 678 in 1997 to PhP 470 in 2004 and PhP 528 in 2006 (**Table 4**). As a consequence, the social services sectors suffered huge backlogs in financing the input requirements and/or in achieving the intermediate output targets in support of the MDGs.

¹ This trend has been strengthened with the higher government revenue collection following the increase in the VAT rate in 2006.

Table 1. Millennium Development Goals: Rate of Progress

MDG	Baseline (1990 or year closest to 1990)	Current Level (2002/2003)	Target by 2015 1/	Average Rate of Progress (1990-2002/2003) (a)	Required Rate of Progress (2002/2003-2015) (b)
Eradicate extreme poverty and hunger					
Proportion of population below					
Subsistence (food) threshold	24.3 a/	13.8 f/	12.15	-0.88	-0.14
Poverty threshold	45.3 a/	30.4 f/	22.6	-1.24	-0.65
Proportion of families below					
Subsistence (food) threshold	20.4 a/	10.4 f/	10.2	-0.83	-0.02
Poverty threshold	39.9 a/	24.7 f/	19.95	-1.27	-0.40
Prevalence of malnutrition among 0-5 year-old children (1% underweight) - Based on international reference standards	34.5	27.65	17.25	-0.53	-0.86
Proportion of households with per capita intake below 100 100 percent dietary energy requirement	69.4 b/	56.9	34.7	-1.25	-1.85
Achieve universal primary education					
Elementary participation rate 4/	85.1 a/	90.05	100.0	0.45	0.77
Elementary cohort survival rate	68.4 a/	69.80	83.0 3/	0.13	1.04
Promote gender equality and empower women					
Ratio of girls to 100 boys					
Elementary education	95.8 c/	101.8 e/	100.0	1.00	-0.14
Secondary education	104.5 c/	115.9 e/	100.0	1.90	-1.22
Reduce child mortality					
Under 5-mortality rate (per 1,000 children)	80.0	40.0	26.7	-3.08	-1.11
Infant mortality rate (per 1,000 live births)	57.0	29.0	19.0	-2.15	-0.83
Improve maternal health					
Maternal mortality rate	209.0	172 d/	52.2	-4.63	-7.05
Increase access to reproductive health services					
Prevalence of men and women/couples practicing responsible parenthood	40.0 b/	48.9	70.0	0.89	1.76
HIV prevalence	< 1%	< 1%	< 1% 2/	0.00	0.00
Halt and begin to reverse the incidence of malaria and other diseases					
Malaria morbidity rate (per 100,000 population)	123.0	48.0	24.0 2/	-5.77	-1.83
Provide basic amenities					
Proportion of families with access to safe drinking water	73.7 a/	80.0	86.8	0.57	0.52

Notes:

a/ 1991: Uses the old methodology considering special rice in the menu and using regional prices; family size is six.

b/ 1993

c/ 1996

d/ 1998

e/ Based on preliminary estimates of DepEd

f/ 2003: Uses ordinary rice, and uses provincial prices; family size is five.

Source: UNDP-NEDA. 2005. Second Philippines Progress Report on the Millennium Development, June.

1/ 2015 target is based on 1990 estimate or the closest year where data is available

2/ Target by 2010 based on MTPDP 2004-2010

3/ Based on DepEd - Education For All (EFA) target

4/ Beginning SY 2002-2003, participation rate was derived based on the age group consisting of 6-11 years old for elementary and 12-15 secondary whereas the previous system used 7-12 and 13-16 years old for elementary and secondary, respectively. Hence, SY 2002-2003 data cannot be compared with that of the previous years

Table 2. National Government Fiscal Position as a Percent of GDP, 1990-2006

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total revenues	16.8	17.7	18.0	17.7	19.9	19.0	18.9	19.4	17.4	16.1	15.3	15.6	14.9	14.8	14.5	15.1	16.3
of w/c:																	
Tax revenues	14.1	14.6	15.4	15.6	16.0	16.3	16.9	17.0	15.6	14.5	13.7	13.6	13.1	12.8	12.5	13.0	14.3
Total expenditures	20.2	19.8	19.1	19.1	18.9	18.4	18.6	19.4	19.2	19.8	19.3	19.7	20.3	19.5	18.4	17.8	17.3
of w/c:																	
Interest payments	6.6	6.0	5.9	5.2	4.7	3.8	3.5	3.2	3.7	3.6	4.2	4.8	4.8	5.2	5.4	5.5	5.2
Surplus/ (deficit)	-3.5	-2.1	-1.2	-1.5	1.0	0.6	0.3	0.1	-1.9	-3.8	-4.0	-4.0	-5.4	-4.6	-3.8	-2.7	-1.0
Total expenditures net of debt service	13.6	13.8	13.3	14.0	14.2	14.6	15.1	16.2	15.5	16.3	15.1	14.9	15.5	14.2	13.0	12.2	12.2

Table 3. National Government Expenditures as a Percent of GDP, 1990-2006

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Social services	4.2	4.0	3.9	3.6	3.7	4.4	4.9	5.4	5.5	5.2	4.9	4.4	4.4	4.3	3.4	3.1	3.7
Education	3.1	2.6	2.8	2.6	2.7	3.2	3.4	3.9	4.0	3.7	3.5	3.3	3.3	3.0	2.7	2.4	2.4
of w/c DepEd	2.6	2.2	2.3	2.2	2.2	2.4	2.6	3.0	3.1	2.9	2.8	2.7	2.7	2.5	2.2	2.0	2.0
Health	0.7	0.7	0.7	0.5	0.5	0.4	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3
of w/c DOH	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Infrastructure	2.9	3.4	2.5	2.3	2.8	2.7	2.2	2.5	2.4	2.3	2.5	2.1	1.6	1.7	1.6	1.2	1.4

Table 4. Real Per Capita National Government Expenditures in 1985 Prices, 1990-2006 (in pesos)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Social services	500	463	445	405	422	520	597	678	659	634	628	557	558	566	470	443	528
Education	367	304	314	297	306	380	418	488	481	457	439	415	416	395	367	344	341
of w/c DepEd	307	250	263	245	249	286	310	374	375	355	351	339	342	325	300	282	284
Health	87	85	83	53	54	52	63	73	60	61	55	45	47	38	42	36	38
of w/c DOH	80	78	76	45	41	41	52	62	50	51	42	37	38	30	31	27	25

For instance, the public school system has a backlog of 37,587 teachers in schools with severe teacher deficits as of the end of SY 2003-2004. Similarly, the system lacks 4,999 classrooms in double-shift schools that have severe classroom-deficits and another 26,953 classrooms in single-shift schools with severe deficits.

In 2005, three new tax measures were passed by Congress: (i) amendments to the excise taxes on sin products, (ii) reformed VAT law that not only limits exemptions but also raises the VAT rate, and (iii) the lateral attrition law which provides incentives to the tax collection agencies to improve their performance. The additional revenues that are forthcoming from these measures have enabled the government not only to reduce its fiscal deficit but also to increase its capacity to finance the MDGs.

1.2. Objectives of the Study

Given this perspective, the improving fiscal situation in the Philippines presents an opportune time for the government to re-assess the resource requirements of achieving the MDGs and to exercise greater vigilance in ensuring that the MDGs benefit from the fiscal space that has been created. This study aims to support this initiative by updating and expanding the earlier study on the financing of MDGs that was completed in 2002. That study generated estimates of the financing gaps and the needed policy measures for the attainment of the MDGs. It should be emphasized that reaching the development goals require not only additional financial resources (from both domestic and external sources) but also enabling policies and institutional environment that will ensure that said resources are utilized efficiently and effectively.

Specifically, the study will:

- (1) estimate the financial requirements needed to achieve Goals 1, 2, 4, 5, 6, and 7;
- (2) compare the resource requirements with the funding level that is likely to be made available to determine the funding gap for each of these goals under alternative macro and sectoral policy scenarios;
- (3) taking existing NG-LGU expenditure assignment into account, arrive at a consolidated estimate of total general government resource requirement and resource gap in financing the said MDGs; and
- (4) propose how resources can optimally be managed, referring to both operational efficiencies and institutional arrangements, so as to maximize their effectiveness.

This study essentially brings up to date the estimates made earlier in 2002 of the resource requirements and resource gaps that are pertinent to the attainment of the MDGs on primary education, child mortality, maternal health, HIV/AIDS, malaria and other diseases, and environmental sustainability given the backlogs in inputs and/or intermediate outputs existing to date. However, it introduces three new items for consideration. First, the present paper provides estimates of the resource requirements and resource gaps with respect to the achievement of the MDG on poverty reduction. Second, it specifically addresses the role of LGUs in financing the MDGs and presents estimates of the amount of resources that are likely to be made available by LGUs in the financing Goal 1 (poverty reduction) and Goal 2 (universal access to primary education).

It also presents estimates of the resource requirements and resource gaps at the LGU level with respect to Goal 4 (child health), Goal 5 (maternal health), and Goal 6 (control of HIV/ AIDS and other diseases). Third, the estimate of the amount of resources that is likely to be generated by the national government takes into account the additional revenues that are likely to be forthcoming from the new tax measures that were legislated in 2005/6.

1.3. Limitation

The estimate of the resource requirement for meeting Goal 1 refers only to the investments needed for pro-poor growth and, as such, focuses only on poverty reduction. Said estimate does not include the funding support needed for addressing hunger *per se*. In the medium/ long-term, poverty reduction should translate to reducing hunger. In the short run, however, hunger might persist even with declining poverty incidence.

On the other hand, the estimate of the resource requirement for meeting Goal 7 (environmental sustainability) only includes the cost of improving access to safe water and sanitation. It does not cover the cost of prevention and control of environmental degradation nor the cost of managing natural resources in a sustainable manner.

In contrast, Goal 3 (gender equality) is addressed indirectly and only in a limited fashion in this paper. To the extent that resource requirement estimates for basic education (Goal 2) and the health-related MDGs (Goals 4, 5 and 6) aim to ensure that there will be enough resources for both boys and girls, both men and women, gender equality is enhanced. However, this paper does not provide estimates of the funding needed for remedial actions that are meant to respond to various sources of gender inequality and/ or interventions that are aimed at promoting gender equality more directly.

2. APPROACH AND METHODOLOGY

This study draws heavily from the results of the Edillon (2006) in estimating the amount of resources needed to halve poverty incidence by 2015 relative to its 1990 level. She explicitly modeled the relationship between poverty reduction and economic growth in the Philippines. Her results show that asset distribution (i.e., land reform) and investments in infrastructure (roads and electrification, in particular) are significant determinants of poverty reduction. More importantly, her study reveals that the distribution of the same investments in favor of lagging regions contributes significantly to make growth more pro-poor. Her study also shows that reducing poverty requires additional investments on roads, electrification and the completion of the land redistribution under the Comprehensive Agrarian Reform Program (CARP). This paper uses these results to arrive at estimates of the resource requirements for achieving the MDG goal on poverty reduction.

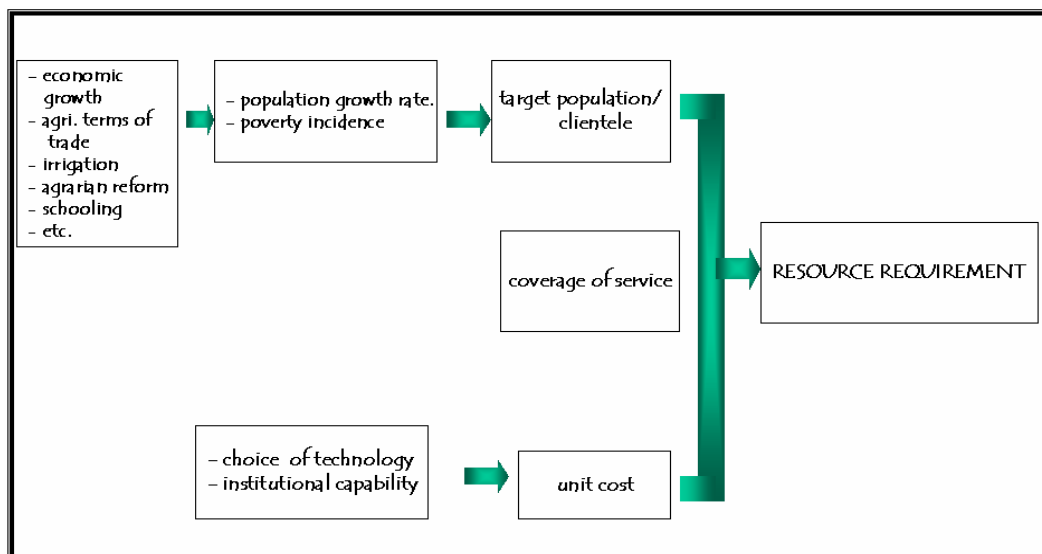
On the other hand, the approach followed in this paper in estimating the resource requirements for the provision of the basic social services that are needed to meet the

MDGs are discussed in greater detail in Section 2.1. This procedure is essentially the same as that followed in Manasan (2002).

2.1. Estimating Resource Requirements for Basic Social Services

The estimation of resource requirement for any given intervention aimed at producing intermediate outputs that are expected to lead to the attainment of the MDGs (outcomes) is presented graphically (**Figure 1**). Here, the amount of resources needed to deliver any given output is estimated as the product of the unit cost, the target population/clientele, and the target coverage rate.

Figure 1. Determinants of Resource Requirements



On the one hand, the unit cost of achieving the MDG goals will vary with the choice of the technology (as to mode of service delivery or type inputs used) and institutional capability. This paper will make use not only of the unit cost of the different interventions as they are currently implemented but it will also explore the implications of using lower cost interventions.

On the other hand, the target population/clientele for each of the MDGs is dependent on alternative assumptions made with respect to demand side variables like population growth and poverty incidence. Note that higher population growth and higher poverty incidence both exert greater pressure on the provision of publicly provided basic social services. This study assumes that population will continue to grow by 2.3% per annum, the average actual rate of growth registered between 1995 and 2000.²

² Given the slow increase in the contraceptive prevalence rate to date, many demographic experts agree that the population growth rate is not likely to decline to 1.9% as envisaged in the MTPDP.

In turn, the poverty incidence in any given year depends on the level and quality of economic growth. In this study, it is assumed that all of the investment measures required to meet the MDG on poverty reduction will be financed and that poverty incidence will in fact be halved between 1990 and 2015.

