SHIKHA PROJECT

October 2013 to
September 2016

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FINAL REPORT

USAID
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Acronyms & Abbreviations

AIN	Aquaculture for Income and Nutrition
A&T	Alive & Thrive
BCCP	Bangladesh Center for Communication Programs
BCC	Behavior Change Communication
BF	Breastfeeding
BIRDEM	Bangladesh Institute of Research & Rehabilitation in Diabetes, Endocrine and Metabolic Disorders
BKMI	Bangladesh Knowledge Management Initiative
BMS	Breastmilk Substitute
BRAC	Bangladesh Rehabilitation Assistance Committee
CF	Complementary Feeding
CIPRB	Center for Injury Prevention and Research, Bangladesh
DDS	Dietary Diversity Score
DFID	UK Department for International Development
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
EBF	Exclusive Breastfeeding
FAO	Food & Agriculture Organization of the United Nations
FHI 360	Family Health International
FLW	Frontline Workers
FTF	Feed the Future
GOB	Government of Bangladesh
ICDDRB	International Center for Diarrheal Disease Research, Bangladesh
IEC	Information-Education-Communication
IP	Implementing Partner
IPHN	Institute of Public Health Nutrition
IYCF	Infant & Young Child Feeding
MaMoni	"Mother and Child"
MBBS	Bachelor of Medicine and Bachelor of Surgery

MCHIP	USAID Maternal & Child Health Integrated Program
MOHFW	Ministry of Health & Family Welfare
M&E	Monitoring & Evaluation
NNS	National Nutrition Services
NWG	Nutrition Working Group
PK	*Pushti Kormi (*"frontline workers")
PO	Program Organizer
PN	Postnatal
QA	Quality Assurance
RMNACH	Reproductive, Maternal, Neonatal & Adolescent and Child Health
SBCC	Social Behavior Change Communication
SES	Socio-economic Status
SHIKHA	*Shishur Khawano*, *(*"Infant & Young Child Feeding")
SK	*Shasthya Kormi* (also frontline workers)
SPRING	Strengthening Partnerships, Results and Innovations in Nutrition Globally
SS	*Shasthya Shebika (*also frontline workers)
TB	Tuberculosis
TBA	Traditional Birth Attendant
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	United States Government (term for USG entities that support international development in the recipient country)
WASH	Water, Sanitation & Hygiene

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Executive Summary

The SHIKHA Project, funded by the United States Agency for International Development (USAID), aimed to reduce under-nutrition in pregnant women and children under 2 years of age in Bangladesh. The Project was implemented from October 2013 to September 2016 in the Barisal and Khulna divisions of southern Bangladesh. Using a proven behavior change strategy to improve infant & young child feeding practices (IYCF) and maternal dietary diversity for pregnant women, the SHIKHA Project successfully achieved its targets during the Project period and identified important lessons to inform future health and nutrition policies.

The SHIKHA Project began with a preparatory phase that included a baseline survey conducted by the Center for Injury Prevention and Research, Bangladesh (CIPRB), a SHIKHA Project consortium partner. CIPRB also conducted two subsequent surveys over the life of the Project, including an endline survey in 2016. Analysis of the baseline and endline surveys showed the following notable results.

- Increase in the percentage of women who reported initiating breastfeeding within an hour of childbirth from 62% to 83%.
- Increase in percentage of children eating a minimum acceptable diet from 18% to 52%.
- Increase in the percentage of mothers with children ages 6 to 23 months who reported that they had a handwashing station at child feeding areas from 12% to 70%.
- Improvements in mean dietary diversity for less-educated women helped close the gap with women of higher levels of education in dietary diversity score (DDS); a similar trend was also observed for women of lower socio-economic status (SES).

Throughout the life of the Project, the SHIKHA team established strong linkages with the community and with implementing partners (IPs), and engaged other USAID-supported projects, such as the USAID-funded Strengthening Partnerships, Results and Innovations in Nutrition Globally (SPRING), Aquaculture for Income and Nutrition (AIN) and the USAID Horticulture Project in Bangladesh ("the Horticulture Project") to improve Infant and Young Child Feeding (IYCF) practices and dietary diversity among pregnant women and mothers with children under 2 years old. The Project also collaborated closely with both the Bangladesh Ministry of Health & Family Welfare (MOHFW) and local government representatives through its social mobilization interventions.

Key Achievements

Overall, the SHIKHA Project provided 161,570 pregnant women with counseling on maternal diet and 298,465 children under 2 years with nutrition services during home visits. The Project further reached 1,190,353 people with mass media campaigns covering 2,400 media-dark villages (81% of total villages in the 26 Project sites). Key messages from USAID-supported programs—AIN, SPRING, *MaMoni*, Sesempur and the Horticulture Project—were incorporated into the SHIKHA Project media campaign. These shows also provided an opportunity for viewers to speak about what they had learned and to ask questions about IYCF and handwashing. Audiences varied in terms of age and sex; the majority were mothers of children under age 2 and pregnant women, but with adolescents, mothers-in-law, husbands of pregnant women and fathers of children under 2 also represented. Male participation did vary during the media campaigns, and to increase men's involvement, Project staff developed a show to be staged in village markets where men gathered to trade and socialize. A total of 40 shows were organized at 40 village markets, reaching 9,265 men with nutrition messages.

SHIKHA health forums and "courtyard meetings" reached a total of 711,393 participants, comprising pregnant women, adolescents and mothers of children under 2 years. At these events, staff disseminated messages about maternal dietary diversity during pregnancy, IYCF, handwashing before food preparation, child feeding, how to establish a handwashing station near child feeding areas and proper disposal of child feces. The Project also trained a total of 7,148 health staff on basic IYCF and maternal nutrition, and provided refresher trainings on use of specific tools, materials and job aids in IYCF and maternal nutrition for 21,157 health staff (104.7% of target).

Influential members of the community played had an important role in the Project. These members of the community contributed to addressing the cultural barriers and taboos that reinforce harmful dietary practices at the household level. Influential figures included husbands of pregnant women, village doctors, religious leaders, *Union Parishad* (local government figures) and other community leaders. The Project engaged these influential people at the beginning of Year 2 and conducted orientations for a total of 40,378 individuals on maternal nutrition, IYCF and correct feeding practices (111.2% of target).

One notable success of the Project was the introduction of the "Food Plate," a plastic plate with printed images of nutritious food types in the correct proportions, that was used for nutrition education with mothers and children. The content of the images and the guidelines for use of the plate itself went through rigorous technical review and field-testing. The Project trained frontline field workers to use this plate during counseling sessions, and produced and distributed 18,500 plates through Project staff and government facilities. The MOHFW Technical Committee on Information, Education & Communication endorsed the Food Plate and approved its use in other nutrition projects.

The SHIKHA Project offered a performance-based cash incentive for frontline workers. SHIKHA partner, the Bangladesh Rehabilitation Assistance Committee (BRAC), subsequently incorporated this incentive system into their own healthcare system for essential health and nutrition programs.

Looking further afield, SHIKHA offered technical support to the Bangladesh Institute of Public Health Nutrition (IPHN) and to organizations in the IYCF Alliance (organizations that work on IYCF interventions), and facilitated the publication of the semi-annual bulletin of the IYCF Alliance as a key editorial member. SHIKHA staff also participated in a best-practices event called *Safolloa Gatha,* or "success story," organized by the Ministerial Working Group on Behavior Change Communication (BCC) in collaboration with the USAID-funded Bangladesh Knowledge Management Initiative (BKMI) managed by Johns Hopkins University and the Bangladesh Center for Communication Programs (BCCP). The team demonstrated SHIKHA's BCC materials, tools, projects, brochures and television spots, and performed a stage show on community outreach during a showcasing event.

Promotion of Breastfeeding

The SHIKHA Project participated annually in World Breastfeeding Week, distributing promotional materials from stalls at both national-level and local-level events. The Bangladesh Secretary of Health and Family Planning, the Director of IPHN and a Line Director of the Bangladesh National Nutrition Services (NNS), along with NNS program managers and participants from government and partners, visited the Project stall and received information about SHIKHA and about the importance of breastfeeding.

In Project Years 2 and 3, the Team also facilitated several other events for World Breastfeeding Week, including collaboration meetings with government agencies and Feed-the-Future (FTF) partners, meetings with UN and other international organizations, and rallies at the *upazila* and district levels, all

under the theme, “Raising Awareness of the Links between Breastfeeding and the Sustainable Development Goals (SDGs).” A total 1,085 participants attended the breastfeeding discussion and rally.

In August 2016, the Project Team, in collaboration with USAID Bangladesh, hosted a roundtable discussion at the national level, “Protecting and Promoting Breastfeeding: Challenges and opportunities to implement the Breastmilk Substitute (BMS) Act 2013.” Twenty key stakeholders from government, international organizations, UN, academia, private agencies, research institutes, print media and electronic media participated in this roundtable.

Integration of WASH and Nutrition

The SHIKHA Project integrated Water, Sanitation & Hygiene (WASH) components into nutrition programming in USAID-funded projects in FTF areas through USAID’s WASH-Plus project. WASH-Plus focused on sanitation, particularly safe disposal of infant feces, and handwashing as key to achieving SHIKHA objectives. WASH-Plus trained a pool of master trainers from BRAC, who then rolled out training for Project “frontline workers,” who in turn addressed safe management of infant feces through counseling during home visits and during community mobilization activities.

Monitoring and Evaluation

All of the Project work fell under SHIKHA’s results framework, which followed a robust monitoring & evaluation (M&E) plan. Project staff collected output indicators from routine monitoring data and from annual surveys. They then used that data to make decisions on project management. The data sources were the surveys conducted by CIPRB each year, quarterly monitoring and quality assurance from BRAC and FHI 360 annual monitoring surveys.

Key Challenges

Political unrest in the country: Bangladesh faced political unrest from October to December 2013. This led to delays in recruitment of frontline workers and basic training for staff, as BRAC training facilities were closed during the unrest. As a result, some community-level interventions were conducted later than planned.

Lack of maternal dietary counseling materials: The Project struggled in the initial stages to counsel pregnant women on dietary diversity, as there were not enough counseling tools readily available. Through rigorous research, and by engaging stakeholders, the Project did eventually establish the Food Plate model to address this challenge.

The commercial promotion of breastmilk substitutes through retail channels threatened exclusive breastfeeding in some project areas.

Seasonal flooding in low-lying areas affected some activities, particularly the sessions for influential figures. In these cases, staff changed meeting places as needed.

Lessons Learned

- Comprehensive BCC is essential to improving nutrition outcomes.
- Adolescent nutrition needs stronger programming that includes mothers-in-law and other household members.

- Male engagement in nutrition is important for improving dietary diversity and IYCF practices.
- Since maternal nutrition is critical to ensure safe pregnancy and to improve nutritional and development outcomes for children, it is important to integrate maternal nutrition through existing Reproductive, Maternal, Neonatal & Adolescent and Child Health platforms (RMNACH).
- Cooperation of village doctors was instrumental in the promotion of breastmilk substitutes; it is imperative to work closely with them to promote exclusive breastfeeding.

