

A multi-sector approach to improve nutrition: Experiences of the Nutrition at the Center project, Bangladesh

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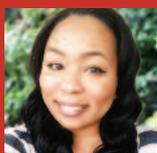
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CARE Bangladesh



A woman who received ANC services and counselling support, Pangaon Village, Derai sub-district, Bangladesh, 2015

Location: *Bangladesh, Sunamgonj district*

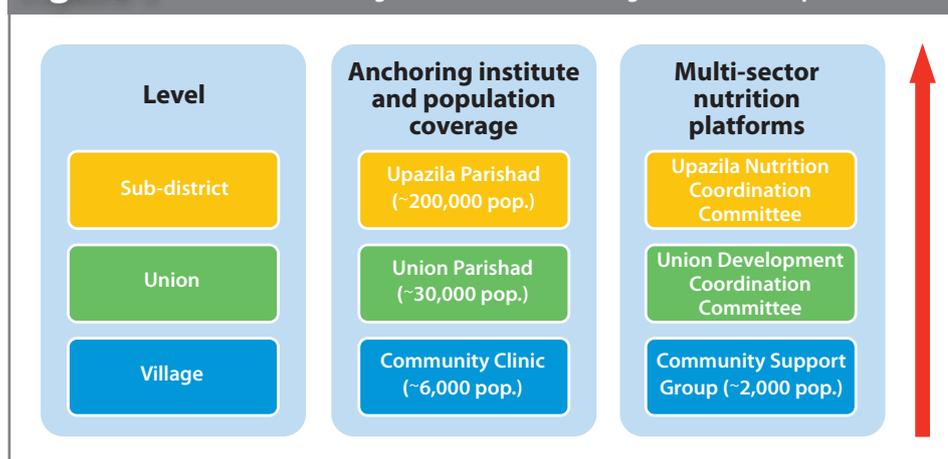
What we know: A multi-sector approach is required to address the multifaceted challenges of undernutrition; however, much remains unknown around process and methodologies related to multi-sector activities, as well as how such activities translate into actions on the ground.

What this article adds: Through the Nutrition at the Center project (N@C), CARE Bangladesh tested a sub-district, multi-sector approach to address malnutrition. One key strategy was to use existing structures and resources to establish a model of community-based, multi-sector coordination platforms to support nutrition-sensitive and nutrition-specific interventions. As such, N@C brought together actors from the public and private sectors, non-governmental organisations and local government at multiple sub-district levels. Results from the endline survey indicate that this multi-sector approach was effective in driving substantial improvements in nutrition outcomes.

Background

In Bangladesh 36% of children aged under five years old are stunted (NIPORT, 2015). The burden of stunting is greatest in the Sylhet region, where the prevalence of under-five stunting is 49.6% (NIPORT, 2015). The Government of Bangladesh (GoB) has committed to achieving the Sustainable Development Goal of ending all forms of malnutrition by 2030; this commitment is made explicit in the country's National Plan of Action for Nutrition (NPAN). Given this political will and the heavy burden of malnutrition in Bangladesh, CARE Bangladesh has set its sights on implementing solid, evidence-based programming in the country to improve maternal and child nutrition. To this end, from 2013-2017, the Nutrition at the Center (N@C) project was implemented. This is an innovative project with a two-fold strategy: (1) to integrate nutrition within the existing community health system; and (2) to strengthen multi-sector coordination around nutrition, with the overall aim of reducing stunting in children aged 0-23 months in project areas by 9%.

The GoB and development partners working in the country have committed to tackling the issue of malnutrition and to doing so via strengthened multi-sector coordination. A multi-sector approach to nutrition is defined in this context by coordinated action among multiple related

Figure 1 Structure and coverage of nutrition coordinating committees and platforms

national government departments, along with local governments and non-governmental organisations (NGOs), to address both direct and underlying causes of malnutrition. Implementation of a multi-sector nutrition programme is context-specific and dependent on what programmes and resources are already in place. The following examples illustrate multi-sector coordination under N@C:

- Maternal and infant and young child feeding nutrition (MIYCN) education was integrated into existing platforms, such as women's empowerment groups;
- Water, sanitation and hygiene (WASH) education was included as part of infant and young child feeding (IYCF) counselling;
- The health department launched school handwashing campaigns to complement school-based iron and folic acid (IFA) distribution programmes; and
- The Women's Affairs department provided vouchers to allow poor pregnant and lactating women (PLW) to access health and nutrition services.

