

IMPROVING HEALTH AND NUTRITION SERVICES IN THAKURGAON, BANGLADESH

The ENRICH project experience



ENRICH
ENHANCING NUTRITION SERVICES TO
IMPROVE MATERNAL AND CHILD HEALTH



BACKGROUND

ENRICH project

In 2016, World Vision Canada and Nutrition International partnered to implement the Enhancing Nutrition Services to Improve Maternal and Child Health (ENRICH) project, alongside HarvestPlus, the Canadian Society for International Health, and the University of Toronto's Dalla Lana School of Public Health. Operating in select regions in Kenya, Tanzania, Bangladesh, Pakistan and Myanmar, the ENRICH project is funded by Government of Canada through Partnerships for Strengthening Maternal, Newborn and Child Health of Global Affairs Canada.¹

ENRICH aims to reduce maternal and child mortality by strengthening the public health system's ability to deliver quality gender-responsive facility-

and community-based health services for improved health and nutrition of pregnant and lactating women and their young children, especially during the first 1,000 days—from conception to a child's second birthday—that set the foundation for optimum child health and development.

The ENRICH project is implemented in all five sub-districts of Thakurgaon district, within Rangpur division, located in northwest Bangladesh. There are 53 unions and 641 villages encompassed within Thakurgaon district. The ENRICH project directly benefits 404,343 people, 58 percent of whom are pregnant or lactating women, and children under two years of age.

¹ ENRICH Pakistan was implemented for two years in Sindh province. The project closed in December 2018.

Nutrition in Bangladesh

The Government of Bangladesh (GoB) emphasizes the need to improve nutrition in several plans and strategies, including the National Nutrition Policy (2015), the National Nutrition Services Operational Plan (2017-2022) under the fourth Health, Population and Nutrition Sector Program, as well as the second National Plan of Action for Nutrition (2016-2025).

The National Strategy on Prevention and Control of Micronutrient Deficiencies (2015-2024) provides guidelines on interventions and actions to improve access to micronutrients, for example, improved access to fortified foods and micronutrient supplementation.

Child nutrition status has improved steadily over the past decade in Bangladesh; however, much progress remains to be achieved. High prevalence of micronutrient deficiencies persists, especially among children under five years and women of reproductive age. According to the Bangladesh Demographic and Health Survey 2011², 51 percent of preschool-age children and 42 percent of “ever-married” women (age 15-49) had anaemia. Further, the Bangladesh National Micronutrient Survey 2011-2012³ showed that the prevalence of zinc deficiency was high among preschool-age children (44 percent) and women (57 percent), and that the prevalence of subclinical vitamin A deficiency among preschool-age children was 20 percent.

Nutrition in Thakurgaon District

Prior to the ENRICH project, there was limited data on health and nutrition service delivery and the nutrition status of the population in Thakurgaon district. In 2016, the ENRICH project conducted a baseline survey of the nutrition status and practices in the community, the knowledge and skills in nutrition of healthcare providers, the availability of commodities for pregnant and lactating mothers and young children, as well as routine health service information. The findings of the survey indicated that key nutrition indicators in Thakurgaon, along with national averages, were below global targets (see Table 1).



Table 1: National and Thakurgaon-specific nutrition indicators

Nutrition Indicator	National	ENRICH Project Area (Thakurgaon)
Stunting among children under five	31% ⁵	31%
Wasting among children under five	8% ⁵	6.5%
Underweight among children under five	22% ⁵	20.8%
Mother consumed ≥ 5 food groups (out of 10) in the past 24 hours (Minimum dietary diversity for women, MDD-W)	35% ⁶	23.8%

ENRICH PROJECT APPROACH AND RESULTS

The ENRICH consortium of partners implemented a multifaceted intervention in Thakurgaon from the facility to the community levels:

World Vision Bangladesh worked at the community level to mobilize community health workers and village committees, sensitize community groups on health and nutrition, and train social and religious leaders. As well, World Vision Bangladesh coordinated with local government to promote home gardens, distribute livestock, and support service provision at community-level health facilities.

HarvestPlus reached farmers and their families with zinc-biofortified rice, provided training on crop production and food preparation, and collaborated with government on capacity development for seed production companies.