Recommendations

- Integrate maternal nutrition as a critical component of RMNACH services in the next government health sector program and focus on adolescents as a key target group for all RMNACH programs.
- Strengthen community-based programs, as they play a crucial role in improving nutrition outcomes for adolescents, pregnant or lactating women and children under 2 years.
- Include WASH messages in counseling to improve exclusive breastfeeding and complementary feeding practices, as WASH contributes to improved nutrition outcomes.
- Establish specific target groups for key issues:
    - Adolescents as a key target group for all RMNACH services and programs.
    - Husbands and in-laws (gatekeepers) for counseling and community outreach to improve health/nutrition outcomes (in addition to targeting pregnant or lactating women and mothers of children under age 2).
- Institute regular reviews of nutrition data at the *upazila* and district levels to monitor performance and share contributions from NGOs and other players for stronger monitoring, accountability and coordination.
- Provide high-quality technical assistance and competency-based training on nutrition to build capacity, knowledge and skills among healthcare workers on nutrition service delivery approaches and benefits of key nutrition interventions.
- Utilize existing healthcare workers and RMNACH platforms for nutrition programming.

Introduction

The three-year SHIKHA Project (Oct 2013–Sep 2016) was funded by the U.S. Agency for International Development (USAID) under the Feed the Future initiative and implemented by FHI 360 in partnership with BRAC, the Center for Injury Prevention and Research, Bangladesh (CIPRB) and Asiatic Marketing and Communication Limited. The Project aimed to reduce under-nutrition among pregnant women and children under the age of 2 by scaling up maternal nutrition and infant and young child feeding interventions in 26 *upazilas* (subdistricts) of the Barisal and Khulna divisions in Southern Bangladesh (in the FTF zone). The Project was designed based on the experience of the Alive & Thrive Project in Bangladesh, funded by the Bill and Melinda Gates Foundation, and the finding that, although food availability and access was ensured through FTF in the intervention areas, those benefits had not yet translated into improved nutrition status. SHIKHA was a name inspired by the Bangla term, "shisukekhawano," which means infant and young child feeding.

The SHIKHA Project implementation was aligned with Bangladesh's National IYCF Communication Strategy, which is built around high impact behaviors recommended by the World Health Organization (WHO) and Alive and Thrive model. The Project focused on five behaviors based on their proven impact on health and nutrition and because they are not widely practiced in Bangladesh:

1. Pregnant women consuming appropriate dietary diversity;
2. Early initiation of breastfeeding (immediately or within one hour after delivery) and no pre/post lacteals such as water, other liquids, or ritual foods;
3. Exclusive breastfeeding from birth through six months (180 days);
4. Quality and quantity of complementary foods and appropriate feeding practices, ensuring adequate density of energy and nutrients-solid, semi-solid or soft food, use of minimum diet diversity/ types of foods, especially animal foods and continued breast feeding through two years of age; and
5. Hand washing with soap before preparing food and feeding children below two years of age to reduce pathogens in complementary foods.

The selection of the 26 *upazilas* as Project sites was done in careful consultation with USAID, FTF partners and the Alive and Thrive Project to avoid overlap in project activities (Table 1).

Table 1: SHIKHA Project sites in Bangladesh

Project Districts	Project Upazilas
Barisal	Agailjhara, Babuganj, Bakerganj, Banaripara, Gaurnadi,, Muladi, Wazirpur
Jhalokhati	Jhalokhati sadar, Kathalia, Nalchity, Rajapur
Patuakhali	Mirzaganj, Patuakhalisadar, Dumki, Bauphal
Bhola	Bholasadar, Tazumuddin, Burhannuddin, Lalmohan, Dawlatkhan, Char Fashion
Satkhira	Debhata, Kolaroa, Kaliganj, Satkhira Sadar, Tala

The Project sought to improve maternal diet and IYCF practices through several means:

- Implementing a multi-faceted program consisting of home visits, community forums, social mobilization and improvement in public and private health provider practices and services, to support mothers to adopt appropriate maternal nutrition and IYCF practices.

- Monitoring the coverage and quality of IYCF activities and practices in program areas in order to initiate corrective actions in a timely manner.
- Monitoring the coverage of pregnant women and appropriate variety in maternal diets.
- Linking SHIKHA activities with other FTF and non-FTF programs in the 26 *upazilas*, particularly in WASH, and in food production (partnering with SPRING).
- Documenting lessons learned in the FTF areas and continuing to improve the program model for greater impact on child nutrition.

Strategic Approach

The SHIKHA technical approach was based on lessons learned from the Alive & Thrive (A&T) Project and followed a community-centered model. Under a comprehensive strategy, the Project team 1) conducted home visits, 2) established counseling and promotion of services, 3) performed supportive supervision, 4) provided oversight for monitoring and use of data for improvement of services and for demand creation, and 5) provided social behavior change communication (SBCC) activities while establishing a vigorous monitoring system and building capacity.

Activities were implemented by BRAC field workers. BRAC maintains registers of all pregnant women for antenatal care (ANC) and postnatal care (PNC) visits, and women with children under two for child visits. *Shasthya Shebekia* (SS) workers are community volunteers who conduct community education and receive small incentives for encouraging women in their communities to adopt healthier behaviors. One SS covers 200-250 households. They are supervised by *Shasthya Kormis* (SK), who conduct home visits to confirm the SS's work; one SK supervises 10 SS. For the SHIKHA project, an additional cadre of nutrition workers were recruited, Pusti Kormis (PK) who monitored the nutrition work. There was one PK per 8 - 10 SS depending on location.

Core Project Components

Home visits: SHIKHA followed a strict home visit schedule of five visits per pregnant woman and 12 visits per child under 2 years of age in specified months. Frontline workers provided mothers of children under age 2 with IYCF counseling, coaching, demonstrations, problem-solving lessons and referrals. Pregnant women also received counseling on diversity of maternal diet.

Antenatal (AN) and postnatal (PN) sessions: Specific frontline workers called *Shasthya Kormi* (SK) conducted antenatal (AN) and postnatal (PN) sessions for pregnant women and new mothers, to discuss early initiation of breastfeeding and exclusive breastfeeding and to provide support for good positioning and attachment.

Health forums: Health forums were organized in village courtyards, where mothers of children under 2 came together and discussed child health and feeding practices, and also shared their best practices.

Social mobilization sessions: Field workers organized group meetings at the community level for influential members of society, fathers and other community members to raise awareness of maternal and child nutrition, maternal diet, IYCF and hygiene, and also to seek the commitment of influential figures in the community to take action in support of maternal diet, IYCF and handwashing.

Mass media and special events in media-dark areas: The SHIKHA team conducted mass media outreach in hard-to-reach villages where electronic media do not reach. These were special communication events to make community members, including mothers of children under 2, more aware of the four

high-impact behaviors: early initiation of breastfeeding; exclusive breastfeeding; complementary feeding; and handwashing.

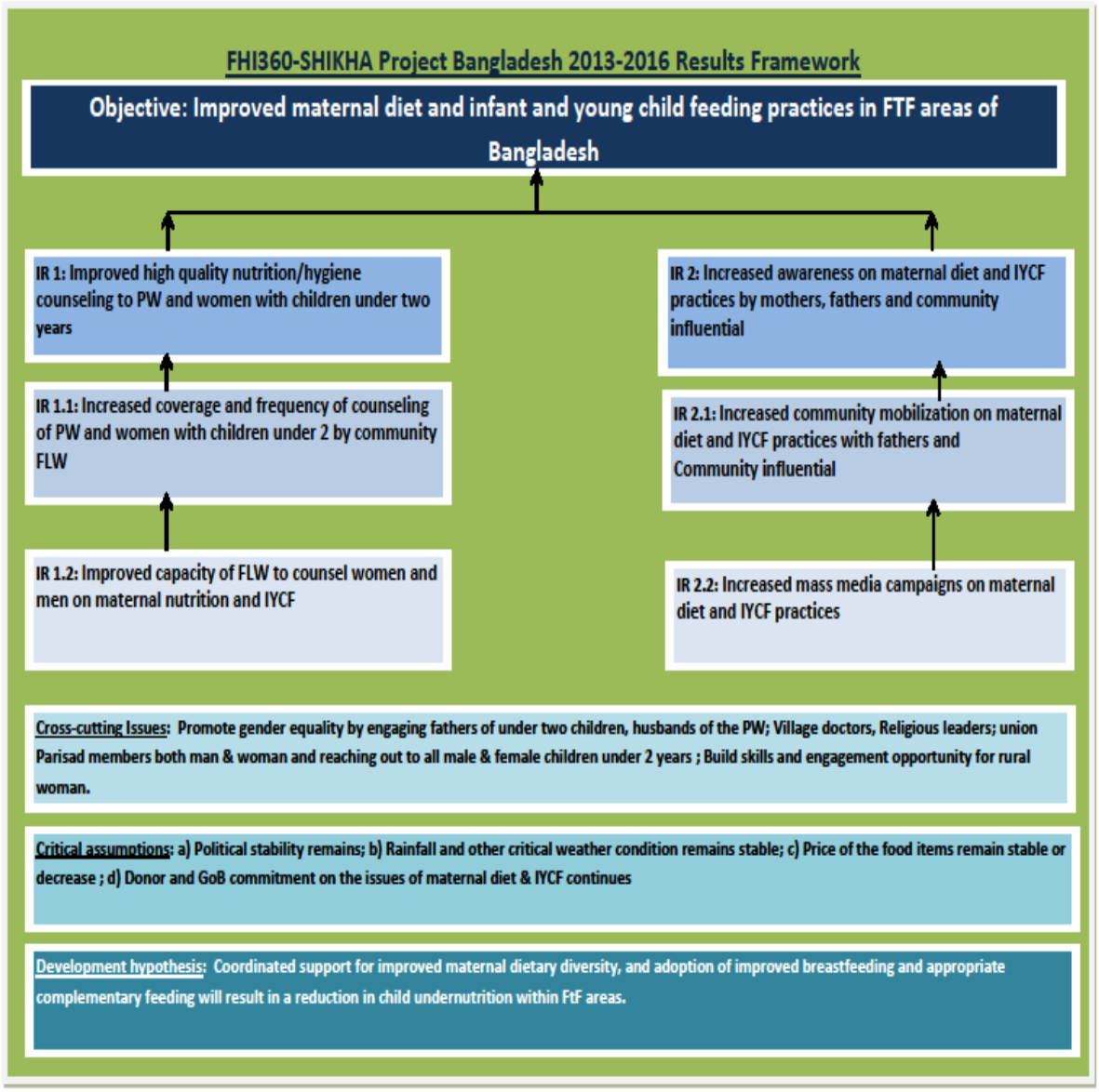
Key Indicators

- Maternal dietary diversity for pregnant women
- Early initiation of breastfeeding
- Exclusive breastfeeding
- Introduction of complementary food at 6 months of age
- Minimum diet diversity (4+ food groups) for children 6 to 23 months
- Minimum meal frequency for children 6 to 23 months
- Minimum acceptable diet (4+ food groups *plus* minimum meal frequency) for 6 to 23 months
- Consumption of iron-rich foods (animal source) from 6 months of age
- Maintenance of handwashing stations at child feeding areas

Activities and Results

SHIKHA activities were linked to USAID's Country Development Cooperation Strategy results framework. The Project contributed to Intermediate Result 2.3. "Improved nutrition and dietary diversity" under Development Objective# 2: "Food security improved," and to Intermediate Result 3.2. "Increased use of integrated essential family planning, health, and nutrition services" under Development Objective# 3: "Health status improved." The SHIKHA Project Results Framework is detailed in Figure 1.