This study assumes that intermediate output targets (on elementary participation rates and immunization coverage rates, for example) as programmed in the Medium Term Philippine Development Plan (MTPDP) are sufficient to effect the desired results in terms of the MDG outcome indicators. It should be emphasized that the relationship between the outputs of specific interventions and the MDG outcomes is not well defined. Although there is widespread agreement on the specific interventions (in terms of programs, activities and projects) that contribute the most to the attainment of the targeted outcomes, there is no well established “dose response” function that defines how increases in the amount of services/interventions funded and delivered will result in improvements in human development outcomes.

Because of data constraints, detailed unit costs are derived for selected key interventions/programs only, i.e., those that are considered critical for the attainment of MDG targets. In particular, in the education sector, it is assumed that the critical ingredients in the achievement of the MDG targets are (1) teachers, (2) textbooks, and (3) classrooms. In the health sector, the critical interventions that are specifically costed included the following: (1) expanded program of immunization, (2) tetanus toxoid vaccination for mothers, (3) control of HIV/AIDS, tuberculosis, and malaria, (4) micronutrient supplementation, (5) provision of contraceptive supplies) and (6) enrollment of indigent population in the national health insurance program (PhilHealth). In the water and sanitation sector, the provision of level 1 water supply (through the installation of deepwells) and sanitation (latrine) are costed individually.

While other programs are also considered important (e.g., performance of the quality assurance function by DepEd’s division offices in the education sector or control of degenerative diseases³ in the health sector), no detailed costing was made for said programs. Instead, what is done is simply to allow the per capita expenditure level in some benchmark year (e.g., 2006) for these items combined to grow in tandem with inflation and the growth of the target clientele. Implicitly, this approach ensures that expenditures on these “other” items are maintained in real per capita terms at their levels during the benchmark years.⁴

It should be emphasized that while the approach followed for the estimation of the resource requirements for the achievement of the MDG in basic education explicitly takes into account the additional personnel needed to cope with increasing enrollment levels, the approach used in the estimation of resource needs in the health sector focused only on recurrent non-personnel cost of essential package of basic health services. This implies

³ Note that in recent years degenerative diseases have emerged as a major cause of morbidity and mortality.

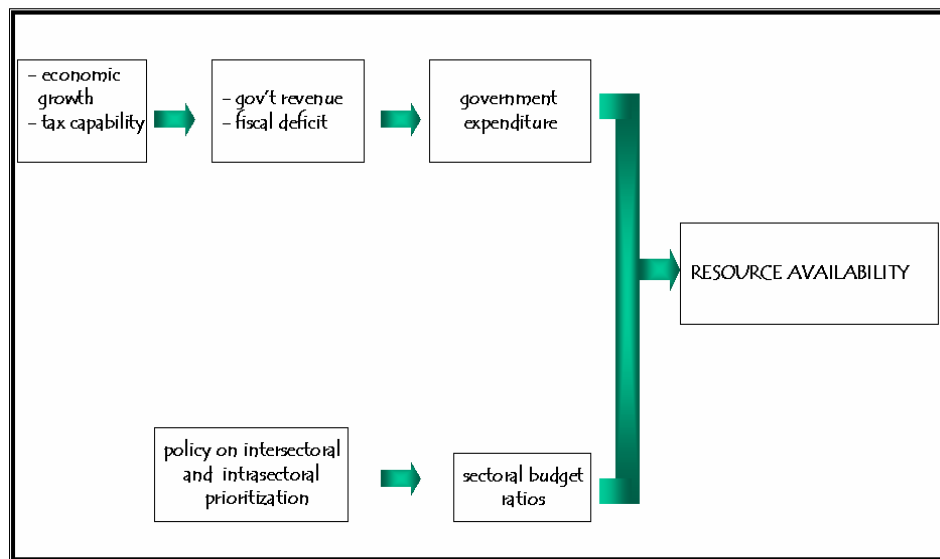
⁴ It should be emphasized that this approach does not allow for the expansion of coverage (assuming that these interventions do not quite reach full coverage) nor the improvement in the quality of these interventions.

that the additional personnel requirement arising from the higher service levels for the basic health services that are needed for the attainment of the MDGs are not taken into account in this study. This limitation is not of serious concern for the central government has responsibility for the financing of commodities, technical assistance and training for LGU partners but not direct service delivery. However, it does mean that estimates of the resource requirements at the local government level would tend to be on the conservative side.

2.2. Estimating Resource Availability

Resource availability depends on total government expenditure and sectoral budget shares (Figure 2). On the one hand, government policy on intersectoral priorities underpins sectoral budget shares. On the other hand, government expenditures depend on government revenues and the target fiscal deficit. For instance, the government plans to have a balance budget by 2008/9. The fiscal consolidation program aimed at achieving this objective is a major determinant of amount of resources available for MDG in 2007-2009.

Figure 2. Determinants of Resource Availability



Moreover, government revenues depend on economic growth and institutional capability to collect taxes. Also, both the level and the quality of economic growth would influence expansion of the tax base and consequently, government revenues.

The sectoral budget shares for the central/national government that are assumed in this study are based on actual budget allocations in the 2006 budget and the indicative

budgetary allocations for the proposed 2007 President’s Budget.⁵ In specific terms, the amount of resources that is likely to be made available in 2008-2015 in support of the MDGs is estimated by assuming that the budget allocations in 2006/7 grow in pace with the growth in national government revenues.

That is, national government spending on the MDGs is assumed to have a unitary elasticity with respect to national government revenues after 2006/7.⁶ On the other hand, the projections of local government spending on the MDGs assume that LGU spending on specific sectors/ sub-sectors has a unitary elasticity with respect to nominal GDP.

Alternative Scenarios. National government revenues are largely dependent on the growth in GDP. In this study, two alternative GDP growth scenarios are assumed: the MTPDP growth path and the low GDP growth path (**Table 5**).

Table 5. Alternative Scenarios: Some Parameters

	2007	2008	2009	2010	2011	2012	2013	2014	2015
real GDP growth rate									
MTPDP growth rate (%)	6.5	6.8	7.0	7.0	7.0	7.0	7.0	7.0	7.0
low growth rate (%)	5.3	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Inflation rate (%)									
MTPDP growth rate	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
low GDP growth rate	5.3	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Growth in NG revenues									
MTPDP growth rate (%)	12.2	11.0	11.9	10.2	12.8	12.2	12.2	12.3	12.3
low growth rate (%)	11.7	9.7	10.4	8.8	11.3	10.6	10.7	10.7	10.8

The projections of national government revenues used in this study takes into account the additional revenues that are likely to be forthcoming from the amendment in the excise taxes on sin products and the implementation of the reformed VAT law which were enacted in 2005. The estimates of the incremental revenues are then added to the trend growth in national government revenues given the growth in GDP. The growth rate in national government revenues thus derived is also shown in **Table 5**.

⁵ In the proposed 2007 President’s Budget the following sectors are given higher priority than others: basic education, infrastructure and compensation adjustment for government employees. All the other sectors are only allowed to increase their allocation for maintenance and other operating expenditures (MOOE) by some inflation adjustment.

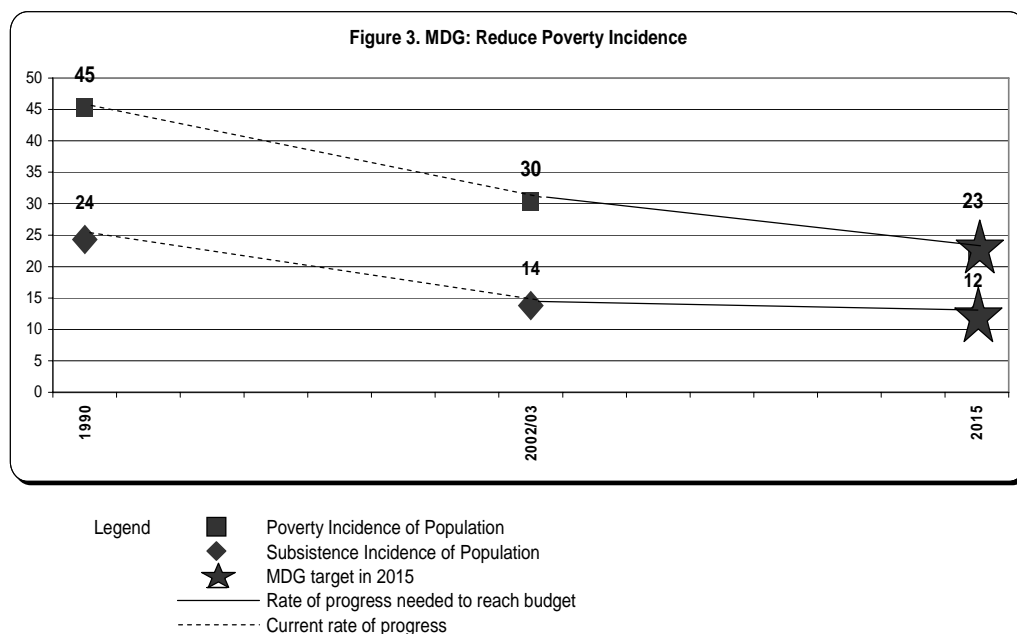
⁶ It should be emphasized that this is not inconsistent with the government’s commitment to having a balance budget by 2008/9 and budget surpluses in the medium term. Note that the aggregate expenditure program in 2006 and 2007 is significantly less than the aggregate revenues collected during this years inclusive of the additional revenues from the new tax measures despite the higher priority given to basic education and infrastructure. Also, all the other sectors are only allowed to increase their allocation for maintenance and other operating expenditures (MOOE) by just enough to keep pace with inflation.

Treatment of ODA. Foreign Assisted Projects (FAPs) are typically viewed as a facility providing extra support to the government. However, because proceeds from Official Development Assistance (ODA), unless explicitly coursed through non-government organizations, have to be appropriated as part of the General Appropriations Act (GAA), FAPs can only be accommodated by crowding out other items in the budget of the departments/ agencies. In this sense, therefore, the estimates of resources that are likely to be made available from the budget already includes ODA.

3. RESOURCE REQUIREMENTS AND RESOURCE GAPS

3.1. Goal 1 - Reducing Poverty

Progress to date. The proportion of the population living below the subsistence (food) threshold declined from 24% in 1991 to 14% in 2003.⁷ On the other hand, the proportion of the population living below the overall poverty threshold went down from 45% in 1991 to 30% in 2003.⁸ **Figure 3** clearly indicates that the rate of reduction in the poverty incidence that is needed to reach the MDG target in 2015 is less than the Philippines' current rate of progress.

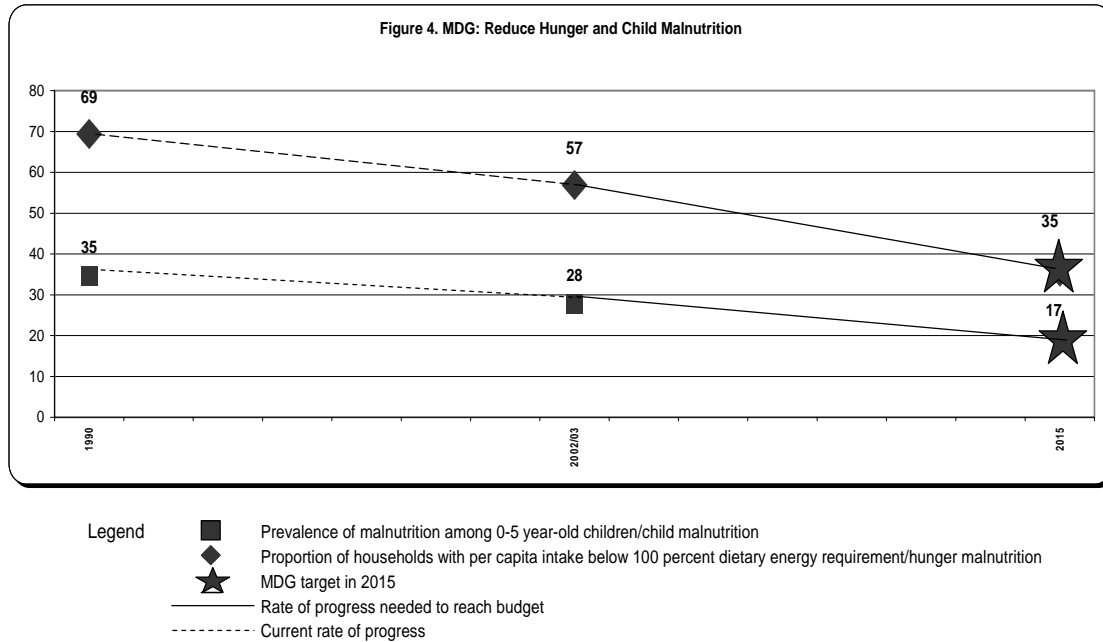


If this is maintained, it is expected that the country would not only achieve the MDG target but would outdo it. However, one of the paradox of Philippine development is the fact that while the MDG targets with respect to poverty reduction are likely to be met,

⁷ The proportion of families living below the subsistence threshold decreased from 20.4% in 1991 to 16.7% in 2000 and 10.4% in 2003.

⁸ The proportion of families living below the overall poverty threshold declined from 29.9% in 1991 to 33.7% in 2000 and 24.7% in 2003.

those for hunger and child malnutrition are not (**Figure 4**). For both of these indicators, **Figure 4** show that the rate of reduction required to meet the MDG target is, respectively, 48% and 62% higher than the average actual rate of progress to date.



It is well established in the literature that economic growth is a necessary condition for poverty reduction. Studies also show that the quality of growth matters, with pro-poor growth having a greater impact on reducing poverty incidence.

What makes growth pro-poor? Edillon (2006) explicitly models poverty reduction and economic growth in the Philippines. Her results show that asset distribution (i.e., land reform) and investments in infrastructure (roads and electrification, in particular) are significant determinants of poverty reduction. More importantly, her study shows that the preferential distribution of the same investments in favor of lagging regions contributes to making growth more pro-poor. In particular, her simulations show that the poverty reduction targets will be met if the paved road density in all provinces increases to at least thrice the 2001 national average by 2015, if all barangays have access to electricity by 2010, and if the land redistribution program under the Comprehensive Agrarian Reform Program (CARP) is fully implemented.

Resource requirements and resource gaps. In arriving at estimates of the resource requirements for the achievement of the MDG on poverty reduction, this study makes use of Edillon’s results and calculates the cost of the required investments in roads, electrification and the completion of the land redistribution that are necessary for halving poverty incidence between 1991 and 2015 (**Table 6**). The required investments in roads are based on 2001 provincial level data on road density and unit costs of the construction of various types of roads from the Department of Public Works and Highways (DPWH).

