



FINAL EVALUATION

Bangladesh

Thematic window
Children, Food Security and Nutrition

Programme Title:

Protecting and Promoting Food Security and
Nutrition among Families and Children in
Bangladesh

Prologue

This final evaluation report has been coordinated by the MDG Achievement Fund joint programme in an effort to assess results at the completion point of the programme. As stipulated in the monitoring and evaluation strategy of the Fund, all 130 programmes, in 8 thematic windows, are required to commission and finance an independent final evaluation, in addition to the programme's mid-term evaluation.

Each final evaluation has been commissioned by the UN Resident Coordinator's Office (RCO) in the respective programme country. The MDG-F Secretariat has provided guidance and quality assurance to the country team in the evaluation process, including through the review of the TORs and the evaluation reports. All final evaluations are expected to be conducted in line with the OECD Development Assistant Committee (DAC) Evaluation Network "Quality Standards for Development Evaluation", and the United Nations Evaluation Group (UNEG) "Standards for Evaluation in the UN System".

Final evaluations are summative in nature and seek to measure to what extent the joint programme has fully implemented its activities, delivered outputs and attained outcomes. They also generate substantive evidence-based knowledge on each of the MDG-F thematic windows by identifying best practices and lessons learned to be carried forward to other development interventions and policy-making at local, national, and global levels.

We thank the UN Resident Coordinator and their respective coordination office, as well as the joint programme team for their efforts in undertaking this final evaluation.

MDG-F Secretariat

The analysis and recommendations of this evaluation are those of the evaluator and do not necessarily reflect the views of the Joint Programme or MDG-F Secretariat.

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Protecting and Promoting Food Security and

Nutrition

for Families and Children in Bangladesh

Final Evaluation

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Acronyms

ANC-Ante Natal Care
CARE-Cooperation of American Relief Everywhere
CMAM-Community Management of Acute Malnutrition
CNS-Community Nutrition Supervisor
CNW-Community Nutrition Worker
DVM-Doctor of Veterinary Medicine
FAO-Food and Agriculture Organization
FCS-Food Consumption Score
FSNIS- Food Security and Nutrition Information System
FSNSP-Food Security and Nutrition Surveillance Project
GoB-Government of Bangladesh
ICDDR,B-International Centre for Diarrhoeal Disease Research, Bangladesh
MAM-Moderately Acute Malnutrition
MDG/F-Millennium Development Goal- Fund
MNP-Micronutrient Powder
MUAC-Mid Upper Arm Circumference
MYCANSIA-Maternal and Young Child Nutrition Security in Asia
NNS-National Nutrition services
PCA- Program Constraints Assessment
PMC-Program Management Committee
RUTF-Ready to Use Therapeutic food
SAM-Severe Acute Malnutrition
SUN-Scaling Up of Nutrition
UN-United Nations Organization
UNDAF-United Nations Development Action Framework
UNICEF-United Nations Children's Emergency Fund
WASH-Water And Sanitation Hygiene
WFP-World Food Program

Executive Summary

With funding from the Spanish Government-financed MDG Fund, departments of the Bangladesh Government with the collaboration of three U.N. development partners, undertook a bold experiment. In contrast to earlier and present approaches to nutrition improvement in the country – phased expansion of community-based programming, and a primarily health facility-based “nutrition mainstreaming” program, the Bangladesh MDG/Fund program chose a new and different modality – referred to as the “convergence” approach, and utilized with great success in Peru and Brazil. The success of the MDG/Fund with this approach provides the Bangladesh government with an attractive new dimension to consider in its strategic programming designed to reducing malnutrition in the country.

The convergence approach selects priority geographic areas based on malnutrition and food insecurity mapping, and concentrates in these areas inputs from each of the sectors which address the underlying determinants of malnutrition – plus the health sector addressing the problem directly. The convergence or co-location of these multisectoral inputs appears to provide benefits that are not simply additive but also synergistic (e.g. $1+1+1=5$.) Evidence from Latin America – and from the Shouhardo program in Bangladesh suggests that this targeted, multisectoral convergence approach, capable of annual reduction in stunting prevalence of more than 4 percentage points per year, can be superior to phased programs seeking national coverage with inputs primarily from the health sector, and more valuable than efforts made to “coordinate” inputs from relevant sectors that are neither convergent nor highly nutrition-sensitive.

In addition to exemplifying the value of the convergence approach, the MDG/F program was successful in demonstrating the value of well-operated nutrition-sensitive interventions in the country – critically important means of addressing the determinants of malnutrition – and the importance, now of scaling them up. International experience suggests that the development of effective nutrition sensitive interventions in the food and agriculture, education, social protection and WASH sectors are vitally important complements to nutrition-specific action – carried out primarily through the health sector.

While the MDG Fund program in Bangladesh did not include all of the sectors which would constitute an ideal convergence program – hardware elements of WASH and employment generation activities were missing, and while the program duration was considerably shorter than desirable, its targeting of agricultural, health and educational inputs in particularly vulnerable coastal areas of southern Bangladesh resulted in an almost total elimination of young child wasting in program areas, a significant but smaller reduction in malnutrition among pregnant and lactating women, and significant improvements in household food security.

The endline survey data, while otherwise highly useful despite seasonal differences and the provision of project services in some of the original control areas, has faced problems of incomplete and internally inconsistent anthropometric data. Part of the problem has related to inconsistencies between weight for height and MUAC data. Accordingly, a decision was made to utilize project monitoring data to assess the project's anthropometric effects despite the absence of a control comparison. This project monitoring data provides a clear indication that child wasting and maternal malnutrition were significantly reduced and in some cases virtually eliminated in program areas. The prevalence of severe acute malnutrition (SAM) in children under age 5 fell to zero from initial prevalence rates of between 2.12% and 0.89%, rising subsequently only to 0.02% and 0.04%. Moderate acute malnutrition fell from between 9 and 11% to 1% with rare occasions of relapse. Malnutrition in pregnant and lactating women using mid-upper arm circumference (MUAC) tapes – an inadequate measure when used alone, fell less sharply – from 7.0% to 5.1%.

Data from the program endline evaluation indicates that the program also improved household food consumption. The endline survey reveals that the percentage of households in program areas with gardens increased over four fold, and that the percentage of household income derived from gardens and poultry increased more than three times, from 2.7% at baseline to 9.3% at endline – although still far from adequate to eliminate food insecurity in these families. As a result, the percentage of households with food consumption scores (FCS) considered minimally adequate or higher – is 86.7% in program areas compared with 63.9% in control areas. (Unfortunately, no comparable data is available from the baseline survey.) In the poorest wealth quintile, the actual average FCS in program areas was found to be 51.8 compared with 40.0 in control areas.

The survey also found that the percentage of households consuming eggs or meat on the day previous to the survey more than doubled between baseline and endline (from 20.4% to 44.1%), while the percentage consuming a milk product increased significantly from 16.8 to 24.7%.

Monitoring of the school program found significant increases in both enrollment and attendance plus considerable anecdotal evidence of school children taking messages home in a “change agent” capacity.

Although endline evaluation data on hemoglobin testing is not yet available, qualitative data indicates that problems of MNP and iron folate supply were reduced over the life of the program as was reticence by mothers to feed MNP to their children.

The Outcome 5 effort to improve nutrition and food security-related data and information produced an important health/nutrition assessment of urban slums in the country, a valuable mapping exercise and studies on women's empowerment and MUAC, and permitted the development of an integrated database likely to be useful in future multisectoral pursuits. The program's failure to utilize the findings

and tools of the Food Security and Nutrition Surveillance Project (FSNSP), however, may have been a missed opportunity.

The program also had a major effect on women's empowerment – not identified as a primary program outcome, although it might have been. Mothers questioned on their role in household decision making relative to the previous year – overall, and specifically on decisions relating to gardens, small livestock, and children's food consumption, reported far higher percentages than were found in control areas.

And the program had a positive effect on pregnancy behaviors, with the practice of consuming more food during pregnancy (as opposed to the frequent practice of “eating down” during pregnancy) more than doubling in program areas between baseline and endline, and the practice of pregnant women getting more daytime rest increasing slightly.

Effective capacity building was instrumental in program success, particularly in the areas of CMAM, facility upgrading and agricultural extension (garden and small livestock activities.)

It is difficult to get a clear sense of costs in a program of such short duration with little opportunity to assess likely longer term costs. However “establishment costs” are presented and discussed. The high cost of treatment – and possible alternatives – are discussed, and MNP distribution, anemia counseling and school-based nutrition education are identified as potentially highly cost-effective activities.

Program efficiency varied according to category. On the plus side, the program demonstrated exceptionally high program coverage for each of the program's outcome areas, efficient national level program governance and highly regarded program coordination. On the minus side, expenditure rates were unusually slow early in the program; the program suffered from an unwieldy fund allocation process; there was inadequate participation by local governments; and associated NGOs, which otherwise performed remarkably well in the program, suffered from high rates of turnover which adversely affected program monitoring.

Perceptions of the program as a whole, by program managers and representatives of participating UN agencies were unusually positive. While comments were made about treatment vs. prevention, the short program duration, missing sectoral inputs, program monitoring, and vacancy rates in government departments, and suggestions were made on Tanahashi or bottleneck analysis, quality assurance teams, the utilization of positive deviance families and the use of beneficiaries as change agents, overall reactions to the program were highly positive. UN and government stakeholders were in agreement that:

- Program planning and implementation were well executed despite challenges

- Coordination was far better than anticipated
- Good decisions were made on fund utilization (including the extra funds available when MUAC screening produced fewer SAM/MAM cases than expected.)

There was unanimity among UN stakeholders in Dhaka that, despite obstacles, the advantages of the three UN agencies and their counterparts working together in this “convergence” program far outweighed the “transaction costs.”

In addition to the value of the convergence approach, other lessons learned from the program include:

- The program disruption resulting from the government’s banning of RUTF imports suggests that the development of mitigation plans may be appropriate in cases where a program is vulnerable to such changes in government policy. Sustainability and program cost questions are also triggered by such a reliance of patented imports, as discussed in this report.
- House to house CMAM screening should be used only as follow-up when young children or pregnant or lactating women fail to appear at community-based screening sessions.
- Referral transport to more distant health facilities should be arranged by program staff.
- Well implemented school meals and gardens can improve school enrollment and attendance significantly and should be actively encouraged.

The report presents three options – not mutually exclusive - for the future of MDG/F type activity in the program area:

- The continued incorporation of MDG/F program activities into existing or new national or regional programs;
- The initiation of an NNS program in this geographic area building on activity and training that already has taken place;
- Using another Peru/Brazil model, experimenting with a UN or GoB Union or Upazila Incentive Fund, in which unions or upazilas meeting specified targets would receive additional funding.

Regardless of the option(s) selected, a program of this importance requires an evaluation of its sustainability – which means returning to the area between 12-24 months after project completion and collecting key information on activity and impact indicators. Funding from concerned government departments and UN partners should be sought to finance this important sustainability evaluation.