Taken altogether, a multi-sector approach allows us to address malnutrition from multiple angles and levels of causation. However, there is a lack of operational knowledge of how to facilitate multi-sector coordination processes, particularly at sub-district levels. Through N@C, CARE Bangladesh therefore sought to facilitate and evaluate methodologies and processes to operationalise multi-sector coordination from sub-district to village levels and integrate nutrition into community health systems. This article describes the strategies, results and lessons learned from these efforts.

Nutrition at Center (N@C) project

The project was established in the Derai and Bishwambarpur sub-districts of the Sunamgonj district of Sylhet and ran from May 2013 to December 2017, with funding from the Sall Family Foundation and CARE USA. Derai and Bishwambarpur were selected as the project sites due to their high concentration of poor and marginalised populations and their remote location, leading them to be two of the most un-

deserved and low performing sub-districts in Bangladesh. The area is also vulnerable to regular flash flooding and the land is waterlogged for half the year, making it unsuitable for growing crops. There were also opportunities in these locations to work with other livelihood and health initiatives and the GoB encouraged partners to work in such remote communities to devise sustainable solutions using existing resources. N@C was designed in consultation with the GoB, civil society organisations and United Nations and other development partners working in the country.

The project aimed to integrate nutrition into the existing community health system in the programme areas in order to support effective MIYCN. To this end, CARE trained 244 (nearly all) government frontline health workers (FLWs) in the project area and their first and second line supervisors on optimal IYCF practices. Training on supportive supervision, mentoring and monitoring (SSMM) was also provided for government first and second-line health and family planning supervisors to build their capacity to effectively mentor and monitor the performance of FLWs. Supervisors were introduced to the concept of mentoring (or coaching) and offered competency-based mentoring training and post-training follow-up to help integrate their newly acquired skills into routine supervision.

Prior to the programme, there was no growth monitoring and promotion (GMP) training in community clinics in the area, primarily due to logistical problems and a lack of skilled healthcare providers. N@C therefore advocated with the Institute of Public Health and Nutrition (IPHN) to ensure supplies to support GMP, and in addition arranged a one-day refresher training on GMP for community health care providers (CHCPs) based at community clinics (the lowest primary healthcare structure in Bangladesh). Breastfeeding corners were established at 42 community clinics with the help of managers from the Ministry of Health and Family Welfare (MoHFW) to create space for CHCPs, family welfare assistants and health assistants to counsel mothers on breastfeeding techniques and MIYCN and to provide privacy for mothers.

The second strand of the programme aimed to facilitate sub-district multi-sector coordination platforms using existing committees within the government system at community, union and sub-district levels (figure 1). CARE facilitated a participatory process to develop terms of reference (TOR) for each of the committees, built the capacity of committee members through awareness and training sessions, and provided on-the-job support to make the committees functional and effective. While committees improved their effectiveness specifically around nutrition, the skills and principles gained through the trainings can also be applied to other priority programming. Additionally, bi-directional (upward and downward) linkages between the coordination committees were established.

Village level: Community Support Groups

The Community Clinic (CC) is a government-mandated structure at the village level. Each CC is supported by three Community Support Groups (CSGs) that are responsible for the promotion of services offered by the clinic to communities in its catchment area. Each CSG comprises approximately 17 representatives per 2,000 community members and includes members of adolescent/youth groups, women's groups, mother-in-law groups, men's groups, clubs and agricultural groups and businesses. CSG members identify PLW and children under the age of two in their communities and refer them for utilisation of relevant services, such as antenatal care (ANC), postnatal care (PNC), immunisations and GMP. Members then follow up with referred families through household visits to ensure compliance with the advice received at the clinic visit.

N@C mobilised 126 CSGs to promote nutrition and multi-sector activities. Frontline health and family planning workers held sessions to train 2,142 CSG members to build their capacity in nutrition counselling, referrals, linking families with both nutrition-specific and nutrition-sensitive services as needed, and strengthening coordination and accountability among service providers. Coverage of services and supplies have improved in the area in recent years due to increased political commitment; thus the community clinics are well positioned to handle referrals.

As part of the capacity-building process, N@C organised training for CSG members on developing action plans, engaging community groups and structures and committing to nutrition-sensitive and/or nutrition-specific activities. On completion of the training CSGs met monthly to discuss successes and challenges and make pragmatic nutrition action plans. The project facilitator worked with GoB supervisors and staff to provide continued support to the CSGs and facilitate social mapping and implementation of the nutrition action plans.

