Saving the Lives of Mothers & Children

Rising to the Challenge

Afghanistan

I. Introduction

Afghanistan is located in southern Asia, north and west of Pakistan, east of the Islamic Republic of Iran. Based on UNDP on-line reference for 2010, the population of Afghanistan is around 31.4 million, which includes the 2.7 million Afghan refugees that are residing temporarily in Pakistan and Iran. The total area is 652 230 sq. km. The Afghani population is young with about 46% of the population is under 15 years of age with a life expectancy for females of 462 and for men 64 years[1]; the life expectancy of men exceeds that of women, a phenomenon that is observed in very few countries, Afghanistan and that might have its cause in an unprecedented high maternal mortality rate[2]. Most of the population lives in the rural areas; the urban population is 23% of total population[3].

Sociodemographic characteristics

The 31.4 million population is young: more than 46% are under the age of 15 years, 66% under the age of 25 years and 17.7 % are under 5 years.

Total estimated under-5 population (000) [2010][1]	5 546
Population growth rate[2] [2010]	2.6%
Estimated number of births (000)[2010][1]	1 440
Percentage of population that is rural[2]	77.0%
Birth registration coverage[3]	37.4%

[1] Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2010 Revision*, http://esa.un.org/unpd/wpp/index.htm (accessed on 16 October 2011)
[2] WHO Regional office for the Eastern Mediterranean, Demographic, social and health indicators for countries of the Eastern Mediterranean, 2012, based on country reports
[3] MICS Afghanistan 2010-2011

Afghanistan is ranked 172 out of 187 countries on the UNDP human development index[4], and no information in the UNDP human development report is available about % of population living on less than US$ 1.25 per day PPP (purchasing power parity)[4]. 39% of the population is below the national poverty line[1].

Afghanistan has the third highest total fertility rate in the Eastern Mediterranean Region after Somalia and Yemen. It is also among the 10 countries in the Region with highest child and maternal mortality rates. Despite the efforts of the authorities, Afghanistan is falling behind the Millennium Development Goals (MDGs) which the international community fixed for 2015.

This document is meant to provide an analysis of the current status of maternal, newborn and child health in the country to highlight the reasons why the country is not on track to achieve MDGs 4 and 5 if current trends continue, and suggest possible solutions and the way forward to accelerate the progress towards MDGs 4 and 5.

II. Maternal and child health situation analysis

II.1 Health system

In Afghanistan, over the past decade, the health care delivery system has been steadily improving, with increasing coverage of primary health care services throughout the country. In 2000, the Ministry of Public Health decided on the Basic Package of Health Services (BPHS) to ensure wider and more equitable coverage of health services provision[1]. This is implemented through contracting in to nongovernmental organizations. The cost of US$ 4–5 per capita was estimated for BPHS as the basis for contracting. The BPHS clearly delineates the services that should be provided by each type of primary health care facility

[1] AMS, 2010
[2] Country Cooperation Strategy for WHO and Afghanistan 2009–2013
[3] Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2010 Revision*, http://esa.un.org/unpd/wpp/index.htm (accessed on 16 October 2011)
[4] Human Development report, UNDP 2011.

(4 types of facilities: health posts, basic health centres, comprehensive health centres and district hospitals). It also specifies the staff, equipment, diagnostic services and medications at each type of health facilities. The BPHS currently covers 82% of the population and the Ministry of Public Health is targeting 95% coverage to be achieved by 2015. There are three major donors supporting the contracting in of the BPHS: the World Bank in 11 provinces, USAID in 13 provinces based on the cluster approach; and European Commission in 10 provinces. For comparability and as a trial for future sustainability, three provinces assigned to the World Bank for implementation of the BPHS – Kapisa, Parwan and Panjsher – have been contracted in to the Ministry of Public Health strengthening mechanisms.

More recently, the Essential Package of Health Services (EPHS) has been developed to create a mutually supportive delivery system and complement the implementation of BPHS. So far, the EPHS has been introduced in 11 provinces.

Payment exemption strategies for the poor are implemented throughout the country with different mechanisms. Meanwhile, the public health interventions and clinical care (immunization, maternal delivery, antenatal care, family planning, treatment of tuberculosis and nutrition interventions) are provided free of charge to any citizen of Afghanistan. Despite those strategies, the out-of-pocket expenditure on health as % of total health expenditure is 77.6%.