Other recommendations include:

1. Important programs such as that undertaken by the MDG Fund require a duration of at least five years.
2. Except in emergency situations, the balance in such programs between prevention and treatment intervention needs to be shifted substantially toward the former.
3. Small farm households in Bangladesh require intensified assistance in home gardening and in marketing, the latter both through the encouragement of cooperatives and through government purchase of food commodities from assisted households for school meal programs.
4. Such assistance can be facilitated where women doing garden and agricultural activity are organized into groups.
5. Intensified efforts are needed to provide life skills counseling and weekly iron tablets to adolescent girls – both those in and out of school.
6. The use of management-by-exception techniques in project monitoring are essential to assure rapid local utilization of data.
7. Future programs such as that undertaken by the MDG/F could benefit considerably from the use of quality assurance teams and from Tanahashi or bottleneck analysis.
8. Shortages of government positions and high vacancy rates in rural areas deserve priority attention by the government.
9. The civil society nutrition advocacy groups now in existence in the country deserve active encouragement.

In sum, the MDG/F program has provided the Government of Bangladesh and the international nutrition community with a highly valuable model of nutrition programming, one that, ultimately, may prove more important than, for example, the coordination of sectors at the national level. The multisectoral nutrition convergence approach, targeted to vulnerable areas appears viable, capable of major impact, and likely to be highly cost-effective.

Introduction

With a grant from the Government of Spain to the United Nations, the MDG Fund was established in 2010 designed to assist a set of low income countries in meeting their Millenium Development Goals. The Bangladesh MDG Fund program titled Protecting and Promoting Food Security and Nutrition for Families and Children in Bangladesh was organized and implemented by three U.N. agencies: the World Food Program (WFP), the Food and Agriculture Organization (FAO) and UNICEF – an unusual UN arrangement – and their Government of Bangladesh counterparts:

- Ministry of Food
- Ministry of Women's and Children's Affairs
- Ministry of Health and Family Welfare
- Ministry of Agriculture
- Ministry of Fisheries and Livestock
- Ministry of Primary and Mass Education
- Economic Relations Division
- Institute of Public Health Nutrition

Among the UN agencies, UNICEF had the responsibility for the treatment of Severe Acute Malnutrition and health sector-based nutrition-specific interventions, FAO for agriculture, small livestock and gardens, and WFP for treatment of Moderate Acute Malnutrition among children and pregnant and lactating women, on school feeding, information management and overall coordination. Each program intervention included considerable training and behavioral change communications.

In the wake of floods and with volatile food prices, the program was designed to improve food security and nutrition for vulnerable children and mothers, and address specifically the MDG-1 hunger reduction target. The program has received considerable international attention as an example of the “convergence” model of nutrition improvement, brought into prominence in Peru and by Brazil's “Zero Hunger” initiative, which targets vulnerable geographic areas with both nutrition specific (primarily health sector) interventions addressing malnutrition problems directly, and nutrition-sensitive interventions addressing their underlying and basic determinants.

The convergence approach utilized by the MDG/F program has had one particularly instructive precedent in the country, the SHOUHARDO Program, operated by CARE through local partner NGOs. SHOUHARDO is a large scale multisectoral project which, like the MDG/F program, is concentrated in the country's most vulnerable areas and combines key resources - both nutrition-specific and nutrition-sensitive interventions - in the same geographic areas. In the SHOUHARDO program, interventions include increased food access, improved health and hygiene, women's empowerment, local government mobilization and disaster preparedness. The

combined effect of these interventions has been a remarkable 4.5 percentage point reduction in young child stunting per year (Smith et al, 2011.)¹

The key elements of the MDG/F program have been homestead food production, community-based management of acute malnutrition, school feeding and gardening, anemia reduction, and the strengthening of food security and nutrition information systems. The overarching objectives of the joint program were to contribute to the reduction of acute malnutrition among children 0-59 months and among pregnant and lactating women and to reduce household food insecurity.

Bangladesh, at present, has among the world's highest rates of underweight and stunting in the world.² Within Bangladesh, the MDG/F program selected the most poverty prone division of the country, Barisal Division; an area in which more than half of the population has been identified as poor by the Bangladesh Bureau of Statistics Income and Expenditure surveys.

The specific sub-districts (upazilas) selected for inclusion were those with the highest estimates of extreme poverty in the division.

Within the overall program goal indicated above, the program identified five specific outcomes to be addressed:

- *Outcome-1* was designed to reduce the prevalence of acute malnutrition and underweight incidence using the Community Management of Acute Malnutrition (CMAM) approach. Malnourished young children between the ages of 0-59 months received assistance through internationally recognized feeding, care and counseling regimens carried out at community clinics (with referral to higher level facilities in cases of accompanying complications.) Similarly, malnourished pregnant and/or lactating women received food and specialized assistance.
- *Outcome-2* was designed to improve household food security through agriculture, homestead food production, and nutrition training. Income generating activities including small livestock rearing, and the marketing of surplus agricultural produce were designed to increase the income earned by women, thereby contributing to their economic empowerment. Women were mobilized into groups with group members receiving training in agro-processing, food marketing, and small business management.

¹ This reduction in stunting was nearly identical to that achieved in Peru with its convergence program in targeted districts.

² The prevalence of underweight in Bangladesh, 36%, is exceeded only by Timor-Leste (45%) India (43%) and Niger (39%). The prevalence of wasting in Bangladesh (16%) is above the 15% level designated by WHO as a public health emergency (UNICEF, 2012.)

- *Outcome-3* focused on improved learning and nutrition awareness among primary school students. Nutrition education was coupled with school gardening with the idea that these children would serve as change agents in their own households while, at the same time, learning important life skills for their own lives as adults. School feeding was provided both to boost active learning capacity and to increase enrollment and attendance.
- *Outcome-4* addressed anemia reduction through the distribution of micronutrient supplements to young children – multi micronutrient powders (MNP), and to pregnant and lactating women – iron/folate tablets.
- *Outcome-5* focused on the strengthening of existing food security and nutrition information systems and provided information essential for nutrition and food security improvement in the country.

The appendix presents a results chain logframe of the program as a whole with each of these outcomes identified. The logframe in this case excludes the program inputs and focuses instead on the outputs/activities, two columns of intermediate outcomes, and the impacts.

One primary question from the outset of the program was whether the advantages of cooperative program efforts by these government entities and three UN agencies would exceed the inevitable “transaction” costs resulting from differing planning, budgetary allocation and review processes. The opportunity, however, to undertake both nutrition-specific and nutrition-sensitive interventions in these desperately vulnerable areas of the country provided an unusual buoyancy to the undertaking, which, as detailed below, proved highly successful.

Administration of the program involved the establishment of a National Steering Committee, and, more importantly, a Program Management Committee (PMC) comprised of implementing UN agency representatives, focal points from the Government and NGO partners. WFP was designated as the “lead agency” responsible for operational coordination.

A second primary question was whether the effort would prove sustainable. As indicated in the analysis below, some but not all program activities are being absorbed into larger national programs. More important than the continuation of specific activities in these particular geographic areas in this case, however, may be the utilization of this convergence model as a whole by the Bangladesh Government and its development partners.

This final evaluation report discusses the quantitative findings of the endline evaluation and utilizes the program constraints assessment (PCA) tool (see Figure 1) to capture the constraints identified by on-the-ground project managers (including managers of the local NGOs, Muslim Aid and Shushilan, which operated specific program services diligently and responsibly), service providers and

beneficiaries. The PCA also captures, for each of the program outcomes plus women's empowerment and pregnancy behaviors, the suggestions offered by stakeholders as means of overcoming the constraints identified.

The report also presents a summary of program component costing, of operating efficiency, of capacity development and of governance; offers a discussion of larger program issues including relevance to government policy and the perceptions of UN agency officials; discusses the importance of a sustainability evaluation; and offers a set of three options for the future plus concluding commentary, lessons learned and recommendations.

Quantitative Data Review

An endline evaluation survey was carried out by Eminence Associates for Social Development. This survey, when completed, will stand as a program document in and of itself. Reference is made throughout this report to evaluation findings, with pre-post and program-control comparisons made whenever possible. Particularly valuable results from the endline survey relate to the food security component, to pregnancy behaviors and to women's empowerment, and these are reflected in the report. At this writing, results are awaited on the effects of the program on the hemoglobin testing.

In the absence of complete and internally consistent data on children's nutrition status at this writing, the report has utilized program monitoring data. Although lacking a control group comparison, the data indicates that child wasting was significantly reduced and in some cases virtually eliminated in program areas. The prevalence of severe acute malnutrition (SAM) in children under age 5 fell to zero from initial prevalence rates of between 2.12% and 0.89%, rising subsequently only to 0.02% and 0.04%. Moderate acute malnutrition fell from between 9 and 11% to 1% with rare occasions of relapse. Malnutrition in pregnant and lactating women using mid-upper arm circumference (MUAC) tapes – an inadequate measure when used alone, fell less sharply – from 7.0 percent to 5.1%.

Monitoring data, of course, captures only those children and mothers who were screened by the program. Use of the data assumes that the coverage of screening was near universal in program areas.

The data collection in the endline evaluation survey also permitted positive deviance analysis. Such analysis looks only at the poorest 50% of households in program areas and asks the question: "What are households with well growing children or healthy pregnant women doing that households with malnourished children or pregnant women are not doing?"³ Unfortunately, the data analysis to date has not identified positive deviance characteristics relating to nutrition in young children or pregnant/lactating women.

Other survey data is presented in the sections that follow.

³ In the state of Bihar in India, such analysis relating to child nutrition found positive deviant characteristics to be maternal literacy, introduction of complementary food at 6-7 months rather than 9 months, and hand washing with soap (Levinson et al, 2007.) In Egypt, such analysis relating to pregnancy outcomes found the positive deviance behaviors/characteristics to be adequate meat and vegetable consumption, adequate day-time rest, avoidance of second hand smoke, and avoidance of urinary tract infection (Ahrari et al, 2006.)

Figure 1: The Program Constraints Assessment

The program constraints assessment (PCA) is a cutting-edge M&E tool, used often as a qualitative complement to a quantitative mid-term evaluation. In this case, the PCA is used to identify weak links in program components that should be addressed in new follow-on programs or as these components are picked up by ongoing national programs. The PCA involves interviews or focus group discussions with on-the-ground project managers, service providers and beneficiaries. The information provided is often unusually valuable – coming from individuals who often have relevant first hand experience but are not often asked about it.

PCA interviews or focus group discussions usually begin by questions on the perceived effectiveness of program components. Then, recognizing that no program is 100% effective, respondents are asked to identify constraints that inhibit effectiveness of the component. Once these are listed, respondents are asked to offer suggestions to address the constraints. These are listed in one of four columns:

- Technical solutions – which can be addressed through refinements at the project level;
- Policy solutions – requiring higher level policy action or change;
- Research or Training solutions – where action is needed in the training of service providers or in providing answers to information gaps inhibiting the program component.

The Screening/CMAM Component

The PCA findings pertinent to the screening and community-based management of acute malnutrition (CMAM) component of the program and related to Outcome 1, are presented in Figure 2. Here, a primary concern expressed was the elimination of RUTF from the program with hope expressed that this gap would be filled rapidly with a locally produced substitute. Concerns also were expressed about the impracticality of house to house screening (easy to rectify in most communities with centralized, community-based screening, ideally coupled with other services), about the challenges of mother-child pairs getting to referral sites, about food secure households receiving food security services, and about the problem of food secure beneficiaries receiving food security services under the program.