Women were proactively encouraged to participate in coordinating committees of the CSGs. As a result, of the 219 CSG members who joined

the Union Parishad standing committee, almost half were women. Furthermore, 22 of 24 Nutrition Focal Points (those responsible for overseeing and coordinating a school's health and nutrition activities) are women.

Union level: Union Development Coordination Committees

The Union Council (UC) is the elected body in rural areas, mainly responsible for leading and coordinating rural development. The Union Development Coordination Committee (UDCC) coordinates all development and service-related Union activities and is comprised of elected chairman-members, extension workers of department line ministries and NGO representatives. Rather than creating a new coordination platform at Union level to promote a nutrition agenda, N@C worked with 14 UDCCs, encouraging them to add nutrition as a priority to their standing agenda, increase budget allocation to nutrition activities, and develop multi-sector annual nutrition action plans based on local resources and in line with the ministries' operational plans. Nutrition plans included both nutrition-sensitive and nutrition-specific activities covering health and nutrition; education; WASH; agriculture and livestock; women's and children's affairs; and social safety net activities. Activities included distribution of IFA supplements to PLW and adolescent girls; sanitary napkin distribution for adolescent girls; tiffin box (lunch box) distribution for school children; tubewell and sanitary latrine installations; and distribution of fertilizer, seeds and agricultural equipment. Of the 14 UDCCs, N@C supported budget preparation for six to ensure allocation for nutrition-related activities.

Through the UDCCs, N@C facilitated evidence-based local planning, recording and reporting within community health systems and

the development of effective coordination, best use of local resources, and performance monitoring in terms of improved nutrition within the catchment populations. For example, members of the UDCC now work together to review data on services provided by government health service providers and NGOs to avoid duplication of efforts and to develop a shared report on health and nutrition for the Union.

Sub-district level: Upazila Nutrition Coordination Committee

Two Upazila Nutrition Coordination Committees (UNCCs) were established (one in each sub-district) under the leadership of the *Upazila Parishad* (sub-district) elected chairman. The UNCC is the key vehicle at the sub-district level for the strengthening of multi-sector engagement for improved nutrition. In project areas, the UNCCs successfully engaged key actors from the health, family planning, agriculture, women's affairs, livestock, WASH and education sectors to improve service delivery and provide monitoring support for nutrition-sensitive and nutrition-specific interventions. Broader civil society engagement was ensured through the active participation of major development agencies operating in the *upazila* and, most importantly, the voice of the community was heard through the active participation of community members. Additionally, with the support of the UNCCs, budget allocations for nutrition activities increased in the Union Parishad and departments related to livestock, education and agriculture. The two UNCCs established by N@C are still in operation and the platform is included in the GoB NPAN-2, with plans for replication in all sub-districts nationwide.

Service coverage and beneficiaries

Table 1 shows the number of training sessions

and participants/beneficiaries for select N@C activities between 2013 and 2017.

Baseline and endline survey methodology

In March 2014 a baseline survey was administered to assess nutritional status and influencing factors in Derai and Bishwambarpur (intervention sub-districts) and Itna and Nikli (control sub-districts). The survey evaluated household socioeconomic status, food security, maternal and child anthropometrics, and household WASH conditions. The results of the baseline survey were used to establish benchmarks to measure performance of the N@C; specifically in terms of maternal and child nutritional outcomes.

The survey was based on a representative sample of non-pregnant women aged 15-49 years who had lived in the sub-district for at least six months and who had a biological child age 0-35 months living with her. Sample size was calculated based on the sample required to determine a 9% decrease in stunting ($n=1,998$ women and their children aged 0-35 months). If more than one eligible child resided in a selected household, one child was randomly selected for anthropometric measurement. Women and children with any known or suspected chronic or congenital disease were not eligible for inclusion.

A two-stage probability proportional-to-size procedure was employed with sub-district units as the primary sampling units (PSU). The secondary sampling units (SSU) were the households within the selected sub-districts with eligible women and children.

On arrival in each sampled area a community meeting was held (prearranged by CARE Bangladesh) to inform community members of the purpose of the data collection and encourage cooperation. Starting from a prominent point at the centre of a union/village, data collectors visited each household contiguously, interviewing one eligible woman. Where multiple eligible women were present, one of them was randomly selected for interview. If there were no eligible women in the household, data collectors proceeded to the next household. This procedure continued until the required number of mothers and children were surveyed.

Height/length and weight of children age 0-35 months and mothers were measured using appropriate equipment. Blood samples were also taken from every third/fourth child age 6-23 months and their non-pregnant mothers (the results of which are still being analysed and will be presented in future). All data were collected using ODK-based platforms for data collection and uploaded to a central server. TAB and programmes with necessary training were provided by CARE.