Currently, most of the secondary and tertiary hospitals are managed by the Ministry of Public Health while some are supported by donors (five provincial hospitals by USAID; four provincial or regional hospitals by the European Union) or by nongovernmental organizations. In terms of availability for 10 000 population, there are 2.9 physicians, 3.6 nurses and midwives and 4.4 hospital beds (2011). Afghanistan lost many health professionals during the 20 years of civil strife and conflict. Training facilities were destroyed and degraded; ad hoc training with varying curricula, duration and teaching methodology was carried out within the country and across the borders resulting in different levels and standards of health workers.

Since 2002, the Ministry of Public Health has made major strides in building the human resources development process through the establishment of the General Directorate of Human Resources Development with all its important functions at the central level and setting up a human resources data base and registration of human resources.

The total health workforce in 2006 was estimated at 27 340 health personnel, about 10 500 of whom are working with contracted nongovernmental organizations. The total number of staff working at the Ministry of Public Health is estimated at 16 840. This includes 3704 physicians, 3311 nurses and midwives, 3217 allied health personnel, 1836 administrative staff and 4762 support staff. Females constitute 21% of the workforce.

The community midwifery programme started in 2002; the programme is running in 21 provinces with 640 students enrolled; 3000 community midwives have graduated since the establishment of the 18-month programme. According to the Ministry of Public Health's strategic plan there is a need for 7000 physicians, and 20 000 nurses, midwives and allied health personnel to implement the BPHS, EPHS and other services.

II-2 Maternal, neonatal and child health (MNCH) policies and strategies

Health of women and children is the key to progress on all development goals, investing more in their health will help in building peaceful, productive societies and reduces poverty. With this vision, the country has adopted a number of policies and strategies in favour of maternal and child health including:

- costed national implementation plan for MNCH
- national child heath strategy
- community treatment of pneumonia with antibiotics
- new oral rehydration salts (ORS) formula and zinc for management of diarrhoea
- introduction of pneumococcal vaccine.

In addition, the Ministry of Public Health adopted 18 strategies for reducing mortality and morbidity in the country and for institutional development in health[5].

Despite the adoption of these strategies and policies, some of them are partially implemented such as the International Code of Marketing of breast milk substitutes. The country has adopted the introduction of pneumococcal vaccine that will come into effect in mid-2013. Other policies reported by the Countdown initiative have not been adopted by the country, namely:

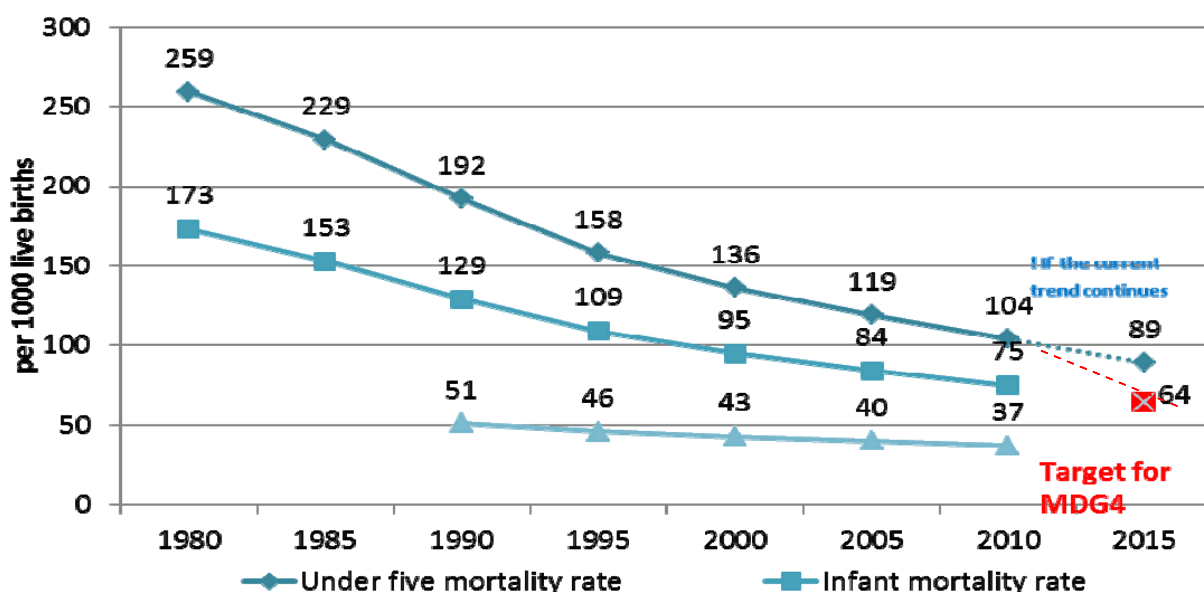
- maternity protection in accordance with Convention 183
- notification of maternal deaths
- introduction of rotavirus vaccine
- user fee protection for women and children.