On the other hand, the number of barangays without access to electricity as of 2003 is obtained from the MTPDP while the unit cost of the various options in providing electricity to these barangays came from the Department of Energy (DOE). Finally, the remaining number of hectares that have to be distributed pending CARP completion and associated cost of land redistribution was provided by the Department of Land Reform.

Table 6. MDG 1 (Poverty Reduction) Requirements and Gaps in Current Prices, 2007-2015 (in million pesos)
(MTPDP GDP growth rate assumption*)

Year	Investment needs				Available resource			Gap	Percent to GDP
	Roads	Electrification	Land redistrib	Total	NG	LGU	Total		
2007	110,110	274	10,824	121,208	49,404	17,445	66,849	54,359	0.80
2008	116,070	287	11,365	127,723	54,822	19,562	74,385	53,338	0.70
2009	122,353	302	11,933	134,588	61,345	21,978	83,323	51,265	0.60
2010	128,976	317	12,530	141,822	67,627	24,693	92,320	49,502	0.51
2011	135,944		7,563	143,507	76,254	27,742	103,996	39,510	0.36
2012	143,301		7,941	151,242	85,522	31,169	116,691	34,552	0.28
2013	151,057		8,338	159,395	95,982	35,018	131,000	28,395	0.21
2014	159,232		8,755	167,988	107,787	39,343	147,130	20,858	0.14
2015	167,850		9,193	177,043	121,009	44,201	165,210	11,833	0.07
2007-2015	1,234,893	1,179	88,444	1,324,516	719,754	261,151	980,905	343,611	0.19

* Refer to Table 5 for alternative GDP growth rate assumptions

The estimates of the amount of resources that are likely to be made available for roads, electrification and land redistribution that are presented in **Table 6** and **Table 7** are based on the actual allocation for these investments in the 2006 President's budget and the proposed 2007 President's budget. They assume that the higher priority accorded to infrastructure in the proposed 2007 budget will be sustained in 2008-2015. In other words, it is assumed that the budget allocation for the infrastructure sector will grow in pace with the growth in national government revenues from 2008 onwards. In turn, the growth in national government revenues depends on the GDP growth scenario that is considered.

The estimates of the available resources from the national government also take into account the fact that some PhP 10 billion from recovered assets from the Marcoses are still unspent as of the end of 2006. Furthermore, **Table 6** and **Table 7** include estimates of the amount of resources that LGUs will likely spend on local infrastructure. These estimates project LGU spending on local infrastructure by assuming that their actual spending in 2003 will increase yearly at the same pace as GDP growth in nominal terms, i.e., LGU spending exhibits unitary elasticity with respect to GDP.

Table 6 shows that under the MTPDP GDP growth rate scenario the resource gap for Goal 1 amounts to PhP 54.4 billion (or 0.8% of GDP) in 2007 and is equal to a cumulative total of PhP 343.6 billion (or 0.2% of GDP) in 2007-2015. On the other hand, the resource gap estimates shown in **Table 7** for the low GDP growth rate scenario are

0.02% higher than those for the MTPDP growth rate scenario in 2007 and 0.25% higher for the entire period 2007-2015.

Table 7. MDG 1 (Poverty Reduction) Requirements and Gaps in Current Prices, 2007-2015 (in million pesos)
(Low GDP growth rate assumption*)

Year	Investment needs				Available resource			Gap	Percent to GDP
	Roads	Electrification	Land redistn	Total	NG	LGU	Total		
2007	110,110	274	10,824	121,208	48,404	17,363	65,767	55,440	0.82
2008	116,070	287	11,365	127,723	53,099	19,234	72,333	55,389	0.74
2009	122,353	302	11,933	134,588	58,637	21,306	79,943	54,645	0.66
2010	128,976	317	12,530	141,822	63,777	23,602	87,380	54,443	0.59
2011	135,944		7,563	143,507	70,961	26,145	97,106	46,401	0.45
2012	143,301		7,941	151,242	78,500	28,963	107,462	43,780	0.39
2013	151,057		8,338	159,395	86,889	32,083	118,972	40,423	0.32
2014	159,232		8,755	167,988	96,224	35,540	131,764	36,223	0.26
2015	167,850		9,193	177,043	106,611	39,370	145,980	31,063	0.20
2007-2015	1,234,893	1,179	88,444	1,324,516	663,102	243,607	906,709	417,807	0.44

* Refer to Table 5 for alternative GDP growth rate assumptions

3.2. Goal 2 - Universal Access to Basic Education

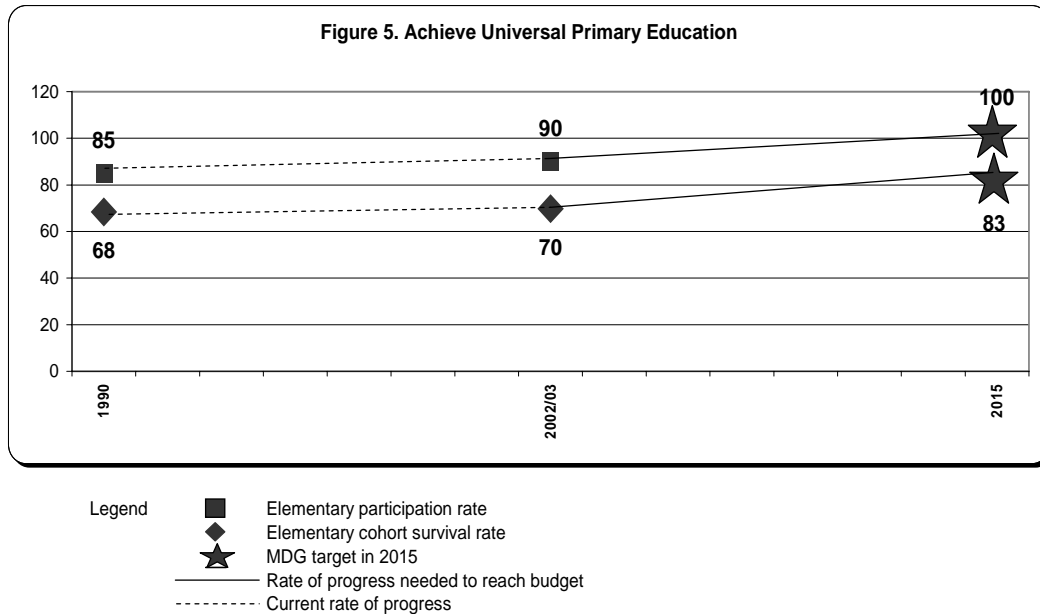
Progress to date. The elementary participation rate improved from 85% in 1990 to 90% in 2002 while the cohort survival rate at the elementary level rose from 68% in 1990 to 70% in 2002 (**Figure 5**). Thus, as of SY 2002-2003, the Grade 1 intake rate reached a high of 74%. However, less than 70% of children who enter school reach grade six and less than half reach and complete the last year of secondary school.

To improve access to basic education, the government put in place a program to ensure that all barangays would have access to elementary schools. Thus, only 118 barangays remain unserved as of 2004.

In addition, the government adopted various programs and projects that address the needs of hard-to-reach areas. These include the Multi-grade program, the Third Elementary Education Project, the Basic Education Assistance for Mindanao, the Accreditation and Equivalency Program and the Child-Friendly School System. Furthermore, alternative delivery programs like the distance learning program were implemented to reach communities which are unserved or underserved by the formal school system.

Despite these improvements, **Figure 5** shows in graphic terms that the rate of progress needed to meet the MDG targets for the participation rate and the cohort survival rate at the elementary level by 2015 are very much higher than the Philippines' current rate of progress, with the difference between the required rate of progress and the actual rate of progress to date for the cohort survival rate being markedly higher than that for the participation rate. Thus, universal access to primary education may not be achieved in

2015 if the country simply maintains its current rate of progress to date. In comparison, universal access to complete primary education by 2015 will even be more difficult to attain given the actual rate of progress to date.



Outstanding issues. Various studies (e.g., Philippine Education Sector Study, Philippine Commission on Education Reform) also note that the problem with basic education in the country is not so much with access but quality. The sad state of the quality of basic education in the country is perhaps best illustrated by the results of the tests given to eighth graders in 38 countries by the Trends in International Mathematics and Science Study (TIMSS) in 1999 where the Philippines ranked 36th in both Math and Science. Despite posting some improvement in the 2003 TIMSS where the Philippines ranked 34th of 38 countries taking the Grade 8 Mathematics test and 43rd of 46 countries taking the Grade 8 Science test, the Philippines continues to underperform all the countries in the region.

This conclusion is validated by the results of national assessments as well. For instance, the results of the High School Readiness Test given in May 2004 suggest that less than 1% of the incoming first year students have achieved Grade VI-level competencies in English, Mathematics and Science. Also, the National Diagnostic Test (NDT) administered to incoming Grade IV and Year 1 students in public schools at the start of SY 2002-2003 revealed that these students have mastered only 40% and 28% of the Grade-III level and Grade VI-level basic competencies, respectively (**Table 8**). Although some improvement in the academic performance of the same group of students was registered in the National Achievement Test (NAT) that was given at the end of the school year, the average test score remained below 50%.

Table 8. NDT and NAT Results: Overall Percentage of Correct Responses

	Overall		English		Science		Math	
	Gr. 4	Yr 1	Gr. 4	Yr 1	Gr. 4	Yr 1	Gr. 4	Yr 1
NDT (June '02)	39.99	28.04	42.15	29.67	39.38	27.75	38.45	26.71
NAT (March '03)	43.55	36.13	41.8	41.48	43.98	34.65	44.84	32.09

At the same time, studies here and abroad indicate that improvements in the availability of teachers, classrooms, desks & seats, and textbooks do not only increase enrolment but also enhance student performance. These findings are validated in the case of the Philippines by Orbeta (2005).⁹ In this context, addressing the input deficits in public schools is key to attaining the MDG for education.

Despite the high priority given to basic education relative to other sectors, the severity of the fiscal constraints in 2000-2005 did not allow the DepEd to adequately respond to the shortages in inputs in earlier years. **Table 9** also shows that the public school system lacks 37,587 teachers in schools with severe teacher deficits (i.e., black, red, orange and gold schools in the teacher spectrum¹⁰) and 4,999 classrooms in double-shift schools with severe classroom deficits (i.e., black, red and gold schools in the classroom spectrum) as of the end of SY 2003-2004.¹¹ Although a total of 27,650 new teacher items were created in 2004-2006, the teacher shortage in schools with severe teacher deficits is estimated to be 9,937 at the end of SY 2006-2007. Also, the allocation of PhP 1-2 billion yearly on schoolbuilding construction in 2004-2006 is not even enough to address the needs of additional number of students entering the public school system every year during that period.

⁹ Orbeta estimates that reducing the pupil-teacher ratio by 10 will result in an increase in Grade 1 enrolment equivalent to $0.029 \times [2003/04 \text{ net enrollment rate for Grade 1}] \times [\text{school-age population}]$ and an increase in Grade 2- 6 and Years I-IV enrollment equivalent to $0.029 \times [2003/4 \text{ cohort survival rate}] \times [\text{number of enrollees in previous year}]$. Also, reducing the pupil-classroom ratio by 10 will result in an increase in Grade 1 enrolment equivalent to $0.01 \times [2003/04 \text{ net enrollment rate for Grade 1}] \times [\text{school-age population}]$ and an increase in Grade 2- 6 and Years I-IV enrollment equivalent to $0.01 \times [2003/4 \text{ cohort survival rate}] \times [\text{number of enrollees in previous year}]$ while reducing the pupil-furniture ratio by 10 will result in an increase in Grade 1 enrollment equivalent to $0.296 \times [2003/04 \text{ net enrollment rate for Grade 1}] \times [\text{school-age population}]$ and an increase in Grade 2- 6 and Years I-IV enrollment equivalent to $0.296 \times [2003/4 \text{ cohort survival rate}] \times [\text{number of enrollees in previous year}]$.

¹⁰ The DepEd uses a “color-coding” scheme to classify schools according severity of the input shortage. A description of the color-coding scheme is given in Appendix 1.

¹¹ In contrast, the total classroom shortage in schools with severe deficits jumps to 31,952 if the deficit in single shift schools is included. The DepEd adopted in SY 2005-2006 a policy to implement double shifting in schools with an average class size in excess of 50 in order to help alleviate over-crowding in public schools.

Table 9. Input Shortages in the Public Schools as of end of SY 2003-2004

	Teacher (including ARMM)		Classroom (Excluding ARMM)				Furniture (excluding ARMM)	
	Elem	Sec	Elementary		Secondary		Elem	Sec
			1shift	2 shifts	1 shift	2 shifts		
Black	758	2,979	--	477	321	171	41,709	12,289
Red	10,959	14,279	1,810	2,380	22,676	1,969	327,265	269,237
Orange	2,317	2,260	--	--	--	--	374,459	224,665
Gold	2,606	1,429	1,303	2	843	--	1,058,414	99,708
Total	16,640	20,947	3,113	2,859	23,840	2,140	1,801,847	605,899

Note: As of school year 2003 to 2004. Source of data: DepEd, BEIS data

In contrast, the budget allocation of the DepEd in 2004-2005 for furniture is enough to address the 2.4 million seat shortage as of the end of SY 2003-2004 and the additional requirements arising from enrollment growth. It is also noteworthy that the textbook-pupil ratio per subject area improved significantly from 1:6 in 1999 to 1:1.13 at the national level in SY 2004-2005 as a result of reforms on textbook procurement, delivery and distribution.

In addition to addressing input deficits, there is a need to improve school-retention. An analysis of the profile of school leavers suggests that children drop out of school for economic reasons (e.g., high cost of education¹², need to seek employment and ill-health) as well as for pedagogic reasons (inability to cope with school work and lack of interest). This suggests the need for targeted subsidy for the poor, programs to improve the nutrition status of children,¹³ and programs to provide in-school health care in addition to improvements in school facilities and teaching quality.

Resource requirements and resource gaps. To meet the MDG target of universal access to complete primary education, the DepEd has launched a number of programs aimed at improving school retention and improving student performance, including: (1) the Schools-First Initiative (SFI), (2) the Early Childhood Education (ECE), (3) the Alternative Learning System (ALS), (4) Teacher Education and Development,¹⁴ (5) the

¹² On the one hand, it is found from the Filipino Report Card on Pro-poor Services (WB 2001) that the school fees paid by children going to public schools are not inconsequential despite the fact that the Constitution mandates free public elementary education. On the other hand, other out-of-pocket costs of public elementary schooling (including cost of textbooks, school supplies, transportation) is large (Maglen and Manasan 1999).

