Bangladesh has made significant progress in reducing child mortality over the last few decades and is on track to meet the fourth Millennium Development Goal (MDG 4). Under-five mortality rate has reduced from 133 in 1994\textsuperscript{1} to 53 in 2011\textsuperscript{2} per thousand live births. The share of neonatal mortality – in the overall under-five mortality has increased from 39 per cent 1989-93 to 60 per cent 2007-11\textsuperscript{2} largely due to the rapid reduction in post-neonatal mortality. The success has been largely due to the improvements in immunization coverage, the increase in the use of oral rehydration therapy (ORT) for diarrhoea, the adoption of Vitamin A supplements and the reduction in fertility rate as well as the improved and increased coverage of female education.

Three quarters of neonatal deaths occur in the first week of life and almost fifty per cent within the first 24 hours, often unattended and without any form of essential care. Neonatal deaths occur predominantly due to infection (24%), birth asphyxia (21%) and preterm/low birth-weight (11%), which is largely preventable. And there are cost-effective and high-impact evidence-based interventions to be done\textsuperscript{2}.

The knowledge and practices for essential new-born care and new-born danger signs are still very low among caretakers and communities, leading to a poor care-seeking tendency for new-born illnesses. The health facilities are also not equipped enough to provide sick new-born care as per the national protocols. And around 71% of deliveries occur at home\textsuperscript{2}.

There is a growing concern among experts that this very low pace of reduction in neonatal mortality may impede achieving the MDG 4 target.

### Issue

**Action**

There are now growing evidences that implementing simple, low-cost and high-impact interventions before and during deliveries and immediately after births can reduce a large proportion of newborn morbidity and mortality. Several studies have shown that home-based essential newborn care (ENC) interventions can prevent almost half of newborn deaths in high mortality settings.

UNICEF in partnership with the Ministry of Health and Family Welfare (MOHFW) of the Government of Bangladesh is implementing the “Home-based Maternal and Newborn Care Interventions to Accelerate Progress towards Achieving MDG-4” which is known as Tangail Maternal, New-born and Child Health Programme (TMNCP). The project has been implemented in Tangail district since 2011 with the financial assistance from the Korea International Cooperation Agency (KOICA). This intervention aims at rapid scaling up home-based essential maternal and newborn care interventions, supplemented by strengthened referral care services in three low performing upazilas (sub districts) of Tangail. The design of this intervention is in alignment with the National Neonatal Health Strategy of Bangladesh and the operational plan of health sector programme.

The interventions include providing basic counselling and care services during pregnancy, during and after delivery for mothers and newborns through home visits by field level health workers, referral of sick new-borns to facilities for appropriate cares and the provision of quality maternal and newborn care in the selected hospitals under the intervention areas. It is envisaged that successful implementation of this project will contribute to a significant reduction (up to 20%) of neonatal deaths over three years in the project area.

### Key Challenges

- The health of a newborn is inextricably tied with the good health of the mother. Unfortunately in Bangladesh access to antenatal care (ANC) and postnatal care (PNC) is limited. Only 60 per cent of pregnant women receive one ANC visit from a medically trained provider and only 26 per cent complete four antenatal visits. The situation of postnatal care for newborns is worse with only 34 per cent receiving a PNC.

---

\textsuperscript{1} 1989-93 Bangladesh Demographic and Health Survey
\textsuperscript{2} 2011 Bangladesh Demographic and Health Survey
visit within 42 days after birth from a medically trained provider.

- Medically trained providers attend only 32 per cent of births. And 71 per cent of the births take place at home. Emergencies remain unrecognized or referred too late. A lack of adequate emergency obstetric and newborn care at the facility level also contributes to an unacceptably high level of maternal and neonatal deaths.

- Wide spread poverty, a lack of awareness coupled with poor quality care and care seeking behaviour at home and community level also contribute to a high level of neonatal mortality.

- Maternal and child under-nutrition remains a serious public health problem in Bangladesh. Overall, the proportions of chronic malnutrition (41 per cent), acute malnutrition (16 per cent) and underweight (36 per cent) remain high.

- Micronutrient deficiencies, especially anaemia among women and children as well as adolescent girls, are also major public health problems. Poor intake of food rich in iron and folic acid and multiple infections are the major contributing factors to the high rates of anaemia.

- Public sector health services suffer from the problem of managing various health systems such as insufficient supplies of medicine, staff shortages, and centralized decision making and financial management. The vast majority of qualified health providers operate in urban areas and more than half of essential health provider positions remain vacant in rural areas. Government hospitals are widely perceived to be overcrowded, to have long waiting times, and to provide cares that are rushed and impersonal.

- There also exists a large gap between the rich and poor with regard to accessing essential maternal and newborn care services.

workers to ensure services to be provided at the community level.

- Initiate and scale up community case management of neonatal sepsis, asphyxia, pneumonia, and diarrhoea.

- Pilot a referral mechanism within the health system for sick newborns through community led referral hubs at remote and hard to reach areas and link them with facilities with local transportation system and mobile network.

- Upgrade facilities with the provision of quality maternal, new-born and child health services as per national standards.

- Increase the demand for maternal, neonatal and child health services through appropriate communication outreach activities.

- Institute and strengthen supervision, monitoring of community-based services with the existing government supervisors to ensure accountability.

Results

- It is envisaged that successful implementation of this project will achieve a 20 per cent reduction of neonatal deaths over three years. This will provide important lessons for further scaling up of the home-based neonatal care interventions throughout the country, which may save the lives of over 83,000 newborn babies dying each year in Bangladesh.

- The proportion of pregnant women who receive at least three ANC during pregnancy and one PNC within two days of delivery from a trained provider (trained health workers, auxiliary health workers or trained community health workers) will increase by 50 per cent from the baseline.

- The proportion of home deliveries attended by community skilled birth attendants will increase by 50 per cent from the baseline.

- The proportion of newborns receiving home visits and essential newborn care regardless of place of delivery will increase by 60 per cent from the baseline.

Strategic Approach

- Target approximately total 734,000 population including 283,000 neonate, children under two, and women, in the three low-performing upazilas (sub-district) in the district of Tangail over a period of three years, applying the lessons learnt from similar in-country interventions.

- Register households and map information about the target population.

- Increase skills of community based government and non-government service providers to ensure a basic package of home care for mothers, newborns and children under the age of two.

- Provide appropriate job-aids, equipment and logistical support to the community based health

3 Report 2011-The UN Inter-agency Group for Child Mortality Estimation