Figure 2: Program Constraints Assessment - CMAM

Constraint	Technology Suggestions	Policy Suggestions	Research & Training Suggestions
1. RUTF eliminated		Replace rapidly with local substitute	Expedite development of local substitute
2. House to house screening impractical	Organize screening together with other services at central community site		
3. Food secure beneficiaries frequently enrolled with food security benefits		Add additional enrollment criteria: landholdings (<.5 acre) or food insecurity score	
4. In cases of complications, difficult to get mother/child to go to referral site	Provide actual transportation – not simply allowance		

The CMAM approach, an evidence-based means of addressing acute malnutrition, was included in the MDG/F program and has been included in the government's National Nutrition Service agenda. As seen in the section on program costs below, CMAM is not an inexpensive program and, with imported ready-to-use therapeutic food (RUTF), the approach has been labeled by some as non-sustainable. The government's banning of imported RUTF in the midst of MDG/F program implementation created challenges for the program, ultimately resolved by providing counseling to the families of severe acute malnutrition (SAM)-affected children on ideal foods to prepare, while the program continued to provide moderately acutely malnourished (MAM) children with WFP-provided wheat-soy blend. While recognizing concerns about providing a non-lipid-based food to SAM children, the decision not to provide any food to the SAM children following the elimination of RUTF imports seems curious. As indicated in the Costs section, evaluation surveys of the Bangladesh Integrated Nutrition Project (BINP) found major reductions in the prevalence of severe underweight (overlapping considerably with the prevalence of SAM) using food supplements prepared by local women's groups, while maintaining very low mortality rates – although recovery took somewhat longer than is the case with RUTF.

A child was selected for CMAM based on house-to-house screening using mid-upper arm circumference (MUAC) tapes. Although subsequent medical review found some shortcomings in measurement techniques, the screening was likely reasonably successful in identifying acutely malnourished children for a facility-based regimen including food supplementation, and with those children suffering from complications referred to district-level health facilities equipped by the program with “SAM corners.”

More questionable, however, was the assumption that the families of SAM and MAM children were also those who should be receiving food security assistance. While the overlap of food insecure households and those with SAM or MAM children is high, field visits found numerous households which were, in fact, food secure and therefore not in need of the program’s food security inputs. Some of these were families with prematurely born children who, by definition, would register as SAM when measured.

Extensive discussions with government and UN personnel indicated a preference in future programming for additional criteria in selecting beneficiaries for food security program assistance. Prime among these is the nine-question food security assessment tool already used in the ongoing food security assessments carried out in the country through the Food Security and Nutrition Information System (FSNIS.)

Finally, for a mother constrained by household and livelihood responsibilities and, often, other children, to have to organize travel to district medical facilities in SAM cases with complications often proved unrealistic in implementation of the Screening/CMAM component. Given the small number of such cases, the program should take responsibility for arranging as well as financing transport.

The Food Security Component

The PCA findings pertinent to the food security component – Outcome 2 of the program, are presented in Figure 3 below.

As seen, most of the concerns raised, e.g. garden produce consumed by animals or damaged in floods, and problems with the goat distribution and breeding efforts can easily be addressed by relatively minor refinements in project design.⁴ A more serious structural concern has to do with problems that poorer households have in marketing their garden produce. Here the Brazil model of purchasing food directly from households assisted in food security interventions – and using that food in the hot school meal program, is about to be introduced in Bangladesh through a

⁴ It should be noted that goat distribution, only 23% of the initial program target, was low in large part because of delayed initiation and procurement (full operation beginning only in 2013.) Toward the end of the program, distribution moved more rapidly.

government pilot project. Such households also may be assisted in the development of cooperatives for joint marketing purposes.

There can be little question that the food security program has had a positive effect on reducing household food insecurity in program areas. The endline survey reveals that the percentage of households in program areas with gardens increased over four fold, and that the percentage of household income derived from gardens and poultry increased more than three times, from 2.7% at baseline to 9.3% at endline – although still far from adequate to eliminate food insecurity in these families.

Data from the endline survey was utilized to create a food consumption score (FCS), a composite score based on dietary diversity, food frequency and the relative importance of different food groups. The percentage of households with food consumption scores considered minimally adequate or higher is 86.7% in program areas compared with 63.9% in control areas. (Unfortunately, no comparable data is available from the baseline survey.)

In the poorest wealth quintile, the actual average FCS in program areas was found to be 51.8 compared with 40.0 in control areas.

The survey also found that the percentage of households consuming eggs or meat on the day previous to the survey more than doubled (from 20.4% to 44.1%), and the percentage consuming a milk product increased significantly from 16.8 to 24.7%. (Consumption of eggs and meat in control areas increased only minimally, while consumption of milk products actually decreased.)⁵

It's also clear that a large majority (over 80%) of program area households attended courtyard nutrition education meetings designed to facilitate behavioral change.

⁵ In the poorest wealth quintile, households in program areas consuming eggs or meat on the day prior to the survey also increased though less dramatically (from 22.5% to 30.2%) while the percentage of households consuming a milk product increased from 16.8 to 20.3%. Among poorest wealth quintile households in control areas, the percentage of households consuming these food groups declined.

Figure 3: Program Constraints Assessment - Food Security Intervention

Constraint	Technology Suggestions	Policy Suggestions	Research & Training Suggestions
1. Garden produce eaten by animals	Add “net jhal” to input distribution		
2. Some goats die	Consider cash provision to beneficiaries for direct purchase of local goats	Increase # of DVMs to 3 per upazila and Vet Assistants to 1 per union	
3. Male goats for breeding in short supply	Consider providing every 10 th family with one buck for insemination		
4. Destruction of gardens by floods	Emphasize raised beds		
5. Assisted households have trouble marketing		Pilot project will soon purchase produce from beneficiary households for school hot meals	

Figure 4: 19 Low Income Households in Charfasson

- All migrated to the area recently because of availability of government land
- All but one woman were married before the age of 18
- All but one child was born “smaller than usual”
- Families were counseled to “wash hands with tubewell water” and to “use latrines” – but none have such facilities
- By selling many young goats – bred from those distributed by the program – each household hopes to purchase a cow – the medium term goal of all the households.
- Of Tk 6,000 (average monthly earnings), expenditures include
 - Rice = Tk 2900
 - Wood and kerosene = Tk 1000
- Other major expenditures:
 - Debt repayment (roughly one half of these households are in debt; fewer than before because of program-facilitated produce sales)
 - School fees and clothes
 - Rickshaw payments
- Most households spend more on chips, chocolate, and sugared juice than on dal.

School-based Activities

Interestingly, there were no major issues raised by project managers, service providers or beneficiaries of the school-based activities – related to Outcome 3 of the program - which, everyone seems to agree, went exceedingly well. There is considerable anecdotal evidence of children taking home nutrition education messages from their classes, and garden enthusiasm from their school garden experiences.

There also is monitoring data indicating significant increases in enrollment resulting from the introduction of school feeding in these areas. In a representative area, primary school enrollment increased from 400 students (57% of primary school aged children in the coverage area) to 706 students (virtually 100%), and attendance jumped from a daily average of 57% (prior to the initiation of MDG/F program activities) to 95% with only a small number of school drop-outs during the period.

Anemia Reduction

The PCA findings pertinent to the anemia reduction component – Outcome 4 of the program, are presented in Figure 6 below. Here, the constraints identified by project managers, service providers and beneficiaries raise major issues about this component – and about future efforts to address anemia reduction in the country.

The first issue, inadequate iron-folate supply at facilities, raises an important issue about facility supply organization, and the need for easy re-ordering mechanisms, utilizing cell phones, as stocks reach pre-determined levels of diminution. Multiple international studies have found the major constraint inhibiting iron-folate intake in pregnancy to be supply constraints, not compliance issues.

The second issue, also serious, is the concern that even pregnant women who consume iron-folate during pregnancy often continue to be anemic. The problem here is one of pre-pregnancy iron stores. Critically needed in the country is the weekly distribution of iron tablets to adolescent girls, including those no longer in school. Such distribution can and should be coupled with counseling on life skills including nutrition and reproductive health. Ultimately, the Bangladesh Government also will need to wrestle with inter-pregnancy iron stores and how best to address this problem.

There was some initial hesitancy by beneficiary mothers provided with multi-micronutrient powders (MNP.) Concerns also were raised about MNP supply shortages.

Unfortunately, at this writing, endline survey results on actual anemia reduction are not yet available.

Figure 5: Three Families in Bamna

Family 1: Woman was married at 14, has four children, all of them undernourished. One died shortly after delivery. The family has no land; the man is an agricultural laborer. Under the project she received a goat which died within a week. She had been given a cell phone number to call in case of problems, but when she calls, she gets no reply.

Family 2: The mother in this family finished her schooling and married at 25. They have two daughters and aren't planning to have more children despite some marginal complaints from the man's mother. The father helps with child care.

Family 3: The family, economically better off, is receiving project benefits only because one child was born premature and fell into the SAM category (meaning program benefits) when measured. The family consumes lots of processed food and is already caught in "the nutrition transition" with family members headed toward overweight and obesity.

Figure 6: Program Constraints Assessment - Anemia

Constraint	Technology Suggestions	Policy Suggestions	Research & Training Suggestions
1. Iron folate for pregnant women often not available in facilities		Recommend updated stock and re-ordering procedures to government	Examine government stock and re-ordering procedures.
2. Pregnant women still anemic despite iron/folate distribution and consumption		Introduce weekly iron supplementation for adolescent girls together with life skills learning. Include out of school girls.	

Outcome 5: Data/Information

The Outcome 5 effort to improve nutrition and food security-related data and information produced an important health/nutrition assessment of urban slums in the country; a valuable mapping exercise identifying the specific government, NGO and development partner initiatives nutrition inputs in each of the country's geographic areas; and studies on women's empowerment, comparison of anthropometric measures, and nutrition education. Outcome 5 expenditures also permitted the development of an integrated database likely to be useful in future multisectoral pursuits

In connection with Outcome 5, it is noteworthy that the Food Security and Nutrition Surveillance Project (FSNSP) implemented by BRAC, the Bangladesh Bureau of Statistics and Helen Keller International, carries out quarterly food security assessments in key ecological zones in the country. The conduct of such surveys of high quality and with such frequency is rare internationally, and, given the high prevalence of food insecurity in the country, of great potential value. Unfortunately, little actual use is made of the data at the national or sub-national level. One might have imagined the establishment of a mechanism under Outcome 5 to put in place in the Barisal region a response mechanism to be triggered when data from these surveys reveals a marked deterioration in food security levels.

As indicated, the 9 question food insecurity scoring system used by FSNSP might be an ideal means of identifying households in programs such as the MDG/F for food security assistance.

Women's Empowerment

Although the issues were highlighted in the proposal, the MDG/F planning team decided against making women's empowerment an explicit program outcome - believing at the time that the planned activities might not have a major effect on this vital national need. The planners' reticence proved unnecessary.

The program's means of promoting women's empowerment was primarily through the food security (Outcome 2) activities. In a country where low income women are highly unlikely to receive agricultural extension activity for small holding farming or homestead gardening, the formation of women's groups through this program assured at least minimal attention. Additionally, women in program households participating in garden or small livestock activities often received earnings themselves for one or both of these activities.