¹³ The Food-for-School Program launched in 2004 involves food assistance for the families of pre-school and Grades 1 pupils conditional on the school attendance of said pupils.

¹⁴ This is designed to improve the teaching and management skills of teachers and includes in-service training on English, Science, Math and Filipino.

High School Bridge Program,¹⁵ and (6) Madrasah Education. The costs of these programs as well as the costs of the inputs needed to serve the higher enrollment numbers implied by the MDG on basic education are thus considered in the projections of the resource requirement for meeting MDG 2. The other assumptions used in projecting said resource requirement includes:

- Grade 1 intake will increase from 74% of cohort in SY 2003-2004 to 100% in 2010-2015. Note that this target is higher than the EFA target (which is also the MTPDP target) of 84.6% in 2010 and 95% in 2015.
- Elementary completion rate (based on Grade 1 entrants) will increase from 68.32% in 2006 to 100% in 2015. This target is higher than EFA target of 77.6% in 2010 and 82.6% in 2015.
- Lack of teachers in schools that have severe shortages will gradually be addressed between 2007 and 2010.
- In addition to addressing the teacher backlog, enough new teacher positions will be created so that the teacher requirements of new entrants are met. The target teacher-pupil ratio is set at 1:45 in 2007-2009 and 1:40 in 2010-2015.
- Lack of classroom in schools that have severe shortages will gradually be addressed in 2007-2013.
- In addition to addressing the classroom backlog, enough new classroom will be built so that classroom requirements of new entrants are met. The target classroom-pupil ratio is set at 1:45 in 2007-2015.
- Classrooms will be rehabilitated every 15 years at 80% of the replacement cost; furniture will be replaced once every 10 years; and textbooks will be replaced once every 5 years.
- Textbook requirement is 5 per pupil in grade school and 6 per student in high school.
- Per student school MOOE in 2007 prices is projected to increase from PhP 200 in 2007-2009, PhP 250 in 2010-2011, PhP 300 in 2012-2013 and PhP 350 in 2014-2015.¹⁶

Based on these assumptions, enrollment in public elementary schools is projected to increase from 12.1 million in SY 2003-2004 to 16.5 million in SY 2010-2011 and 18.4 million SY 2015-2016. Providing the projected number of students with adequate teachers, textbooks and classrooms implies that by 2015, an additional 394,111 teachers will have to be hired, an additional 285,614 new classrooms will have to be constructed, an additional 11.4 million seats and an additional 65.8 million textbooks will have to be procured between 2004 and 2015.

The financial requirements for meeting MDG 2 thus estimated are presented in **Table 10**. In specific terms, **Table 10** projects the amount of resources needed to meet the MDG in basic education to be equal to PhP 176.2 billion (or 2.7% of GDP) in 2007 and a cumulative total of PhP 2,454.8 billion (or 3.2% of GDP) in 2007-2015.

¹⁵ The High School Bridge Program was designed to improve elementary school graduates' preparedness for high school.

¹⁶ The increase is aimed at allowing per student MOOE to gradually increase to its 1997 level in real terms.

Table 10. Resource Requirement for Basic Education in Current Prices, 2007-2015 (in million pesos)
(High Cost Assumption)

Year	Teachers	Textbooks	Classrooms	Other cost (excl books, rooms, teachers)	Total	Total % of GDP
with MTPDP						
2007	117,833	1,753	17,724	38,929	176,239	2.71
2008	131,682	1,459	21,606	41,738	196,484	2.83
2009	146,137	1,687	30,719	44,969	223,512	3.01
2010	164,321	1,953	35,026	49,984	251,285	3.16
2011	183,043	2,961	36,143	53,553	275,700	3.24
2012	202,094	3,224	34,596	60,474	300,388	3.30
2013	222,093	2,475	29,381	65,652	319,602	3.28
2014	242,551	2,576	25,177	73,458	343,761	3.30
2015	263,471	2,655	22,113	79,564	367,802	3.30
2007-2015	1,673,226	20,743	252,484	508,320	2,454,773	3.16

Basic education is financed from two major sources: the national government budgetary allocations and LGUs' Special Education Fund (SEF). LGU spending on basic education is projected to grow at the same pace as nominal GDP from its 2003 level. On the other hand, national government spending on basic education is assumed to increase at the same pace as national government revenues from its 2007 level. The estimates of the resources that are likely to be made available from both sources under the MTPDP GDP growth rate scenario are presented in **Table 11**. In this scenario, the resource gap is estimated to be equal to PhP 32.0 billion (or 0.49 of GDP) in 2007 and a cumulative total of PhP 348.9 billion (or 0.45% of GDP) in 2007-2015.

In contrast, the resource gap is estimated to be equal to PhP 34.3 billion (or 0.53% of GDP) in 2007 and a cumulative total of PhP 506.4 billion (or 0.70% of GDP) in 2007-2015 under the low GDP growth rate scenario (**Table 12**). These projections, thus, provide an indication of the difficulties in achieving the MDG in basic education particularly under the low GDP growth rate policy regime.

Table 11. Resources Available and Resource Gap in Basic Education in Current Prices, 2007-2015, (in million pesos)
(High cost - MTPDP GDP growth rate assumption*)

Year	Available Resources from NG w/ MTPDP GDP gr	Available Resources from LGU w/ MTPDP GDP gr	Available Resources from NG and LGU w/ MTPDP GDP gr	Resource Requirement w/ MTPDP GDP gr	Gap w/ MTPDP GDP gr
Levels In Million Pesos					
2007	134,195	10,078	144,273	176,239	31,966
2008	148,912	11,301	160,214	196,484	36,271
2009	166,629	12,697	179,326	223,512	44,185
2010	183,694	14,265	197,959	251,285	53,326
2011	207,126	16,027	223,153	275,700	52,547
2012	232,301	18,006	250,307	300,388	50,080
2013	260,713	20,230	280,943	319,602	38,658
2014	292,778	22,729	315,506	343,761	28,255
2015	328,692	25,536	354,228	367,802	13,574
2007-2015	1,955,040	150,870	2,105,910	2,454,773	348,863
Percent to GDP					
2007	2.07	0.16	2.22	2.71	0.49
2008	2.15	0.16	2.31	2.83	0.52
2009	2.24	0.17	2.42	3.01	0.60
2010	2.31	0.18	2.49	3.16	0.67
2011	2.44	0.19	2.63	3.24	0.62
2012	2.55	0.20	2.75	3.30	0.55
2013	2.68	0.21	2.89	3.28	0.40
2014	2.81	0.22	3.03	3.30	0.27
2015	2.95	0.23	3.18	3.30	0.12
2007-2015	2.52	0.19	2.71	3.16	0.45

* Refer to Table 5 for alternative GDP growth rate assumptions

Table 12. Resources Available and Resource Gap in Basic Education in Current Prices,
2007-2015 (in million pesos)
(High Cost - low GDP growth rate assumption*)

Year	Available Resources from NG w/ low GDP gr	Available Resources from LGU w/ low GDP gr	Available Resources from NG and LGU w/ low GDP gr	Resource Requirement w/ low GDP gr	Gap w/ low GDP gr
Levels In Million Pesos					
2007	131,955	10,031	141,986	176,239	34,253
2008	144,755	11,112	155,866	196,484	40,618
2009	159,849	12,309	172,158	223,512	51,353
2010	173,864	13,635	187,499	251,285	63,786
2011	193,446	15,105	208,550	275,700	67,150
2012	213,999	16,732	230,731	300,388	69,657
2013	236,868	18,535	255,403	319,602	64,198
2014	262,316	20,532	282,848	343,761	60,913
2015	290,632	22,744	313,376	367,802	54,426
2007-2015	1,807,683	140,735	1,948,418	2,454,773	506,355
Percent to GDP					
2007	2.05	0.16	2.21	2.74	0.53
2008	2.14	0.16	2.30	2.90	0.60
2009	2.24	0.17	2.41	3.13	0.72
2010	2.31	0.18	2.49	3.33	0.85
2011	2.43	0.19	2.62	3.46	0.84
2012	2.55	0.20	2.75	3.58	0.83
2013	2.67	0.21	2.88	3.61	0.72
2014	2.81	0.22	3.03	3.68	0.65
2015	2.95	0.23	3.18	3.73	0.55
2007-2015	2.50	0.19	2.69	3.40	0.70

* Refer to Table 5 for alternative GDP growth rate assumptions

Generating Cost Savings. Previous studies (e.g., Manasan 2002) have noted inefficiencies in teacher deployment. The BEIS for SY 2003-2004 indicates that there is an excess of 82,816 teachers in teacher-surplus schools at the same time that there is a shortage of 44,297 teachers in teacher-deficit schools as of the end of SY 2003-2004. Thus, savings could be generated if teacher shortages are met in part by transferring vacant teacher posts from surplus schools to deficit schools in lieu of creating new teacher items under current practice. The difficulties of a more aggressive teacher redeployment program have been attributed to the constraints imposed under the Magna Carta for Public School Teachers with regards to the reassignment of teachers across

geographical borders. However, consultations with various division offices of the DepEd suggest that some redeployment is possible even without amending the Magna Carta.¹⁷ The estimate of the potential efficiency dividend if 50% of the excess teachers in teacher-surplus schools are redeployed to teacher-deficit schools is assumed in the estimates shown in **Table 13**.

Table 13. Resource Requirement for Basic Education in Current Prices, 2007-2015
(in million pesos)
(Low cost assumption*)

Year	Teachers	Textbooks	Classrooms	Other cost (excl books, rooms, teachers)	Total	Total % of GDP
with MTPDP						
2007	115,885	1,753	14,179	38,758	170,575	2.63
2008	127,591	1,459	17,285	41,476	187,810	2.71
2009	139,693	1,687	24,575	44,578	210,533	2.84
2010	155,299	1,953	28,021	49,486	234,760	2.96
2011	173,570	2,961	28,914	53,034	258,480	3.04
2012	192,148	3,224	27,677	59,950	282,998	3.11
2013	211,649	2,475	23,505	65,145	302,774	3.11
2014	231,585	2,576	20,141	72,960	327,263	3.14
2015	251,957	2,655	17,690	79,069	351,370	3.15
2007-2015	1,599,378	20,743	201,987	504,456	2,326,563	3.00

* Assumes the following sources of operational efficiency: 1) teacher redeployment and 2) cheaper school building construction arrangements

Table 13 also factors in another source of potential efficiency gains: the use of alternative lower cost arrangements in school building construction. Note that various studies have documented such lower cost arrangements. For instance, Loehr and Manasan (1999) are able to construct school buildings at a cost that is at least 20% lower than the Department of Public Works Highway (DPWH). More recently, the DepEd has also found out Principal-Led School Building Program to be more cost-efficient than that implemented by the DPWH. A comparison of **Table 10** and **Table 13** indicates that the cost savings outlined above will yield a 5.2% reduction in resource requirement in basic education on the average in 2007-2015.

On the other hand, the estimates of the resource gaps when such efficiencies in service delivery are put in place are shown in **Table 14** and **Table 15**. A comparison of **Table 14** and **Table 15** with **Table 11** and **Table 12**, respectively, suggests that the resource gap is cut from 0.45% of GDP to 0.28% of GDP in 2007-2015 under the MTPDP GDP growth rate scenario and from 0.70% of GDP to 0.52% of GDP under the low GDP

¹⁷ Of course, an amendment of the Magna Carta will facilitate redeployment of teachers.

growth rate scenario as a result of the assumed savings from more efficient service delivery.

Table 14. Resources Available and Resource Gap in Basic Education in Current Prices, 2007-2015, (in million pesos)
(Low Cost¹ - MTPDP GDP growth rate assumption²)

Year	Available Resources from NG w/ MTPDP GDP gr	Available Resources from LGU w/ MTPDP GDP gr	Available Resources from NG and LGU w/ MTPDP GDP gr	Resource Requirement w/ MTPDP GDP gr	Gap w/ MTPDP GDP gr
Levels In Million Pesos					
2007	134,195	10,078	144,273	170,575	26,302
2008	148,912	11,301	160,214	187,810	27,597
2009	166,629	12,697	179,326	210,533	31,206
2010	183,694	14,265	197,959	234,760	36,801
2011	207,126	16,027	223,153	258,480	35,327
2012	232,301	18,006	250,307	282,998	32,691
2013	260,713	20,230	280,943	302,774	21,831
2014	292,778	22,729	315,506	327,263	11,756
2015	328,692	25,536	354,228	351,370	(2,858)
2007-2014	1,626,348	125,335	1,751,682	1,975,193	223,511
2007-2015	1,955,040	150,870	2,105,910	2,326,563	220,653
Percent to GDP					
2007	2.07	0.16	2.22	2.63	0.40
2008	2.15	0.16	2.31	2.71	0.40
2009	2.24	0.17	2.42	2.84	0.42
2010	2.31	0.18	2.49	2.96	0.46
2011	2.44	0.19	2.63	3.04	0.42
2012	2.55	0.20	2.75	3.11	0.36
2013	2.68	0.21	2.89	3.11	0.22
2014	2.81	0.22	3.03	3.14	0.11
2015	2.95	0.23	3.18	3.15	(0.03)
2007-2014	2.90	0.22	3.12	3.52	0.40
2007-2015	2.52	0.19	2.71	3.00	0.28

Notes:

1. Assumes the following sources of operational efficiency: 1) teacher redeployment and 2) cheaper school building construction arrangements
2. Refer to Table 5 for alternative GDP growth rate assumptions

Table 15. Resources Available and Resource Gap in Basic Education in Current Prices, 2007-2015,
(in million pesos)
(Low cost¹ - low GDP growth rate assumption²)

Year	Available Resources from NG w/ low GDP gr	Available Resources from LGU w/ low GDP gr	Available Resources from NG and LGU w/ low GDP gr	Resource Requirement w/ low GDP gr	Gap w/ low growth w/ low GDP gr
Levels In Million Pesos					
2007	131,955	10,031	141,986	170,575	28,589
2008	144,755	11,112	155,866	187,810	31,944
2009	159,849	12,309	172,158	210,533	38,374
2010	173,864	13,635	187,499	234,760	47,261
2011	193,446	15,105	208,550	258,480	49,930
2012	213,999	16,732	230,731	282,998	52,267
2013	236,868	18,535	255,403	302,774	47,371
2014	262,316	20,532	282,848	327,263	44,415
2015	290,632	22,744	313,376	351,370	37,994
2007-2015	1,807,683	140,735	1,948,418	2,326,563	378,146
Percent to GDP					
2007	2.05	0.16	2.21	2.66	0.45
2008	2.14	0.16	2.30	2.77	0.47
2009	2.24	0.17	2.41	2.94	0.54
2010	2.31	0.18	2.49	3.11	0.63
2011	2.43	0.19	2.62	3.25	0.63
2012	2.55	0.20	2.75	3.37	0.62
2013	2.67	0.21	2.88	3.42	0.53
2014	2.81	0.22	3.03	3.50	0.48
2015	2.95	0.23	3.18	3.56	0.39
2007-2015	2.50	0.19	2.69	3.22	0.52