Figure 1: SHIKHA Project Results Framework



Intermediate Result 1: Improved high-quality nutrition/hygiene counseling to pregnant women and women with children under 2 years

Under Intermediate Result 1, the Project focused on increasing coverage, frequency and quality of counseling, building capacity of frontline workers to deliver counseling services to men and women.

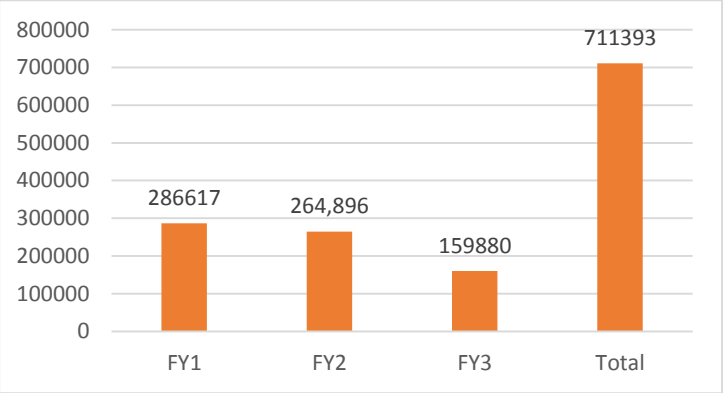
Household visits by frontline workers, *Pushti Kormi* (PK) and *Shasthya Shebika* (SS)

The Project ensured maximum coverage by trained field workers, who addressed the barriers to better feeding behaviors and counseled pregnant women and mothers of children 2 years or younger on correct feeding practices. Every pregnant woman received five visits during pregnancy and every mother of children 2 years or younger received 12 counseling visits, demonstrations and problem solving support related to feeding practices. SHIKHA enrolled 468,351 pregnant women: 161,570 (99% of target), were counseled on maternal diet during home visits. A total 1,005,946 children under 2 years were enrolled and 298,465 of these (91% of target) were reached by USAID-supported nutrition services during home visits.

Health forums and courtyard meetings

A total of 711,393 pregnant women, adolescents and mothers of children under 2 years were reached through health forums and courtyard meetings during the Project, and received messages on maternal dietary diversity during pregnancy, IYCF and hygiene. Frontline workers organized and facilitated these health forums and courtyard meetings, forming several small groups in each village (Figure 2).

Figure 2: Number of participants covered through health forums/courtyard meetings, by year



Training and materials

Basic training: SHIKHA offered five-day, hands-on trainings on IYCF and two-day trainings for project staff, on maternal nutrition using the national training curriculum: 7,148 staff (99.8% of target) received training on basic IYCF and maternal nutrition. (See Table 2)

Table 2: Staff receiving basic and refresher trainings, by year

Item	Year 1		Year 2		Year 3		Total	
	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
Basic training	6,500	6,446	208	242	460	460	7,168	7,148
Refresher training	10,000	9,902	5,966	6,733	4,486	4,522	20,452	21,157

Refresher trainings: The Project offered refresher trainings for frontline staff to improve their use of nationally approved IYCF tools during home visits, to improve their counseling skills, to improve their use of IYCF job aids and handwashing job aids and to improve their use of 250ml demonstration bowls for complementary feeding.

These maternal nutrition job aids were developed specifically for Bangladesh and were thoroughly field-tested. The refreshers helped attendees to properly use observation checklists for pregnant women, children 0 to 6 months and children 6 to 23 months. A total 21,157 staff (104.7% of target) received refresher trainings.

The Project sought to clearly define specific targets for frontline workers and supervisors to ensure balanced coverage and supervision (Table 3).

Table 3: Targets for coverage by project staff

Workers	Allocation
1 *Shasthya Shebika* (SS) (frontline worker) for every 200 households	1 SS covers approx. 23 pregnant women and 43 children under 2 years
1 *Pushti Kormi* (PK) (frontline worker) for every 8 *Shasthya Shebika*	1 PK covers approx. 184 pregnant women and 328 children under 2 years
1 Program Organizer (PO) for every 12 *Pushti Kormi* and 96 *Shasthya Shebika*	1 PO covers approx. 276 pregnant women and 3,936 children under 2 years

Frontline workers invested considerable time in conducting household visits for counseling, demonstration of better practices and for problem solving. They maintained registers of pregnant women and IYCF registers, where every pregnant woman and child under 2 years was logged. They then provided these lists every month for update of the main register.

Printing of revised tools and materials: SHIKA's most innovative idea was Food Plate, which was rigorously reviewed and field-tested by partners and by the MOHFW Technical Committee on Information-Education-Communication (IEC). In Year 2, Food Plate was implemented with wide acceptance.

The Project produced a total 18,500 plates and distributed these to staff and government frontline workers. The team also developed and printed 250 social mobilization flipcharts for social mobilization orientations at the *upazila* level. Staff also printed 1,000 IYCF posters for distribution at MOHFW facilities (district, *upazila*, union and community levels).

Observation checklists: Throughout the Project, *Pushti Kormi* and POs conducted supervision of frontline workers using observation checklists to follow-up on their counseling practices regarding maternal diet, maintaining supply of breastmilk, improving complementary feeding, feeding of unwell children and maintenance of handwashing stations. POs analyzed the checklists each month for frontline workers and arranged hands-on training for them in areas where performance was low. Staff completed a total 65,674 supervision checklists over Project life (Figure 3).

Performance incentives: SHIKHA introduced performance-based cash incentives for frontline workers and other staff. *Pushti Kormi* recorded the work of frontline workers, logging visits to households with children 0-24 months, and type, timeliness and appropriateness of services based on the age of the child. Registers were divided into age group and action performed (Table 4 and Table 5).

Figure 3: Instances of supervision by PKs & POs

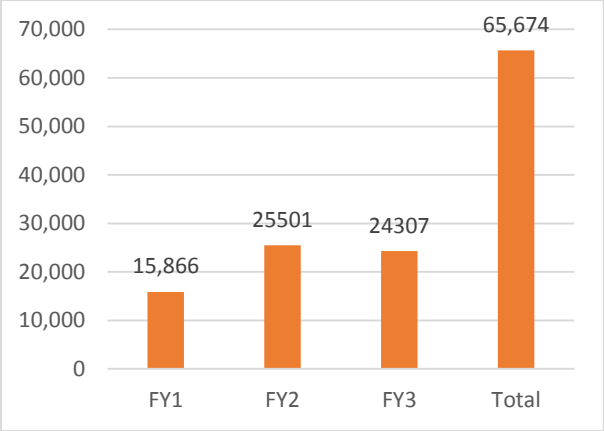


Table 4: Home visit schedule for pregnant women, by Pushti Kormi

	Month of pregnancy				
	3-4	5	6	7	8-9
Visit Schedule	1st visit	2nd visit	3rd visit	4th visit	5th visit

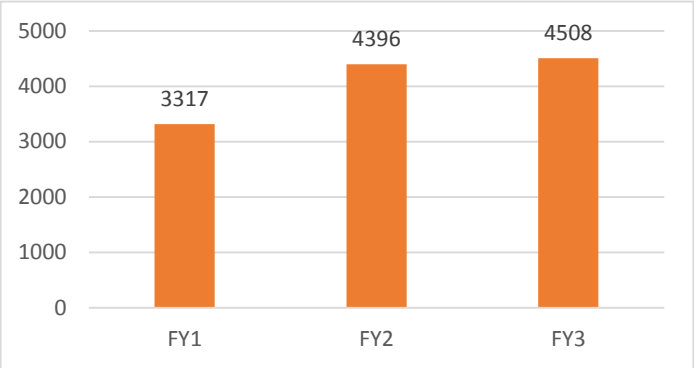
Table 5: Home visits to households with children under 2 years, by Pushti Kormi

	Age of child (months)				
	0-8	9-10	11-12	15-18	23-24
Number of visits	8 (1/month)	1	1	1	1

These registers also included space to record whether frontline workers identified any problems and whether these were resolved or were referred to a health facility or other healthcare provider. Workers also ensured that visits were accurately recorded and that this information was recorded in the register. At the end of each month, *Pushti Kormi* tallied incentives and submitted this to program organizers. These were then verified at the *upazila* office, where 20% to 30% were randomly checked for accuracy. Monitors based at *upazila* offices would then double-check, spending about five days per month on the task. For this they would randomly select the work of individual Pushti Kormi, visit the households that they said they had visited and verify the IYCF practices of the mothers in those households.

SHIKHA paid incentives to 4,508 frontline workers over the Project period, and FHI 360 has since initiated a discussion with BRAC to continue the incentive system (Figure 4).

Figure 4: Numbers of frontline workers receiving incentives by year



Intermediate Result 2: Increased awareness on maternal diet and IYCF practices by fathers and influential community figures

Under Intermediate Result 2, the Project used community mobilization and mass media campaign strategies to improve maternal diet and IYCF practices.

Community mobilization

SHIKHA tapped influential members of the community to help spread the word on improved feeding practices. These individuals can be helpful in addressing the barriers and taboos that reinforce undesirable practices at the household level. The Project identified potential figures, including fathers of children 2 years or younger, doctors, traditional birth attendants (TBAs), religious leaders and local government representatives as partners who would have some sway with SHIKHA target audiences. SHIKHA offered these individuals orientations on maternal nutrition, IYCF and correct feeding practices, and 40,378 of them (111.2% of target) were brought in over the life of the Project (Table 6).