Their major role in the home garden and small livestock activities resulted in major changes in their decision making in these areas as indicated in Figure 7. Women in program areas were more than one and a half times more likely than control area women to indicate that their decision making role in children's food consumption was greater than in the previous year. On their role in household decision making as a whole, program area women's positive responses were nearly double that of women in control areas. And on garden and small livestock decision-making, program area women's responses were 9.9 and 6.7 times higher, respectively.

Figure 7: Percentages of women believing their decision-making role in the household to be greater than the previous year

Type of Decision Making	Program Areas (%)	Control Areas (%)
Child's food consumption	73.5	41.9
Garden activities	42.7	4.3
Small livestock activities	22.8	3.4
Overall household decision making	77.0	41.9

Pregnancy Behaviors

As with women's empowerment, the MDG/F program planners chose not to make pregnancy outcomes or behaviors a primary outcome - this recognizing that the program was providing counseling but no services. Unfortunately, no data on birthweights (or perceived size of child relative to normal) was collected at baseline or endline. Information, however, was collected on pregnancy behaviors.

As seen in Figure 8, the practice of consuming more food during pregnancy (as opposed to the frequent practice of "eating down" during pregnancy) more than doubled in program areas between baseline and endline. The practice of getting

more daytime rest increased slightly. The endline data suggests significant decreases in both in control areas, but without explanation.

Figure 8: Pregnancy Behaviors, Pre-Post, Project and Control Areas

Pregnancy Behavior	Change in Program Areas – Baseline to Endline (%)	Change in Control Areas – Baseline to Endline (%)
Consuming more food than pre-pregnancy	15.1 to 36.7	17.3 to 7.1
Getting more day-time rest than pre-pregnancy	55.6 to 59.0	73.2 to 42.9

Program Costs

Although the program covered a relatively small number of beneficiaries and did not run for a long enough period to generate on-going long run costs, the program did calculate a set of “establishment costs” (see Figure 9.) It will be important to examine these costs over time, as specific MDG/F components are absorbed into more permanent programs. There is no question that ongoing program costs are far lower than “establishment costs.”

Figure 9: Program Costs

Outcome	Total Cost (\$)	No. of beneficiaries	Cost per beneficiary (\$)
SAM, MAM and PLW malnutrition treatment	2,002,500	12,200	164
Courtyard-based acute malnutrition prevention (young children and PLWs)	360,000	26,000	14
Gardens, livestock	1,673,000	8,000	209
BCC: IYCF and dietary diversity	275,000	12,500	22
School feeding ⁶	1,241,000	42,000	30
School gardens	640,700	110 schools	5,824 per school
Nut Ed, Grade 4	212,500	7,000	30
MNP distribution	48,000	10,000	5
Anemia counseling	140,000	13,000	11

⁶ Includes commodities, transport, distribution, storage and monitoring

Even recognizing that these are establishment costs, the treatment cost is high. While saving lives is essential, the question outstanding is whether less expensive, more sustainable approaches could save as many lives even if the benefits are not as rapid. With the elimination of RUTF from the nutrition treatment equation in Bangladesh, a key question will be the effectiveness and cost of the local replacement being developed by ICDDR,B – and, perhaps a comparison of cost, effectiveness and time of recovery with the kind of low cost locally produced food supplements which, in BINP, were successful in reducing the prevalence of severe underweight from 9% to less than 2% in three years while providing employment for low income women.

Assuming effectiveness, MNP distribution, anemia counseling and grade 4 nutrition education appear to be excellent bargains.

Program Efficiency

Expenditure Rates

A review of program expenditure rates indicates that the expenditures were behind schedule for the first two years of the program, and then improved considerably. (During the first six months of operations, January to June 2010, the program spent only between one eighth and one sixteenth of its allocated budget on program components.⁷) Part of the early shortcomings relate to unrealistic targets, and in particular the 10 fold overestimate of the number of children in the coverage area under age 2. There was a 15 fold overestimate in the number of children with severe acute malnutrition resulting from faulty assumptions about the relationship of weight for age and MUAC data. Additionally, subsequent to initial budget estimates, the program expanded its implementation area to three additional unions. This expansion permitted coverage of two entire upazilas, thus enabling involvement of administrative apparatus at the upazila level and, in turn, generating the necessary compliance at the union level and below. A related problem was the absence of the Ministry of Local Government and Rural Development - the federal entity overseeing upazila administration.

Fund Allocation Process

Each of the participating UN agencies were allocated funds directly from the program secretariat, and not from WFP, the program's lead organization. This separation proved at times unwieldy. More sensible might have been an independent program management unit with a pooled fund mechanism permitting much easier funding disbursements and also funding adjustments when necessary.

⁷ The garden and small livestock components were particularly delayed – spending only one eighth of its anticipated budget in the first year of operations. As indicated in the food security section above, part of this shortfall resulted from delays in goat procurement.

Coverage by Outcome

To the program's credit, all children under the age of 5 and all pregnant and lactating mothers were screened according to the program's schedule, and all children under the age of two received MNP. All children attending government schools in the program coverage area received high energy biscuits, and all class 4 children participated in school gardens.

Overall Governance, Coordination and Communication

The Program Management Committee (PMC), chaired by the Economic Relations Division of the Ministry of Finance functioned efficiently. PMC meetings covered project location and expansion, fund transfers and the identification of needed studies in addition to operational updates with reviews of monitoring data. There also were governance meetings at sub-national levels focused on monitoring data on project progress and on issues in need of attention. There was, however, an unfortunate "disconnect" between national and sub-national governance, this perhaps related to funding flows from the UN to NGOs and bypassing the government. On the whole, local government participation was inadequate, leading to the third of the "Options for the Future" provided below.

In addition to the coordination of UN development partner inputs by WFP, project coordination committees chaired by the chairperson of the upazila or union and the UNO, with GoB service provider and NGO representation and with participation of CNWs and CNSs, were established at the upazila and union levels.

The above groups served as the primary discussion platforms at the national and sub-national levels. At the same time, a web-based database was utilized to permit broader access to project information and progress. The Joint Program organized two workshops with CNWs and CNSs to facilitate their collection and utilization of project data. Post-workshop commentary by the participants indicates that these were highly appreciated. The quality of the monitoring data, on the whole, attests to the value of these workshops.

NGOs themselves performed a notch less well in their monitoring responsibilities, this, in part, a result of high turnover of key NGO staff working in these remote areas of the country.

Capacity Development

The MDG/F developed and implemented a capacity strengthening plan with formal, on-the-job, and refresher training designed to enhance capabilities in the concerned sectors. Considerable effort was expended by the participating NGOs and the UN agencies themselves in local capacity development relating primarily to the organization of CMAM at the community level, and at community clinics and referral

points, and to agricultural extension and other staff responsible for implementation of the garden and small livestock activities. Discussions with key informants at all levels indicate that the training was carried out efficiently and was effective in transferring necessary skills. While the CMAM training will continue to be highly relevant with the expansion of the NNS, the future use of the garden and small livestock training will depend upon government follow-up with such programs.

In addition a “community learning program” was undertaken for the mothers of young children, pregnant women and men. These sessions focused on the causes of under nutrition and the means of addressing them at the family and community level. The decreases in child malnutrition and the low relapse/readmission rates in the CMAM activity indicate that the learning program was reasonably successful. The exit strategy evaluation recommended below will help determine the extent to which these behavioral changes have been sustainable.

To the credit of the program and the involved NGOs, these training efforts were carried out throughout the program coverage area including its most remote sites, and with a critical mass of service providers based in these areas.

In the final year of the program, some use of mass media was utilized to reinforce messages delivered at the community level.

Government Ownership and Relevance to National Government Policies

The MDG/F program offers the Government of Bangladesh a model of nutrition programming significantly different from those pursued in the past two decades.

Between 1996 and 2011, the government carried out major community-based programs in the country, although political support and commitment to these programs varied. In the first of these, the Bangladesh Integrated Nutrition Project which operated from 1996 to 2003, the community-based component was coupled with an intersectoral component including garden and poultry support to low income families in the same areas. These community-based programs were terminated in 2011 and replaced by the National Nutrition Service (NNS), a health sector based program seeking to “mainstream” nutrition into each of the health sector services while “coordinating” multisectoral nutrition activity through a Steering Committee that meets periodically.

While NNS officials were members of the MDG/F Program Management Committee and participated actively in MDG/F planning, interaction related primarily to the CMAM outcome, to facility training and to related interventions associated with the health sector. Although, as indicated, NNS has multisectoral coordination responsibilities, this has not yet led to anything resembling the MDG/F convergence approach, or the multi-year CARE-assisted SHOUHARDO project, also utilizing the convergence approach, which has achieved remarkable reductions in stunting.

Accordingly, the MDG/F experience presents to the government a new direction which, given its effectiveness, is likely to generate considerable interest.

Importantly, the extraordinary effectiveness of civil society advocacy in Peru and Brazil have led to the creation of two civil society organizations in Bangladesh. The Civil Society Alliance for Scaling Up Nutrition Bangladesh is aligned with the global SUN Movement and is composed of representatives from civil society networks across the country with BRAC serving as its secretariat. A new, more recent, network is the Bangladesh Civil Society Network for Promoting Nutrition, similarly committed to nutrition advocacy and made up of local non-profits and professional bodies; the NGO Eminence serves as its secretariat. These civil society organizations are well positioned to advocate for broader-based convergence programming for nutrition in the country, for high level political commitment to such programming, and for adequate budgeting to support it. These organizations also can take on quality assurance responsibilities for such programs and for keeping the government and its partners accountable for well implemented and effective programs.

Larger Program Issues and Perceptions of Participating UN Organizations in Dhaka

PCA tables on the program as a whole are provided below in Figure 10. The constraints noted in these figures also mirror many of the issues raised by representatives of the participating UN organizations in Dhaka.

Treatment vs. prevention

An important issue frequently raised was the attention – to some excessive attention given to treatment in the program relative to prevention. This reaction is not infrequent internationally in programs which include therapeutic care and feeding, and particularly when treatment budgets exceed those for prevention. Indeed the opportunity costs of therapeutic care are high in terms of prevention efforts that could be carried out with these funds. As indicated in the Costing discussion above, there may be alternatives worth considering. The question facing Bangladesh and other countries which continue to face high infant and young child mortality rates is whether sustainable, less costly alternatives are available to address the problem of acute malnutrition, even if results take somewhat longer to achieve. Clearly the jury is still out on this important topic in the international nutrition community.

Short program duration

A second issue regularly raised is the unusually short duration of MDG/F activities for a program of this nature, and the problem of sustainability. This issue is

addressed in the section below on Options for the Future. Normally, the issue would be of primary importance. In the case of this MDG/F program, its primary function – presenting a new and different model of nutrition programming in the country – may be more important than the sustainability of specific activities in this particular geographic area.

Missing sectoral inputs

Respondents interested in the convergence nature of the program were quick to note the missing sectoral inputs: WASH (the endline survey found that more than a third of households in program areas are without adequate sanitary facilities)^{8 9} and employment generation (over two thirds of households in program areas are landless – 65.3%.) Some also noted inadequate attention to pregnancy – improved service delivery with high quality counseling, although, as indicated, pregnancy behaviors in program areas were significantly better than in control areas.¹⁰

Program decision making

Some respondents noted that decision making in the program took longer than is sometimes the case, and that ERD, acting as coordinator for the government departments, took some time to establish the operating norms. However responses on the decisions themselves were possible, and ERD was identified as a valuable partner in supporting multisectoral nutrition pursuits in the country.