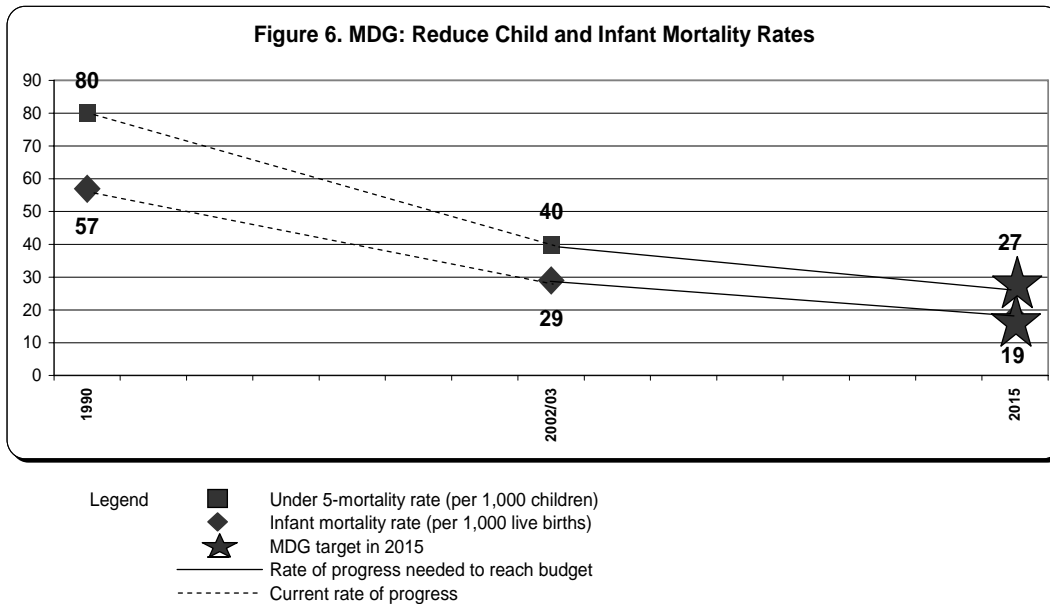
Notes:

1. Assumes the following sources of operational efficiency: 1) teacher redeployment and 2) cheaper school building construction arrangements

2. Refer to Table 5 for alternative GDP growth rate assumptions

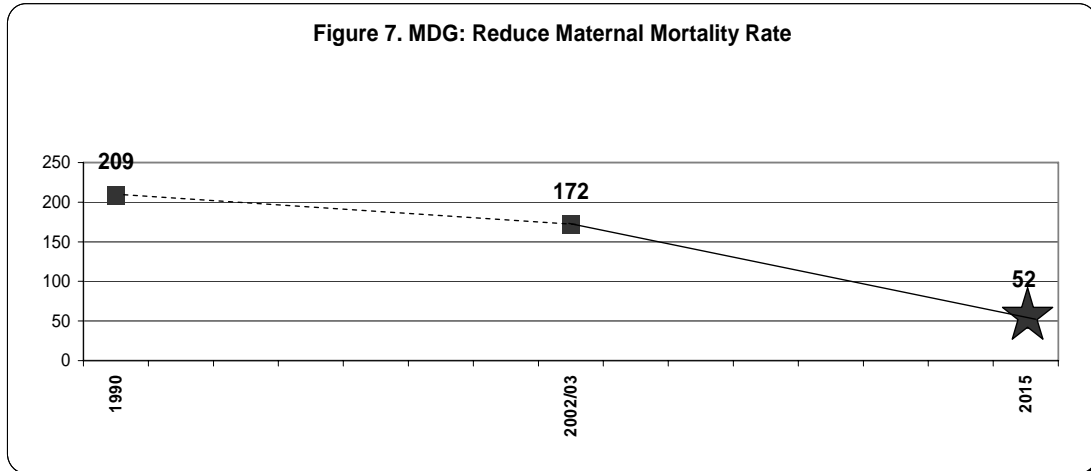
3.3. Goals 4, 5, and 6 – Health-Related MDGs

Progress to date. The Philippines posted notable gains in 1990-2003 in reducing both the infant mortality rate (IMR) and the child mortality rate (CMR). During this period, the infant mortality was halved from 57 to 29 infant deaths per 1,000 live births (**Figure 6**). In like manner, the child mortality rate went down from 80 to 40 under-five deaths per 1,000 children.



The rate of progress needed to reach the 2015 target is less than the actual rate of progress to date suggesting that it is likely that the MDG targets for child health will be achieved. However, the decline in recent years in the proportion of fully immunized children before they turn a year old may put the gains in child health at risk. To wit, the proportion of fully immunized children dipped from 71.5% in the 1993 National Demographic and Health Survey (NDHS) and 72.8% in the 1998 NDHS to 69.8% in the 2003 NDHS. Also, while the proportion of the fully immunized children as per the FHSIS reached 84.8% in 2004, said figure is still lower than the 95% target for the year as per the National Objectives for Health or NOH (DOH 1999). Moreover, the actual number of reported measles cases in 2004 is 13,034, more than four times higher than the target number of cases for that year as per the NOH.

On the other hand, the Philippine performance in reducing the maternal mortality rate (MMR) is not as commendable, with the MMR declining from 209 maternal deaths per 100,000 live births in 1993 to 172 maternal deaths per 100,000 live births in 1998 (**Figure 7**). The rate of progress necessary to reach the 2015 target is thus more than 50% higher than the actual rate of progress in 1993-1998, suggesting that the Philippines would have to reduce MMR at a faster pace than its historical performance to date. In turn, this indicates that the government would have to exert additional effort relative to what it has done in the past if the Philippines is to attain the MDG in this area.



Legend

- Maternal mortality rate
- ★ MDG target in 2015
- Rate of progress needed to reach budget
- - - Current rate of progress

In contrast, the performance with respect to some of the key maternal care interventions (namely, tetanus toxoid vaccination and the provision of pre-natal care) has stagnated (if not deteriorated) (**Table 16**). While the proportion of births attended by professional health provider and proportion of women with at least 1 post-natal visit increased between 1993 and 2003, the 2003 level for both of these indicators is lower than the corresponding 2004 NOH target by 20 and 29 percentage points, respectively.

Table 16. Maternal Health Indicators

	1993	1998	2003
Pregnant women:			
Given 2 or more doses of tetanus toxoid (%)	42.2	37.8	37.3
With at least 4 prenatal visits (%)	52.1	77**	70.4
Given iron supplement (%)		74.6	76.8
Birth attended by professional health provider (%)	52.8	56.4	59.8
Women w/ at least 1 post natal visit within one week after delivery(%)		42.7	51.1
Proportion of married women currently using contraception (%)	40	46	49

Source: NDHS

* maternal mortality ratio; deaths per 100,000 births

** with at least 3 prenatal visits

On the other hand, while the proportion of married women currently using contraception increased in 1993-2003, not only has the rate of increase decelerated in 1998-2003 but 2004 contraceptive prevalence rate is also very much lower than the NOH target of 70%. Thus, it is not surprising that the rate of reduction in the total fertility rate has decelerated from 4.1 children in 1993 to 3.7 children in 1998 and 3.5 children in 2003. Also, the actual total fertility rate in 2003 is still 1 child more than desired fertility rate of 2.5 children per woman.

Meanwhile, the decline in the incidence rate of major infectious diseases like TB, malaria and STI appears to have faltered in 2001-2003 (**Table 17**). In contrast, the incidence rate of schistosomiasis went up in 2001-2004 while that of HIV/AIDS inched up from 0.16% in 2000 to 0.24% in 2004.

Table 17. Notifiable Diseases: Reported Cases
Number and Rate/100,000 Population

Year	Diseases									
	TB		Malaria		STI		HIV/AIDS Infection		Schistosomiasis	
	No. of cases	Incidence rate	No. of cases	Incidence rate	No. of cases	Incidence rate	No. of cases	Incidence rate	No. of cases	Incidence rate
1999	144,932	193.9	68,155	91.2	2,921	3.9	158	0.21	11,572	15.5
2000	126,489	165.7	50,869	66.6	2,100	2.7	123	0.16	4,240	5.6
2001	105,695	135.6	40,543	52.0	1,777	2.3	174	0.22	5,881	7.5
2002	114,221	143.7	39,994	50.3	1,586	2.0	184	0.23	7,426	9.3
2003	92,079	117.6	28,549	36.5	1,273	0.7	193	0.23	5,967	7.6
2004	103,214	129.1	19,894	24.9	1,518	1.9	199	0.24	6,628	8.3

Source: Field Health Service Information System (FHSIS) except for HIV/AIDS infection as data of which are based on UNAIDS Presentation, March 2007
Note: The incidence rates for HIV/AIDS infection are higher than those reported in FHSIS as the number of cases given in the same are said to be understated

Resource requirements and resource gaps. The components of essential health care packages for various segments of the population are presented in the NOH (DOH 1999, page 123). For infants and under-five children, the key interventions include: full immunization, micronutrient supplementation and birth weight and growth monitoring. For mothers, the key interventions include: tetanus toxoid vaccination, micronutrient supplementation, pre-natal care, clean and safe delivery, and family planning services. The NOH also calls for the reduction of morbidity, mortality, disability and complications from diarrhea and other food and water-borne diseases, tuberculosis, HIV/AIDS and other sexually transmitted diseases, hepatitis B and other major diseases like malaria, schistosomiasis, filiriasis, etc.

In line with this, the DOH in its “National Objectives for Health, 1999-2004” (DOH/NOH 1999) outlines the following intermediate objectives that will contribute significantly in improving the overall health status of Filipinos (as reflected in reductions in the IMR, the under-5 mortality rate, and the MMR):

- increase the proportion of fully immunized infants from 89% in 1998 to 95% in 2004;
- increase the proportion of infants immunized against hepatitis B from 37% in 1998 to 95% in 2004;
- increase the proportion of pregnant women receiving 2 doses of tetanus toxoid vaccine from 50% in 1998 (FHSIS) to 80% in 2004;
- increase the proportion of children given Vitamin A supplement from 90% in 1998 to 100% from 2004 onwards so as to reduce the prevalence of Vitamin A deficiency from 38% in 1993 to 15% in 2004;¹⁸
- increase the proportion of lactating women given Vitamin A supplement from 49% in 1998 (FHSIS) to 56% in 2004 so as to reduce prevalence of vitamin A deficiency from 1% in 1993 to 0.3% in 2004 amongst lactating women and from 0.5% to 0.2% amongst pregnant women;
- increase the proportion of pregnant and lactating women given iron supplement from 64% in 1998 to 74% in 2004 so as to reduce prevalence of anemia from 51% in 1998 to 40% in 2004 amongst pregnant women and from 46% to 37% amongst lactating women;
- increase the proportion of women aged 15-40 given iodine supplement from 21% in 1998 to 35% in 2004 so as to reduce the prevalence of iodine deficiency from 36% in 1994 to 20% in 2004;
- reduce the prevalence of smear positive TB cases from 310 per 100,000 population in 1997 to 280 in 2004; increase the case detection rate (i.e., number of new smear positive cases detected relative to proportion of smear positives) from 45% in 1998 to 70% in 2004; increase the proportion of identified TB cases given the Directly Observed Treatment Shortcourse (DOTS) from 50% in 1997 to 100% in 2004 onwards;
- increase the proportion of clinically diagnosed malaria cases given treatment from 17% in 2001 to 40% in 2004, increasing to 5 percentage points yearly to reach 95% in 2015; sustain proportion of malaria A and B houses sprayed at 100% in 2002-2004;
- increase proportion of exposed population in schistosomiasis areas given stool exam from 20% in 1999 (FHSIS) to 62% in 2004; maintain proportion of those with positive stool exam given treatment at 100%;
- provide assistance to 18 provinces/cities each year from 2002-2010 to help them improve health facilities and allow them to be accredited providers under the NHIP;

¹⁸ This target as well as those for vitamin A supplementation for lactating women, iron supplementation for pregnant and lactating women and iodine supplementation for women aged 15-40 refer to the high cost estimate. Under the low cost assumption, the coverage of Vitamin A micronutrient supplementation for children is assumed to decline to about 10 percentage points above the poverty incidence as food fortification takes effect from 2005 onwards. Moreover, poverty incidence is assumed to decrease from 32% in 2002 to 31% in 2003 and 30% in 2004, and by 1 percentage point per year every year thereafter up to 19% in 2015.

- sustain per capita expenditures in other public health programs at their 2002 levels; and
- increase indigent households enrolled in NHIP from .3% of total number of poor households in 2001 to 22.5% in 2004.

In line with these, the estimates of the resource requirements needed to meet the health-related MDGs extrapolated the intermediate outputs in the NOH so as to deliver the following intermediate outputs by 2015:

- ❖ Child health
 - Fully immunized child coverage will increase from 84.5% in 2005 to 100% in 2015.
 - Hepatitis B coverage will increase from 45.6% in 2005 to 100% in 2015.
 - The proportion of children aged 0-5 years of age who are given Vitamin A will increase from 79% in 2004 to 100% in 2015.
 - All under-five children will be given micronutrient supplementation.
- ❖ Maternal health
 - Coverage of tetanus toxoid vaccination will increase from 80% in 2005 to 100% in 2015.
 - The proportion of pregnant women and lactating mothers given Vitamin A will increase from 53% in 2004 to 100% in 2015.
 - Contraceptive prevalence rate (modern users) will increase from 48.9% in 2004 to 70% in 2015.

On the other hand, the estimates of the resource requirements to combat HIV/AIDS, malaria and TB take into account that the DOH aims to reduce the STI prevalence rate from 5% of the general population in 2006 to 1% in 2010 and 0.5% in 2015; the TB morbidity rate from 310 per 100,000 population in 1999 to 290 in 2006, 250 in 2010 and 190 in 2015; the malaria morbidity rate from 455 per 100,000 population in 1999 to 269 in 2006, 138 in 2010 and 1 in 2015. To achieve this, the DOH MDG report calls for the:

- Mass treatment of commercial sex workers;
- Clinical care for HIV/AIDS case;
- Treatment of malaria cases;
- Prophylaxis of pregnant women and non-immune visitors;
- Provision of laboratory supplies, insecticides and mosquito nets;
- Treatment of TB cases, including children;
- Provision of laboratory logistics; and
- Training of health frontline workers.