Nutrition International, in partnership with the National Nutrition Services, Institute of Public Health Nutrition, Ministry of Health and Family Welfare, worked to strengthen the health system at the district and facility levels to improve delivery of quality nutrition services provided in Thakurgaon.

Nutrition service delivery

In Bangladesh, the National Nutrition Services (NNS)'s Operational Plan (OP) aims to implement a comprehensive package of nutrition services to reduce maternal and child undernutrition. Aligned with the OP, the ENRICH project promoted nutrition services including support for first-hour initiation of breastfeeding and exclusive breastfeeding for infants under six months, complementary feeding and multiple micronutrient powder (MNP) supplementation for children age 6-23 months, as well as screening and treatment of severe acute malnutrition in children under the age of five, and daily supplementation with iron and folic acid (IFA) for pregnant women.

However, the delivery of nutrition services in Thakurgaon district was hampered by limited knowledge and skills of its healthcare providers. The ENRICH baseline survey found that less than half of the facilities in the project area had any staff who had received training in the previous two years on topics such as growth monitoring and promotion (GMP), infant and young child feeding (IYCF), and nutrition assessment and counselling. Nutrition International worked with the GoB to develop the capacity of health managers, first-line supervisors and frontline healthcare workers in these topics by providing training in several areas of service delivery. Discussion on nutrition service provision was instituted at monthly district- and upazila-level meetings, and supportive supervision tools were developed to facilitate improvement in the skills and performance of healthcare providers. Nutrition International also conducted formative research to gather data that informed a context-specific behaviour change intervention strategy to support service providers in promoting the uptake and maintenance of health and nutrition practices by the beneficiaries.

In the community, the demand for nutrition services increased with the improvements in its delivery over the course of the ENRICH project. For example, healthcare providers reported more caregiver interest in tracking the growth of their children. Healthcare providers also reported increased use of the GMP cards provided by the project, which caregivers received during counselling at health facilities as well as various community platforms (i.e. immunization outreach centres, satellite clinics, domiciliary visits and courtyard meetings by the community health workers).

ENRICH training topics

Basic nutrition: maternal nutrition, IYCF, hygiene, management of acute malnutrition, consumption of nutrient-rich foods and fortified foods, and micronutrient supplementation

Supply chain and commodity management (SCM): demand forecasting, stock ordering, reporting, and documentation, and warehousing basics

HMIS reporting: data collection, reporting, and analysis of nutrition indicators to improve timely and quality reporting and facilitate data-driven program decision-making

MNP implementation: IYCF, proper use of MNP, counselling of caregivers, monitoring and reporting

Supportive supervision (SS): systematic coaching and follow-up procedures to ensure quality service provision with timely and quality reporting

Health information management

The NNS OP aims to develop the capacity of health workers to effectively report on nutrition indicators. In Thakurgaon district however, the last training on health management information systems (HMIS)—particularly the District Health Information System 2 (DHIS 2)ⁱⁱ for health workers and managers at the district level—was conducted in 2014. The training did not cover nutrition indicators, so few facilities reported on nutrition.

Nutrition International worked with the GoB to develop the capacity of health managers, supervisors, and frontline healthcare workers by providing training in HMIS data collection and analysis. Following the training of healthcare providers, regular HMIS data quality review meetings were held and complemented newly instituted supportive supervision visits to health facilities. With nutrition service provision discussed in monthly meetings, healthcare providers reported a renewed sense of accountability for nutrition data collection and reporting.

Another challenge encountered in reporting on nutrition involved the indicators and systems the Directorate General of Health Services (DGHS) and the Directorate General of Family

Planning (DGFP) under the Ministry of Health and Family Welfare (MoHFW) used to collect nutrition information. While both Directorates collected nutrition information, they used different indicators and health information systems. Thus, reports on nutrition data generated from the two systems could not be aggregated. This made it difficult to track all nutrition service provision and construct a clear picture of the nutrition status of the population. To support the NNS OP, which aims to create linkages between DGHS and DGFP information management, Nutrition International worked with a local consulting organization to develop and test harmonized nutrition indicators and reporting tools that both Directorates could use.