II-3 MNCH current status

II-3.1 Maternal, newborn and child mortality

Afghanistan witnessed a 47% reduction in under-5 mortality between 1990 and 2011. 28% of under-5 deaths occurred during the neonatal period in 2010 and more than two-thirds in the post-neonatal period. According to the MICS survey carried out in 2003 in Afghanistan, the under-5 mortality rate was 24% higher in the rural than in the urban area of the country.

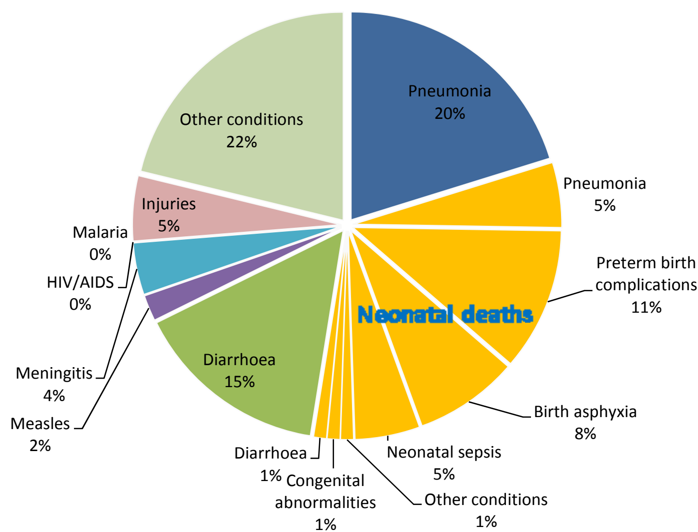
Trends in under-5 mortality 1990 – 2011 and extrapolation to 2015.



Source: United Nations Inter-agency group for child mortality estimation (IGME*)- Levels & Trends in Child Mortality, Report 2012* - WHO / UNICEF / World Bank/ UNPD and independent experts. These figures are computed by the United Nations agencies and are not necessarily the official statistics of the Member State, which may use alternative methods of estimation of mortality. All Member States have undergone an official country consultation on these estimations.

[5] *Country Cooperation Strategy for WHO and Afghanistan 2009 - 2013*

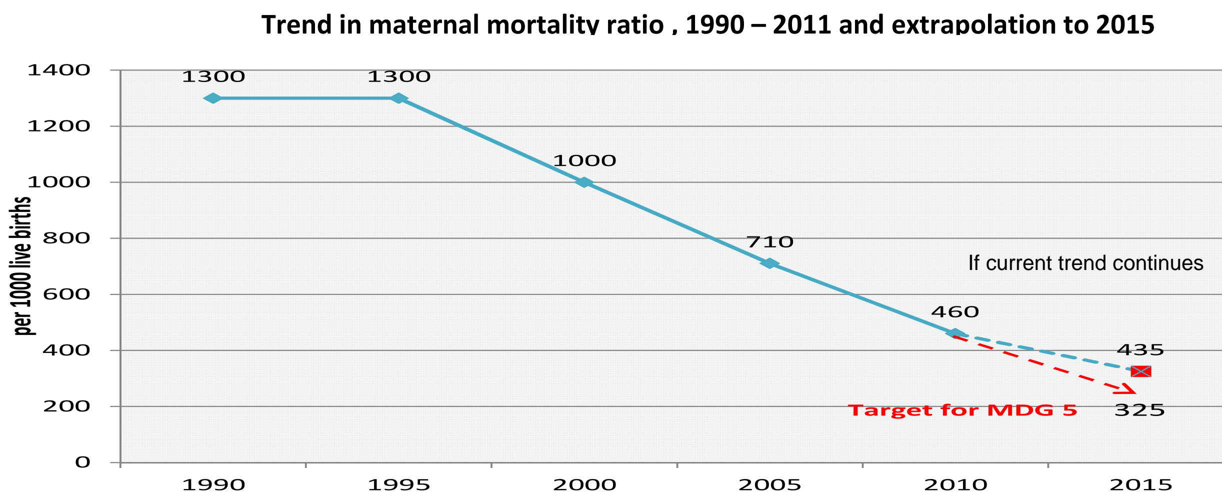
Infectious diseases such as diarrhoea (16%), pneumonia (25%) and measles (2%) account for almost half (43%) of the 129 000 deaths that occurred among children 1-59 months of age in Afghanistan in 2010.Another 24% were due to birth asphyxia (8%), preterm births (11%), neonatal sepsis (5%).



