The Millennium Development Goals: Where Bangladesh Stands?

Six countries including Bangladesh received the UN Millennium Development Goal (MDG) Awards for their significant achievements towards attaining the goal. Three of these countries are from Asia and three from Africa.

Prime Minister Sheikh Hasina receiving the UN MDG Award in New York's Astoria Hotel on Sunday 19 September 2010

Bangladesh received the UN award for its remarkable achievements in attaining the Millennium Development Goals (MDGs) particularly in reducing child mortality. Prime Minister Sheikh Hasina received the award at a colorful function at New York's Astoria Hotel on Sunday (19 September 2010).

Prime Minister Sheikh Hasina with other Ministers in a photo session following receipt of UN MDG Award 2010 (19 September 2010, New York)

In September 2000, world leaders endorsed the Millennium Declaration, a commitment to work together to build a safer, more prosperous and equitable world. The Declaration was translated into a roadmap setting out eight time-bound and measurable goals to be reached by 2015, known as the Millennium Development Goals (MDGs): They include goals and targets on poverty, hunger, maternal and child mortality, disease, inadequate shelter, gender inequality, environmental degradation and the Global Partnership for Development.

The proud Minister for Health and Family Welfare of Bangladesh Professor Dr AFM Ruhal Haque, MP with the UN MDG Award Crest in hand following the ceremony.

New York, 19 September 2010

List of countries which received UN MDG Awards in 2010

Country	Progress made for MDGs
Bangladesh	MDG4
Nepal	MDG5
Cambodia	MDG6
Sierra Leone	MDG6
Liberia	MDG3
Rwanda	MDG4 & 5

Nepal has received a Millennium Development Goal (MDG) Award for significantly improving maternal health. Nepal was selected for the award from among 49 Least Developed Countries (LDC)s for the outstanding national leadership, commitment and progress towards achievement of the MDG goal related to improving maternal health.

Cambodia has been presented with a Millennium Development Goals Award for its national leadership, commitment and progress towards achievement of Goal 6 - Combating HIV, malaria and other diseases. Cambodia has been honored within the 'Government' category of the annual Awards initiative, presented at a high-profile event in New York City.

Sierra Leone received the United Nations Millennium Development Goal (MDG) Award in recognition of President Ernest Koroma 's remarkable leadership commitment and progress towards achieving the Millennium Development Goals (MDGs) Goal Six.

Liberia has been named as the winner of this year's prestigious Millennium Development Goal Three (MDG 3) award for outstanding leadership, commitment and progress toward the achievement of the MDG-3 through the promotion of gender equality and women's empowerment across the country.

Rwanda has been nominated for two Millennium Development Goals (MDGs) awards for its efforts to reduce child mortality and improve maternal health. Rwanda was nominated for the awards in two categories, MDG Goal 4 of Reducing Child Mortality and Goal 5 of Improving Maternal Health which target reducing the mortality rate of children under five years by two thirds, between 1990 and 2015 and the maternal mortality rate by three quarters, respectively.

Health related MDGs – Global Situation

When only 5 years are ahead to reach the dateline of year 2015 for meeting the targets of MDGs, assessment is ongoing throughout the world to find the answer whether or not the countries crossed sufficient road. The answer, in general, is no, although progress has been made in some areas. The same is true also for Bangladesh. A report has been published by the secretariat of the World Health Organization for the 63rd World Health Assembly held in May 2010 (WHA document A63/7). The report summarizes the current global status of the health-related MDGs.

MDG 4: Child survival

The report reveals that the global child mortality rate overall has shown declining trend; but uneven between countries; and the target may not be achieved in all countries. However, the interesting well-known fact is: about 40% of the under-5 child deaths occur in the first month of the newborns' life and most in the first week. The rest 60% of under-5 deaths occur due to malnutrition, HIV, vaccine preventable and other communicable diseases including pneumonia, diarrhea, and other causes.

MDG 5: Maternal health

The maternal health is the area which shows the poorest performance globally. In some countries of Africa the maternal mortality rate is about 900 per 100,000 live births, whereas the lowest figure in the world is 27 per 100,000 live births. It is evident that half of all maternal deaths occurred in the African Region and another third in the South-East Asia Region. Reports consistently show that most of the maternal deaths can be prevented if skilled care is ensured during pregnancy, child birth and postpartum period and emergency obstetric care is ensured. In both the African Region and South-East Asia Region, less than 50% of women receive skilled care during childbirth. Maternal care during postpartum period also creates opportunity to look after newborn. Therefore, a comprehensive pregnancy care package can improve both maternal and child health situation.

