# SHOUHARDO

## a Title II program of USAID

Final Evaluation Report

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Prepared by

**TANGO International, Inc.**

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# Acronyms

| | |
|---|---|
| ADPC | Asian Disaster Preparedness Center |
| ALO | Alternative Livelihood Options |
| ANC | Ante Natal Care |
| BBS | Bangladesh Bureau of Statistics |
| BCC | Behavior Change and Communication |
| BLAST | Bangladesh Legal Aid and Services Trust |
| BMD | Bangladesh Meteorological Department |
| BRDTI | Bangladesh Rural Development Training Institute |
| BRRI | Bangladesh Rice Research Institute |
| CAP | Community Action Plan |
| CAV | Community Agriculture Volunteer |
| CBDRM | Community Based Disaster Risk Management |
| CED | Chronic Energy Deficiency |
| CEGIS | Center for Environmental and Geographic Information Services |
| CF | Community Facilitator |
| CFW | Cash For Work |
| CHD | Comprehensive Homestead Development |
| CHV | Community Health Volunteer |
| CLTS | Community-Led Total Sanitation |
| COG | Core Occupational Group |
| CRC | Community Resources Center |
| DAP | Development Activity Project |
| DD | Direct Delivery |
| DH | District Hospital |
| DPHE | Department of Public Health Engineering |
| DPT3 | Diptheria, Pertussis, Tetanus |
| DV | Disaster Volunteer |
| EBF | Exclusive Breast Feeding |
| ECCD | Early Child Care for Development |
| ECMWF | European Centre for Medium-Range Weather Forecasts |
| EDU | Economic Development Unit |
| EKATA | Empowerment, Knowledge and Transformative Action |
| EMP | Emergency Management Plan |
| EOC | Emergency Obstetric Care |
| EPI | Expanded Program of Immunization |
| EU | Education Unit |
| EWS | Early Warning System |
| FANTA | Food and Nutrition Technical Assistance |
| FDP | Food Distribution Point |
| FF | Field Facilitator |
| FFP | Food For Peace |
| FFW | Food For Work |
| FFWC | Flood Forecasting Water Commission |
| FP | Family Planning |
| FWV | Family Welfare Visitor |
| GIS | Geographic Information Systems |
| GMP | Growth Monitoring Promotion |

| | |
|---|---|
| GoB | Government of Bangladesh |
| HA | Humanitarian Assistance |
| HDRC | Human Development Research Centre |
| HH | Household |
| HHN | Health Hygiene and Nutrition |
| ICDDR,B | International Centre for Diarrheal Disease Research, Bangladesh |
| IDA | Iron Deficiency Anemia |
| IDD | Iodine Deficiency Disorder |
| IDSL | Institutional Development Services Limited |
| IFSP | Integrated Food Security Program |
| IGA | Income Generating Activities |
| IUCN | International Union for the Conservation of Nature |
| IPM | Integrated Pest Management |
| IPTT | Indicator Performance Tracking Table |
| IR | Intermediate Result |
| IUCN | International Union for the Conservation of Nature and Natural Resources |
| LCS | Labor Contracting Society |
| LEB | Locally Elected Bodies |
| LGD | Local Government Division |
| LGED | Local Government Engineering Department |
| LGSP | Local Government Support Program |
| LOA | Life of Activity |
| LPS | Local Project Societies |
| LRSP | Long Range Strategic Plan |
| MCHN | Maternal and Child Health and Nutrition |
| MCWC | Maternal and Child Welfare Clinic |
| M&E | Monitoring and Evaluation |
| MFI | Micro-Finance Institutions |
| MOH | Ministry of Health |
| MOU | Memorandum of Understanding |
| MTR | Mid-Term Review |
| NBD | Nation Building Department |
| NILG | National Institution of Local Government |
| NIRAPAD | Network for Information, Response and Preparedness Activities on Disaster |
| NSDP | NGO Service Delivery Program |
| OCAT | Organizational Capacity Assessment Tools |
| OFDA | Office of U.S. Foreign Disaster Assistance |
| PACC | Program Advisory Coordinating Committee |
| PDMC | Pourashava Disaster Management Committee |
| PEP | Poor and Extreme Poor |
| PERSUAP | Pesticide Evaluation Report and Safer Use Action Plan |
| PIC | Program Implementation Committee |
| PKSF | Palli Karmo Sahayak Foundation |
| PMP | Program Monitoring Plan |
| PNC | Post Natal Care |
| PNGO | Partner NGO |
| PRA | Participatory Rural Appraisal |
| PSIEE | Pourashava Specific Initial Environmental Examination |
| PSO | Program Support Officer |
| PTA | Parent Teacher Association |
| REFLECT | Regenerated Freirean Literacy through Empowering Community Techniques |