Causes of under-5 deaths

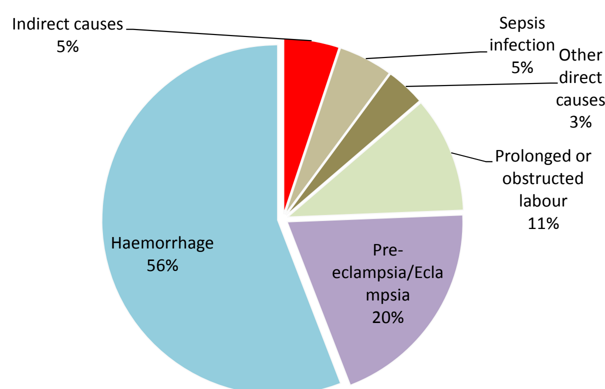
Source: WHO/CHERG 2012, 2010 data

Afghanistan witnessed a 65% reduction in maternal deaths between 1990 and 2010.



Source: Trends in maternal mortality: 1990 to 2010. WHO 2012

Haemorrhage is by far the leading cause of maternal deaths in Afghanistan (56%). Eclampsia is associated with one-fifth of maternal deaths and prolonged or obstructed labor with 11% of maternal deaths. The percentage of maternal deaths attributed to sepsis is relatively low (5%). Also, indirect causes of maternal death—pre-existing conditions and diseases aggravated by pregnancy and delivery—are relatively rare (5%) which may be due to underreporting of such causes in the verbal autopsy interview, or coding preferences of the physicians.



Causes of maternal death

Source: WHO 2010

II-3.2 Maternal, newborn and child morbidity

Malnutrition among under-5 children is one of the main health problems in Afghanistan and increases the risk of mortality. About one in three children under-5 in Afghanistan is stunted (35%) and underweight (32%), while 16% of under-5 children are wasted. More than half of pregnant women suffer from anaemia which also represents a high risk for mortality.