Table 6: Orientations for influential individuals in the community

Type of Individual	Year 1	Year 2	Year 3	Total
Fathers of children under 2 years	9,150	6,138	3,580	18,868 (47%)
Village doctors	5,617	1,539	1,037	8,193 (20%)
Bachelor of Medicine and Bachelor of Surgery (MBBS) doctors	115	74	110	299 (1%)
Imams	3,587	1,550	518	5,655 (14%)
Local government representatives	1,047	1,550	280	2,877 (7%)
Traditional Birth Attendants	2,983	1,503	0	4,486 (11%)
Total	**22,499**	**12,354**	**5,525**	**40,378 (100%)**

Mass media campaigns

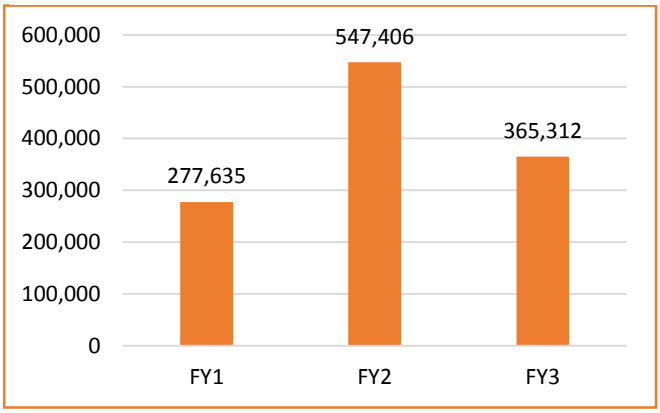
SHIKHA conducted mass media and special communications event strategies to build demand for services and to reinforce better behaviors. Staff produced seven national TV commercials on IYCF and handwashing that addressed specific barriers to good IYCF practices, and presented them in media-dark villages. The Alive & Thrive Project aired seven TV commercials on national channels under a cost-sharing agreement with SHIKHA Project partner, Asiatic Marketing & Communications (Asiatic), to

facilitate these shows at the village level. There were also ten branded vehicles with logos and audiovisual equipment available for media events.

In total, SHIKHA conducted 7,520 mass media shows in 2,400 media-dark villages (81% of the 2,958 total media-dark villages identified). These shows had an interactive format, where the participants had the opportunity to respond to what they had learned and ask questions on IYCF and handwashing. In total, 1,190,353 participants saw these shows during the Project lifetime.

Audiences in the media campaign varied in age. The majority were mothers, adolescents, youth and mothers-in-law. Fathers of children less than 2 years old were also represented. These advertisements were aired during prime time, for example during Bangla feature films, reality shows, dramas and news.

Figure 5: Numbers of people participating in mass media campaign by year



Media shows at village markets/fairs to reach more men

SHIKHA staff discovered early that male participation varied during media campaigns, and to increase involvement of men, the Project initiated customized shows at village markets (*hat*), where men in Bangladesh gather to sell goods and socialize. Initially the team piloted two shows at two village markets and the outcome was positive. They customized the shows with two TV commercials, one on breastmilk substitutes and one on animal protein, and followed these up with discussions on maternal diet during pregnancy.

The shows lasted 30 to 35 minutes each and one of them attracted over 100 participants. Based on field trials in October and December 2015, the Project then developed a detailed communication and implementation strategy for village market/fair shows from January to March, 2016, through engaging BRAC and local government representatives. A total of 40 shows were organized at 40 village markets/fairs reaching a total 9,265 men.

Integration of FTF messages

The SHIKHA Project collaborated with other FTF projects—AIN, SPRING, Seasmpur, the USAID Horticulture Project and *MaMoni*—to integrate specific messages about food and nutrition into the mass media campaign (Table 7).

Table 7: Project and Topics related to food and nutrition integrated into campaign

FTF Project Name	Topics Included in Campaign
SHIKHA Project	• Diet during pregnancy • Early initiation of breastfeeding • Exclusive and complementary breastfeeding • Handwashing

FTF Project Name	Topics Included in Campaign
AIN	• Small fish farming and benefits of small fish for child nutrition • Tilapia farming
Spring	• *Hajol* (an improved device for egg production) • "Tippy Tap" (for handwashing)
USAID Horticulture Project	• Sweet potatoes • Homestead vegetable gardens

SHIKHA also incorporated messages on antenatal care and neonatal check-ups from the *MaMoni* Project into the ongoing media campaign in the Jalakathi district of Barisal.

Cross-cutting Issues

Promoting gender equality

The majority of BRAC volunteers and staff who carried out home visits and provided specialized counseling on IYCF were women. The Project sought to increase male involvement by specifically targeting men as a primary audience of the social mobilization sessions to raise awareness of IYCF and seek their commitment. This was part of a larger strategy to bring in influential members in the community and family elders to improve IYCF practices. The Project engaged fathers of children aged 2 or younger, husbands of pregnant women, village doctors, religious leaders, *Union Parishad* and other male figures in Years 2 and 3.

Collaboration and coordination at the national level

The SHIKHA Project staff prioritized collaboration and coordination with a variety of stakeholders in Bangladesh. The Project staff actively participated in coordination meetings with IPHN and FTF partners, and regularly presented project updates to NNS partners and USAID partners. In addition, the Project took an active role in organizing meetings of the IYCF Alliance. The SHIKHA Project Chief of Party also served as an Executive Committee member on the SUN Civil Society Alliance.

Collaboration with IPHN: Project staff attended a series of meetings at IPHN to share progress and demonstrate toolkits developed by the Project on dietary counseling for pregnant women. One result from these meetings was a request to the MOHFW by its Information-Education-Communication (IEC) Technical Committee for endorsement and widespread use of the Food Plate model developed by the Project. This request was approved by the MOHFW. The SHIKHA Project also extended technical support to IPHN to organize regular technical meetings. SHIKHA staff who attended these meetings shared progress on the Project and, along with IPHN and the United Nations Children's Fund (UNICEF), facilitated publication of the semi-annual bulletin of the IYCF Alliance.

Collaboration with Government of Bangladesh: The Project collaborated closely with MOHFW and organized meetings to share project information. The Additional Secretary for Health & Family Welfare (Primary Health & WHO) attended and expressed commitment to support the IYCF Alliance initiative.

The staff also engaged MOHFW on media campaigns and held joint site visits with officials to strengthen collaboration. At the national level, the Project was actively involved with not just the IYCF Alliance, but also the Nutrition Working Group (NWG) and the BCC Working Group, and shared lessons learned.

SHIKHA made several joint visits to project sites with IPHN and USAID officials, to showcase its approach, activities at the community level and key strengths for achieving results. These visits were attended by various representatives including the Director of IPHN, Line Director of the National Nutrition Services (NNS), Deputy Director of the Directorate General of Health Services (DGHS), Programs Managers from NNS, civil surgeon from Barisal district, AOR of the SHIKHA Project and representatives from FHI 360 and BRAC.

During these visits, attendees held discussions with parents of young children, influential members of the community and Project staff, and were given presentations on SHIKHA progress by division-level staff. They viewed mass media shows at the village level and observed complementary feeding practices for children aged 7 to 23 months, going house to house and asking questions related to knowledge, practices, counseling processes and challenges of IYCF.

Regional-level SHIKHA representatives coordinated on a regular basis to share project updates with district- and *upazila*-level representatives from MOHFW, FTF managers' and government officials from multiple sectors.

Figure 6: Food Plate and Guidelines

After lengthy collaboration with MOHFW in February 2016, IPHN and NNS reviewed the Food Plate model in its general form, and the nutritionist and communication specialist present at the meeting proposed a separate version for pregnant and lactating women. They also suggested (1) making the message more action-oriented, (2) changing some of the images and (3) producing a version for nutrition educators from all agencies working in Bangladesh, including frontline workers at government agencies. The Food Plate was modified to incorporate these recommendations, and in March 2016 the MOHFW IEC Technical Committee approved the model and guidelines on how to use it (Figure 6).

The Health, Population & Nutrition Best-Practices Showcasing Event ("Safolloa Gatha"): In 2016, SHIKHA participated in a best-practices event organized by the Ministerial BCC working group in collaboration with BKMI, called *Safolloa Gatha,* or "success story." The team demonstrated SHIKHA's BCC materials, tools, projects, brochures and television spots. They also performed a stage show on community outreach during a showcasing event. The main objective was to highlight the process for media campaigns in rural settings and how they contribute to changing behaviors on diet during pregnancy, IYCF and handwashing. Program Managers from IPHN took part in the closing session of the show and shared learning from SHIKHA's field visits with USAID and IPHN.

Collaboration with FTF Partners: The Project established strong collaboration with FTF partners, which was critical for the media campaign and design and rollout of the Food Plate. The SHIKHA Project also collaborated with World Fish and FAO, and Project staff worked with SPRING to expand interventions related to dietary diversity in common work areas for both organizations. SPRING provided support to SHIKHA in promoting nutrient-dense homestead gardens in Project areas. SHIKHA incorporated key

messages about this in media campaigns and SPRING provided training on how to establish the gardens as part of its "Farmer Nutrition School" approach.

Promotion of Breastfeeding

Each year the SHIKHA Project participated in World Breastfeeding Week at the national level. The Project set up a stall and displayed information about project activities along with breastfeeding promotional materials. The stall was visited by high level government officials (including the Secretary of Health & Family Welfare, the Director of IPHN and the Line Director of NNS) along with NNS program managers and participants from government and partners.

Figure 7: Breastfeeding promotion rally

In the Jhalokati, Potuakhali and Bhola districts of Barisal division, SHIKHA participated in annual mass awareness-raising rallies and discussion forums along with SPRING and the USAID Maternal & Child Health Integrated Program (MCHIP). District administrators, Health & Family Planning officials, medical officers, nurses, media personalities, frontline workers and NGO workers also participated in these rallies (Figure 7)

Figure 8: Media Coverage of Roundtable on breastfeeding

In years 2 and 3, SHIKHA Project facilitated World Breastfeeding Week events in five target districts, with collaboration from government agencies, FTF partners, UN and other international organizations. This included meetings and rallies at the *upazila* and district levels. The theme of World Breastfeeding Week 2016 was Raising Awareness of the Links Between Breastfeeding and the Sustainable Development Goals (SDGs).

In August 2016, SHIKHA facilitated a roundtable discussion, "Protecting and Promoting Breastfeeding: Challenges and Opportunities to Implement BMS 2013," in partnership with the Bangla daily, *Kaler Kantha*, the *Daily Sun* and News24. Twenty key experts from GOB, international organizations, UN, academia, research institutes, private agencies and media participated in this roundtable. The State Minister for Health & Family Welfare, Mr. Zahid Maleque, a deputy of the Minister for Health & Family Welfare, attended as lead guest while *Kaler Kantha* Editor, Imdadul Haque Milan, moderated the roundtable.

Dr. Tahmeed Ahmed, director of the Center for Nutrition & Food Security at the International Center for Diarrheal Disease Research (ICDDR) was the keynote speaker while Dr. Iftekhar Rashid, Nutrition Specialist at USAID Bangladesh,

USAID Development Outreach Coordinator Troy Beckman, and SHIKHA Chief of Party (COP), Dr. Shamim Jahan, shared their key points in this roundtable discussion. News24 broadcast the event live and *Kaler Kantha* and the *Daily SUN* released stories in Bangla and English (Figure 8).

Integrating WASH and Nutrition

The SHIKHA Project staff sought to integrate WASH into nutrition programming for USAID-funded projects in FTF areas through WASH-Plus. WASH-Plus focuses on sanitation, particularly safe disposal of infant, child and animal feces.