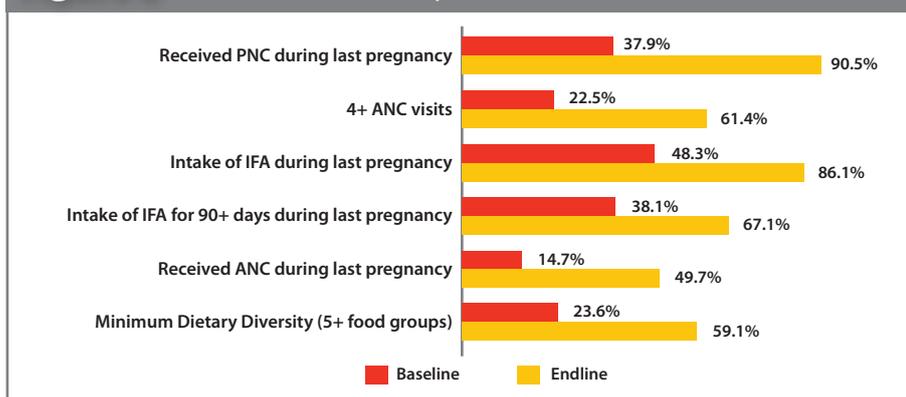
Identical sampling and survey procedures were followed for the endline survey, administered from March to April 2018. For the endline, 1,809 mothers and their children aged 0-35 months were surveyed.

Table 1 Coverage of N@C activities and numbers of beneficiaries

Service/activity	Total	Participants/ Beneficiaries	
Stakeholder training			
MIYCN training (union to district level)	34 sessions	671 (target 671)	
GMP training	–	50 (target 50)	
SSMM training	–	39 (target 41)	
Community Support Group training			
Training for community support group members on leadership, management, and nutrition	35 sessions	672 (target 630)	
Community and school-based activities			
Complementary feeding and cooking demonstrations	1,171	11,091	
Mother & child gatherings at community clinics	1,407	18,336	
Adolescent girls receiving IFA from school-based programme	–	5,218	
School-based health education sessions	451	6,485	
Community handwashing demonstrations	119	2,452	
Services for PLW			
	2015 (#)	2016 (#)	2017 (#)
Counselling sessions for pregnant women	43,978	45,686	54,436
Counselling sessions for lactating women	101,970	110,271	116,200
ANC services	21,101	33,232	46,978
Pregnant women provided with IFA	30,850	27,654*	34,472
Lactating women provided with IFA	13,488	9,440*	13,479

* Decline in IFA distribution from 2015 to 2016 was due to low supply at service centres. This was corrected the following year and IFA distribution to PLW increased again in 2017.

Figure 2 Baseline and endline survey results: Maternal health and nutrition



ANC = antenatal clinic IFA = iron and folic acid PNC = postnatal care

Figure 3 Baseline and endline survey results: IYCF practice

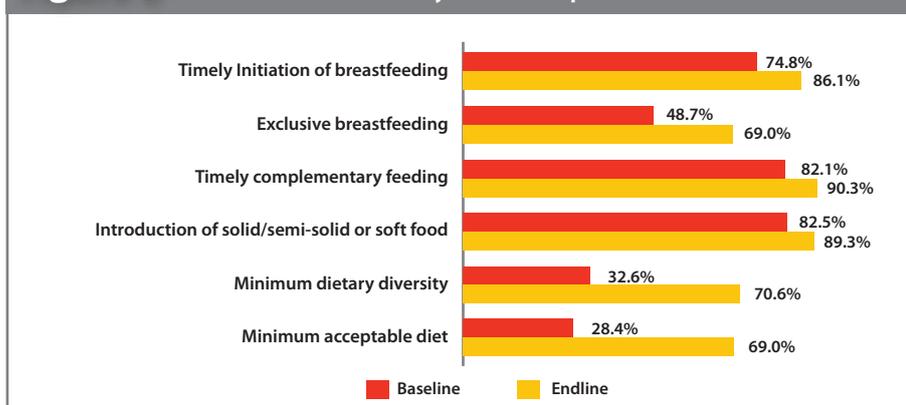
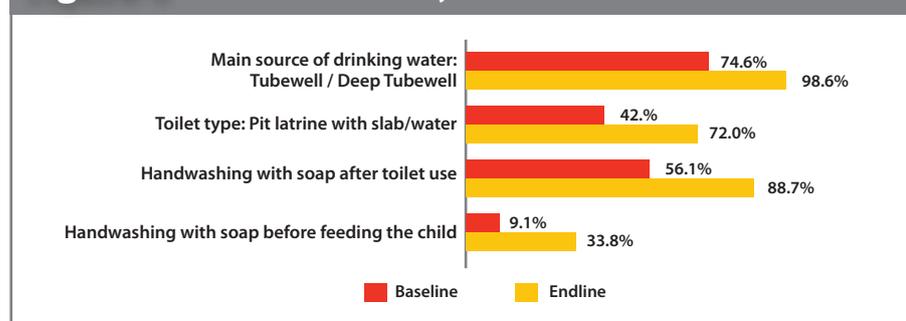