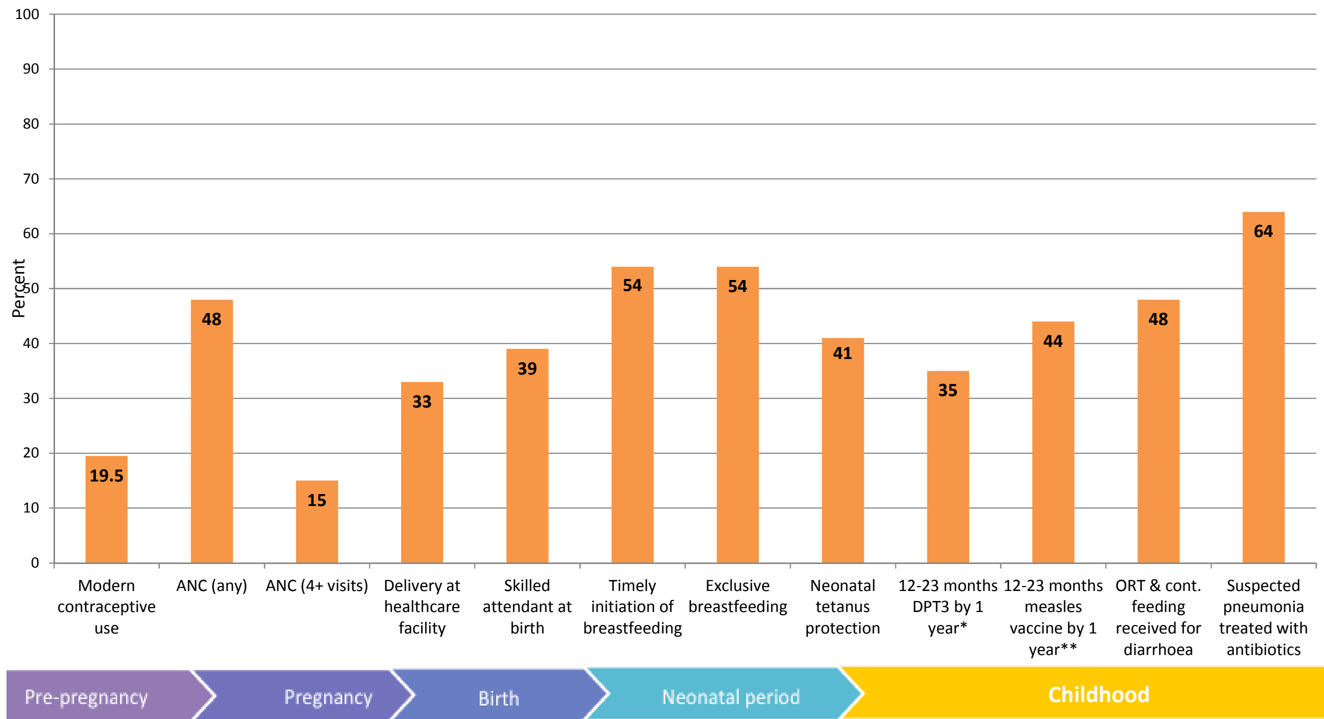
Maternal:	
Anaemia in pregnant women[1]	61%
Newborn:	
Low birth weight in newborns	----
Child:	
Children under 5 with suspected pneumonia (2010)[2]	19.0%
Children under 5 with diarrhoea (2010)[2]	23.0%

Nutritional status in children under 5 [2]	
Stunting	55%
Wasting	18%
Underweight	31%

[1] WHO/EMRO, 2010 data [2] MICS Afghanistan 2010 - 2011

Fistula, uterine prolapse, reproductive tract infections and infertility are among the common morbidities in pregnant women.

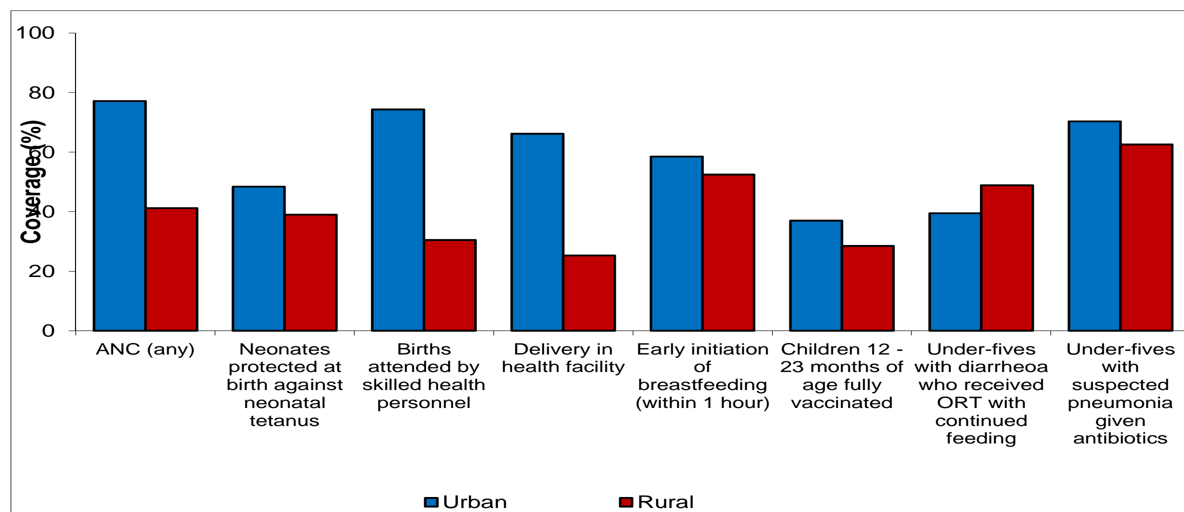
II-3.3 Coverage indicators across the continuum of care



According to the available data from the latest MICS, most interventions in the continuum of care showed low coverage rates (≤64%).[6] Interventions with highest coverage rates are under-5s with pneumonia who were treated with antibiotics (64%), timely initiation of breastfeeding (54%) and exclusive breastfeeding (54%).