SHIKHA incorporated safe management of infant feces into its activities using a "small doable actions" approach to ensure better nutrition outcomes for beneficiaries. For this, WASH-Plus trained a pool of master trainers, who then trained frontline workers. These frontline workers addressed safe infant feces management practices through behavior change sessions and counseling during home visits, and also during community mobilization activities. WASH-Plus also conducted a two-day training on hygiene and sanitation for BRAC program organizers. Over 5,700 Frontline workers put this knowledge to use during social mobilization sessions.

Monitoring and Evaluation

SHIKHA developed a robust results framework and monitoring and evaluation (M&E) plan, where output level indicators were collected from routine monitoring data and annual surveys. Data collection sources were annual cross-sectional surveys conducted by CIPRB, quarterly monitoring and quality assurance by BRAC, and annual monitoring surveys conducted by FHI 360.

Annual Surveys

In December 2013, FHI 360 partner, CIPRB, conducted the first annual survey for the SHIKHA Project that provided baseline data to inform the project activities and messages. The survey included 2,040 respondents randomly selected from SHIKHA Project intervention areas. CIPRB followed a rigorous protocol to ensure data quality that included training for data collectors, data checks at the field level and regular cross checks during data collection and analysis. The Project provided feedback to data collectors, developed a database, worked to ensure error-free data, cleaned data as necessary and triangulated findings with national-level data.

CIPRB conducted the second survey in 2015 (midline survey). Participants included 1,522 mothers of children under 2 years and 516 pregnant women who were randomly selected from intervention areas. In addition, 514 pregnant women were also included from non-intervention areas. CIPRB shared the results of the survey with stakeholders and field-level staffs

CIPRB conducted a third and final survey in 2016 that served as the Project endline survey. There were 1,275 pregnant women randomly selected from the intervention areas. Data were collected on diet-related knowledge, dietary intake and socio-demographic characteristics. There were also 1,016 pregnant women included in the survey from randomly selected non-intervention (control) areas. The results included dietary diversity score (DDS) for each woman in the study, calculated by totaling the number of food groups (from nine groups) consumed in the 24 hours prior to interview. In addition to pregnant women, staff also randomly selected 1,500 mothers of children less than 2 years old from intervention areas and interviewed them on feeding practices for infants and young children. The study

results were shared with local- and national-level stakeholders. All survey results were shared with key stakeholders and final reports are available with FHI 360.

Project Monitoring

During the Project, the BRAC monitoring team collected data each quarter from a group of randomly selected respondents, including pregnant women, mothers of children 0-6 months and mothers of children 6-23 months. These data were used for monitoring and quality assurance. A total of 936 respondents participated over the life of the project.

FHI 360 also conducted monitoring surveys in Year 2 and Year 3 in all 26 *upazilas* targeted by the Project. Using new mobile data collection devices, staff randomly selected four frontline workers from each *upazila* to collect data from four sample respondents, including one pregnant woman and one mother of a child age 0-6 months, one mother of a child 7-12 months and one mother of a child 13-24 months. This produced a total of 412 respondents. Data from these monitoring surveys were used to monitor and measure project outcomes.

Throughout the Project, FHI 360 and BRAC jointly visited field offices to monitor and validate data from the monthly, quarterly and annual reports. This provided an opportunity to help program managers make decisions at the local level to improve performance.

Data Quality Assessments

FHI 360 conducted data quality assessments (DQA) in select *upazilas* to assure that surveys, observation checklists, refresher training registers, monthly *upazila* reports and reports from frontline workers were carried out and analyzed properly. During these assessments, FHI 360 staff examined three indicators: number of children under 2 years; number of pregnant women; and number of observation checklists completed. These activities led to significant improvement in data quality and reporting. Staff found that there were no discrepancies between the register and the final compilation.

Qualitative Survey

SHIKHA conducted a qualitative study to evaluate the impact on quality of diet for pregnant adolescents and to identify potential barriers to improvement. In the midline survey, the Project found no significant improvement in dietary diversity among adolescent pregnant women, although there had been improvements among older pregnant women. A team of three research assistants, including two with anthropology backgrounds, conducted 15 focus groups and eight in-depth interviews to probe the reasons for this. Participants included (1) adolescent pregnant women, (2) pregnant women who experienced pregnancy during their adolescence and adulthood, (3) mothers-in-law and fathers-in-law, (4) husbands, and (5) frontline workers. In total, 120 individuals participated in these focus groups, and data reveal that the main barriers to dietary diversity among adolescent pregnant women were:

- living in poverty (most of their husbands were adolescents or young adults and not yet fully employed or still students);
- low control over resources (dominated by mothers-in-law and husbands);
- pregnancy shortly after marriage, while they were still acclimating to the new food/cultural environment of their in-laws' houses with limited information about preparing for healthy pregnancy (including nutrition);
- transitioning to a new cultural environmental was challenging; and

- limited knowledge of support and health systems with restricted mobility (they were not allowed to move because of their age).

The study also demonstrated that dietary diversity is strongly associated with socio-economic status of a household. Low socio-economic status is associated with poor, non-varying diet. The final report is available at FHI 360.

Final dissemination

The SHIKHA Project held a final event with stakeholders in both Barisal and Khulna divisions to discuss the lessons learned in the Project and share recommendations for future. Participants provided valuable feedback, which is included in the endline report.

For wider dissemination of progress, challenges and lessons learned, FHI 360 organized a national-level event jointly with IPHN in September 2016. This was attended by more than 70 participants from MOHFP, IPHN, community clinics, NGOs, FTF partner NGOs, United Nations agencies and representatives from USAID. Roxana Quader, Additional Secretary (PH&WHO) of Health & Family Welfare, attended the function as lead guest. CIPRB also made a presentation on endline findings and SHIKHA COP, Dr. Shamim Jahan, shared challenges, lessons learned and recommendations.

Key Project Outcomes

Improvements in diet of pregnant women: The SHIKHA endline survey clearly indicated that pregnant women in the 26 target *upazilas* did consume proper amounts of starchy and fleshy foods, dairy products, leafy vegetables and eggs. The mean dietary diversity score for pregnant women was 4.28 ± 1.08 at baseline and increased to 4.76 ± 1.16 at endline. Mean dietary diversity of less-educated women improved more when compared to that of women with higher levels of education. A similar trend was also observed for women of lower socio-economic status (SES). This decreased the gap in scores between less-educated and more-educated women.

Improvements in IYCF: The Project made significant improvements in indicators for IYCF, of more than 12% on average from baseline to endline for exclusive breastfeeding. For exclusive breastfeeding, there was an increase from 62% at baseline to 83% at endline of respondents reporting that they initiated breastfeeding within an hour of childbirth. At baseline less than 18% of children were eating the minimum acceptable diet. This increased to 52% at endline.

Improvement in Handwashing Facilities: The Project made gains on handwashing facilities at the household level. Among mothers of children 6-23 months, only 12% had a handwashing station at the child feeding area at baseline. This percentage more than doubled by midline to 27%, and then rose dramatically to 70% at endline.

Sustainability

The partnership with BRAC was instrumental for SHIKHA Project to ensure the sustainability of IYCF support within the BRAC system. Through this system, the Project was able to demonstrate that IYCF interventions are feasible and can produce results within a short time. The use of incentives to motivate frontline workers were successful. BRAC has now integrated basic IYCF interventions into several of its existing programs and has made a public commitment to continue to support IYCF as part of its core

interventions. The frontline workers recruited and trained on maternal nutrition and IYCF under the SHIKHA Project have been continued BRAC as regular workers.

Under the Project, BRAC supported extended geographic coverage through their community-level presence as well, and the success of the approach under the Alive & Thrive Project has already attracted additional donor funding: the UK Department for International Development (DFID) now supports IYCF activities through BRAC.

At present, local governments will continue to review data regularly and both the use of the Food Plate model and the training for MOHFW frontline workers will continue beyond project end.

Challenges

In the first year of the project, recruitment of frontline workers was delayed at the local implementing partner level by political unrest. Local staff working under BRAC could not be trained because training facilities were closed. As a result, the project rollout was delayed by almost one full quarter. Activities were interrupted in some areas during the second quarter of Year 2. While field staff continued implementing community components, supervisory visits from national and district level were hampered and mass media campaigns delayed.

Other major ongoing project challenges included:

- Frequent turnover of key positions in Health & Family Planning directorates and in IPHN, which necessitated several meetings to introduce new officers to the Project. SHIKHA had to hold several meetings with IPHN to resolve overlap with SPRING.
- Promotion of breastmilk substitutes threatened exclusive breastfeeding in some Project areas.
- Organizing sessions with influential figures was challenging, as some of the low-lying areas of the country experienced seasonal flooding.

Lessons Learned

Comprehensive BCC was essential to improving nutrition outcomes. The project used a variety of communication media to successfully effect behavior change, including one-on-one communication during home visits, community mobilization, health forums, and general and targeted mass media campaigns that integrated messages from multiple sectors. Easy-to-use tools for counseling, for example, the Food Plate, that are well accepted by both the service providers and pregnant women, can be critical communication aids for improving dietary diversity. Media campaigns played a vital role in changing behaviors in media-dark villages. Recall of messages from media campaigns on EIBF increased from 31% at baseline to 65% at endline. Other strategies, such as the use of social media, should also be considered for future programming.

Adolescent nutrition programming must be strengthened and must include mothers-in-law and other household members. As shown in survey results, special efforts are needed in order to improve adolescent nutrition during pregnancy, particularly the engagement of gatekeepers (mothers-in-law and other family members) during house visits and counseling sessions. Adolescent girls have little power within the household and these gatekeepers are critical for change.

Male engagement in nutrition was important for improving dietary diversity and IYCF practices. Findings from studies implemented during the project show that men are key gatekeepers in decision makers in dietary diversity in the household and need to be engaged and targeted for specific messages through a variety of media channels.

Integration of maternal nutrition into existing RMNACH is critical for securing positive health outcomes. Since maternal nutrition is key to ensuring safe pregnancy and to improve nutritional and development outcomes for children, it is important to integrate maternal nutrition through all existing Reproductive, Maternal, Neonatal & Adolescent and Child Health platforms (RMNACH).

Involvement of village doctors to promote breastfeeding is critical. The cooperation of village doctors was instrumental in the promotion of breastmilk substitutes; it is imperative to work closely with them to promote exclusive breastfeeding.

Recommendations

General

- Integrate maternal nutrition as a critical component of RMNACH services in the next government health and nutrition program (2017-2021). The use of existing healthcare workers and RMNACH platforms is critical for effective and efficient implementation.
- Center nutrition programs in the community. Community-based programs play a crucial role in improving nutrition outcomes for adolescents, pregnant women, lactating women and children under 2.
- Integrate WASH into all nutrition programs.
- Include counseling as a vital component in nutrition programs to improve exclusive breastfeeding and complementary feeding.

Special target groups

- Focus on adolescents as a key target group for all RMNACH services and programs.
- Include husbands and in-laws in all activities through counseling and community outreach to improve health/nutrition outcomes. These groups are key gatekeepers.