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

The global progress, as the report shows, in cases of malaria, tuberculosis, HIV/AIDS, neglected tropical diseases, sanitation, safe drinking water supply, and in non-communicable diseases are noteworthy and promising. The report on malaria shows that the 9 African countries and 29 countries outside Africa, where the malaria burdens are the highest, are on course to meet the MDG target by 2010. Globally, the estimated case-detection rate for new smear-positive cases of tuberculosis increased from 40% in 2000 to 62% in 2008. Data on treatment-success rates for new smear-positive cases indicate steady improvements, with the global rate rising from 69% in 2000 to 86% in 2007. However, multidrug-resistant tuberculosis and HIV associated tuberculosis pose considerable challenges. New HIV infections were declined by 16% globally between 2000 and 2008,

owing, at least in part, to successful HIV prevention efforts. It is estimated that by the end of 2008 more than four million people in low- and middle-income countries had access to antiretroviral therapy, a 10-fold expansion in five years, with the greatest growth in sub-Saharan Africa. More than 1000 million people are affected by neglected tropical diseases. In 2008, 496 million people were treated for lymphatic filariasis out of the 695 million targeted. At the beginning of 2009, 213,036 cases of leprosy were reported, compared with 5.2 million in 1985.

The percentage of the world's population using "improved" drinking-water sources increased from 77% to 87% between 1990 and 2008. This rate of improvement is sufficient to achieve the relevant Millennium Development Goal target globally. In 2008, 2600 million people were not using "improved" sanitation facilities, and of these 1100 million were defecating in the open, resulting in high levels of environmental contamination and exposure to the risks of helminthes infestations (such as schistosomiasis) and microbial infections (such as trachoma, hepatitis and cholera).

Health related in MDGs in Bangladesh

Table-1 summarizes the target, benchmark and the latest information on the achievement of health related MDGs in Bangladesh. Due to paucity of information available close to the year 2010, we used the latest available sources to show the achievements on MDG. However, disagreements exist on some indicators between values reported by different sources. To allow the readers make their judgment on which reference they will accept, we quoted all the sources. However, we caution the readers with one important message that virtually in almost all areas there were considerable improvements after the reference period. The National Institute of Population Training and Research (NIPORT) is undertaking a survey to measure the maternal mortality ratio. The result, when available, will reveal the actual current situation.

Table-1. The MDG targets and indicators

Global goal, target and indicator			Bangladesh target, benchmark and current situation		
Goal	**Target**	**Indicator**	**Target (Year)**	**Benchmark (Year)**	**Achievement (Reference)**
Goal 1: Eradicate extreme poverty and hunger	Reduce by half the proportion of people who suffer from hunger	Prevalence of UW children <5 yrs of age			41.0 (BDHS 2007) 41.0 (UNICEF 2008)
		Population below minimum level of dietary energy consumption (%)			
Goal 4: Reduce child mortality	Reduce by two thirds the mortality rate among children under five	<5 year mortality rate/ 1,000 live births	48.0 (2015)	144.0 (1990)	67.0 (MICS 2009) 53.84 (SVRS 2008) 65.0 (BDHS 2007)
		Infant mortality rate/ 1,000 live births	31.3 (2015)	94.0 (1990)	45.0 (MICS 2009) 41.26 (SVRS 2008) 52.0 (BDHS 2007)
		1 year old children immunized against measles (%)		52 (1991)	82.8 (BECES 2009) 83.1 (BDHS 2007)

Table-1. The MDG targets and indicators (continued…)