Detailed information on the unit cost of the following critical public health interventions were obtained from the DOH: (1) expanded program of immunization, (2) tetanus toxoid vaccination for mothers, (3) micronutrient supplementation, and (4) treatment and control of tuberculosis, malaria, and STI. Next, the financial requirement for the achievement of the MDG targets is computed as the product of the unit cost, the target population/clientele and the target coverage rate.

It is worth emphasizing that the delivery of basic health services has been devolved to LGUs under the Local Government Code. However, the public good nature of public health services suggests that the central government cannot fully abdicate its role in this sub-sector despite devolution. It should also be recalled that when health services were actually devolved to LGUs in 1992/1993, the estimate of the cost of devolved health services (which was netted out of the DOH budget at that time and which is the basis of all subsequent analysis regarding the adequacy of the IRA to fund devolved services) only included the PS cost of personnel who were actually transferred to LGUs and the MOOE of the operation of devolved facilities. The cost of public health commodities that was retained in the DOH budget (amounting to PhP 1 billion in 1993) was not included in this reckoning.

The estimates of the resource requirements for the attainment of the health-related MDGs take into account the *de facto* division of responsibilities in basic health services:

- In child and maternal health, the central government finances procurement of antigens for vaccination while LGUs takes care of the provision of syringes and safety boxes as well as health staff (including training cost) who actually administer the vaccines.
- Procurement of supplies for iron supplementation and drugs for the control of acute respiratory illness and control of diarrhea is an LGU responsibility.
- Procurement of contraceptive supplies is lodged almost 100% with LGUs.
- Health staff who delivers services relating to the treatment and control of HIV/AIDS, TB and malaria are financed by LGUs while the central government provides the drugs and medicines.
- Travel cost to training venue of LGU health personnel is the responsibility of the LGU while the cost of facilitators, resource persons, training materials and accommodations is the responsibility of the central government.

At the central government level

Table 18 presents the estimates of the amount of resources needed to meet the health-related MDGs at the central government level. It shows that the amount of resources needed to support the attainment of the MDG on basic health is equal to PhP 10.4 billion (or 0.15% of GDP) in 2007 and equal to a cumulative total of PhP 123.5 billion (0.12% of GDP) in 2007-2015.

Table 18. Resource Requirement for Basic Health in Current Prices, 2007-2015, (in million pesos)
(High cost assumption)

Year	EPI for Women & Children	Micro- nutrients	TB	Malaria	STI/ HIV	Other Public Health programs	Policy	Regulation	Premium Contribution to Philhealth	Total	Total % of GDP
with MTPDP											
2007	648	246	1,490	2,583	169	847	293	227	3,944	10,448	0.15
2008	701	264	1,600	2,768	183	910	308	245	4,167	11,146	0.15
2009	758	284	1,718	2,967	198	978	323	263	4,402	11,891	0.14
2010	820	305	1,845	3,180	214	1,051	340	282	4,648	12,686	0.13
2011	887	328	1,982	3,409	231	1,130	357	304	4,906	13,533	0.12
2012	959	352	2,129	3,654	250	1,214	374	326	5,177	14,436	0.12
2013	1,037	378	2,286	3,917	270	1,305	393	351	5,462	15,399	0.11
2014	1,121	406	2,455	4,199	292	1,403	413	377	5,759	16,426	0.11
2015	1,212	436	2,637	4,502	316	1,508	433	405	6,071	17,521	0.10
2007-2015	8,144	3,000	18,143	31,181	2,123	10,346	3,235	2,780	44,536	123,487	0.12

The amount of resources that will most likely be made available to basic health from the central government is estimated by allowing the 2007 baseline to grow in pace with the growth in national government revenue. It is notable that the 2007 baseline already incorporates a shift of budgetary resources from retained hospitals to public health. Given this, the resource gap at the central government level is estimated to be equal to PhP 5.1 billion (or 0.07% of GDP) in 2007 and equal to a cumulative total of PhP 45.0 billion (or 0.04% of GDP) in 2007-2015 under the MTPDP GDP growth rate scenario (**Table 19**). On the other hand, the resource gap is expected to amount to PhP 5.5 billion (or 0.08% of GDP) in 2007 and a cumulative total of PhP 55.5 billion (or 0.06% of GDP) in 2007-2015 under the low GDP growth rate scenario (**Table 20**).

**Table 19. Resources Available and Resource Gap in Basic Health
in Current Prices, 2007-2015, (in million pesos)
(High cost - MTPDP GDP growth rate assumption*)**

Year	Available Resources w/ MTPDP GDP gr	Resource Requirement w/ MTPDP GDP gr	Gap w/ MTPDP GDP gr
Levels In Million Pesos			
2007	5,384	10,448	5,064
2008	5,974	11,146	5,172
2009	6,685	11,891	5,206
2010	7,370	12,686	5,316
2011	8,310	13,533	5,223
2012	9,320	14,436	5,116
2013	10,460	15,399	4,939
2014	11,746	16,426	4,680
2015	13,187	17,521	4,334
2007-2015	78,437	123,487	45,049
Percent to GNP			
2007	0.08	0.15	0.07
2008	0.08	0.15	0.07
2009	0.08	0.14	0.06
2010	0.08	0.13	0.06
2011	0.08	0.12	0.05
2012	0.08	0.12	0.04
2013	0.08	0.11	0.04
2014	0.08	0.11	0.03
2015	0.08	0.10	0.03
2007-2015	0.08	0.12	0.04

* Refer to Table 5 for alternative GDP growth rate assumptions

Table 20. Resources Available and Resource Gap in Basic Health in
Current Prices, 2007-2015, (in million pesos)
(High cost - low GDP growth rate assumption*)

Year	Available Resources w/ low GDP gr	Resource Requirement w/ low GDP gr	Gap w/ low GDP gr
Levels In Million Pesos			
2007	4,962	10,448	5,486
2008	5,444	11,146	5,703
2009	6,011	11,891	5,880
2010	6,538	12,686	6,147
2011	7,275	13,533	6,258
2012	8,048	14,436	6,388
2013	8,908	15,399	6,492
2014	9,865	16,426	6,562
2015	10,929	17,521	6,592
2007-2015	67,979	123,487	55,507
Percent to GDP			
2007	0.07	0.15	0.08
2008	0.07	0.15	0.08
2009	0.07	0.14	0.07
2010	0.07	0.14	0.07
2011	0.07	0.13	0.06
2012	0.07	0.13	0.06
2013	0.07	0.12	0.05
2014	0.07	0.12	0.05
2015	0.07	0.11	0.04
2007-2015	0.07	0.13	0.06

* Refer to Table 5 for alternative GDP growth rate assumptions

At the local government level

On the other hand, the estimates of LGU resource requirement for the non-personnel portion of the health-related MDGs are shown in **Table 21**¹⁹ while the estimates of the resource gap are presented in **Table 22**. The resource gap for LGUs is estimated to be equal to a cumulative total of PhP 38.6 billion in 2007-2015 under the MTPDP GDP growth rate assumption and PhP 39.3 billion under the low GDP growth rate scenario.

¹⁹ The total resource gap at the LGU level is likely to be larger. While city governments spend considerably more than enough to sustain the same service levels prevailing in 1991 in the post-Code period after adjustments are made for population growth, inflation and salary adjustments of devolved personnel, the actual spending of municipalities is barely enough to sustain the 1991 service levels. This suggests that higher resource gaps are likely to be forthcoming from municipalities over those presented in **Table 27** if they are to continue to have the personnel complement necessary to deliver the higher service levels (or high coverage rates) implied by the MDG targets.

Table 21. LGU Resource Requirement for Health MDGs in Current Prices, 2007-2015 (in million pesos)
(High cost assumption)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Child care	1,022	1,102	1,189	1,282	1,382	1,490	1,607	1,733	1,868	12,675
<i>of which:</i>										
EPI logistics	461	500	541	587	635	688	745	807	874	5,840
Iron supplementation (100%)	488	524	563	604	649	697	749	804	864	5,941
CAPABILITY BUILDING (net of DOH)	430	386	407	429	382	404	426	450	475	3,789
Contraceptives (net of DOH)	2,151	2,455	2,792	3,165	3,578	4,035	4,540	5,098	5,713	33,526
Total resource need	3,603	3,943	4,387	4,876	5,342	5,929	6,573	7,280	8,057	49,990

Table 22. LGU Resource Gap for Health MDGs in Current Prices, 2007-2015 (in million pesos)
(High cost assumption)

Year	Available Resources w/ MTPDP GDP gr	Resource Requirement	Gap w/ MTPDP GDP gr	Percent of GDP
2007	764	3,603	2,839	0.04
2008	857	3,943	3,086	0.04
2009	963	4,387	3,424	0.04
2010	1,081	4,876	3,794	0.04
2011	1,215	5,342	4,127	0.04
2012	1,365	5,929	4,564	0.04
2013	1,534	6,573	5,039	0.04
2014	1,723	7,280	5,557	0.04
2015	1,936	8,057	6,121	0.04
2007-2015	11,437	49,990	38,553	0.04
Year	Available Resources w/ low GDP gr	Resource Requirement	Gap w/ low GDP gr	Percent of GDP
2007	764	3,603	2,839	0.04
2008	846	3,943	3,097	0.04
2009	938	4,387	3,450	0.04
2010	1,039	4,876	3,837	0.04
2011	1,150	5,342	4,192	0.04
2012	1,274	5,929	4,655	0.04
2013	1,412	6,573	5,161	0.04
2014	1,564	7,280	5,717	0.04
2015	1,732	8,057	6,324	0.04
2007-2015	10,719	49,990	39,271	0.04

Generating Cost Savings. Costs savings could be generated in the delivery of micronutrient supplementation if the food fortification law is successfully implemented. In the cost estimates, these are reflected by assuming that the coverage of micronutrient supplementation programs will decline to about 20 percentage points above the poverty incidence taking into account the likelihood that government will still provide micronutrient supplementation because the poor are not able to buy fortified food in sufficient amounts and recognizing that targeted provision will be less than perfect. Cost savings may also be generated if immunization is delivered with less wastage. In the estimates below, the wastage allowance for antigens is that assumed under the EPI logistics manual of the DOH which is consistent with WHO standards.

At the central government level

A comparison of **Table 18** and **Table 23** shows that the better targeting and more efficient service delivery may cut the resource requirement for the attainment of the health-related MDGs at the central government level by 15% on the average in 2007-2015.

Table 23. Resource Requirement for Basic Health in Current Prices, 2007-2015, (in million pesos)
(Low cost assumption*)

Year	EPI for Women & Children	Micro-nutrients	TB	Malaria	STI/HIV	Other Public Health programs	Policy	Regulation	Premium Contribution to Philhealth	Total	Total % of GDP
with MTPDP											
2007	512	73	1,490	1,402	174	847	293	227	3,944	8,961	0.13
2008	553	77	1,600	1,479	188	910	308	245	4,167	9,527	0.12
2009	598	81	1,718	1,560	198	978	323	263	4,402	10,122	0.12
2010	647	86	1,845	1,646	214	1,051	340	282	4,648	10,758	0.11
2011	699	150	1,982	1,735	231	1,130	357	304	4,906	11,493	0.11
2012	756	158	2,129	1,829	250	1,214	374	326	5,177	12,214	0.10
2013	817	167	2,286	1,927	270	1,305	393	351	5,462	12,978	0.09
2014	883	176	2,455	2,030	292	1,403	413	377	5,759	13,789	0.09
2015	955	186	2,637	2,138	316	1,508	433	405	6,071	14,650	0.08
2007-2015	6,420	1,154	18,143	15,746	2,133	10,346	3,235	2,780	44,536	104,492	0.10

* Assumes the following sources of operational efficiency: 1) lower wastage allowances for vaccines and supplies and 2) better targeting in the delivery of some of the public health programs (e.g. micronutrient supplementation and malaria control)

In turn, the efficiency gains described above is also expected to reduce the resource gap at the central government level to a cumulative total of PhP 26.1 billion (or 0.03% of GDP) in 2007-2015 under the MTPDP GDP growth rate assumption (**Table 24**). In contrast, the resource gap is equal to a cumulative total of PhP 36.5 billion (or 0.04% of GDP) under the low GDP growth rate assumption (**Table 25**).

Table 24. Resources Available and Resource Gap in Basic Health in
Current Prices, 2007-2015, (in million pesos)
(Low cost¹ - MTPDP GDP growth rate assumption²)

Year	Available Resources w/ MTPDP GDP gr	Resource Requirement w/ MTPDP GDP gr	Gap w/ MTPDP GDP gr
Levels In Million Pesos			
2007	5,384	8,961	3,577
2008	5,974	9,527	3,552
2009	6,685	10,122	3,436
2010	7,370	10,758	3,388
2011	8,310	11,493	3,183
2012	9,320	12,214	2,894
2013	10,460	12,978	2,518
2014	11,746	13,789	2,043
2015	13,187	14,650	1,462
2007-2015	78,437	104,492	26,055
Percent to GDP			
2007	0.08	0.13	0.05
2008	0.08	0.12	0.05
2009	0.08	0.12	0.04
2010	0.08	0.11	0.04
2011	0.08	0.11	0.03
2012	0.08	0.10	0.02
2013	0.08	0.09	0.02
2014	0.08	0.09	0.01
2015	0.08	0.08	0.01
2007-2015	0.08	0.10	0.03

Notes:

1. Assumes the following sources of operational efficiency: 1) lower wastage allowances for vaccines and supplies and 2) better targeting in the delivery of some of the public health programs (e.g. micronutrient supplementation and malaria control)

2. Refer to Table 5 for alternative GDP growth rate assumptions

**Table 25. Resources Available and Resource Gap in Basic Health
in Current Prices, 2007-2015, (in million pesos)
(Low cost¹ - low GDP growth rate assumption²)**

Year	Available Resources w/ low GDP gr	Resource Requirement w/ low GDP gr	Gap w/ low GDP gr
Levels In Million Pesos			
2007	4,962	8,961	3,999
2008	5,444	9,527	4,083
2009	6,011	10,122	4,110
2010	6,538	10,758	4,220
2011	7,275	11,493	4,219
2012	8,048	12,214	4,166
2013	8,908	12,978	4,071
2014	9,865	13,789	3,925
2015	10,929	14,650	3,720
2007-2015	67,979	104,492	36,513
Percent to GDP			
2007	0.07	0.13	0.06
2008	0.07	0.13	0.05
2009	0.07	0.12	0.05
2010	0.07	0.12	0.05
2011	0.07	0.11	0.04
2012	0.07	0.11	0.04
2013	0.07	0.10	0.03
2014	0.07	0.10	0.03
2015	0.07	0.10	0.02
2007-2015	0.07	0.11	0.04

Notes:

1. Assumes the following sources of operational efficiency: 1) lower wastage allowances for vaccines and supplies and 2) better targeting in the delivery of some of the public health programs (e.g. micronutrient supplementation and malaria control)

2. Refer to Table 5 for alternative GDP growth rate assumptions

At the local government level

The low cost estimate of the resource gap at the local government level reflects not only the lower wastage factors for immunization but also better targeting for micronutrient supplementation and the provision of contraceptive supplies (**Table 26**). The provision of contraceptive supplies account for the bulk of the LGU resource requirement. Consequently, better targeting of contraceptive supplies is estimated to result in a 56% reduction in the cumulative LGU resource requirement in 2007-2015 (Compare **Table 21** with **Table 26**). In turn, **Table 27** shows that the LGU resource gap will be equal to a cumulative total of PhP 13.1 billion in 2007-2015 under the MTPDP GDP growth rate scenario and PhP 13.7 billion under the low GDP growth rate scenario.