Data analysis, technical assistance and training

- Conduct regular reviews of nutrition data at the *upazila* and district levels to monitor performance and share partner contributions for stronger monitoring, accountability and coordination. As a model example, the SHIKHA Project worked with GOB on data review on a quarterly basis.
- Provide high-quality technical assistance and competency-based training to build capacity, knowledge and skills among healthcare workers on nutrition service delivery and benefits of key nutrition interventions.

ANNEXES

Annex 1: SHIKHA Implementation Chart by Intermediate Result Area

Program Area	Activity	Partners/ Collaboration	Implementation Timeframe			Achievement	Geographic Location and Achievement
			Y1	Y2	Y3		
IR1	Improved high quality nutrition/hygiene counseling to pregnant women and women with children under 2 years.						
IR 1.1.	Increased coverage and frequency of counseling of pregnant women and women with children under 2 years by frontline workers.						
	Improved capacity of frontline workers to counsel women and men on ensure maximum coverage and high frequency of visits to address the barriers to feeding behaviors, demonstrate and counsel pregnant women and mothers of children under 2 in correct feeding practices.						
1.1.1.	Conducted household visits by PK and SS: Every pregnant woman receives 5 visits during pregnancy and every child < 2 years receives 12 visits with counseling, demonstration and problem solving for feeding practices,	BRAC	x	x	X	Project reached 85% of the target group	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira – Total 26 upazilas
1.1.1. a	Conducted home visits for pregnant women - demonstration, counseling and problem solving.	BRAC	x	x	X	Population estimate for 6 mos.: 102,030. Project target to reach at least 80% of this group. Coverage of pregnant women: 161,570 with highest enrollment 468,351	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira – Total 26 upazilas
1.1.1. b	Children < 2 years: home visits, demonstration, counseling and problem- solving. Population estimate for 6 mos.: 272,624	BRAC	x	x	x	Project target to reach at least 80% of the target group. Coverage of children under 2: 298,456, with highest enrollment 1,005,946	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira – Total 26 upazilas

Program Area	Activity	Partners/ Collaboration	Implementation Timeframe			Achievement	Geographic Location and Achievement
			Y1	Y2	Y3		
1.1.2.	Nutrition group counseling: pregnant women and mothers of children < 2 years receive group counseling in existing Essential Health Care program by BRAC.						
1.1.2. a	Pregnant women and lactating mothers: counseling on maternal nutrition and IYCF during routine AN & PN sessions.	BRAC	X	X	X	Sessions: 149,907	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 *upazilas*
1.1.2. b	Health forums/courtyard meetings.	BRAC	X	X	X	Health forums: 711,393 participants	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 upazilas
IR 1.2.	Improved capacity of frontline workers to counsel participants on maternal nutrition & IYCF.						
1.2.1.	SHIKHA will conduct training and orientation on maternal diet and IYCF for frontline workers from both the Project and GOB H&FP to ensure uniformity in understanding and communication of messages on nutrition.						
1.2.1. a	Refresher training/orientation of H&FP frontline staff on maternal nutrition and IYCF.	FHI 360 & BRAC	X	X	X	Participants: 4,730 Batches: 128	Barisal & Khulna - upazilas
1.2.1. b	5-day basic IYCF and maternal nutrition training	FHI 360 & BRAC	X	X	X	Participants: 6,426 Batches: 978	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 upazilas
1.2.1. c	1-day special refreshers for SS & PK	BRAC	X	X	X	Participants: 12,392 Batches: 1,180	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 upazilas
1.2.2.	Printing of tools and materials.						
1.2.2. a	IEC Technical Review Committee approval through IPHN and reprinting of food plates for pregnant women.	FHI 360, IPHN FAO, UNICEF, BIRDEM, Worldfish, CIP, SPRING	X	X	X	18,500 food plates printed for counseling of pregnant women	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 upazilas

Program Area	Activity	Partners/ Collaboration	Implementation Timeframe			Achievement	Geographic Location and Achievement
			Y1	Y2	Y3		
1.2.2. b	Reprinting & distribution of maternal nutrition job aids for frontline workers.	FHI 360, IPHN, A&T & BRAC	X	X	X	Maternal nutrition job aids printed and delivered to frontline workers	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 upazilas
1.2.2.	Supportive supervision and incentives for SS to improve performance.						
1.2.2. a	Supervisory visits using observation checklist.	FHI 360 & BRAC	X	X	X	Observation checklist completed: 65,674	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 upazilas
1.2.2. b	Incentive schemes for SS to maintain high coverage, quality of counseling and practice by pregnant women and mothers of children under 2.	BRAC	X	X	X	SS: 4,508	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 upazilas
IR2	**Increased awareness on maternal diet and IYCF practices by fathers and influential community figures**						
IR 2.1.	Increased community mobilization on maternal diet and IYCF practices by fathers and influential community members.						
IR 2.1.1.	Conducted orientation sessions for fathers of children under 2, village doctors, religious leaders and Union Parishad on maternal nutrition & IYCF and their role in the community.	BRAC	X	X	X	Sessions: 1,687 No. of participants: 40,378	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 upazilas
IR 2.2.	Increased mass media campaigns on maternal diet and IYCF practices.						

Program Area	Activity	Partners/ Collaboration	Implementation Timeframe			Achievement	Geographic Location and Achievement
			Y1	Y2	Y3		
IR 2.2.1.	Conducted video shows in media-dark and hard-to-reach villages. (Identify villages, coordinate with district representatives from agriculture, fisheries, livestock, integrate messages and communication materials from other sectors/projects, train team, perform shows)	Asiatic and FHI 360	X	X	X	Shows: 7,520 Total villages: 2400; Total audience: 1,190,353	Barisal, Jhalokathi, Patuakhali, Bhola and Satkhira - Total 26 upazilas

Annex 2: Enrollment of pregnant women, by FY

District	Upazila	Children under 2 yrs. enrolled				Pregnant women enrolled			
		Baseline	FY 13-14	FY 14-15	FY 15-16	Baseline	FY 13-14	FY 14-15	FY 15-16
Barisal	Agailjhara	4,266	6,049	23,551	15,914	1,143	2,555	9,570	11,523
	Babuganj	4,465	6,671	30,664	19,005	1,542	3,297	12,256	13,162
	Bakerganj	9,445	13,864	57,134	37,469	3,373	7,034	25,872	27,013
	Banaripara	3,788	5,745	25,423	16,279	1,273	3,013	11,291	11,728
	Gaurnadi	4,300	6,413	29,470	17,131	1,248	3,026	12,872	12,505
	Muladi	5,234	7,239	31,145	19,617	1,669	3,457	13,292	14,310
	Uazirpur	6,074	9,188	38,832	22,646	1,835	4,551	16,342	16,420
Bhola	Sadar	9,213	14,001	64,441	39,611	3,181	7,342	30,768	28,556
	Burhannuddin	6,236	9,761	38,838	26,342	2,335	5,133	18,675	19,150
	Charfashion	16,785	23,913	90,622	60,910	5,908	12,201	46,285	45,062
	Dawlatkhan	7,120	10,421	37,568	25,373	2,606	4,816	18,258	18,756
	Lalmohan	10,036	14,554	57,972	37,594	3,536	7,775	27,088	27,908
	Tazumuddin	4,288	6,339	25,975	16,956	1,293	2,961	12,079	12,228
Jhalokathi	Sadar	3,646	5,443	23,109	16,173	1,043	2,550	10,004	11,636
	Kathalia	2,607	4,270	17,962	10,858	760	1,997	7,839	7,934
	Nalchhiti	3,615	6,125	28,797	17,984	1,068	2,901	12,276	12,866

District	Upazila	Children under 2 yrs. enrolled				Pregnant women enrolled			
		Baseline	FY 13-14	FY 14-15	FY 15-16	Baseline	FY 13-14	FY 14-15	FY 15-16
	Rajapur	3,438	5,134	24,586	14,663	1,054	2,764	11,091	10,591
Patuakhali	Sadar	9,107	13,160	48,627	31,622	3,260	7,265	24,310	24,632
	Bauphal	10,454	16,264	62,822	40,919	4,159	8,424	26,763	29,640
	Dumki	2,427	3,567	13,345	8,811	895	1,645	5,019	6,285
	Mirzaganj	3,874	5,068	19,915	13,354	1,227	2,204	8,285	10,351
Satkhira	Sadar	8,700	13,686	56,910	36,867	2,732	6,519	25,804	25,992
	Debhata	3,913	5,534	21,860	13,303	856	2,083	9,350	9,663
	Kaliganj	8,808	12,671	47,797	29,216	1,603	4,675	19,517	21,165
	Kolaroa	4,941	7,610	36,188	22,370	1,615	3,729	16,158	16,015
	Tala	8,010	11,967	52,393	31,424	2,897	6,503	23,839	23,260
Total		164,790	244,657	1,005,946	642,411	54,111	120,420	454,903	468,351

Annex 3: Performance Data

No	Indicator	Target 2015-16	Achieved 2015-16
1	Women's dietary diversity: mean number of food groups consumed by pregnant women in SHIKHA areas	4.78	4.76
2	% of infants receiving early initiation of breastfeeding (EIBF)	73.8%	83.1%
3	Prevalence of exclusive breastfeeding of children under 6 months of age	83.98%	85.4%
4	% children 6-23 months introduced to complementary food (solid, semi-solid or soft) at 7 months	72%	82.7%
5	% children 6-23 months with minimum diet diversity	32.6%	56.6%
6	Prevalence of children 6-23 months receiving a minimum acceptable diet (F Standard Indicator 3.1.9.1-1)	30.3%	51.5
7	% children 6-23 months maintaining minimum meal frequency	80.8%	87.1%
8	% children 6-23 months consuming iron-rich food	67.8%	74.2%
9	% mothers with children 6-23 mos. maintaining handwashing station (water container with water and soap/soapy water) near place of feeding	24.2%	69.9%

No	Indicators	FY14		FY15		FY16		Overall achievement
		Target	Achieved	Target	Achieved	Target	Achieved	
10	Number & % of SS received any performance incentives.	100	59%	80%	83%	80%	85%	85% of target
11	Number of children under 2 reached by USG-supported nutrition programs (FTF indicator and F Standard Indicator 3.1.9-15)	327,415	244,657	327,415	298,465	272,624	291,823	298,465 (91% of target)
12	Number of rural households benefiting directly from USG interventions (FTF indicator 4.5.2-13).	489,961	363,795	489,961	459,598	374,654	415,600	459,598 (93.8% of target)
13	Number and % of targeted pregnant women counseled on maternal diet during home visits.	162,546	120,420	162,546	161,570	102,030	123,777	161,570 (99%) of target)
14	Number and % of targeted mothers of children 0-6 mos. counseled on EBF during home visit.	160,224	116,803	160,224	149,543	103,409	123,793	149,543 (93.3% of target)
15	Number and % of targeted mothers of children 6-23 mos. counseled on CF during home visit.	167,191	127,854	167,241	148,922	169,215	168,030	168,030 (99.3% of target)
16	Number and % of targeted mothers of children 6-23 mos. counseled on HWS maintenance during home visit.	167,191	127,854	167,241	148,922	169,215	168,030	168,030 (99.3% of target)
17	Percentage of targeted households visited according to visit schedule in the previous six months.	70%	90%	75%	97%	80%	97%	97% of target
	Number of people trained in child health and nutrition through USG-supported programs (F Standard indicator 3.1.9-1) NEW TRAINEES (individuals)							