ⁱⁱ DHIS 2 is the world's leading tool for collection, analysis and visualization of statistical data, tailored to integrated health information management activities. More information is available at dhis2.org.





Supply and management of commodities

The NNS OP aims to strengthen management of the supply chain to ensure an adequate, timely and uninterrupted supply of nutrition commodities for delivery of quality nutrition services. It also outlines the establishment of an online supply chain management portal and a Logistics Management Information System (LMIS) to ensure timely supply of products from central warehouses to health facilities as well as capacity development of health workers on SCM. However, guidelines for systems to ensure adequate procurement and supply of nutrition commodities at all levels of the health system and training for healthcare providers were lacking.

Nutrition International conducted a first-of-its-kind assessment of the nutrition commodity supply chains from national to district level and used its findings to inform the training of healthcare providers, in alignment with the NNS OP. Nutrition International also supported the implementation of an electronic LMIS for more effective commodity management. As a result, there has been better registration of commodities to prevent stock-outs and product expiration, proper commodity storage practices preventing stock losses, and improved reporting to allow for up-to-date information on varieties and quantities of nutrition commodities at facilities.

EARLY RESULTS

Comparing ENRICH baseline and midterm survey data (see Table 2 and Figures 1 and 2) shows some results of the health system strengthening activities in Thakurgaon district. ENRICH will conduct the endline survey in 2021.

Table 2: Select nutrition indicators in Thakurgaon from baseline to midterm

Select Indicators	Baseline Survey (2016)	Midterm Survey (2018)
Number of facilities reporting HMIS data to the district/ sub-district every quarter in the past year	69.2% (18 of 26)	70.0% (7 of 10)
Exclusive breastfeeding among children ages 0-5.9 months	70.6%	74.3%
Mother knew about ≥ 3 recommended nutrition practices for pregnant women to follow during pregnancy	25.1%	38.3%*
Mother knew about ≥ 3 recommendations for appropriately feeding children 6-23.9 months	13.8%	29.2%*

* Indicates a statistically significant change

Figure 1: Statistically significant changes in practices from baseline to endline in ENRICH project area

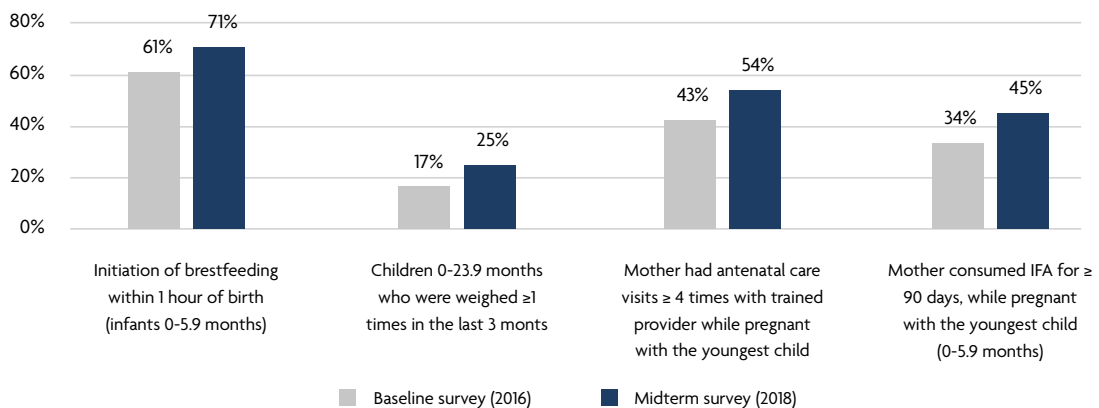
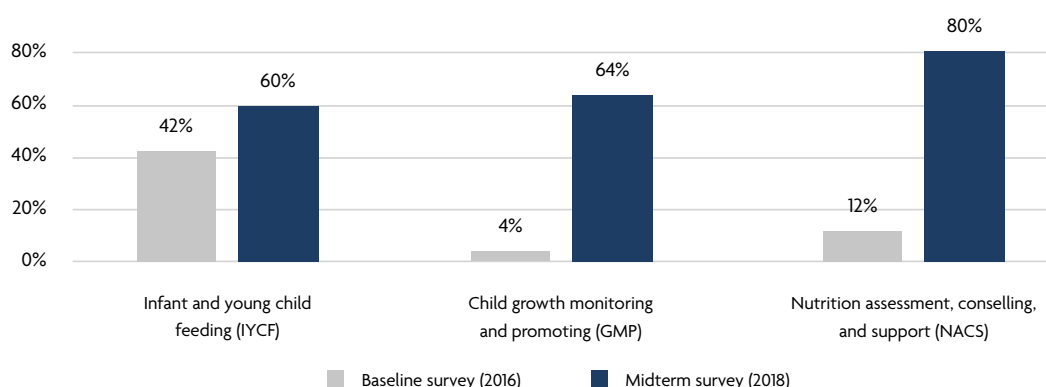