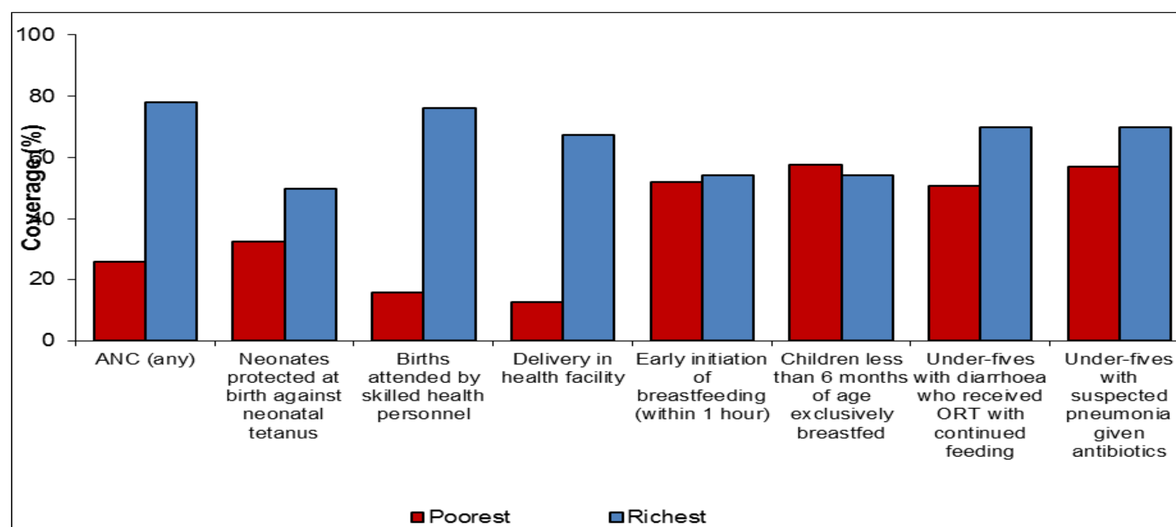
II-3.4 Inequities in coverage of indicators across the continuum of care

In general, there is disparity in coverage of key effective interventions along the continuum of care between urban and rural areas. The coverage of most interventions is higher in urban areas except for children with diarrhoea who received ORT with continued feeding.



[6] **Source:** MICS Afghanistan 2010-2011

In addition, the coverage is higher for all interventions among the richest population than the poorest. It is more than double for some interventions such as ANC (any) and skilled birth attendants



II-4 Towards MDGs 4 and 5

Afghanistan has made efforts to respond to the existing MNCH situation in the country. These include:

- a high level of political commitment to maternal and child health;
- signatory to the MDGs;
- maternal and child health as the main components of the joint plans between the Ministry of Public Health and United Nations organizations (WHO, UNICEF and UNFPA);
- more than 18 strategies to address maternal and child health mortality;
- the BPHS which includes packages of maternal and child health interventions;
- adoption and implementation of a package of interventions targeting the main causes of child and maternal deaths based on the global cost-effective and evidence-based interventions, delivered in an integrated way. Research has shown that these interventions have the highest impact on mortality.

II-4.1 Child health

A set of interventions targeting the main causes of under-5 mortality in Afghanistan has been packaged and implemented under the umbrella of the Integrated Management of Childhood Illness Strategy (IMCI). This strategy addresses not only the main causes of under-5 mortality but also the key health promotive and preventive elements. The three components of the IMCI strategy aim at improving the quality of child health care services at primary health care level, the health system related elements and child health related family and community practices.

Package of child health key cost effective interventions implemented at primary health care level

- Case management of neonatal sepsis, pneumonia, diarrhoea and jaundice.
- Child case management:
  - pneumonia case management and prevention
  - diarrhoea case management and prevention
  - malaria case management and prevention
  - malnutrition case management
- Early initiation of breastfeeding
- Promotion of exclusive breastfeeding
- Promotion of sound complementary feeding
- Improving care seeking
- Increasing immunization coverage
- Vitamin A supplementation.

Different implementation approaches were adopted to overcome the problem of the access to primary health care:

- at primary health care facilities: implementation coverage at 88% of primary health care facilities was achieved;
- at community level through the community health workers.