Program monitoring

Respondents, particularly project managers were concerned about monitoring in the program, to paraphrase their words, “thorough but inadequate,” with an expressed hope that data collected could be more rapidly utilized locally to address problems as they arise. There is no question that the NGOs participating in the program were vigilant and responsible in the monitoring of program activities – as they were in facilitating program implementation as a whole.

But program monitoring was understood in traditional terms: with data moving from community nutrition workers, to community nutrition supervisors, to union supervisors to upazilas to districts and finally to offices in Dhaka, and with each

⁸ Endline survey results indicate that households without improved sanitation have wasting and underweight prevalence 1.4 times higher than households with improved sanitation. Stunting prevalence without improved sanitation is 1.2 times higher.

⁹ There can be little question of the importance of WASH in reducing malnutrition, particularly in densely populated areas. Analysis by Dean Spears of 140 DHS surveys in India has found that the height of Indian children is highly associated with their and their neighbors access to toilets, and that open defecation accounts for much of the excess stunting in India (Spears, 2012.)

¹⁰ The program encouraged ANC visits for women but was not involved in pregnancy service delivery *per se*.

level aggregating data for onward transmission to the next level. Numerous respondents recognized that while the system permits an accounting of program implementation, it misses a primary purpose of monitoring – namely identifying local problems quickly so that they can be rapidly addressed.¹¹

Shortages of positions, high vacancy rates and high turnover

Government officials themselves were forthcoming about the constraints under which they have to operate: an inadequate number of positions and high vacancy rates. (Respondents also noted the high turnover rate in NGO staff.) These problems which plague government programs in most countries require high level policy attention. Should the convergence approach to malnutrition, exemplified by the MDG/F program be adopted by the government as a national policy, however, government staff requirements in each of the selected target areas would be clear in advance, permitting the necessary budgeting and staffing.

Praise for the program

But the identification of these constraints in total did little to cloud the extremely positive impressions of most respondents, noting regularly that:

- Program planning and implementation were well executed despite challenges
- Coordination was far better than anticipated
- Good decisions were made on fund utilization (including the extra funds available when MUAC screening produced fewer SAM/MAM cases than expected)

Other responses

Stakeholders noted that

- Remote areas proved unusually challenging (see Figure 11.)
- Positive deviant families (which, despite obstacles, have found ways, e.g. to raise well nourished children or have healthy pregnancy outcomes) can be used increasingly in the BCC components of such programs

¹¹ The solution to this problem is the increasingly utilized technique of “management by exception.” Using this tool, unions, for example, would set minimal acceptable levels for primary indicators and would examine data coming from each of the communities, circling entries that fail to reach these “trigger” levels. If the trigger level for SAM recovery, for example, is 85%, the union would identify those communities failing to achieve that level, and would be responsible for investigating and addressing the problem in these communities. The same mechanism would operate for upazilas reviewing unions and for districts reviewing upazilas. Where computers are used, data management systems can easily be programmed to highlight entries not achieving trigger levels.

- Tanahashi or bottleneck analysis can be particularly useful in the analysis of programs like the MDG/F
- The inclusion of “quality assurance teams” in such programs, arriving unannounced at project sites, can assess the quality of service delivery and make recommendations to service providers and program managers
- Beneficiaries themselves can sometimes be used as “change agents” in such programs

Overall reaction

There was unanimity among UN stakeholders in Dhaka that, despite obstacles, the advantages of the three UN agencies and their counterparts working together in this “convergence” program far outweighed the “transaction costs.”

Figure 10: Program Constraints Assessment - Overall Program

Constraint	Technology Suggestions	Policy Suggestions	Research & Training Suggestions
1. Program overly treatment oriented		Increase emphasis on prevention	
2. Program duration inadequate for full benefit		Extend program for three more years; use beneficiaries as change agents	
3. Key program dimensions missing		Add: Attention to pregnancy; WASH; livelihood training' safety net nutrition delivery	
4. Program monitoring inadequate		Introduce management by exception process; increase government involvement	
5. Inadequate nutrition-related government staff positions; high vacancy rates (worse in more remote areas); high turnover of NGO staff			

Figure 11: Outlying Areas Mean Significantly Reduced Benefits

Despite being a beneficiary household, absence of roads often means:

- No children in school
- Non-attendance at hospital in case of referral
- CMAM activity at home except for WSB picked up fortnightly at a facility
- Poor attendance at courtyard meetings
- On average, 80% of income spent on food

In addition, many outlying families

- Have no access to tubewell water or a sanitary facility
- Have no cell phone (no electricity for recharging, no funds for calls)

Overall, the primary limiting factors in these areas relate to physical infrastructure which, once addressed, will permit increased effectiveness of all social sector programs.

Conclusions

The MDG/F program has provided the Government of Bangladesh and the international nutrition community with a highly valuable model of nutrition programming. The effects of the multisectoral nutrition convergence approach appear to be not simply additive but also synergistic (e.g. 1+1+1=5.) As examples:

- Households with improved household food security are more likely to be able to comply with nutrition counseling messages.¹²
- Children in households with improved water, sanitation and hygiene will have a reduced prevalence of diarrheal infection and, in turn, improved nutritional status.¹³
- In schools offering nutrition education classes and school gardening, increased school enrollment and attendance, facilitated by school meals, will often translate into better nutrition practices in the home and increased homestead gardening.

When this convergence is targeted to vulnerable areas it appears viable, capable of major impact, and likely to be highly cost-effective.

¹² But these messages need to be consistent across programs which has not always been the case.

¹³ The endline evaluation survey found that diarrheal infection was 23% lower in “normal” children than in moderately or severely wasted children.

In addition to exemplifying the value of the convergence approach, the MDG/F program was successful in demonstrating the value of well-operated nutrition-sensitive interventions in the country, implemented to scale in these geographic areas, and successful in addressing these particular determinants of malnutrition. These interventions now need to be scaled up together with health sector-based nutrition-specific programming.

The effects of the program on nutrition and food security indicators were impressive: a near elimination of severe acute malnutrition and a reduction of moderate acute malnutrition to roughly one tenth of earlier levels, highly significant increases in the percentage of vulnerable households with home gardens, in the income derived from gardens and poultry, in the consumption of eggs and meat, and in food consumption scores. Additionally, the school lunch and garden programs were successful in improving school enrollment and attendance.

Although women's empowerment and improved pregnancy outcomes were not explicit objectives of the program, effects on both were significant with women's roles in household decision making greatly enhanced, and with a doubling of the percentage of project area pregnant women consuming more food than usual.

Valuable studies were carried out under "Outcome 5" of the program: nutrition and food security-related data and information, although the program's failure to utilize the findings and tools of the Food Security and Nutrition Surveillance Project may have been a missed opportunity.

Program efficiency varied by category with expenditure rates unusually slow early in the program, with an often unwieldy fund allocation process, with inadequate participation by local governments, and with some shortcomings in NGO monitoring, but with exceptionally high program coverage in each of the program's outcome areas, with efficient national level program governance, and with highly regarded program coordination.

Capacity development in the program was systematic and vital to the program, particularly in the areas of CMAM operation and garden and livestock-related training.

There was agreement among all stakeholders that the advantages of the three UN agencies and their government counterparts working together far outweighed the "transaction costs" of doing so.

Lessons Learned

The MDG/F program experience offers several valuable lessons for nutrition efforts in Bangladesh and for the international nutrition community.

1. The “convergence” approach of multisectoral inputs in targeted vulnerable areas is capable of significant nutritional benefit. While the MDG/F program was of short duration and did not include all of the sectoral involvement desirable, experience from the Shouhardo project in Bangladesh and from Peru indicates that a reduction in stunting prevalence by more than 4 percentage points a year is possible.
2. The program disruption resulting from the government’s banning of RUTF imports suggests that the development of mitigation plans may be appropriate in cases where a program is vulnerable to such changes in government policy. Sustainability and program cost questions are also triggered by such a reliance of patented imports, as discussed in this report.
3. Food security programming should take full advantage of state-of-the-art assessment techniques, and specifically food insecurity scoring systems.
4. House to house CMAM screening in Bangladesh – and in most countries – is usually unnecessary and results in missed opportunities: interaction among child caretakers, group counseling and the provision of additional health services at the community level. Where there are shortfalls in attendance, good monitoring can identify non-attending children with home visits then organized to those households.
5. Referral to more distant health facilities is often overly challenging to low income families, particularly in more remote locations. The arranging of transport for such families is likely to have high returns in compliance.
6. Well implemented school meals and gardens can improve school enrollment and attendance significantly and should be actively encouraged.

Options for the Future

Three primary options – not mutually exclusive - present themselves for the future of MDG/F type programmatic activity in the program area:

1. Substantial efforts have already been made to incorporate MDG/F activities into existing or new national or regional programs. As of this writing, program activities are likely to be incorporated into the United Nations Development Action Framework (UNDAF), into the WFP national school feeding program and into UNICEF programs including the UNICEF-assisted MYCANSIA program. Additionally, non health sectors can continue to strengthen the nutrition focus of their services in these MDG/F areas with technical support as appropriate.
2. The National Nutrition Service (NNS), about to gear up its activities in the country, could choose to undertake a pilot program in the MDG/F program

area building on the activities undertaken. The NNS plans to increase the nutrition orientation of health facilities, and have one community nutrition worker in place for screening in each community clinic coverage area.¹⁴

3. Using another Peru/Brazil model, it may be possible to experiment in the program area with a UN or GoB Union or Upazila Incentive Fund, selecting appropriate indicators. As an example, interested MDG/F unions or upazilas which, after two years – and with reliable external assessment – are able to maintain the lower levels of wasting achieved by the program would receive a significant supplement to its nutrition-related budget for coming years. With elected officials at both the union and upazila levels, meeting these targets and procuring these additional funds could provide a major incentive for intensive nutrition-related action.¹⁵

Evaluating MDG/F Program Sustainability

Regardless of the option(s) selected, a program of this importance requires an evaluation of its sustainability – which means returning to the area between 12-24 months after project completion and collecting key information on activity and impact indicators. Such an evaluation addresses the primary question of whether the impact achieved by the program has been sustained, and secondly tallies the program activities still in existence. On the latter, it would, for example, be valuable to know whether the women's groups established by the project are still in existence, whether the garden and small livestock inputs have proven sustainable, whether CMAM continues to function well, and whether school programs have been continued.

Although MDG/F funding per se will not be available for data collection at that time, means should be found by the concerned government departments and UN partners to finance this important sustainability evaluation.

Other Recommendations

The following recommendations emerge from this evaluation report:

1. The convergence approach as a model, with multisectoral interventions operating in areas targeted by high rates of malnutrition and/or food insecurity (in the case of the MDG/F program, the highly vulnerable southern coastal areas of the country) deserves serious consideration by the government and its development partners. Convergence should include

¹⁴ Among many other issues, NNS would have to find local supplementary food substitutes for acute malnutrition cases.