Global goal, target and indicator			Bangladesh target, benchmark and current situation		
Goal	**Target**	**Indicator**	**Target (Year)**	**Benchmark (Year)**	**Achievement (Reference)**
Goal 5: Improve maternal health	Reduce by three quarters the maternal mortality ratio	Maternal mortality ratio/ 100,000 live births	143.5 (2015)	574.0 (1990)	194.0 (BMMS 2010)
		Births attended by skilled health personnel (%)	50.0 (2010)	7.0 (1990) 12.2 (2001)	26.54 (BMMS 2010)
	Achieve, by 2015, universal access to reproductive health	Contraceptive prevalence rate (%)		39.9 (1991)	55.8 (BDHS 2007)
		Adolescent birth rate			33.0 (BDHS 2007)
		Antenatal care coverage (at least one visit) (%)		48.7 (2004)	52.0 (BDHS 2007)
		Antenatal care coverage (at least four visits) (%)			20.4 (BDHS 2007)
		Unmet need for family planning (%)			17.1 (BDHS 2007)
Goal 6: Combat HIV/AIDS, malaria and other diseases	Halt & begin to reverse the spread of HIV/AIDS	HIV prevalence among population aged 15-24 yrs (%)	Halt (2015)		<0.1 (HSS 2006) among high risk population
	Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need	Population with advanced HIV infection with access to ARV drugs (%)	100.0 (2015)		100.0 (NASP 2009)
	Halt & begin to reverse the incidence of malaria & other major diseases	Malaria incidence rate/ 1,000 population			0.63 (DGHS 2009)
		Malaria death rate (%)		0.053 (2003)	0.032 (2007)
		Children U-5 sleeping under insecticide-treated bed nets (%)			
		Children U-5 with fever treated with appropriate anti-malarial drugs (%)			
		TB incidence rate/ 100,000 population			100.0 (WHO 2009)
		TB prevalence rate%			79.0 (2010)
		TB death rate (%)			
		TB case detection rate (%)	75.0 (2010) >70.0 (MDG)	38.4 (2003)	74.0 (NTP 2009)
		TB cure rate (%) with DOTS	93.0 (2010) >85.0 (MDG)	83.7 (2003)	92.0 (NTP 2009)
Goal 7: Ensure environmental sustainability	Reduce by half the % of people without sustainable access to safe drinking water % basic sanitation	Population using improved drinking water source (%)	100.0 (2015)	97.6 (2006)	97.8 (MICS 2009) 98.23 (SVRS 2008) 97.0 (BDHS 2007)
		Population using improved sanitation facility (%)	100.0 (2015)	39.2 (2006)	80.4 (MICS 2009)

Note: BDHS 2007 (Bangladesh Demographic and Health Survey 2007); MICS 2009 (Multiple Indicators Cluster Survey 2009 done by Bangladesh Bureau of Statistics; SVRS 2008 (Sample Vital Registration Survey 2008 done by Bangladesh Bureau of Statistics; BECES 2009 (Bangladesh EPI Coverage Evaluation Survey 2009); MTR 2008 (Mid Term Review 2008 by Independent International team of Health, Nutrition and Population Sector Program 2003-11; HSS 2006 (HIV Sero-surveillance 2006); NASP 2009 (National AIDS Surveillance Program 2009); DGHS 2009 (Directorate General of Health Service 2009); NTP 2009 (National Tuberculosis Control Program 2009)

The readers should consider that due to difference in time, place, method and sampling, there can be variation in the survey results, which we mentioned as reference. To help

understand the methodology used in the three major surveys referenced here, a brief description of each is given below:

Bangladesh Demographic and Health Survey 2007 (BDHS 2007)