The Ministry of Public Health has taken the responsibility of building the capacity of health cadres in the delivery of the package, while implementation has been contracted out to nongovernmental organizations. Afghanistan has reached a high coverage with IMCI (88% of primary health care facilities). However due to low access to primary health care, the services have noted reach the large number of under-5 children in need. Due to lack of supervision and follow up after training, major concerns exist about the quality of implementation. To address the problem of access to primary health care services (57%), the country adopted the policy of using community health workers to provide community case management and counselling. The same concern about the quality of services delivered to under-5 children exists.

Recognizing the important impact of immunization on the reduction of under-5 mortality, Afghanistan has witnessed improvement in routine vaccination coverage during the last few years. Reported coverage has increased from 41% DTP3 coverage in 2001 to 82% Penta3 coverage in 2011. However, it has been estimated that the national coverage with Penta3 is only 62%. The frequent occurrence of outbreaks of diphtheria and pertussis proves that routine immunization is low.

With the support of the GAVI Alliance and government commitment to co-financing, Afghanistan successfully introduced Hib vaccine in 2009 and pneumococcal vaccine will be introduced mid-2013. This commendable success of introduction of the new life-saving vaccines will have significant impact on reduction of under-5 mortality and contribute to achieving the target of MDG 4 if high, equitable routine vaccination coverage is achieved.

Coverage with the routine first dose of measles vaccine (MCV1) is still low, 75% in 2011 based on reported data. Coverage with MCV2 is very low. Periodic measles follow-up campaigns, targeting birth cohorts less than 5 years of age, are being conducted every 3-4 years to cover for the low routine coverage. However, the ongoing outbreaks of measles reflect the low quality of the implemented campaigns.

II-4.2 Maternal health

The package of interventions accorded to maternal and neonatal health includes the following interventions:

- family planning services
- antenatal care
- skilled birth attendants through midwifery training.
- postnatal care
- scaling up community midwifery education
- raising community awareness of reproductive, maternal and neonatal health issues.

This package has been implemented at primary health care facilities, and in the community by community health workers. The interventions are accompanied by activities for raising community awareness about life-saving practices.

II-4.3 Can Afghanistan reach the targets set for MDG 4 and 5 by 2015?

Afghanistan has shown a decreasing trend in the under-5 mortality rate since 1980. However, trends have flattened since 1995. If trends continue to be similar to that observed between 1990 and 2011, with an estimated average annual rate of reduction (AARR) of 3.1, the under-5 mortality rate in Afghanistan will be equal to 89 per 1000 live births in 2015, while the target rate is 64 per 1000 live births and would require an AARR of 11.4, which is almost 4 times as high as the rate achieved until 2011. With the current

annual average reduction in maternal mortality, the maternal mortality rate will reach 435 per 100 000 live births versus that targeted by MDG 5 which is 325 per 100 000 live births.

III. Feasibility analysis

- There is a high level commitment to address maternal and child health issues. The political situation and the crisis in the country hinder the effect of those efforts.
- Many donors have shown interested in investing in maternal and child health in Afghanistan. However, each has a separate plan with the Ministry of Public Health and is working with different standards and approaches.
- The health workforce development situation in Afghanistan is complex and requires special attention. There is a continued shortage of qualified health professionals in terms of numbers, gender, quality and distribution at all levels of the health services, especially for nurses, midwives, pharmacists and environmental hygienists. There is a severe shortage of female health workers in the remote areas of the country.
- In addition, there is maldistribution of health care providers between and within provinces, and between urban and rural areas which leaves the peripheral health facilities and remote areas understaffed. The main reasons for the maldistribution are the poor working, living and social conditions, security concerns and lack of educational facilities for children. Concern has been expressed regarding the level of knowledge and skills of health workers trained outside the government health system.
- The insecurity and lack of transport infrastructure restricts people from seeking health care, limits referrals of cases to secondary care facilities and prevents health workers from working in the security compromised and remote and inaccessible areas. This challenge is however outside the purview of the health sector.
- The current inequitable access to the health services poses a major challenge in reducing maternal and child health mortality.
- The level of remuneration of staff working to deliver BPHS is almost three times that of the regular staff of the Ministry of Public Health, but considerably less than the salaries of the staff working in the nongovernmental organization contracted out facilities. Moreover, there is a clear tension between nongovernmental organizations and the provincial and district health staff.
- While there is a scaling up of the implementation of MNCH interventions at primary health care level, the quality of implementation is a major concern. This is due to many factors including quality of training, lack of regular monitoring and evaluation.
- The system of referral and care, as revealed by the national assessment, does not offer a good quality of services for the severe conditions of mothers and children and consequently does not help in reducing mortality.
- Almost 96% of total health sector funding comes from international support while the Government allocates only 0.8% of its gross domestic product (GDP) to the health sector. Bilateral assistance remains the most important element in supporting primary health care delivery through contracting in services to nongovernmental organizations.
- The experience of contracting in of the BPHS to nongovernmental organizations has been promising in the medium term, although there have been several issues in relation to insufficient coverage, poor quality, inequity and sustainability as the funding for this initiative comes entirely from the donors.
- Community case management is another approach to increase access to services, although it requires a long time to reach a wide coverage, adequate financial support to provide required supplies and supervision to ensure good quality. Moreover, this approach requires a policy decision before implementation.
- Substantial investments are required to strengthen key health system-related elements, in particular the serious shortage of essential medicines for mothers and children, non-functioning health information system, and weak supervisory system which affect both the quality and the scaling up of service delivery.