No	Indicators	FY14		FY15		FY16		Overall achievement
		Target	Achieved	Target	Achieved	Target	Achieved	
18	Basic training.	6,500	6,446	208	242	460	460	7,148 (99.8% of target)
	Special refresher training.	10,000	9,902	5,966	6,733	4,486	4,522	21,157 (103.4% of target)
19	% of village doctors oriented in SHIKHA area delivering correct message on IYCF and maternal diet	40%	NA	60%	NA	NA	NA	Not done, but included with influential people
20	% of health professionals, primary healthcare workers, community health workers, volunteers, non-health personnel trained in child health care and child nutrition through USG-supported programs who received at least 80% score in their training- specific post-test during the reporting year.	100%	88%	80%	100%	80%	100%	82% (average)
21	Number of influential figures (village doctors, fathers, TBA, religious leaders and *Union Parishad*) in Project area who participated in community mobilization orientation.	20,380	22,499	10,920	12,354	5,000	5,525	40,378 (111.2% of target)
22	% of influential figures (village doctors, fathers, TBA, religious leaders and elected people representative) oriented in child health and nutrition through SHIKHA who received at least an 80% score.	74%	70.4%	80%	99%	80%	97%	89% (78% targeted) (average)
23	Number of targeted media shows completed in media-dark areas.	2,580	1,720	3,440	3,440	2,400	2,360	7,520 (89.3% of target)

No	Indicators	FY14		FY15		FY16		Overall achievement
		Target	Achieved	Target	Achieved	Target	Achieved	
24	Number of targeted mothers/family members of children < 2 years, influential figures, pregnant women and their husbands (households) attending media events (total audience).	399,990	277,635	516,000	547,406	372,000	365,312	1,190,353 (92.4% of target)
25	% mothers of children < 24 months who could recall mass media messages on (1) EBF (limited to mothers of infants < 6 mos.); (2) CF; (3) handwashing.	-	-	-	-	135,372	164,788	164,788 (121.7% of target)

Annex 4: Case Studies

Case Study 1 Bina learns to improve complementary feeding practices for her young daughter

Bina, a mother of two sons and one infant daughter living in Rajguru village, Barisal district, thought she knew from her family what children need to be fed and didn't think child nutrition important. Then she attended a SHIKHA orientation where community health workers were showing different tools for better nutrition and hygiene, and giving practical demonstrations to mothers and children. She was inspired to learn more, for her 7-month-old daughter, Shahina.

A community health worker from SHIKHA offered to come to Bina's home to provide an orientation and give a practical demonstration on supplementary feeding for Shahina, the feeding that comes after six months of exclusive breastfeeding. The worker asked Bina to have on hand food items that were usually served to adults and older children for lunch.

Bina was confused. Why serve this to a 7-month-old baby? She thought you fed babies formula from powdered milk. That's what her sons had grown up on. And when the community health worker stopped by, he confirmed there would no longer be any need for powdered milk formula, informing her that children's stomachs could not absorb it easily and it may cause loose stools and diarrhea.

Rather, after exclusive breastfeeding from birth to 6 months, children can start having complementary foods starting at 7 months, such as rice, lentils, fish, meat, liver, eggs, vegetables and any type of seasonal fruit, such as banana, guava, mango and papaya - all in age-appropriate amounts.

Bina started feeding mashed foods to Shahina, such as cooked rice, lentils, sometimes fish or egg, and sometimes meat. She also provided mashed leafy greens or locally grown pumpkin, water gourd and green papaya. She mashed a small amount of each item and served it to Shahina from a 250-ml bowl each hour between 12:00 and 3:00 pm daily, as she had learned from SHIKHA. And this she complemented with breastfeeding.

Bina also learned from SHIKHA community health workers that she needed to wash her hands with soap diligently before preparing food and before feeding Shahina, so as not to spread any worms or other parasites to her.

When Shahina was 10 months, Bina started increasing the quantity and frequency of meals. Instead of a half bowl, she prepared a full bowl, and she fed Shahina at breakfast, lunch and dinner in addition to her regular snacks. During this time, Bina also reduced breastfeeding, to practice complementary feeding and encourage Shahina to pick up food using her own hands. Here again she was sure to wash her hands *and* Shahina's hands with soap before eating.

By 13 months, Shahina was familiar with most household foods, and she sometimes used her own hands to eat while sitting with her parents. She was usually provided a full bowl and sometimes more than a full bowl each time, and was given seasonal fruits such as banana, guava or a few pieces of chopped papaya. At 24 months, Bina reduced frequency of breastfeeding again.

Shahina's father, Khabir, also keeps fresh fish for cooking in the house now, and cooks more fish at home for Shahina rather than buying milk powder like he used to.

Bina says it is easy to offer complementary foods to Shahina in the home, and it's more affordable than she thought. She has also asked her husband to buy chickens and ducks for rearing, so that they can have a regular supply of eggs and meat. Bina also planted banana and papaya trees, and after one year she already has a harvest.

"I believe following this good feeding practice helps (Shahina) to increase her physical and mental growth," says Bina.

Case Study 2 **A village doctor adopts SHIKHA knowledge over customary infant feeding beliefs and the health of his patients improves dramatically**

"Change the days, change the practices, nothing except breastmilk for babies ages 0 to 6 months."

-Village Doctor, Nirmol Chandro Biswash

Nirmol Chandra Biswash started practicing as a village doctor in a small pharmacy at Mahelara Bazar, Barisal District, more than 15 years ago. Since he started his business, Nirmol has witnessed the traditional nutrition behaviors of pregnant women and lactating mothers, and for years he has suggested to the parents of young children to continue local practices, of feeding honey and powdered milk to the children, even for infants, if the mother does not have sufficient breastmilk. He has also sold supplementary food for babies in his pharmacy. He admits that he did not know much about infant and young child nutrition, especially exclusive breastfeeding for babies 0 to 6 months.

Three years ago, several babies were brought to Nimrol's shop multiple times within one week for diarrheal disease. He prescribed medicine and suggested that they stop breastmilk. He believed that the babies' stomachs were "not sufficiently strong to absorb the breastmilk and there may have been a problem with the milk." He found that after several days many of the children were still not well. Their skin was pale and their ribs were showing!

Then, in March 2015, a BRAC staff member working with SHIKHA came to Nimrol and asked what he gave mothers with infants ages 0 to 6 months and children ages 6 to 23 months for treatment, and Nimrol told him how he typically handled these cases. The SHIKHA staff member told Nirmol that there was an orientation for village doctors coming up, to share information about infants and young children in order to improve feeding practices.

Nirmol attended, and learned an entirely new way to approach infant feeding and hygiene. It initially took a few months to change his old practices, but then slowly Nimrol adopted the new learning. Now, each day, when pregnant women or lactating mothers with babies come to him with complaints like fever, common cold, skin disease, loose stools, worms, eye infection, or gastric and other common diseases (for them or their babies), he takes a different approach. He provides suggestions to follow only breastfeeding for babies 0 to 6 months without giving any substitutes like water, honey, bottle feeding or powdered milk. Some mothers ask him to give suggestions about types of baby milk for their infants when they don't have enough breastmilk, and explains that they should be mentally prepared not only to breastfeed their children but also to eat enough of the essential foods, rice, bread, fish, meat, eggs, vegetables, lentils, lemon, green papaya and other fruits every day themselves if possible.

He also tells mothers to breastfeed frequently, in the right position, to ensure that babies will get *enough* breastmilk.

One day, a woman named Gayotri came to the pharmacy with her two-and-a-half-month-old daughter and six-year-old son. Nirmol found the girl had only a mild temperature, and was otherwise very healthy. He asked Gayotri her feeding practices, and she told him she was giving breastmilk only.

Gayotri said that she had learned from SHIKHA that newborns should be on breastmilk within one hour of birth and should stay on it exclusively for six months. Under this practice, her daughter had gone from three kilograms at birth to six kilograms, and was very healthy.

“He provided advice to me and other pregnant mothers to eat sufficient foods like vegetables, fish, meat, eggs, rice and bread, and fruits,” Gayotri says.

She also says that when her son was the age that her daughter is now, that he had suffered from diarrhea and other diseases, most likely because she had followed traditional practices of feeding honey and water, or formula made from milk powder.

Now Nimrol says that not a single baby has come in with diarrheal disease in several months. But there are 20 pharmacies in Mahelara Bazar, and only four of them have received SHIKHA training; some still suggest milk powder formula over breastmilk.

Case Study 3 **One SHIKHA volunteer personally learns the benefits of proper nutrition during pregnancy**

Kohinoor Begum became a community volunteer for SHIKHA in 2013, in the Agailjhara *Upazila* of Barisal District. During her training, she received one of the innovative "food plates" developed by the Project to illustrate a healthy, balanced diet. This food plate has actual images of healthy foods and the proper quantities to eat printed on it. Kohinoor uses this to provide nutrition counseling to pregnant and lactating mothers during her visits to households.

Like other SHIKHA volunteers, Kohinoor has found the food plate a useful tool in her efforts to promote maternal nutrition and the healthy growth and development of children. During the past year she has also used it to help her own family: her eldest daughter suffered two miscarriages and her second daughter, Munni, was pregnant.

Munni, who is 25 and has a bachelor's degree, was eager to learn from her mother. She had received antenatal care at a clinic, but no one talked to her about nutrition. But after listening to Kohinoor describe the diet on the food plate, and the importance of a diverse diet, Munni read materials on maternal nutrition and pregnancy services. She also accompanied Kohinoor on household visits to observe her counseling pregnant and lactating women on maternal nutrition and exclusive breastfeeding.

Munni was inspired by these sessions, and during her pregnancy followed the food plate instructions carefully, eating a variety of foods four or five times a day. Her husband, Aslam, was eager to help too. Almost every day he brought her fish, local fruits such as papaya, guava, and mango, and sometimes meat or chicken. Kohinoor also made sure that Munni had mixed vegetables to eat at each meal, such as pumpkin, bottle gourd, leafy greens and Colocasia stem.

The diversity of pregnant women's diets — an important indicator of good nutrition — has improved in the SHIKHA Project areas though nutrition support and counseling, including the use of a customized food plate. Updated in 2016, the plate depicts a nutritious meal of local foods and includes evidence-based, action-oriented messages about nutrition for pregnant and lactating women. The government plans to use it throughout Bangladesh.