¹⁵ Considerable interest in this approach has been expressed by senior program stakeholders.

those interventions utilized in the MDG/F program plus WASH (specifically WASH hardware) and employment generation activities.

2. Important programs such as that undertaken by the MDG Fund require a duration of at least five years.
3. Except in emergency situations, the balance in such programs between prevention and treatment intervention needs to be shifted substantially toward the former.
4. Small farm households in Bangladesh require intensified assistance in home gardening and in marketing, the latter both through the encouragement of cooperatives and through government purchase of food commodities from assisted households for school meal programs.
5. Such assistance can be facilitated where women doing garden and agricultural activity are organized into groups.
6. Intensified efforts are needed to provide life skills counseling and weekly iron tablets to adolescent girls – both those in and out of school.
7. The use of management by exception techniques in project monitoring are essential to assure rapid local utilization of data.
8. Future programs such as that undertaken by the MDG/F could benefit considerably from the use of quality assurance teams and from Tanahashi or bottleneck analysis.
9. Shortages of government positions and high vacancy rates in rural areas deserve priority attention by the government.
10. The civil society nutrition advocacy groups now in existence in the country deserve active encouragement.

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Appendix: MDG/F Program Results Chain Logframe

Activities/Outputs	Intermediate Outcomes 1	Intermediate Outcomes 2	Impacts
Monthly screening of children 0-59 months and P&L women	Identification of children and mothers with SAM and MAM for CMAM, and for food security assistance		Reduced prevalence of underweight; reduced prevalence of SAM in children 0-59 months (Outcome 1)
Treatment of MAM (WSB+) and SAM (instruction on halwa and khichri)	High graduation and low relapse rates		
Strengthening of clinic capacity in CMAM	Improved quality of services and increased coverage capacity with BCC provided		
Referral of SAM cases with complications to upazila clinic			Reduced malnutrition in P&L mothers and improved pregnancy outcomes (Outcome 1)
BCC counseling on breastfeeding, complementary feeding, dietary diversity, hygiene etc.	Knowledge increases	Increased % of infants exclusively breastfed for six months, of timely introduction of nutrient-rich complementary food, of continued breastfeeding for at least 24 months, of hand washing with soap, and adequate dietary diversity	

Activities/Outputs	Intermediate Outcomes 1	Intermediate Outcomes 2	Impacts
MNP distribution by CNWS and at facilities for child consumption beginning at 6 months of age	MNPs mixed with food at home and consumed by children		
Encouragement of facility-level ANC and iron folate procurement and consumption by pregnant women	Women attend clinics, receive ANC, and receive iron folate tablets	High compliance by women in iron folate tablet consumption	Decreased prevalence of anemia in young children (Outcome 4)
School feeding (high energy biscuits for all children)	Improved active learning capacity in school		
Deworming of school children through existing government program	Improved school attendance, particularly among female students addressing women's empowerment outcome		
	Increased understanding of nutrition	Improved learning and awareness (Outcome 3) increase receptivity to health and nutrition messages addressing outcomes 1, and 4	

Activites/Outputs	Intermediate Outcomes 1	Intermediate Outcomes 2	Impacts
School gardening (grades 3 and 4)	Children engaged; Gardening and nutrition messages taken home by the child	Improved learning and awareness (outcome 3) increases household income and food security	
Homestead garden assistance to families of children or P or L mothers identified with SAM and MAM (seeds, saplings, liquid fertilizer, tools and T.A.) – work normally carried out by women	Garden production increases or is initiated Egg and meat production increases or is initiated	Sales of produce, eggs and meat increase household incomes Produce, eggs, meat retained for home consumption is also provided to young children and to P&L mothers (addressing outcomes 1 and 4)	Reduced household food insecurity (outcome 2) Increased women's empowerment
Goats or ducks provided to the same families with T.A. – work normally carried out by women	Women frequently are able to keep the money earned from small livestock. Women meet regularly for training and for sharing experiences		
Grouping of women into producer groups		As groups, women producers are far more likely to receive DAE services	

Activities/Outputs	Intermediate Outcomes 1	Intermediate Outcomes 2	Impacts
Silos for grain storage provided to the same families	Storage reduces necessity to purchase foods at higher prices later in the year		
Food processing training provided for leaders in targeted communities – work normally carried out women	Year-round availability of nutrient-rich foods also address outcomes 1 and 4		
Capacity building provided for information systems			
Establishment of NGO M&E systems	Strengthened information systems (outcome 5) also addresses Outcomes 1, 2, 3 and 4		
Establishment of screening system			
Development of mapping system			
Beneficiaries provided with phone numbers to access health and agricultural information	Also strengthens national systems on an ongoing basis		

Joint Programme M&E Framework (update as of June 2013)

Protecting and Promoting Food Security and Nutrition for the families and Children in Bangladesh

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Baseline	Overall JP Expected target	Achievement of Target to date	Means of Verification	Collection methods (with indicative timeframe & frequency)	Responsible agency	Risks & assumptions
From Results Framework (Table 1)	From Results Framework (Table 1)	Baselines are a measure of the indicator at the start of the joint programme	The desired level of improvement to be reached at the end of the reporting period	The actual level of performance reached at the end of the reporting period	From identified data and information sources	How is it to be obtained?	Specific responsibilities of participating UN agencies (including in case of shared results)	Summary of assumptions and risks for each result
JP Outcome 1: Reduced prevalence of acute malnutrition and underweight in children 6-59 months and acute malnutrition in pregnant and lactating women (Project Area GAM 18.4%, SAM 4.6%)								
Indicators: - Prevalence of acute malnutrition (as measured by Weight for Height W/H & MUAC) in children 6-59 months of age in the project areas. - Percentage of underweight children (as measured by Weight for Age W/A) 6-59 months of age in the project areas. - Prevalence of acute malnutrition (as measured but MUAC) amongst pregnant and lactating women in the project areas.								
Output 1.1 Improved Access for SAM children aged 6-59 months of age facility and community based management of acute malnutrition	Indicators: - Proportion of SAM children, 6-59 months of age, enrolled in the CMAM programmes (> 60%), default rate (15%) and death rate (<10%) - Proportion of enrolled SAM children aged 6-59 months recovered in the CMAM programme (75%) - Proportion of SAM children (6-59 months) readmitted in the programme. Baseline: To be established when children are screened Timeframe: 2010-2012	There are no specific services available for children suffering from Severe Acute Malnutrition Baseline=0	Enrollment >60 % Default rate 15% Recovered 75%	693 (69% of total target) SAM children, 6-59 months of age, enrolled in the CMAM programmes Enrollment rate:100% Default Rate for SAM :9% Recovery Rate for SAM:81% Relapse rate for SAM:2%	Regular Screening by the programme, Summary reports; implementing partners' registers and monthly reports; systematic formal evaluations/case studies,CMAM data base report	Collection methods Collected for regular programme management information system and to be used for scaling-up of programme design	UNICEF/MOHFW	
Output 1.2 Improved access for MAM children 6-59 to CMAM programmes through supplementary feeding programmes.	Indicators: - Proportion of MAM children, 6-59 months of age, enrolled in the CMAM programmes (>60%), default rate (<15%) and death rate (<10%) - Proportion of enrolled MAM children, 6-59 months of age, recovered in the CMAM programme (>75%). - Proportion of MAM children (6-59 months) readmitted in the programme.	There are no specific services available for children with acute malnutrition in the programme Baseline =0	Enrollment >60 % Default rate 15% Recovered 75%	9688 (121% of total target) children, 6-59 months of age, with MAM enrolled in the CMAM programme, Enrollment rate:100% Recovery rate for MAM:95% Default rate for MAM:2.5% Relapse rate for MAM:2.3%	Summary reports by the Implementing partners' registers and monthly reports; systematic formal evaluations/case studies	Collection methods Collected for regular programme management information system and to be used for scaling-up of programme design	WFP with NGO, MoHFW, MoWCA, DWA	Political & security climates remain stable; Macro-economic situation remains stable ; Sufficient importance attached to programme implementation and ownership; Various relevant authorities will consider and support the strategy; Sufficient number of partners in the field; Access to programme areas is possible; Assured supply & logistics chain
	Baseline: 0 Timeframe: 2010-2013					Timeframe/Frequency (Baseline, follow-up at the end of intervention, follow-up after 6 months		

Output 1.3 Improved access for PLWs to supplementary feeding programmes.	Indicators: - Proportion of acutely malnourished PLWs recovered in supplementary feeding programmes (75%). Proportion of PLWs and mothers trained on WSB and comprehensive nutrition education package. Baseline: To be determined Timeframe: 2010-2012	Not yet available as programme activities have not yet started. Baseline to be established in September 2011	Enrollment >60 % Default rate 15% Recovered 75%	4279 (134% of total target) acutely malnourished PLWs enrolled in supplementary feeding programmes Enrollment rate:100% Default rate for PLW:10% Recovery rate for PLW:78% 4279 PLWs and 9272 Mothers trained (on going) on WSB and 25,818 Caregivers (beneficiaries & non beneficiaries) comprehensive nutrition education package. (ongoing)	Pilot projects summary reports; Nutrition partners' registers and monthly reports; Formal evaluations/case studies	Collection methods Collected for regular project management reporting system. Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	UNICEF/MOHFW	Political & security climates remain stable; Macro-economic situation remains stable ; Sufficient importance attached to programme implementation and ownership; Various relevant authorities will consider and support the strategy; Sufficient number of partners in the field; Access to programme areas is possible; Assured supply & logistics chain
Output 1.4 Improved knowledge and practice on optimum IYCF (incl. hygiene, care) and maternal nutrition practices in targeted groups	Indicators: - % of infants 0-5 months of age who are fed exclusively with breast milk - % of children 6-23 months of age who receive a minimum acceptable diet (in addition to breast milk) - % of health facility, NGO and community staff trained on optimum IYCF and maternal nutrition practices who score at least 80% in post-test evaluations Baseline: To be determined Timeframe: 2010-2012	Exclusive Breast feeding rate for children 0-5 months= 27.5% (baseline report) % of Children 6-23 months started complementary feeding on time= 36.2% % of Health Facility staff scoring at least 80% post test on CMAM=51% (Save the Children report)	To be established after baseline value is known	90 GoB Staff from health facility trained on CMAM , 209 NGO Community Staff trained on CMAM , 208 NGO Community Staff trained on BCC and 193 on IYCF & maternal nutrition practices .	Pilot projects summary reports; Nutrition partners' registers and monthly reports; Formal evaluations/case studies	Collection methods Collected for regular project management reporting system. Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	UNICEF/MOHFW	Political & security climates remain stable; Macro-economic situation remains stable ; Sufficient importance attached to programme implementation and ownership; Sufficient number of partners in the field; Access to programme areas is possible;
Output 1.5 National SAM and CMAM guidelines and protocols used to provide good quality management of acute malnutrition.	Indicators: -National CMAM guidelines developed and endorsed. Proportion of health facilities and CMAM programmes managing SAM in line with national guidelines, protocols & standard indicators. Baseline: To be determined Timeframe: 2010-2012		To be established after baseline value is known	Developed	Pilot projects summary reports; Nutrition partners' registers and monthly reports; Formal evaluations/case studies	Collection methods Collected for regular project management reporting system. Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	UNICEF/MOHFW	Political & security climates remain stable; Macro-economic situation remains stable ; Sufficient importance attached to programme implementation and ownership; Sufficient number of partners in the field; Access to programme areas is possible;
JP Outcome 2: Food security improved through agriculture, homestead food production and nutrition training								
Indicator: Percentage of beneficiary households with acceptable food consumption scores as measured using dietary diversity indicators								