- There is inadequate capacity for health planning and management, monitoring and evaluation at central and especially at provincial level.
- In relation to child health, there is a tendency to shift focus to the neonatal period by partners despite the bigger proportion of deaths occurring in the post neonatal period.
- The estimated level of scaling-up requires substantial funds. Advocacy, strong collaboration and coordination among the different partners will ensure the flow of funds to the country.
- Sustaining the timely co-financing of the new vaccines to avoid interruption of GAVI Alliance support requires additional effort by the Government.
- The lack of community awareness in relation to maternal and child health practices is a major factor that affects the progress in improving maternal and child health indicators.

IV. Is it achievable?

With the current trends of reduction in maternal and under-5 child mortality, funds and human resources allocation, Afghanistan is most unlikely to achieve MDGs 4 and 5. However, if the country makes a high level commitment, with concerted efforts by the Ministry of Public Health and partners to accelerate the implementation of the cost effective evidence based packages of interventions, allocation of the required human and financial resources, and the provision of good quality of services, the country will be able to accelerate progress towards MDGs and more lives of mothers and children will be saved.

V. Conclusions: key drivers

With the active support of the international community, the country should aim at accelerating the pace of reduction of under-5 and maternal deaths by scaling up interventions in light of the coverage target set by MNCH programmes at the Ministry of Public Health. The accelerated pace of reduction in mortality will bring the country closer to the MDG targets and will save a larger number of mothers and children. This acceleration requires the following.

- Sustaining the high level of political commitment to child and maternal health, considering it at the top of the country's priorities and as a major indicator of national development.
- Putting the related policies and strategies into effect.
- Providing the required financial resources to implement the national MNCH plans.
- Strengthening partnerships and coordination among concerned stakeholders to contribute to one national plan for MNCH and to achieving the national related targets.
- Focusing on the population most in need and addressing inequities (geographic, social and economic).
- Moving towards universal access to primary health care services by expanding the network of primary health care facilities and adopting innovative approaches to accelerate the provision of MNCH services at the community level.
- Building capacities to produce an adequate qualified workforce to meet the service needs of the population (by in-service training and pre-service education).
- Ensuring adequate numbers of qualified workforce.
- Strengthening the key health systems essential elements, such as the health information system and supervision.
- Providing high quality of health services to children and mothers.
- Ensuring the continued supply and availability of medicines and vaccines as key elements to reduce mortality.
- Strengthening the monitoring and evaluation system.
- Focusing on under-5 children throughout the life course, further strengthening efforts in the post-neonatal period in order to reduce the under-5 mortality rate.

- Giving particular attention and developing institutional mechanisms in the areas of: monitoring, evaluation and analysis of the health situation, public health surveillance, health planning and management, and health regulation and enforcement
- Promoting equitable access to health services and addressing inequities
- Ensuring the high quality of the immunization programme in general, and to the measles campaign in particular, and strengthening routine immunization to achieve the target of 90% coverage at national level and 80% coverage in each district through proper implementation of the reaching every district approach (RED).