Munni also visited the nearest community clinic twice to receive antenatal support and supplies of folic acid and calcium tablets. Nutrition workers and health workers from BRAC made regular follow-up visits to her mother's house as well, providing suggestions on nutritious foods and checking her weight each month. When she was weighed just before delivery, Munni had gained a healthy 14 kilograms.

In October 2015, Munni delivered a 3.5-kilogram baby girl, who was at her mother's breast within an hour. Using what she had learned from her mother and the SHIKHA Project, Munni gave her daughter nothing but breastmilk for six months, and after six months she introduced her daughter to supplementary food prepared at home, mixing small amounts of fish, egg, leafy vegetables, lentils and rice from the food prepared for other household members and mashing the mixture until it was soft enough for her daughter to eat easily.

Gradually she reduced the frequency of breastfeeding and increased the frequency of supplementary feeding, including mashed fruits.

At eight months now, Munni's daughter weighs 7.5 kilograms and has received all the required vaccines for her age. She is an active, healthy child who has not faced any illness. Her mother also feels healthier than ever before. Kohinoor praises Allah that both her granddaughter and daughter are thriving. She attributes their good health to Munni's willingness to follow the advice of the SHIKHA Project.

Munni now urges all pregnant women to eat a healthy, diverse diet like the one shown on the food plate, and to follow the SHIKHA Project on exclusive breastfeeding and supplementary feeding, so they can give their children a healthy start in life.

Case Study 4 The imam who sought training on nutrition

The involvement of religious leaders is a powerful way to improve childhood nutrition and bring sustainable changes to people's lives. Harun-ur-Rashid has been a teacher at the Waijabad Fazil madrassa and an imam since 2004. He describes the nutrition training he received through SHIKHA, and how he has raised the awareness of people in his community through his teachings on the importance of good nutrition and hygiene for expecting mothers and young children.

"A nutrition worker from the SHIKHA Project came to me last year and asked whether I had any children below the age of 2 years. I said that I had a son who was 15 months old. He then asked what I knew about nutrition for children and mothers. After I told him what I knew, he asked whether I would be interested in attending a training session on nutrition for pregnant women, newborns and children.

I was surprised by his invitation and asked whether a mosque imam needed to attend such a training. I was feeling shy and wondered what others would think of me. But after further discussion, I became interested and decided to attend. Before this, I had a poor impression of the work of non-governmental organizations (NGOs), but my views became positive during the training as I observed the participants in the discussions. After the training, I realized that feeding honey and powdered milk to babies, and other traditional acts, was not correct.

I have learned much during my training from the SHIKHA project. For example, a baby should be at the mother's breast within an hour of birth, with the nipple in the baby's mouth. The baby should receive only breastmilk for the first 6 months, except for prescribed medicines. After 6 months, the baby needs additional foods, and the best are those from home, rather than milk from a tin. These additional foods could be rice, lentils, eggs, meat or fish, pumpkin, papaya including leafy vegetables, and seasonal fruits. The amount of hot spices should be reduced If possible before feeding the food to the children.

I also learned that a baby who is 6 to 8 months old needs 250 ml of food during lunch and dinner. Babies need to eat small meals every hour and those that do not like to eat should be encouraged and fed according to their choices. Babies should be fed slowly too, and with patience. Then the amount of supplementary foods should increase for children 9 to 23 months old, who should be encouraged to use their own hands in the company of household members.

The training helped me to think about nutrition for my son and wife too. We introduced vegetables and seasonal fruits, such as papaya, banana, mango and some local fruits, instead of chips and chocolates. After we reduced the amount of junk food, my son napped very well, was very active during play and had good growth and brighter skin. This tripled my motivation and focus to provide nutritional food that was made at home. My son has not been sick since we started complementary feeding practices and handwashing with soap before cooking and eating our meal. I was so happy to see these changes in my son and wanted to share what I had learned with my madrassa students and during mosque prayers.

I have now given several speeches about breastfeeding, easily accessible supplementary feeding, handwashing and my personal learning in at least 70 to 80 prayers during Friday services in the mosque. I have also started to talk with my madrassa students. The people who attended the mosque prayers and the girls in the madrassa were very impressed and wanted to learn more. After Friday prayers, some individuals asked questions about feeding honey and powdered milk first, their common practices and beliefs. I satisfied their queries with proper justification and examples of what I have learned from the Project. After two to three months of giving these speeches, three or four people told me that they were following my advice for their children, with good results."

Case Study 5 Raising awareness about the importance of nutrition among pregnant women in a remote village

"During my last pregnancy, 12 years ago, I experienced physical and mental hardships, and exploitation by my family. Clear messages about pregnancy, and what needs to be done during pregnancy, are critically important for first-time mothers to give birth to a healthy baby." *"Murshida"*

"Murshida" lives in Khalishakhali Village, Patuakhali Sadar *Upazila*. She is 29 and has a 13-year-old son and 12-year-old daughter. And she is currently 6 months pregnant. Her first pregnancy, when she was 16, was full of anxiety and beset with difficulties. Because Murshida was so young, her family believed that she would have a difficult delivery unless she gave birth to a small baby, so they allowed her only small amounts of food and told her "not to eat too much." She began experiencing pain in her stomach, legs and lower abdomen during the pregnancy, and worried about the delivery. But nobody provided care for her, not even her husband, "Jafar," who believed that the act of making her pregnant was a major contribution already, a common belief in rural Bangladesh.

But as a participant in SHIKHA, Murshida learned that the food she eats during pregnancy helps the baby's growth and promotes good health, and during her current pregnancy she has been very careful to eat adequate amounts of nutritious food every day. Her diet includes rice, vegetables, eggs, green peppers and lentils. She also eats fish most days of the week, and mangos when they are in season.

Murshida follows "Food Plate," a model for nutrition developed by SHIKHA that demonstrates, with images of actual food portions printed on re-usable plates, the proper amounts of the proper food for a health pregnancy, including fish, vegetables, eggs and lentils. All the information she needs is there on the plate.

Murshida's mother-in-law, an influential figure in the life of any Bangladeshi woman, is now very keen to help her with preparing breakfast and other household tasks, and gives her proper amounts of food. She herself has participated in SHIKHA too, and has a positive attitude toward pregnant mothers now, adding that the family has started a small poultry farm with more than 15 chickens and 10 ducks. They keep some of the eggs for themselves and sell the extras to other pregnant women.

Murshida also now makes regular visits to BRAC frontline workers in the SHIKHA Project, for antenatal care, and expects to give birth at home with the aid of a skilled birth attendant. Or she will go to her *Upazila* health complex.

From SHIKHA she also learned that she needs to start breastfeeding her new baby immediately after giving birth, with assistance from the birth attendant, and needs to keep the baby on breastmilk exclusively for the first six months.

Now even Jafar acknowledges the importance of comprehensive healthcare for mothers during pregnancy and says that he would provide additional care, and would accompany Murshida from their remote village to the health complex if she needed it.

To keep the SHIKA message alive and benefiting young pregnant women in her community, Murshida says that members of the community who did receive training should disseminate that message to ensure a safe delivery and a healthy baby. She wants to raise awareness about proper nutrition and is currently visiting 10 pregnant women in her community. She provides awareness, encouragement and emotional support, and also plans to accompany newly pregnant women to the community clinic for antenatal care and advice. These good practices should be replicated through programming in hard-to-reach and vulnerable locations in Bangladesh.

Case Study 6 Improving Childhood Nutrition as a Local Government Representative

"In childhood I learned that if you don't feed honey to a newborn baby then you cannot expect him or her to 'speak sweetly' throughout life. But in March 2015, I learned from SHIKHA that breastfeeding initiation within one hour of birth, not honey, is the best for improving child growth, intelligence and overall health. Also that it should be only breastmilk until 6 months."

-Nazmun Nahar, Local Government Representative, Lawkhati Union of Patuakhali Sadar Upazila, Bangladesh

Nazmun Nahar, a 32-year-old wife and mother, lives in Lawkhati village, Patuakhali Sadar *Upazila*. She is a member of the Union Parishad and, as a local government representative, is responsible for three wards totaling nearly 8,000 households. Nazmun has worked with BRAC in these communities for nearly seven years, and is well known.

"I prefer to visit almost every house in my territory, and I like to understand their health and their livelihood options. The training I received from the SHIKHA Project, which was organized by BRAC in March 2015, helped me to understand the needs of pregnant women and childhood nutrition. When I received an invitation to attend the training, I did not believe that I needed to attend because my son was more than 7 years old. The training was organized in the Union Parishad office with 20 participants and some observers," she says.

But she attended anyway, and the SHIKHA training reversed her long-held beliefs that babies should be fed honey and milk formula from powder.

"I learned about nutrition practices for pregnant women, the importance of handwashing, exclusive breastfeeding for the first 6 months of life and the need for diverse foods after that to promote a child's health and intelligence. I learned that at least four types of food are essential, like rice, bread, fish, eggs, meat, lentils, vegetables and fruits, including some green pepper and lemon with every meal. A pregnant woman needs to eat more, and more often, than she did before she was pregnant, and she must avoid heavy work to protect the health of her baby."

Nazmun is applying what she learned in her work. Whenever a pregnant woman is seeking services from the Union Parishad, she asks about that woman's eating habits.

"Is she receiving enough folic acid and calcium? Is she visiting the community clinic for health checkups? Is she washing her hands with soap to reduce disease and improve nutrition?"

She offers suggestions about eating a variety of foods several times a day, visiting a health clinic to receive any needed medicines and providing breastfeeding exclusively for the first 6 months.

"I also visit most of the families after the mother gives birth to observe the mother's and child's health. I encourage lactating mothers to drink plenty of water, eat more vegetables, fish, eggs, lentils, rice or bread, and some fruits to help with the production of breastmilk," she says.

"As a local representative of the Union Parishad, I conduct follow-up visits to make sure that the families are following my instructions. And I am often stern with them if they are not following good practices."

Although Union Parishad reports do not typically discuss the health of pregnant mothers and children, a recent training inspired a discussion about breastfeeding, complementary feeding practices and the

associated challenges. There was also an important discussion about child marriage as well as two orientation sessions with a total of 75 imams, “sub-imams” and other local leaders.

“I took the opportunity to speak about these topics in both sessions. The minutes of the meeting were recorded by the Union Parishad secretary,” Nazmun says.

“My observations suggest that the nutrition and health of the children during the first 23 months of their lives is better than it was three or four years ago. I have not seen or heard of any children who suffered from diarrhea in the past 12 months; the reduction is quite noticeable. Similarly, the number of maternal and child deaths has also decreased, according to my observations.”

Nazmun continues to be active and keeps up with the people living in her wards. She works in the Union Parishad office, and follows health and nutrition activities of these households. She is planning to hold courtyard meetings as well, with pregnant women and lactating mothers, and she will be asking the union chairman to provide funds for these activities.

If Union Parishad members were more active, then much would be achieved to help rural men and women who need their support. The initiative to involve local government representatives, especially female members, in SHIKHA has proven effective in supporting and improving the nutrition of children in the community.