Output 2.1 Improved dietary intake and supplementary household income generation through the promotion and implementation of homestead gardens	Indicators: — % of participating HHs establish integrated homestead farm - % of HH report changes in dietary pattern at the end of the project. - % increase in the number of HH (women) involved in IGA i.e. homestead garden, livestock and field crop production. Baseline: to be determined Timeframe: 2010-2012	% HHs involved in Homestead activity=32.3% % Women involved in Homestead activity =21.7%	8000	12,504 participating HHs establish integrated homestead garden 12,504 has involved in the (women) in IGA i.e. 7760 participants recieved livestock support (distribution ongoing for rest)	Pilot projects summary reports; Nutrition partners' registers and monthly reports; Formal evaluations/case studies	Collection methods Collected for regular project management reporting system Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	FAO/ MoA /DAE/ MoFDM, NGOs: BRAC/HKI	Political & security climates remain stable; Macro-economic situation remains stable ;Sufficient importance attached to programme implementation and ownership; Sufficient number of partners in the field; Partners' commitment remains high; Access to programme areas is possible.
Output 2.2 Improved skills and practices on food production, preservation and consumption in the targeted households	Indicators: - % of households with safe grain storage facility - % of HH who receive training produce year round homestead gardens. Baseline: to be determined Timeframe: 2010-2012	Not yet available as programme activities have not yet started. Baseline to be established in September 2011	8000	12,504 households with safe grain storage facility 526 HH received training food production, preservation & year round homestead gardens. 12,378 HH received training basic nutrition awarness training on cooking demonstrations. Baseline: to be determined Baseline: to be determined	Pilot projects summary reports; Nutrition partners' registers and monthly reports; Formal evaluations/case studies	Collection methods Collected for regular project management reporting system Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	FAO/ MoA/ DAE/MoFDM	Political & security climates remain stable; Macro-economic situation remains stable ;Sufficient importance attached to programme implementation and ownership; Sufficient number of partners in the field; Access to programme areas is possible.
Output 2.3 Improved access to support for optimal infant and young child feeding (IYCF) practices and increased access and availability to relevant nutrition information for the homestead he members	Indicators: - # of mothers received training on infant and young child feeding practices. - % of mothers exclusively breastfeeding their infants till 6 months of age. - % of mothers have knowledge on appropriate complementary feeding. - % HH have standard dietary plan in place PLW Baseline: to be determined	% of women knowing about proper duration of Exclusive Breast feeding=58% % of women knowing about timely introduction of complementary feeding=48%	8000	Education session on IYCF has completed for 12,348 Participants at field Not applicable for this period	Pilot projects summary reports; Nutrition partners' registers and monthly reports; Formal evaluations/case studies	Collection methods Collected for regular project management reporting system Timeframe/Frequency 2010-2012, midterm evaluation	FAO/ MoA/DAE/MoFDM	Political & security climates remain stable; Macro-economic situation remains stable ;Sufficient importance attached to programme implementation and ownership; Sufficient number of partners in the field; Access to programme areas is possible
JP Outcome 3: Improved learning and nutrition awareness through school feeding and school gardening								
Indicators: - Attendance rates: # of school days in which girls and boys attend classes, as % of total number of school days; - Proportion of the targeted children in primary schools achieved the nutrition awareness threshold.								
- Pass rate for boys and girls;								

Output 3.1 Fortified biscuits and essential learning support Provided to children in WFP-assisted pre-primary and primary schools.	Indicators : - Number of boys and girls receiving a school snack of 75 gm of biscuits by age group and gender -% of attendance of primary & preprimary students increased at WFP assisted school -Enrollment increased at WFP assisted Pre-primary & Primary schools - Number of boys and girls using fresh drinking water at school level. -Number of schools have adequate safe drinking water facilities Number of community mobilization workshops and awareness sessions organized. - Number of SMC members trained. - Number of children in primary schools attended nutrition education class. Timeframe: 2010-2012	Not yet available as programme activities have not yet started. Baseline to be established in September 2011	School age children 42000	31,967 students (Bhola&Barguna) of which 47% are boys and 53% are girls , are receiving a school snack of 75 gm of biscuits by age group and gender. Attendance increased significantly. Increase of attendance of 10-15 % at school level observed in Bhola. Avrg attendance rate for boys-83% and girls 84% were observed at MDGF areas (Bhola & Barguna) More than 90% of the schools have safe drinking facilities More than 90% of the students visibly use fresh drinking water at school level (either from school or from home) 110 SMC members trained /oriented about the programme. Not applicable in this period	Summary reports; implementing partners' registers and monthly reports; systematic formal evaluations/case studies	Collection methods Collected for regular project management reporting system Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	WFP/NGO/MoPME/DPE	Political & security climates remain stable; Macro-economic situation remains stable; Sufficient number of partners in the field; Access to programme areas is possible; Assured supply & logistics chain
Output 3.2 Establish demonstration gardens and food based nutrition education in targeted primary schools.	Indicators: - % of the targeted children attended food based nutrition education session. - Number of school demonstration garden established. % of the targeted school children participated in vegetable gardening activities. - 60% of the participated students gained knowledge and technical skill on vegetables gardening - % of trained school students that score at least 80% on post evaluation test on basic nutrition concept. Baseline: to be determined Baseline: to be determined Timeframe: 2010-2012	Not yet available as programme activities have not yet started. Baseline to be established in September 2011	110 schools in the program area 42000 school children	ToT completed for 110 teachers on food based nutrition education,IEC developed;activities are ongoing. 110 school established gained. 110 of the targeted school children participated in vegetable gardening activities. 5500 students recieved nutrition education sessions of 110 schools Not applicable for this period	Pilot projects summary reports; Nutrition partners' registers and monthly reports; Formal evaluations/case studies	Collection methods Collected for regular project management reporting system Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	FAO/MOA/DAE/M OFDM	Political & security climates remain stable; Macro-economic situation remains stable; Sufficient importance attached to programme implementation and ownership by partners and farmers. Sufficient number of partners in the field; Access to programme areas is possible.
								Assured supply & logistics chain.

Output 3.3 Mechanism/tests developed for assessing students' learning of establishing school gardens and practical nutrition concepts through exposure/participation in the school gardening activities	Indicators: - % of students understand what is malnutrition and causes of malnutrition. - % of students understand terms food and nutrition - % of students can describe the functions of food - % of students can explain importance of balanced diet and roles in good health - % of students can explain the appropriate methods for cooking leafy and other vegetables - % of students communicated messages to their parents on appropriate cooking methods - % of students consuming at least 1 fruit and 2 vegetables (excluding potato) everyday - % of students who can describe at least 4 messages on hygienic handling foods including fruits, vegetables, meat and eggs. Baseline: to be determined Timeframe: 2010-2012	Not yet available as programme activities have not yet started. Baseline to be established in September 2011	110 schools in the program area 42000 school children	882 School BCC sessions conducted for school children on Food & Nutrition and Health & Hygiene. <i>Assessment to be completed next quarter</i>	Workshops, questionnaires, individual consultations; Pilot projects summary reports; Formal evaluations/case studies.	Collection methods Collected for regular project management reporting system Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	FAO/MOA/DAE/MOE	Sufficient importance attached to programme implementation and ownership. Sufficient number of partners in the field; Access to programme areas is possible; Political & security climates remain stable; Macro-economic situation remains stable.
JP Outcome 4: Prevention and control of iron deficiency anaemia in children aged 6-23 months.								
Indicators: Prevalence of iron deficiency anaemia among 6-23 month age group in project areas.								
Output 4.1 Improved access to anaemia prevention and control activities for children aged 6-23 months.	Indicators: - % of children aged 6-23 months, among total children in project area, who receive MNP in past 7 days. - % of children aged 6-23 months, among total children in project area, who consume 60 sachets MNP in past six months - % of caregivers who correctly practice at least three main key messages for prevention of anaemia. Baseline: to be determined Timeframe: 2010-2012	Prevalence of Anemaim =6-23 months=99.8%	To be established after baseline value is known	12687 children aged 6-23 months, have been supported with MNP sachets in project area. About 25,000 Caregivers correctly practice at least three main key messages for prevention of anaemia.	Formal evaluation/assessment	Collection methods NGO reports. Collected for regular project management reporting system Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	WFP/UNICEF/MoH FW	Political & security climates remain stable; Macro-economic situation remains stable; Sufficient number of partners in the field; Access to programme areas is possible; Assured supply & logistics chain
JP Outcome 5: Strengthened food security and nutrition information systems for planning, monitoring and evaluations (Not yet reviewed)								
Indicators: # of partners with strengthened food security and nutrition information systems used for planning, targeting/resource allocation, monitoring and/or impact assessments; # of timely and good quality food security and nutrition monitoring reports generated and distributed widely								

Output 5.1 Existing or currently developed food security monitoring and nutrition surveillance systems supported and strengthened	Indicators # of implementing partners, GOB structures and stakeholders with strengthened food security and nutrition monitoring or surveillance systems. Baseline: to be determined Timeframe: 2010-2012	Not yet available as programme activities have not yet started. Baseline to be established in September 2011	To be established after baseline value is known		Means of Verification Food security/nutrition surveillance information bulletins prepared and disseminated to partners	Collection methods Collected for regular project management reporting system Thematic task force meetings minutes Timeframe/Frequency 2010-2012, midterm evaluation	WFP and UNICEF	Political & security climates remain stable; Macro-economic situation remains stable ;Sufficient importance attached to programme implementation and ownership; Various relevant authorities will consider and support the strategy; Sufficient number of partners in the field; Access to programme areas is possible;
Output 5.2 Common knowledge/information base of best practices for improved food security and nutrition programmes established	Indicators: targeting/resource allocation, monitoring and/or impact assessment; number of people received hardware/software training Report produced and widely disseminated. Database established and uploaded to web. Baseline: to be determined Timeframe: 2010-2012	Not yet available as programme activities have not yet started. Baseline to be established in September 2011	To be established after baseline value is known		Means of Verification Number of food security/nutrition surveillance information bulletins prepared and used by partners	Collection methods Collected for regular project management reporting system Thematic task force meetings minutes Systematic evaluations Timeframe/Frequency 2010-2012	WFP,FAO NFPCSP	Political & security climates remain stable; Macro-economic situation remains stable ;Sufficient importance attached to programme implementation and ownership; Various relevant authorities will consider and support the strategy; Sufficient number of partners in the field; Access to programme areas is possible;
Output 5.3: Shared knowledgebase of historical food security and nutrition survey data established	Indicators: Database created and potential users informed. User survey; two thirds or more of users evaluating database rated favorable. Baseline: to be determined Timeframe: 2010-2012	Not yet available as programme activities have not yet started. Baseline to be established in September 2011	To be established after baseline value is known		Means of Verification Number of food security/nutrition surveillance information bulletins prepared and used by partners	Collection methods Collected for regular project management reporting system Thematic task force meetings minutes Systematic evaluations Timeframe/Frequency 2010-2012	WFP FAO NFPCSP	Political & security climates remain stable; Macro-economic situation remains stable ;Sufficient importance attached to programme implementation and ownership; Various relevant authorities will consider and support the strategy; Sufficient number of partners in the field; Access to programme areas is possible;