Figure 2: Any provider in the facility received training in the past two years on various topics



LESSONS LEARNED

ENRICH sought to assist the GoB in the operationalization of their existing nutrition strategies and plans, ultimately to help improve maternal and newborn health and nutrition outcomes. The project was successful in part because it was planned and implemented in close consultation with—and endorsed by—key government entities.ⁱⁱⁱ

A few takeaways from the ENRICH project experience:

Effective implementation of a comprehensive and systematic health system strengthening (HSS) intervention requires a longer timeframe. Gap assessments, updates to curricula and training materials, and capacity development activities took up the first year of the project. Intensive discussions and consultation with government on the scope of work to better align with existing operational plans also required considerable time but facilitated a close and synergistic working relationship. Given the time required to complete the groundwork and plan activities for subsequent years in coordination with government and other implementing partners, progress towards achieving some outcomes were not fully evident at the time the midterm survey was conducted. For future projects, implementing partners and government should engage in intensive discussions during the design and planning phase to better understand the context and allocate appropriate time for conducting the HSS work.

Effective implementation of HSS interventions for nutrition requires a considerable amount of resource allocation. Advocacy for increased budget allocation for nutrition at the district level is required to continue strengthening the health system and sustain the impact of the ENRICH project. Sensitization to government at all levels on the value of investing in health system strengthening interventions can facilitate continued and increasing allocation of resources to nutrition.

ⁱⁱⁱ Ministry of Health and Family Welfare, the Institute of Public Health Nutrition (IPHN)'s National Nutrition Service (NNS), Directorates General of Health Services (DGHS), and Family Planning (DGFP) at national and district levels.

Implementation of a systematic approach to supportive supervision requires comprehensive advanced planning. Identifying gaps, developing checklists and data analysis dashboards, and training health managers and supervisors on supportive supervision took a considerable amount of additional time which limited the project's window of opportunity to improve the nutrition services provision by supportive supervision. More extensive discussions among implementing partners during the planning phase to better understand the gaps in supportive supervision would have resulted in more accurate estimation of time requirements in workplans.

Improving the quality of HMIS data collection and reporting on nutrition requires consideration of overburdened healthcare workers and innovative solutions for promoting this essential activity. The heavy workload of healthcare providers hindered the quality of HMIS data collection and reporting on nutrition indicators. Incentives and recognition should be offered to healthcare providers for improving motivation, and health managers may consider implementing a task-shifting approach among health workers to improve the data collection and reporting to mitigate its risk to service delivery.

Without the ability to harmonize nutrition reporting between DGHS and DGFP, it is not possible to gain a clear picture of nutrition services provided and the nutrition status of the population. Due to the lack of harmonization of indicators and compilation of reports as described above, it was difficult to track the progress of different nutrition services from the HMIS and to facilitate the data-driven program decision-making in the ENRICH project area. In the future, implementation of the ENRICH-developed harmonized reporting indicators and tools, and compilation of all nutrition data within DHIS 2, would provide a clear and accurate picture of the performance and impact of nutrition service provision.

MORE INFORMATION

Founded in 1992, Nutrition International is a global organization dedicated to delivering proven nutrition interventions to those who need them most. Working in partnership with countries, donors and implementers, our experts conduct cutting-edge nutrition research, support critical policy formulation, and integrate nutrition into broader development programs. In more than 60 countries, primarily in Asia and Africa, Nutrition International nourishes people to nourish life. NutritionIntl.org

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