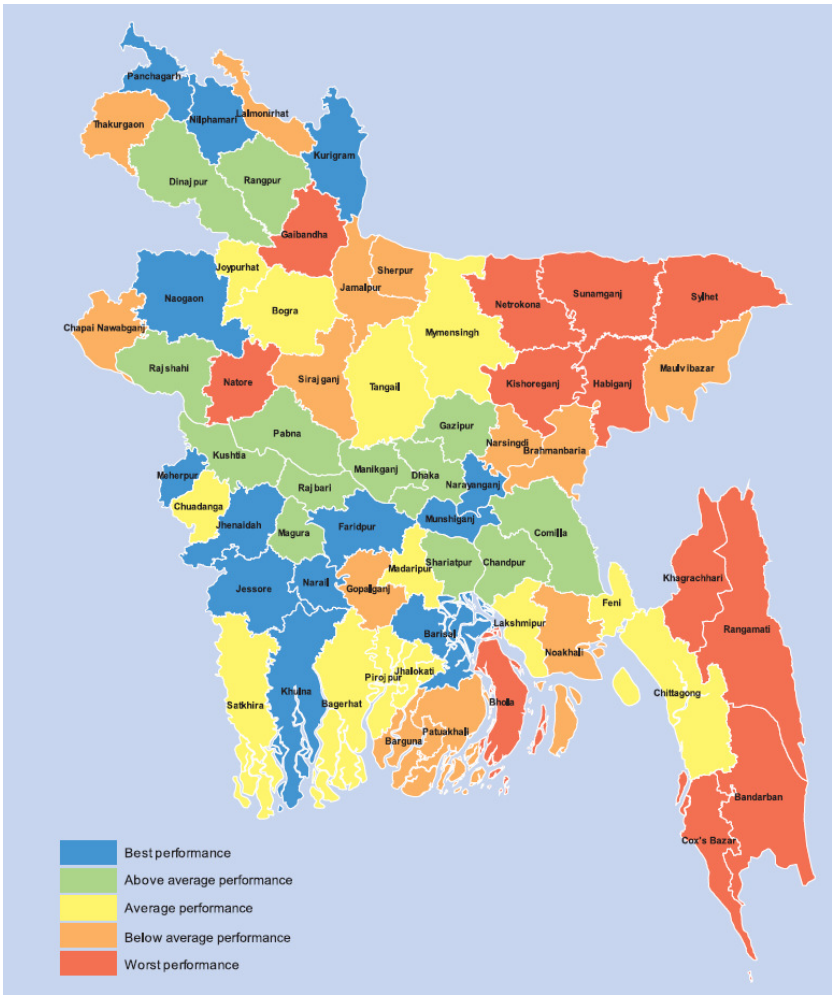
BDHS is undertaken under supervision of the National Institute of Population Research and Training (NIPORT). BDHS 2007 used Enumeration Areas (EAs) followed in 2001 census. EAs from the census were used as the Primary Sampling Units (PSUs) for the survey, because they could be easily located with correct geographical boundaries and sketch maps were available for each one. An EA, which consists of about 100 households, on average, is equivalent to a mauza in rural areas and to a mohallah in urban areas. The survey was based on a two-stage stratified sample of households. At the first stage of sampling, 361 PSUs were selected. The 361 PSUs selected in the first stage of sampling included 227 rural PSUs and 134 urban PSUs. A household listing operation was carried out in all selected PSUs from January to March 2007. The resulting lists of households were used as the sampling frame for the selection of households in the second stage of sampling. On average, 30 households were selected from each PSU, using an equal probability systematic sampling technique. In this way, 10,819 households were selected for the sample. However, some of the PSUs were large and contained more than 300 households. Large PSUs were segmented, and only one segment was selected for the survey, with probability proportional to segment size. Households in the selected segments were then listed prior to their selection. Thus, a 2007 BDHS sample cluster was either an EA or a segment of an EA. The survey was designed to obtain 11,485 completed interviews with ever-married women age 10-49. According to the sample design, 4,360 interviews were allocated to urban areas and 7,125 to rural areas. All ever-married women age 10-49 in selected households were eligible respondents for the women's questionnaire. In addition, ever-married men age 15-54 in every second household were eligible to be interviewed.

Multiple Indicators Cluster Survey 2009 (MICS 2009)

MICS is done by the Bangladesh Bureau of Statistics. The sample for MICS 2009 was designed to provide estimates on a few indicators on the situation of children and women for urban and rural areas, at the national, district and upazila levels. Upazilas were identified as the main sampling domains and the sample was selected in two stages. Within each upazila, at least 26 census enumeration areas (EA) were selected with probability proportional to size. A segment with 20 households was randomly drawn in each selected EA. The sample was stratified by upazila and is not self-weighting. For reporting national and district level results, sample weights were used. Data collection was done from 28 April to 31 May 2009. Number of households selected was 300,000 of which 299,842 were successfully interviewed for a household response rate of 99.9 per cent. In the interviewed households, 336,286 women (age 15-49) were identified. Of these, 333,195 were successfully interviewed, yielding a response rate of 99.1 per cent. In addition, 140,860 children under age five were listed in the household questionnaire. Questionnaires were completed for 139,580 children corresponding to a response rate of 99.1 per cent. An overall response rate of 99.0 percent was obtained for both the women and for children aged under-five.

Sample Vital Registration Survey 2008 (SVRS 2008)

The SVRS is done by Bangladesh Bureau of Statistics (BBS). The decennial Population and Housing Censuses produce bench-mark data about the population, its composition and spatial distribution. However, census covers only basic information at every ten years. The detailed changes of vital events during the inter-census period are not known from census data. To have a picture of the changes of the vital events during inter-census period, BBS conducts a surveillance system called "Sample Vital Registration System" (SVRS) since 1980 to provide data on key life cycle or vital events. Its coverage is 1000 Primary Sampling Units (PSUs) each comprising of about 250 compact households. The data are collected by the local registrars and the quality of the data checked by the supervisors. Filled-in schedules are then sent to headquarters on monthly basis. Rechecking is done by Regional Statistical Officers and other officers and staff members. Internal Validation and close supervision of data collection is done to improve the quality of data. The surveys are conducted throughout the year. Dissemination is done every 2-3 years.