IEC material under MDG-F project

MATERIALS	Audiences	Contents
BCC guide	Community Nutrition workers (CNW)	<ul style="list-style-type: none"> ✓ Project Objective ✓ Expected behavior change ✓ Component based key messages ✓ Service delivery tools description
Flash card – Food & Nutrition (8 cards)	Mothers and Care givers	<ul style="list-style-type: none"> ✓ Basic concepts of service components ✓ Illustrated descriptions/ demonstrations ✓ Expected key practices/ call for action ✓ Group exercise/game
Flash card – IYCF (6 cards)	Mothers and Care givers	<ul style="list-style-type: none"> ✓ Basic concepts of service components ✓ Illustrated descriptions/ demonstrations ✓ Expected key practices/ call for action ✓ Group exercise/game
Flash card – Anemia prevention (6 cards)	Mothers and Care givers	<ul style="list-style-type: none"> ✓ Basic concepts of service components ✓ Illustrated descriptions/ demonstrations ✓ Expected key practices/ call for action ✓ Group exercise/game
Flash card – Hygiene (4 cards)		<ul style="list-style-type: none"> ✓ Basic concepts of service components ✓ Illustrated descriptions/ demonstrations ✓ Expected key practices/ call for action ✓ Group exercise/game
Flyer	Fathers Community leaders Traditional healers	<ul style="list-style-type: none"> ✓ Project objectives and components ✓ Project activity description ✓ Urge for family and community support
Festoons For CNW	Satellite service recipients	<ul style="list-style-type: none"> ✓ Component based key benefit and practices

	Community meeting attendants	
School and institutes Festoon	School/ Institutes	✓ Key nutrition messages
Community Message board	All community people	✓ Awareness message and support information
Facility Message board	All facility service recipients	✓ Service access and community linkage information
Guidelines developed	Beneficiaries and implementers	<ul style="list-style-type: none"> ✓ Project Operational Guideline ✓ Project Implementation guideline ✓ CMAM guideline ✓ BCC guideline
Forms, format & Card	Beneficiaries, monitoring and supervision	<ul style="list-style-type: none"> ✓ Data based software ✓ Health Facility Assessment Tool ✓ Capacity Assessment Tool for Implementing Partner NGO's and staffs ✓ Beneficiaries Card ✓ Monitoring Format: SAM, MAM, PLW, MNP ✓ Check list: SAM, MAM, PLW, Courtyard session, Household visit, Supervision ✓ Tally Sheet ✓ Referral slip ✓ Register ✓ Master role: WSB, RUTF, MNP
Visibility materials	Community	<ul style="list-style-type: none"> ✓ Community message board ✓ Signboard for OTC ✓ Apron for CNWs & CNS ✓ Container for WSB ✓ Pot songs
Video films	Stakeholders and interested	<ul style="list-style-type: none"> - Joint Programme - Women's Empowerment

	audiences	
Study Reports & data base	Stakeholders and interested audiences	<ul style="list-style-type: none"> ✓ Baseline report ✓ Women's Empowerment Study ✓ Final Evaluation ✓ Mapping report ✓ Nutrition Education in the Primary Schools ✓ Food Security and Nutrition Mapping data base ✓ Food Security and Nutrition Assessment in Selected Urban Slums of Bangladesh ✓ Analysis for Comparing measures of acute malnutrition in Bangladesh
General Communication Material.	Stakeholders and interested audiences	<p>JP Theme notebook</p> <p>JP Theme Folder</p>

List of all document/studies produced by the joint programme

- Roy, S.K., Baseline Survey on Protecting and Promoting Food Security and Nutrition for Families and children in Bangladesh, ICDDR, MDG Fund, Dhaka, November 2011.
- World Food Programme, Women's Empowerment in a Food Security and Nutrition Programme- A Case Study, MDG Fund, Dhaka, February 2013.
- Economic Research Group, Issues in Assessing Multi sectoral Food Security and Nutrition Programmes in Bangladesh,- Case study of two selected programmes in Bangladesh; World Food Programme, Dhaka, May 2013.
- Economic Research Group, Food Security and Nutrition Initiatives in Bangladesh: An analytical exercise into mapping; Documentation, Illustrations and Recommendations. World Food Programme, Dhaka, June 2013.
- VAM, Food Security and Nutrition Assessment in Selected Urban Slums of Bangladesh, World Food Programme, Dhaka, June, 2013.
- Levinson, F.J., Hussain, D., Final Evaluation- Protecting and Promoting Food Security and Nutrition for Families and Children in Bangladesh, MDG Fund – 2010-2013, WFP Dhaka, 2013.
- Eminence, The Role of School Gardens and Nutrition Education in Primary Schools: Report on Programme and Policy Implications; WFP , Dhaka, 2013.
- HKI Bangladesh, Analysis for Comparing measures of acute malnutrition in Bangladesh, WFP, Dhaka, 2013

Minutes of the 15th meeting of the Programme Management Committee (PMC) of the project titled “Protecting and Promoting Food Security and Nutrition for Families and Children in Bangladesh” under MDG-Fund

The 15th meeting of the Programme Management Committee (PMC) of the project titled “Protecting and Promoting Food Security and Nutrition for Families and Children in Bangladesh” was held on 29 July 2013 at the Economic Relations Division. The meeting was chaired by Ms. Nurjahan Begum, Joint Secretary Economic Relations Division. The list of the participants attending the meeting is attached (**Annexure-A**).

1. At the outset the Chairman welcomed the participants for attending the meeting. Following the introduction of participants, the agenda topics were discussed and decisions taken in the meeting:

- 1. Official closure of the Joint Programme and the Approval of the final Narrative report of the Joint Programme:** The Chairperson invited the MDG-F Coordinator to update the PMC on the closure and provide a highlight of the final Evaluation report.

- The JPC informed that the project successfully completed all the implementation activities by 30th June 2013. Only some of the studies are ongoing which was started before the project closure. The Coordinator then gave a brief highlight from the summary of the Final Evaluation report.
- She indicated that the report was circulated in the TRC and feedback provided by the stakeholders along with the MDG-F secretariat has been incorporated in the report by Professor James Levinson. She stated that the evaluation recognized the “Convergence” approach that was used in the project was successful. Specifically, the convergence approach, is the one in which different services that are to have an effect on nutrition, are provided in the same area. The project provides an alternative model to multispectral approaches to nutrition. The Coordinator highlighted that the project has shown success on the food consumption especially in the intake of dairy and meat products. The malnutrition level of the project shown a reduction based on the analysis of the monitoring data. The

evaluation complements the efforts taken by the JP to inform policies; especially the mapping the Urban food security study and women's empowerment study. She also informed that the evaluation found a significant achievement in Women's Empowerment in the project area. Women in the project area report increased roles in making decision related to food and nutrition of the households

The Coordinator informed that the evaluation also identified some of the areas for improvement. The provision of services using only under nutrition as the selection criteria needs to be reconsidered, as this allows food secure families to be eligible for receiving food security inputs. The evaluation also recommended that the programme should have made systematic use of the available food security and nutrition monitoring data especially the use of FSNSP surveillance data. The evaluation commended on the effective coordination by ERD, and the technical support provided by the partner ministries and departments. The JPC informed that the final report of the Evaluation will be circulated among the PMC members and later a dissemination of the report is also planned.

- In response to the Chairman, the Coordinator updated the PMC on the financial status of the project. She said by the end of the project financial closure 95% of the fund will be consumed. She also informed any remaining balance of the JP will be transferred to the MDG-F secretaries.

The PMC endorsed the Final Narrative report with the understanding that all comments/feedback received by July 29th. have been incorporated into the final version.

2. Approval of the balance commodity transfer under WFP to the Country Programme: The JP Coordinator presented a summary of the commodity balance that is available under WFP after 30 June 2013.

The summary commodity table shows that a total of 101.303mt of Wheat-soya blend and 131.11mt of High Energy Biscuits are available under WFP as of 30 June 2013. The JPC proposed that if the PMC.s approved, this balance amount could be distributed through the WFP Country Programme to the MDG-F project areas. She informed that both school feeding and nutrition activities under MDG-F will be continuing under WFP country programme in the JP areas. She explained that commodities were purchased under the MDG-F fund and to distribute this balance, USD 76,000 will be needed. If the PMC approves then this amount can be deducted from the WFP portion.

In response to Mr. Sharif, RC office, on the availability of the \$76,000, it was clarified that at present only \$20,000 is only available with WFP. The rest of the

amount has been committed for the organization staffs support cost. After the PMC's approval, WFP will reallocate the committed amount of staff support cost to make the remaining USD 56,000 available for distribution of the commodities.

The PMC approved the transfer of commodities from MDG-F fund to the WFP country programme for continuing the same activities in the same area supported by the Joint Programme.

The PMC also approved the use of USD 76,000 for the distribution of commodities from the WFP budget.

3. AoB:

Assets transfer: Ms. Amatullah, ERD, informed that the committee recommended by the PMC has been formed and a meeting will be held on 1st August.

As this is supposed to be the final PMC meeting, the Chairperson raised her concern about the delay in the decision on the assets transfer. She mentioned that decision from the Assets transfer committee needs to be shared with the PMC members. Mr. Sharif mentioned the method of the committee formation and the approval process were approved by the previous PMC.

The Chairman recommends that decision of the assets transfer committee needs to be shared in the NSC.

National Striating Committing meeting:

In response to the Chairperson, Mr. Sharif informed that the RC office is trying to hold a NSC in mid-August. He also added that as it is difficult to get all the members for a meeting, last time online approval through email was taken from NSC members.

The chairperson emphasized the need to hold a NSC meeting this time as it would be the final NSC.

Project formal Closure ceremony:

In response to the Chairperson JPC informed that final closing event is tentatively planned for September 9th. The date will be finalized in consultation with key stakeholders. She informed once she has a confirmed date she will inform the PMC member and the Chairman.

Stakeholder's workshop:

Ms. Naher, FAO, mentioned about the need of the Stakeholders workshop, as this is a multi-sectorial project and different national and local government agencies are involved. She mentioned for continuation of project activities by the government, and monitoring of the inputs some policy level decision is needed. The JPC mentioned that PMC can decide on the necessity of the workshop. The Coordinator emphasized bilateral consultations with respective government agencies are needed.

The PMC recommended organizing a Stakeholder meeting followed by the final closing ceremony. .

Ms. Naher, FAO, informed that FAO planned to do an impact assessment a year after closure of the project. The Chairman mentioned that this is also a recommendation from the Final Evaluation of the project.

4. Vote of thanks

The Chairman thanked all the PMC members for their active participation and good coordination for this project. She mentioned that the project was a good lesson learnt for all the stakeholders. She looked forward to a successful final closer of the project.

The Joint Programme Coordinator also thanks ERD for the effective coordination, and for their active support to the Joint Programme. She also thanked the Technical members and the Implementing Partners for their contribution and hard work to make this project a successful one.

The meeting ended with a vote of thanks from the Chair.