Table 26. LGU Resource Requirement for Health MDGs in Current Prices, 2007-2015 (in million pesos)
(Low cost assumption*)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Child care	749	804	863	927	996	1,069	1,148	1,233	1,324	9,112
of which:										
EPI logistics	437	473	513	555	601	651	705	763	826	5,524
Iron supplementation (50%)	238	252	266	281	297	313	331	349	368	2,694
CAPABILITY BUILDING (net of DOH)	97	92	97	102	37	40	42	44	47	598
Contraceptives (net of DOH)	1,019	1,146	1,284	1,434	1,595	1,770	1,959	2,163	2,382	14,753
Total resource need	1,864	2,042	2,244	2,463	2,628	2,879	3,149	3,440	3,753	24,463

* Assumes the following sources of operational efficiency: 1) lower wastage allowances for vaccines and supplies and 2) better targeting in the delivery of some of the public health programs (e.g. micronutrient supplementation and malaria control)

Table 27. LGU Resource Gap for Health MDGs in Current Prices, 2007-2015 (in million pesos)
(Low cost assumption*)

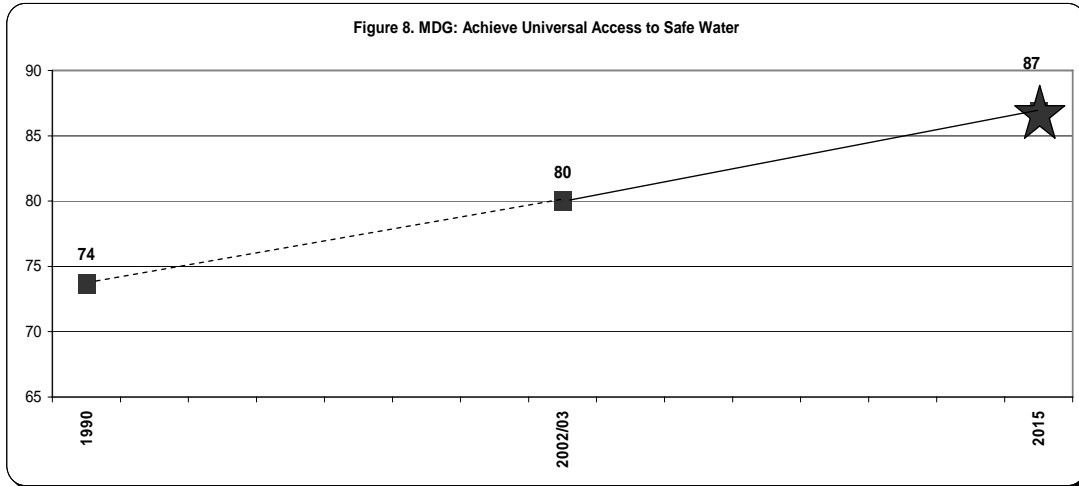
Year	Available Resources w/ MTPDP GDP gr	Resource Requirement	Gap w/ MTPDP GDP gr	Percent of GDP
2007	764	1,864	1,100	0.02
2008	857	2,042	1,186	0.02
2009	963	2,244	1,282	0.01
2010	1,081	2,463	1,381	0.01
2011	1,215	2,628	1,413	0.01
2012	1,365	2,879	1,514	0.01
2013	1,534	3,149	1,615	0.01
2014	1,723	3,440	1,717	0.01
2015	1,936	3,753	1,817	0.01
2007-2015	11,437	24,463	13,026	0.01

Year	Available Resources w/ low GDP gr	Resource Requirement	Gap w/ low GDP gr	Percent of GDP
2007	764	1,864	1,100	0.02
2008	846	2,042	1,196	0.02
2009	938	2,244	1,307	0.02
2010	1,039	2,463	1,424	0.02
2011	1,150	2,628	1,478	0.01
2012	1,274	2,879	1,605	0.01
2013	1,412	3,149	1,737	0.01
2014	1,564	3,440	1,876	0.01
2015	1,732	3,753	2,021	0.01
2007-2015	10,719	24,463	13,744	0.01

* Assumes the following sources of operational efficiency: 1) lower wastage allowances for vaccines and supplies and 2) better targeting in the delivery of some of the public health programs (e.g. micronutrient supplementation and malaria control)

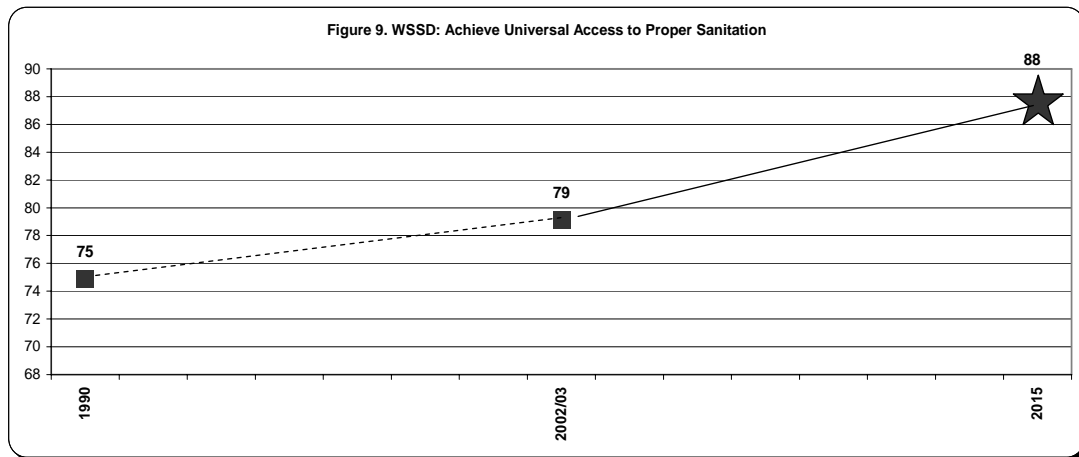
3.4. MDG in Access to Safe Water and Supply

Progress to date. The proportion of households with access to safe drinking water rose from 74% in 1991 to 80% in 2003 (**Figure 8**) while the proportion of households with access to proper sanitation increased from 75% in 1991 to 79% in 2003 (**Figure 9**). The rate of progress needed to reach the 2015 target is less than the actual rate of progress to date suggesting that the country would hit the MDG targets for water and sanitation.



Legend

- Proportion of families with access to safe drinking water
- ★ MDG target in 2015
- Rate of progress needed to reach budget
- - - Current rate of progress



Legend

- Proportion of families with access to proper sanitation
- ★ MDG target in 2015
- Rate of progress needed to reach budget
- - - Current rate of progress

Resource requirements and resource gaps. Given the unit costs of the provision of safe drinking water and proper sanitation and the MDG target of 87% access, **Table 28** projects that, if public provision of low cost water and sanitation is limited to the poor with a 20% leakage rate, the amount of resources needed to meet MDG 7 is equal to PhP 12.3 billion (or 0.01% of GDP) in 2007-2015. If the amount of resources that are likely to be made available is benchmarked relative to the allocation in the proposed 2006 budget but allowed to grow in pace with national government revenues, the resource gap is estimated to be equal to PhP 1.9 billion in 2007-2015 under the MTPDP GDP growth rate assumption and PhP 2.7 billion under the low GDP growth rate assumption (**Table 29**).

Table 28. Resource Requirement for Low-cost
Water Supply/Sanitation in Current Prices, 2007-2015 (in million pesos)

Year	with MTPDP			% to GDP
	Water Supply	Sanitary Toilets	Total	
2007	770	307	1,077	0.02
2008	816	325	1,141	0.01
2009	864	344	1,208	0.01
2010	915	363	1,278	0.01
2011	968	384	1,351	0.01
2012	1,024	405	1,429	0.01
2013	1,082	427	1,509	0.01
2014	1,143	451	1,594	0.01
2015	1,207	475	1,682	0.01
2007-2015	8,788	3,481	12,269	0.01

4. CONCLUSIONS

The consolidated resource requirement for the central government and LGUs combined for poverty reduction, universal access to complete primary education, the health-related MDGs and improved access to low cost water supply and sanitation is shown in **Table 30** for the high cost assumption and in **Table 31** for the low cost assumption. In turn, **Table 32** presents the estimates of the resource gaps under the high cost assumption while **Table 33** presents the estimates of the resource gaps under low cost assumption.

Based on the high cost assumption, **Table 32** shows that cumulative resource gap for 2007-2010 is equal to PhP 409.5 billion (or 1.3% of GDP) under the MTPDP GDP growth rate assumption while the cumulative resource gap is equal to PhP 447.8 billion (or 1.4% of GDP) under the low GDP growth rate scenario. Based on the low cost assumption, the cumulative resource gap for 2007-2010 is cut to PhP 350.6 billion (or 1.1% of GDP) under the MTPDP GDP growth rate scenario and PhP 389 billion (or 1.2% of GDP) under the low GDP growth rate scenario (**Table 33**).

Table 29. Resources Available and Resource Gap in
Watsan in Current Prices, 2007-2015 (in million pesos)

Year	Available Resources w/MTPDP GDP gr	Resource Requirement	Gap w/MTPDP GDP gr	Percent to GDP w/MTPDP GDP gr
2007	710	1,077	367	0.01
2008	788	1,141	352	0.00
2009	882	1,208	325	0.00
2010	973	1,278	305	0.00
2011	1,097	1,351	255	0.00
2012	1,230	1,429	199	0.00
2013	1,380	1,509	129	0.00
2014	1,550	1,594	44	0.00
2015	1,740	1,682	-58	(0.00)
2007-2010	3,354	4,703	1,350	0.00
2007-2015	10,350	12,269	1,918	0.00
Year	Available Resources w/ low GDP gr	Resource Requirement	Gap w/ low GDP gr	Percent to GDP w/MTPDP
2007	698	1,077	380	0.01
2008	765	1,141	376	0.01
2009	845	1,208	363	0.01
2010	919	1,278	359	0.01
2011	1,023	1,351	329	0.01
2012	1,131	1,429	297	0.01
2013	1,252	1,509	257	0.01
2014	1,387	1,594	207	0.01
2015	1,536	1,682	146	0.01
2007-2010	3,227	4,703	1,477	0.01
2007-2015	9,556	12,269	2,713	0.09

Table 30. Summary of Resource Availability in Current Prices, 2007-2015 (in million pesos)
(High cost assumption)

Year	Resources available - MTPDP GDP growth rate						Resource requirement					
	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP
2007	144,273	6,148	710	66,849	217,980	3.20	176,239	14,051	1,077	121,208	312,575	4.58
2008	160,214	6,831	788	74,385	242,218	3.17	196,484	15,089	1,141	127,723	340,437	4.45
2009	179,326	7,648	882	83,323	271,180	3.16	223,512	16,278	1,208	134,588	375,586	4.37
2010	197,959	8,451	973	92,320	299,703	3.10	251,285	17,561	1,278	141,822	411,946	4.27
2011	223,153	9,525	1,097	103,996	337,771	3.11	275,700	18,875	1,351	143,507	439,434	4.05
2012	250,307	10,685	1,230	116,691	378,913	3.11	300,388	20,365	1,429	151,242	473,424	3.88
2013	280,943	11,994	1,380	131,000	425,317	3.11	319,602	21,972	1,509	159,395	502,478	3.67
2014	315,506	13,469	1,550	147,130	477,655	3.11	343,761	23,707	1,594	167,988	537,049	3.49
2015	354,228	15,123	1,740	165,210	536,302	3.10	367,802	25,578	1,682	177,043	572,105	3.31
2007-2015	2,105,910	89,874	10,350	980,905	3,187,040	3.12	2,454,773	173,477	12,269	1,324,516	3,965,035	3.88
Year	Resources available - LOW GDP growth rate						Resource requirement					
	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP
2007	141,986	5,726	698	65,767	214,177	3.15	176,239	14,051	1,077	121,208	312,575	4.60
2008	155,866	6,290	765	72,333	235,255	3.13	196,484	15,089	1,141	127,723	340,437	4.53
2009	172,158	6,949	845	79,943	259,895	3.12	223,512	16,278	1,208	134,588	375,586	4.51
2010	187,499	7,577	919	87,380	283,374	3.07	251,285	17,561	1,278	141,822	411,946	4.46
2011	208,550	8,425	1,023	97,106	315,104	3.08	275,700	18,875	1,351	143,507	439,434	4.30
2012	230,731	9,322	1,131	107,462	348,646	3.08	300,388	20,365	1,429	151,242	473,424	4.18
2013	255,403	10,319	1,252	118,972	385,947	3.08	319,602	21,972	1,509	159,395	502,478	4.01
2014	282,848	11,428	1,387	131,764	427,427	3.08	343,761	23,707	1,594	167,988	537,049	3.86
2015	313,376	12,662	1,536	145,980	473,554	3.08	367,802	25,578	1,682	177,043	572,105	3.72
2007-2015	1,948,418	78,698	9,556	906,709	2,943,381	3.09	2,454,773	173,477	12,269	1,324,516	3,965,035	4.16

Table 31. Summary of Resource Availability in Current Prices, 2007-2015 (in million pesos)
(Low cost assumption)

