report

DFID Department for International Development

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MAINTAINING MOMENTUM TOWARDS THE MDGs

AN IMPACT EVALUATION OF INTERVENTIONS TO IMPROVE MATERNAL AND CHILD HEALTH AND NUTRITION OUTCOMES IN BANGLADESH

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Bangladesh has achieved spectacular rates of progress in the last two decades, most notably with respect to fertility decline and reduced under-five mortality. Nutrition has been an exception to these successes, although there has been some improvement in recent years. These improvements have been spread across all Bangladeshis and there is robust evidence that these improvements can in part be attributed to donor support.

Background

This is the second in a series of three DFID-funded evaluations being carried out at the World Bank Operations Evaluation Department. It focuses on the **impact of donor support on maternal and child health outcomes in Bangladesh.**

The study addresses four key issues: (1) What has happened to child health and nutrition outcomes and fertility in Bangladesh since 1990? Are the poor sharing in the progress being made? (2) What have been the main determinants of MCH outcomes in Bangladesh over this period? (3) Given these determinants, what can be said about the impact of publicly-supported programmes to improve health and nutrition? (4) To the extent that interventions have brought about positive impacts, have they done so in a cost effective manner?

Key findings

The key determinants of the **reduction in child mortality** have been improved economic well-being and health and education interventions, notably expanded immunisation and greater female enrolment in both primary and secondary education. A more detailed analysis shows that:

- Improved immunisation coverage, financed largely with support from UNICEF but also from other donors including DFID's £7 million for polio, has averted over 2 million child deaths, at a cost of about $200 per life;
- Training traditional birth attendants, which was abandoned following a shift in international opinion, was also a cost-effective way of reducing child

mortality, at an estimated cost of under $800 per life saved;

- Increasing female secondary schooling by making a stipend payable to female students (another government initiative benefiting from external funding) averted child deaths at a cost of between $1000 and $5000 each;

- Finally, proving that interventions from other sectors have an impact on these health outcomes, rural electrification is shown to have averted deaths at a cost of $20,000 per life.

The analysis of **nutrition outcomes** focuses mainly on the World Bank's Bangladesh Integrated Nutrition Project (BINP), an initiative promoting nutritional counselling complemented by supplementary feeding for pregnant women and young children. The evaluation concludes that:

- The theoretical causal chain leading to improvements in nutrition breaks down as a result of among others: excessive focus on mothers when in many cases they are not the key decision makers; deficiencies in targeting of beneficiaries; a knowledge-practice gap, whereby advice is not turned into action (generally as a result of time or resource constraints); impact on pregnancy weight gain is small, and pre-pregnancy nutritional status is more important to birth weight in any case.

- Simply giving food to families with children would have had a larger nutritional impact. Doing this would also have saved lives at half the cost of BINP, which is estimated at between $2,000 and $4,000 per life.

The analysis of **fertility reduction** shows that a large part of the improvement is attributable to socio-economic developments. It also finds that:

- A large share can also be attributed to the country's family planning service, built up since 1971 with substantial donor support. The continued decline of fertility in the 1990s, driven by rising contraceptive prevalence, demonstrates the continued effectiveness of this programme.

- Raising the age of marriage is unlikely to have much of an impact in reducing fertility, although it is desirable for both maternal and child health.

- Targeting high fertility households, attempting to tackle son preference and the continued success in reducing child mortality could all contribute to a continued reduction in fertility.

Lessons

- Externally-supported interventions have had a notable impact on child health and nutrition outcomes and fertility in Bangladesh.

- Small amounts of money save lives, though the amount varies by intervention.

- Interventions from many sectors significantly affect maternal and child health outcomes.

- Programmes should be based on local evidence, rather than general conventional wisdom.

- Gender issues are central to health strategies in Bangladesh, but need not be the constraint which is sometimes suggested.

- Alternatives should be considered to the Bank-supported Bangladesh Integrated Nutrition Project.

- Rigorous impact evaluation relying on national surveys can show which interventions are contributing most to meeting poverty reduction goals.

DFID Response (by DFID Bangladesh)

The report is very well written and laid out in a way that logically progresses from point to point. The inclusion of the role of other sector activities (ie education, income, power, etc.) is particularly important and useful. The recognition (however complex and difficult to fully capture) of the interconnected influences of different sectors enables the report to give a far more representative interpretation of the "real world". This will be particularly relevant as the PRSP drives the larger development framework

The study was carried out in a participative way with opportunities for influencing the design of the second sector wide programme fully explored. A number of dissemination workshops were organised for local academics and policy makers. DFIDB has had a number of opportunities to debate and discuss the findings.

It is unfortunate that the study was not able to benefit from the findings and data set of the 2004 Demographic and Health survey.

There are a number of important lessons for the Bangladesh programme to take forward:

1. Early marriage is still a major obstacle to improving maternal and child health in Bangladesh. One in three births are to teenage mothers with implications for both the maternal and the child's health. Greater efforts are needed to delay early marriage, and delay first births within marriage. This must include greater investment in secondary schooling and employment for single women in rural areas. Addressing human security and gender issues are fundamental to delaying age at marriage.

2. The Sector programme (HNPSP), which includes nutrition, will need to reassess strategies especially supplementary feeding programmes. The knowledge practice gaps must be better addressed through more culturally appropriate strategies.

3. Skilled Birth Attendants (SBA) training requires substantial hands-on practice, and thus training sufficient numbers will take a long time. This suggests that the TBAs will continue to play a role in delivery for a considerable time to come. Thus they need to be oriented to avoid bad practices, and to refer for complications. Role of TBA's in reducing neonatal mortality needs to be explored further.

4. Evaluation studies provide a snap shot view of the population at a given time. Bangladesh lacks a robust health management information system, which is necessary to show the routine service delivery statistics and immediate trends. This has been identified as priority for the sector programme. With the diminishing role of the public sector in service delivery it is necessary to harness the strengths of the private and NGO sector. Health Information Systems will need to take this into account.

The full evaluation report is available from http://www.worldbank.org/oed/ie

DEPARTMENT FOR INTERNATIONAL DEVELOPMENT

The Department for International Development (DFID) is the UK government department responsible for promoting development and the reduction of poverty. The government first elected in 1997 has increased its commitment to development by strengthening the department and increasing its budget.

The central focus of the government's policy, set out in the 1997 White Paper on International Development, is a commitment to the internationally agreed target to halve the proportion of people living in extreme poverty by 2015, together with the associated targets including basic health care provision and universal access to primary education by the same date. The second White Paper on International Development, published in December 2000, reaffirmed this commitment, while focusing specifically on how to manage the process of globalisation to benefit poor people.

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