Districts by MDG performance

The report on the Multiple Indicators Cluster Survey 2009 (MICS 2009) categorized the districts of Bangladesh in five groups based on their MDG performance measured on a scale of MDG composite index. The index comprised of nine indicators, viz. (i) net attendance rate in primary education; (ii) proportion of pupils reached grade five from grade one; (iii) ratio of girls to boys in primary school; (iv) ratio of girls to boys in secondary school; (v) under-5 mortality rate; (vi) proportion of births attended by skilled health personnel; (vii) proportion of women aged 15-24 years with comprehensive correct knowledge of HIV/AIDS; (viii) proportion of population using drinking water; and (ix) proportion of population using an

improved sanitation facility. The national average for each indicator was used as the standard and a deviation, on either side, was considered as negative or positive values. Each district's score was calculated from sum of each of the 9 indicators.

Community Ownership of Government Settings for Integrated Health Development The Chougacha & Narsingdi Models

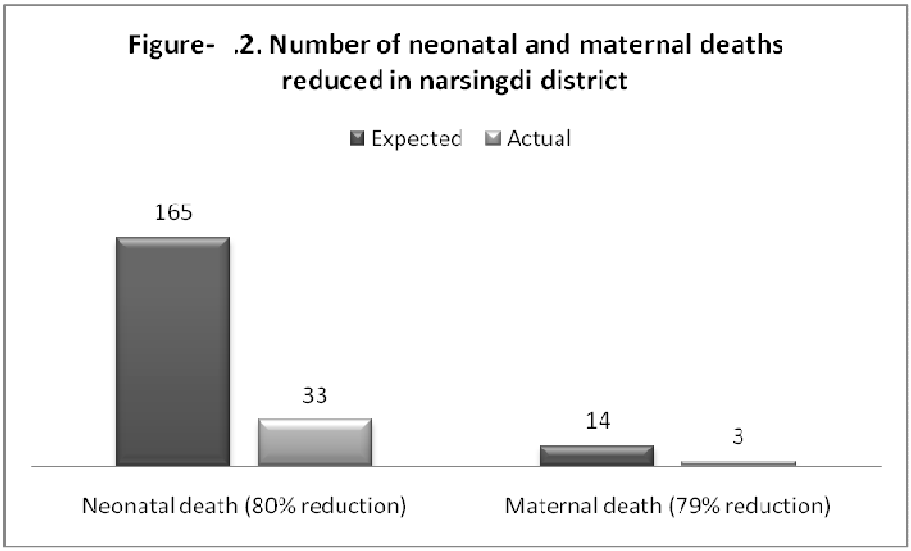
The Ministry of Health and Family Welfare of Bangladesh is emphasizing on community ownership for accelerating the achievement of health related MDGs and other health development goals. Two models are very frequently spoken of. These are Chougacha Model and Narsingdi Model.

Chougacha is a upazila (sub-district) under Jessore district of Bangladesh. The government owned upazila hospital of this area has been successful in mobilizing active community participation in operating the hospital and community health programs. Local elites and people participate in funding additional human resources, equipment, reagent, tracing vulnerable clients and health campaigns. Begun in 1996 by the local hospital manager, the initiative has shown remarkable successes with respect to National & International health goals.

Table-2. Achievements of Chougacha model compared to national reference

Indicator	National	MDG target 2015	Chougacha
Hospital delivery	18%	100%	72%
MMR per 100,000 live births	290	120	42
NMR per 1000 live births	30.9	-	19.3
IMR per 1000 live births	41.3	31.3	23.9
Under-5 MR	53.8	48.0	25.8
Total fertility rate	2.3	-	2.1
Contraceptive prevalence rate	55.8%	-	67%
TB case detection rate	74.0%	>70%	83%

Later Ministry's HNP Sector Program, UNICEF and JICA took part in further improvement of the services. The Chougacha model made improvement in almost all the health indicators in the area. Table-2 compares



its achievement with the national reference data.

The Narsingdi Model is in fact a Safe Motherhood Promotion Project (SMPP), begun as a pilot by Ministry of Health & Family Welfare in July 2006 aiming with support from JICA to improve health status of women and neonates in the target district of Narsingdi through strengthening safe delivery service and supporting women and neonates to utilize obstetric and neonatal care. It has developed a community support system for pregnant women and newborn during obstetric emergencies organized by the community people. Regular meetings, engagement of private community birth attendants, pregnancy registration and mapping, transportation for emergency referral, funding support for poor pregnant women are, amongst others, the key elements of the activities. Local union parishads are active partners of the project. This is a successful model of Maternal and Neonatal Health built in the cultural and economic context of Bangladesh for achieving MDG 4 and 5. The figures show that the Narsingdi model could improve the percentage of institutional deliveries and also the deliveries attended by skilled birth attendants in the project area.