Year	Resources available - MTPDP GDP growth rate						Resource requirement					
	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP
2007	144,273	6,148	710	66,849	217,980	3.20	170,575	10,826	1,077	121,208	303,686	4.45
2008	160,214	6,831	788	74,385	242,218	3.17	187,810	11,569	1,141	127,723	328,243	4.29
2009	179,326	7,648	882	83,323	271,180	3.16	210,533	12,366	1,208	134,588	358,694	4.17
2010	197,959	8,451	973	92,320	299,703	3.10	234,760	13,221	1,278	141,822	391,081	4.05
2011	223,153	9,525	1,097	103,996	337,771	3.11	258,480	14,122	1,351	143,507	417,460	3.85
2012	250,307	10,685	1,230	116,691	378,913	3.11	282,998	15,093	1,429	151,242	450,762	3.70
2013	280,943	11,994	1,380	131,000	425,317	3.11	302,774	16,127	1,509	159,395	479,806	3.50
2014	315,506	13,469	1,550	147,130	477,655	3.11	327,263	17,229	1,594	167,988	514,073	3.34
2015	354,228	15,123	1,740	165,210	536,302	3.10	351,370	18,402	1,682	177,043	548,498	3.17
2007-2015	2,105,910	89,874	10,350	980,905	3,187,040	3.12	2,326,563	128,955	12,269	1,324,516	3,792,304	3.71

Year	Resources available - LOW GDP growth rate						Resource requirement					
	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP
2007	141,986	5,726	698	65,767	214,177	3.15	170,575	10,826	1,077	121,208	303,686	4.47
2008	155,866	6,290	765	72,333	235,255	3.13	187,810	11,569	1,141	127,723	328,243	4.36
2009	172,158	6,949	845	79,943	259,895	3.12	210,533	12,366	1,208	134,588	358,694	4.31
2010	187,499	7,577	919	87,380	283,374	3.07	234,760	13,221	1,278	141,822	391,081	4.24
2011	208,550	8,425	1,023	97,106	315,104	3.08	258,480	14,122	1,351	143,507	417,460	4.08
2012	230,731	9,322	1,131	107,462	348,646	3.08	282,998	15,093	1,429	151,242	450,762	3.98
2013	255,403	10,319	1,252	118,972	385,947	3.08	302,774	16,127	1,509	159,395	479,806	3.82
2014	282,848	11,428	1,387	131,764	427,427	3.08	327,263	17,229	1,594	167,988	514,073	3.70
2015	313,376	12,662	1,536	145,980	473,554	3.08	351,370	18,402	1,682	177,043	548,498	3.56
2007-2015	1,948,418	78,698	9,556	906,709	2,943,381	3.09	2,326,563	128,955	12,269	1,324,516	3,792,304	3.98

Table 32. Summary of Resource Gaps in Current Prices, 2007-2015 (in million pesos)
(High cost assumption)

Year	Resource gaps - MTPDP GDP growth rate					
	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP
2007	31,966	7,903	367	54,359	94,595	1.39
2008	36,271	8,258	352	53,338	98,219	1.28
2009	44,185	8,631	325	51,265	104,406	1.21
2010	53,326	9,110	305	49,502	112,243	1.16
2011	52,547	9,350	255	39,510	101,663	0.94
2012	50,080	9,680	199	34,552	94,511	0.78
2013	38,658	9,979	129	28,395	77,161	0.56
2014	28,255	10,237	44	20,858	59,394	0.39
2015	13,574	10,455	(58)	11,833	35,804	0.21
2007-2010	165,748	33,902	1,350	208,463	409,463	1.25
2007-2015	348,863	83,602	1,918	343,611	777,995	0.76
Year	Resource gaps - low GDP growth rate					
	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP
2007	34,253	8,325	380	55,440	98,398	1.45
2008	40,618	8,799	376	55,389	105,182	1.40
2009	51,353	9,330	363	54,645	115,690	1.39
2010	63,786	9,984	359	54,443	128,572	1.39
2011	67,150	10,450	329	46,401	124,330	1.22
2012	69,657	11,043	297	43,780	124,778	1.10
2013	64,198	11,653	257	40,423	116,531	0.93
2014	60,913	12,278	207	36,223	109,622	0.79
2015	54,426	12,916	146	31,063	98,551	0.64
2007-2010	190,010	36,438	1,477	219,917	447,842	1.41
2007-2015	506,355	94,778	2,713	417,807	1,021,654	1.07

Table 33. Summary of Resource Gaps in Current Prices, 2007-2015 (in million pesos)
(Low cost assumption)

Year	Resource gaps - MTPDP GDP growth rate					
	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP
2007	26,302	4,678	367	54,359	85,705	1.26
2008	27,597	4,738	352	53,338	86,025	1.12
2009	31,206	4,718	325	51,265	87,515	1.02
2010	36,801	4,770	305	49,502	91,378	0.95
2011	35,327	4,597	255	39,510	79,689	0.73
2012	32,691	4,408	199	34,552	71,849	0.59
2013	21,831	4,134	129	28,395	54,489	0.40
2014	11,756	3,760	44	20,858	36,418	0.24
2015	(2,858)	3,279	(58)	11,833	12,196	0.07
2007-2010	121,906	18,904	1,350	208,463	350,623	1.07
2007-2015	220,653	39,081	1,918	343,611	605,264	0.59
Year	Resource gaps - low GDP growth rate					
	Educ	Health	Watsan	Poverty red'n	Total	Percent to GDP
2006	16,932	4,027	371	49,452	70,782	1.16
2007	28,589	5,100	380	55,440	89,509	1.32
2008	31,944	5,279	376	55,389	92,988	1.24
2009	38,374	5,417	363	54,645	98,799	1.19
2010	47,261	5,644	359	54,443	107,707	1.17
2011	49,930	5,697	329	46,401	102,356	1.00
2012	52,267	5,771	297	43,780	102,116	0.90
2013	47,371	5,808	257	40,423	93,859	0.75
2014	44,415	5,801	207	36,223	86,646	0.62
2015	37,994	5,741	146	31,063	74,944	0.49
2007-2010	146,168	21,440	1,477	219,917	389,002	1.22
2007-2015	378,146	50,257	2,713	417,807	848,923	0.89

These estimates highlight the fact that the Philippines cannot afford to be complacent and act as if it is “business as usual.” It cannot be denied that the policy thrusts embodied in the MTPDP are supportive of the attainment of the Millennium Development Goals. In addition, the government, in general, and many government agencies, in particular, have already started to implement many policies, strategies and programs that are to enhance the achievement of the MDGs. These policies, strategies and programs will have to be sustained or pursued with greater vigor. But beyond this, there is a need for further improvements in other policy areas and institutional arrangements.

Eleven major challenges face the government if it is to finance the resource gaps in basic social services. One, the government has to further improve its tax effort to enable it to increase the allocation for MDG-related programs while at the same time balancing the budget by 2008/9. Three new tax measures were legislated in 2005/6. Prospectively, further improvements in the tax effort will have to come from improved tax administration. In this regard, there is a need to sustain the Bureau of Internal Revenue's Run After Tax Evaders (RATE), the Bureau of Custom's Run After the Smugglers (RATS) and the Department of Finance's Revenue Integrity Protection Service (RIPS). There is also a need to strengthen the systems and procedures in the revenue collection agencies so as to improve their capability to collect taxes more efficiently.

Two, given that the internal revenue allotment (which represents the share of LGUs in the central government revenues) accounts for an increasing share of the central government budget, it is critical that LGUs are mobilized as effective partners in meeting the MDGs. However, because of the public good nature of basic social services (i.e., not all of the benefits arising from the provision of basic social services can be internalized by local residents), it might be necessary to design matching grants programs to encourage LGUs to spend more on the provision of said services.

Three, although some LGUs may have enough resources to support the attainment of the MDGs, the wide disparity in the distribution of the LGU tax base suggests that there might be a need to explicitly take into account the equalization objective (i.e., equalization relative to LGUs' capacity to provide minimum service standards) in the distribution formula of the IRA.

Four, on-going budget reform initiatives in the public sector should be sustained and supported. These reforms augur well for a more effective allocation of scarce government resources by shifting the focus of the budget process from inputs and rules-based compliance to outputs/ outcomes and results/ performance orientation, and by promoting greater flexibility, transparency, and accountability. Two of the more important strands of this reform agenda are the institutionalization of the Organizational Performance Indicator Framework (OPIF) and the Medium Term Expenditure Framework (MTEF).

The OPIF is an approach that focuses budget decision making and accountability on three core items: outcomes – what impacts on society the government wishes to achieve; outputs – what goods and services government delivers to attain said outcomes; and performance indicators – how the government and society know whether the desired outcome is being achieved in an efficient and effective manner. As such, the OPIF aims to allocate resources in line with the results that government seeks to achieve.

On the other hand, the MTEF is a budget formulation process which provides government decision makers with mechanisms to assist them in allocating public resources to their strategic priorities while ensuring overall fiscal discipline. "The MTEF consists of a top-down resource envelope, a bottom-up estimation of the current and medium-term costs of existing policy and, ultimately, the matching of these costs with

available resources. The matching of costs should normally occur in the context of the annual budget process, which should focus on the need for policy change to reflect changing macroeconomic conditions as well as changes in strategic priorities of the government. ... The MTEF aims (i) to improve macroeconomic balance by developing a consistent and realistic resource framework (through the development of a macro framework for making projections of revenues and expenditures), (ii) to improve the allocation of resources to strategic priorities between and within sectors (through the formulation of a budget policy statement by the Cabinet), (iii) to increase commitment to predictability of both policy and funding so that departments can plan ahead and programs can be sustained; and (iv) to provide line agencies with a hard budget constraint and increased autonomy, thereby increasing incentives for efficient and effective use of funds” (Schick 1998).

Five, all sectors should support budget reform initiatives that favor the basic social services. In the education sector, this involves the sustained reallocation of resources away from tertiary education in favor of basic education. However, this can only be achieved if certain reforms take place in the higher education sub-sector. First, state universities and colleges (SUCs) have to become more efficient operationally. In this regard, the Commission on Higher Education (CHED) piloted the use of a normative financing model in allocating central government subsidy to SUCs in 2005. This model proposes to finance higher education student places based on norms or standards where the standard is based on the pricing of full-time equivalent students differentiated by field of study, level of education and priority factors assigned by CHED (including quality indicators, government priorities for national development and sanctions for duplication of private sector provision). On the other hand, normative allocations for research are based on the potential of the SUC to do research as evidenced by the size of graduate enrollment, the number of advanced degree holders among the faculty, the number of senior research staff and the number of national research centers at the SUC while normative financing of extension services is based on graduate enrollment in selected fields, the number of senior extension services staff, graduate degree holders and number of training centers at the SUC. The plan of CHED and DBM to phase in the full application of this model to SUCs MOOE by 2008 should be supported.

Second, cost recovery in SUCs is low. The fees charged by SUCs continue to be minimal. For instance, the average tuition and other fees charged by SUCs in 2003 is just about a third of the average school fees in private institutions. Clearly, increasing tuition fees in the SUCs would not only reduce their continued dependence on national government budgets, but it would also impose the discipline of the market place on their operations. In this regard, it is notable that the share of tuition and other school fees expanded markedly between 2002 and 2003 with the reduction of NG subsidy during those years. This movement is consistent with the recommendations in both the Philippine Commission on Education Reforms (PCER) to increase cost recovery in SUCs but much still remains to be done.

Third, increased cost recovery in SUCs through tuition fee increases should be implemented hand in hand with a higher budget for targeted scholarship program in higher education if equity and efficiency goals are to be addressed simultaneously. However, the coverage of scholarship and financial aid programs to college level students continues to be low despite some increments in more recent years. Also, the program is not well targeted on the poor. Prospectively, the coverage of these programs should be broadened some more and their administration streamlined.

In the health subsector, intra-sectoral budget re-allocation involves the increasing allocations for public health by freeing up of resources from retained hospitals by encouraging increased cost recovery while ensuring that the poor are protected with the allocation of sufficient amounts for the central government subsidy for the premiums of indigents in social health insurance program. This initiative has already been adopted by the DOH with the issuance of Administrative Order No. 2006-0023 dated 30 June 2006. Moreover, the DOH has already started to rationalize the allocations for retained hospitals in the 2007 budget. The challenge is to make this reform stick and to explore the possibility of further extending it.

Six, cost savings can be realized by using more cost-efficient modes of service delivery and by targeting some of the MDG services to the poor. In the education sector, this may involve improvements in teacher deployment and the pursuit of alternative arrangements for the construction of school buildings, (e.g., Principal-led construction, NGO-led construction, or LGU-implemented construction). While the Magna Carta for Public School Teachers does not necessarily prohibit teacher redeployment, its amendment will facilitate the movement of teachers across divisions and schools.

In the health sector, the pursuit of greater cost efficiency involves reducing the wastage allowances for the delivery of the immunization program. It also involves better targeting of micronutrient supplementation and the provision of contraceptive supplies. In consonance with this, the DOH has also issued Administrative Order No. 2006-002 dated 12 July 2006 which calls for allocation of critical commodities on the basis of performance-based criteria and more effective targeting to specific population groups.

Seven, the government should continue to exert maximum effort to ensure that resources are used efficiently. Initiatives to improve governance through procurement system reform have already been launched and should be sustained.

Eight, there is a need to exert greater effort in mobilizing resources for basic education from local government units. In this regard, it is imperative that LGUs are capacitated to collect the real property tax more efficiently so that more resources will flow into the Special Education Fund. It is also important that SEF resources are allocated towards the strategic needs of the basic education sector and that they are utilized more efficiently.

Nine, there is a need to exert greater effort in mobilizing resources from the private sector. The DepEd has already made some headway in this regard. It has established partnership arrangements with the business sector and communities through its *Brigada*

Eskwela and its Adopt-a-School Program, among others. However, given the enormity of the financial challenge of meeting the education demands in the next decade, more such programs need to be established.

Ten, the government should promote a policy environment that is not only conducive to sustained growth but also allows the poor to participate in and benefit from such growth. Studies have shown that the quality of growth is important if poverty is to be reduced at an accelerated pace (Balisacan and Pernia 2001). It is not enough that more resources are put in building up the country's infrastructure stock, it is just important that new investments address the need of lagging regions (Edillon 2006).

Eleven, it is imperative that the government pursues a stronger population management program. The estimates of the resource needs and resource gaps for MDGs presented in this paper assumes that population will continue to grow by 2.3% yearly. With a smaller population, the financial cost of meeting the MDGs will be less prohibitive.

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