Figure 4 Baseline and endline survey results: WASH



Results

Preliminary results comparing baseline and endline data indicate some improvements in terms of maternal and child nutrition, IYCF practices, WASH and women’s empowerment in the N@C intervention area. Further analysis of changes in the intervention versus the control area is required (forthcoming) to determine with more certainty the extent to which these changes are attributable to N@C interventions.

Maternal health and nutrition

As shown in Figure 2, 59.1% of women in N@C areas met the standards for minimum dietary diversity¹ in the endline survey, an increase from 23.6% at baseline. In N@C project areas, 90.5% of women had at least one ANC visit, compared to only 37.9% at baseline. The percentage of women who had at least four ANC visits also increased from 22.5% at baseline to 61.4% at endline. Iron folic acid (IFA) intake during last pregnancy rose from 48.3% to 86.1% in the N@C project areas. IFA intake for at least 90 days (the recommended minimum) also increased, from 38.1% to 67.1%. The percentage of women who received postnatal care increased substantially, from 14.7% at baseline to 49.7%.

The majority of infants (86.1%) in the N@C project areas were put to the breast within an hour of birth (74.8% baseline) (see Figure 4). The prevalence of exclusive breastfeeding rose from 48.7% to 69.0% in the N@C intervention area. Timely complementary feeding rose from 82.1% to 90.3%. Minimum dietary diversity and minimum acceptable diet increased substantially, from 32.6% to 70.6%, and from 28.4% to 69.0% respectively.

WASH

Figure 5 presents baseline and endline survey results for select WASH indicators. In the intervention area, most households had an improved water source (i.e., tubewell), which increased from 74.6% at baseline to 98.6% at endline. The proportion of households with an improved toilet facility also increased from 42.0% to 72.0%. In terms of hygiene practices, the percentage of mothers who reported that they washed their hands after using the toilet increased from 56.1% to 88.7%. However, not all hygiene practices were well adhered to: only about one third (33.8%) of mothers responded that they washed their hands with soap before feeding their child; an increase from only 9% at baseline.

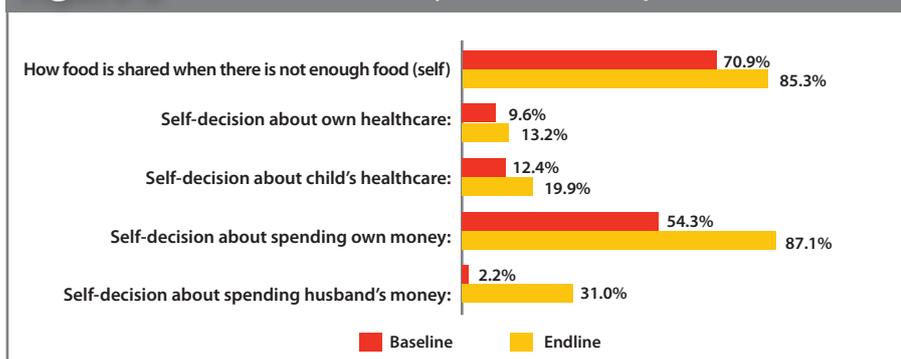
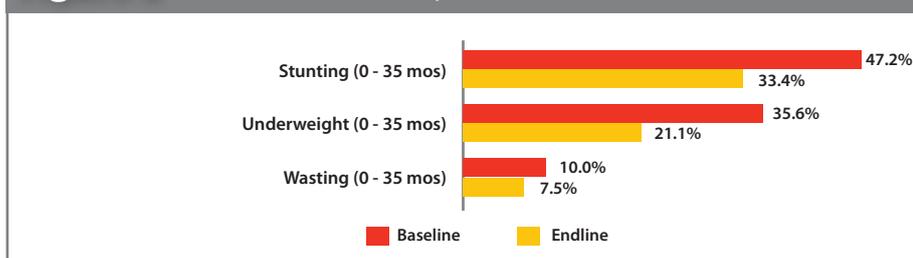
Women’s Empowerment