| | |
|---|---|
| RLP | Rural Livelihoods Programme |
| RPM | Regional Program Manager |
| SBA | Skilled Birth Attendant |
| SDC | Slum Development Committee |
| SHOUHARDO | Strengthening Household Ability to Respond to Development Opportunities |
| SIC | Scheme Implementation Committee |
| SMC | School Management Committee |
| SO | Strategic Objective |
| SSC | Scheme Supervision Committee |
| SVAW | Stop Violence Against Women |
| TANGO | Technical Assistance to Non-Government Organizations |
| TBA | Traditional Birth Attendants |
| TOTS | Training of Trainers |
| TT | Tetanus Toxoid |
| UDM | Urban Disaster Management |
| UDMC | Union Disaster Management Committees |
| UHC | Upazila Health Complex |
| UHFPO | Upazila Health and Family Planning Office |
| UNO | Upazila Nirbahi Officer |
| UP | Union Parishad |
| USAID | United States Agency for International Development |
| VAD | Vitamin A Deficiency |
| VDC | Village Development Committee |
| VGF | Vulnerable Group Feeding |
| VSIEE | Village Specific Initial Environmental Examination |
| WHO | World Health Organization |

# Executive Summary

The overall goal of CARE Bangladesh's *SHOUHARDO*[1] (Strengthening Household Abilities for Responding to Development Opportunities) Program is to 'Sustainably reduce chronic and transitory food insecurity of 400,000 households in 18 districts of Bangladesh by 2009'. The SHOUHARDO Program is a Title II Development Assistance Program (DAP) funded through Food for Peace (FFP) and the Government of Bangladesh. It has operated since October 2004 and is set to be completed in May 2010. This program has been managed in conjunction with key government partners including Local Government Division, Local Government Engineering Department, the National Institute of Local Government, and a coordinating committee comprising 11 other ministries. The program is executed primarily by 44 local NGO partners, with approximately five percent of activities directly delivered by CARE Bangladesh. The program coverage area includes remote communities located in four major regions of Bangladesh – Kishoreganj, Rangpur, Tangail and Chittagong. CARE Bangladesh commissioned TANGO International to conduct a final evaluation of SHOUHARDO in December 2009.

SHOUHARDO is attempting to address not only the availability, access and utilization issues that lead to food insecurity, but also the underlying issues that contribute to vulnerabilities such as a lack of participation, social injustice, and discrimination that prevent people from realizing their full potential in leading healthy and productive lives. The four Strategic Objectives (SOs) that contribute to achievement of the overall program goal are:

*Strategic Objective 1* (SO1): Improved availability/economic access to food through strengthening livelihoods, entitlements and enhancing accountability of service providers;

*Strategic Objective2* (SO2): Sustainable improvement in the health and nutrition of project participants;

*Strategic Objective 3* (SO3): Enhanced empowerment of 400,000 women and girls from targeted vulnerable households; and

*Strategic Objective 4* (SO4): Targeted communities and institutions are better able to prepare for, mitigate and respond to natural disasters.

The objectives of this final evaluation are to:

- Conduct an assessment of the *outputs* of the SHOUHARDO program to determine its success in meeting output targets;
- Conduct a comprehensive analysis of the extent to which SHOUHARDO has been able to achieve intended targets for program *outcomes*;
- Identification of both and positive and negative *impacts* of SHOUHARDO project activities on the food and livelihood security of poor and extreme poor (PEP) households;
- Assess the appropriateness of program design and implementation for achieving SHOUHARDO's strategic objectives;
- Identify key achievements and challenges for each of SHOUHARDO's core program areas, and lessons learned for improved program design and implementation;
- Assess the sustainability of positive changes brought about by SHOUHARDO in terms of human condition, social position and enabling environment; and

[1] "Amity, friendship" in Bangla.

- Analyze strengths and weaknesses of institutional relationships with implementing partners.

The findings contained in this report are intended to benefit SHOUHARDO in its final months, as well as provide lessons for future programming to be carried out by CARE, its partners, and other development actors throughout Bangladesh.

## Methodology

The final evaluation utilized both quantitative and qualitative data to measure the outputs, outcomes and impact of SHOUHARDO. In close collaboration with CARE Bangladesh, TANGO deployed a team to visit communities in which SHOUHARDO was implemented to carry out a qualitative review of the program, while a team based in the US worked with the local research institute International Center for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) to conduct a quantitative survey representative of SHOUHARDO communities. To better inform and guide the evaluation, the team conducted a thorough review of all relevant program documents including: the baseline study, project monitoring documentation, mid-term review, M&E guidelines, the 2009 annual report, various strategy documents, and budget reports.

### *Quantitative Data Collection*

The quantitative analysis of this report is based on data from ten household surveys: two baseline surveys, six periodic monitoring surveys, and two endline surveys. The population sampled for all surveys is PEP SHOUHARDO project beneficiaries identified prior to the baseline survey using Participatory Poverty Appraisal. All are population-based and employed stratified random sampling.

Two baseline surveys, conducted in February 2006, were carried out by The Asia Foundation in partnership with Data International Ltd. The first multi-topic survey covered all beneficiary households while the second focused mainly on health, hygiene and nutrition (HHN), and was administered only to households with 6-24 month old children. The monitoring surveys were conducted at 6 month intervals from January/February 2007 to August 2009 by CARE staff.