To assess women’s empowerment, the survey collected information from women who answered that they are the primary decision-maker for the given topic. (see Figure 6). In general, the percentage of women who are the primary decision-makers generally increased. Involvement in economic decision-making increased from 54.3% to 87.1%. Most women are the primary decision-maker in terms of deciding how food is distributed within the household in times of scarcity (85.3%). There was a small increase, from a low baseline, in women’s decision making



A CSG member educates pregnant and lactating women on the importance of taking iron and folic acid, Soromangal village of Derai sub-district, Bangladesh, 2017

¹ Women’s Dietary Diversity is a proxy for food security; minimum dietary diversity is defined as having eaten food from five or more food groups (out of nine food groups) in the 24 hours preceding the survey.

Figure 5 Baseline and endline survey results: Women's Empowerment**Figure 6** Baseline and endline survey results: Children's nutritional status

around her own health care (13.2%) and that of her child (19.9%). Various platforms, such as CSG meetings and mother/child gatherings at community clinics, were mobilised to implement activities around women's empowerment, with a focus on increasing women's role in household decision-making as well as promoting men's involvement in support maternal and child nutrition. This particular result pertaining to self-determination around health care indicates that further understanding needed around how to best empower women to make decisions around their own health and that of their children.

Impact: Children's nutritional status

Results of the endline survey indicate a reduction in stunting of just over 13 percentage points, although the prevalence of stunting among children in the N@C project area remains high at 33.4%. Underweight prevalence among children aged 0-35 months decreased

from 35.6% to 21.1%, while wasting also decreased from 10% to 7.5%. Results for the anaemia analysis are forthcoming.

Lessons learned

Learnings from phase one suggest that developing competency in mentoring is an ongoing process.

- Specific TOR and guidelines are essential to clarify the structures and roles of multi-sector coordination committees
- Identification and implementation of feasible and evidence-based actions encourage multi-sector committee members to add ambitious actions over time.
- Regular progress-sharing and recognition are important to sustain the motivation of multi-sector committee members and hold them accountable for achieving nutrition goals.
- Keep national-level policymakers informed and engaged by facilitating

field visits to observe the processes and achievements of sub-district multi-sector coordination committees.

- Improvements in nutrition outcomes can be achieved through strengthening union and village-level platforms along with district and sub-district-level multi-sector platforms.
- Special attention and specific efforts are required to maintain the quality of activities as the multi-sector nutrition coordination platforms are scaled up throughout the country in coming years.

In Phase 2 CARE envisions building a sustainable system of support that allows supervisors to improve their technical skills and expertise on different MIYCN issues and to provide more mentoring to FLWs. Phase 2 is currently underway as the Collective Impact for Nutrition (CI4N) initiative. Through CI4N, CARE is collaborating with members of SUN to support the Bangladesh National Nutrition Council (BNCC) in operationalising multi-sector nutrition approaches in all 64 districts of Bangladesh.

Dissemination and learning for national scale up

The results of N@C in Bangladesh have been shared through a national-level dissemination workshop. CARE also facilitated multiple field visits for GoB high officials, donors and civil society organisations, including members of the Civil Society Alliance for Scaling Up Nutrition (CSA for SUN), to allow these important stakeholders to observe the multi-sector approaches on the ground in the Sunamgonj district. As a result, policy makers have begun to prioritise and incorporate multi-sector nutrition committees in the country's second National Plan of Action for Nutrition (NPAN-2).

Conclusion

The Government of Bangladesh has institutionalised multi-sector coordinating committees at different levels, incorporating these platforms in the NPAN-2. However, the benefits of multi-sector nutrition committees can be only achieved through effective and sustainable implementation. To this end, CARE Bangladesh offers operational guidelines that are built on our experience in effectively facilitating these sub-district platforms. Furthermore, at just US\$1000 per year, facilitating the sub-district coordinating committees is financially sustainable. In order to make these multi-sector committees fully functional and effective, initial external facilitation supports add critical value that should be considered by government and development partners in nutrition programming in Bangladesh.

For more information, please contact Jahangir Hossain at Jahangir.hossain@care.org



Members of the development, health, and nutrition communities attend a sharing event where CARE presented on the N@C multi-sectoral approach to nutrition, Dhaka, Bangladesh, 2018