Data for the first endline survey, conducted in July/August 2009, were collected only on children's nutritional status. The sample consisted of children 36 to 60 months old in order to be able to capture changes over time in prevalence of malnutrition among children who were under two years at the time of the baseline. Half of the sample was comprised of the same children who were sampled at baseline (a cohort) and half were from a new sample of children in the age group. This survey was conducted by the ICDDR,B.

The final endline survey was conducted by the ICDDR,B with TANGO oversight in November 2009. It covered the same topics as the baseline HHN survey and was also administered only to households with 2-24 month old children. Additionally, data were collected on food and economic security, women's empowerment, and participation of households in SHOUHARDO interventions. The sample size for this endline survey was 3,356 households.

### *Qualitative Data Collection*

For the qualitative portion of the evaluation, a team from TANGO held meetings with SHOUHARDO staff at CARE Bangladesh headquarters and at regional offices, with key stakeholders, and conducted interviews with implementing partners. The team was divided between the four regions and visited 32 villages, which were randomly selected by the consultants, with some villages also purposively selected to review specific features of the program. In each village, focus group discussions were held using semi-

structured questionnaires to obtain some standardized feedback while also permitting participatory discussions in which respondents could openly share their perspective on the program. On-site verifications were done with a range of project outputs such as infrastructure, Early Child Care for Development (ECCD) centers, businesses and Village Development Committee (VDC) centers. The results of this qualitative phase were shared at a national workshop with all staff, partner organizations, and the donor, and their feedback incorporated into this report.

## Key Findings

### *Overall Program Impact*

The quantitative analysis of the final evaluation examined the relationships between participation in SHOUHARDO interventions and achievement of the project outcome indicators. The specific questions addressed are: (1) Do households that have participated in a larger number of interventions exhibit greater improvements in outcomes than those whose participation has been less?; and (2) How have specific interventions impacted project outcomes? The analyses are designed to assess the extent to which the observed improvements can be attributed to the "intensity" of participation and to specific interventions.

With respect to children's nutritional status, there is clear evidence that project interventions have contributed toward the strong reductions in stunting and underweight that have taken place over the life of the SHOUHARDO project. Furthermore, several different types of project intervention have contributed toward improved nutritional status of children. Food assistance to children 6-24 months and lactating mothers, participation in Core Occupational Groups (COG), assistance with tubewells, courtyard sessions and growth monitoring are all associated with improved anthropometric indicators. Dietary diversity of both children and their mothers is greater in households that have received food assistance (for lactating mothers) and vegetable and fruit production COG support. In general, nutritional status of children has been improved through a combination of direct food assistance, interventions to improve the economic conditions of childrens' households, support for providing clean water supplies, and health, hygiene and nutrition (HHN) support to mothers. SHOUHARDO HHN courtyard sessions appear to have had a wide-reaching positive impact on mothers' caring practices for their children and on their own antenatal care.

Improvements in household food security can also be attributed to project interventions. The more project interventions participated in by a household, the better its food security, as measured by number of months of sufficient access to food and dietary diversity. Households that participated in Comprehensive Homestead Development (CHD) also exhibited improved food security compared with non-participants. Direct food assistance is shown to have improved both the number of months of sufficient food access but also, interestingly, the quality of households' diets.

Significant improvements in women's empowerment have occurred over the life of the project, and many of these improvements can be attributed to project interventions. Women's participation in household decisions, freedom of movement, and reported changes of patriarchal attitudes all exhibit improvements in association with the degree of women's' participation in Empowerment, Knowledge and Transformative Action (EKATA) groups, as well as participation in other SHOUHARDO groups. Most impressive is the degree to which participation in EKATA and other groups increases the likelihood that women earn cash income. Project interventions designed to improve households' economic security, such as COG support to agriculture and CHD, also contributed to women's empowerment. Overall, the results show that the project has had very significant impacts with respect to empowerment of women.

The impacts of project interventions on the economic status of households are not as evident as for these other types of outcome. This is because many of the interventions were targeted to the poorest and most

vulnerable among PEP households, such that those participating in more interventions appear to be poorer than those participating in fewer. The method employed for the impact analysis was not able to take into account this targeting-based "selection bias". Thus, many potentially positive impacts of the project on households' economic security could not be detected. However, the analysis did find that households receiving COG support—in particular for vegetable production and fisheries—and those who were a member of a savings group were less likely to have a household member migrate to find work.

In summary, the evaluation's quantitative analysis of the impact of the SHOUHARDO project demonstrates that most of the major improvements in household, woman, and child-level outcomes that have taken place since the start of the project can be attributed to the project activities themselves. The changes were brought about by a host of interventions, ranging from promotion of breastfeeding, to support for savings groups, to empowering women through the formation of EKATA groups. There is evidence of complementarity of interventions: the quantitative analysis shows that, in general, the more involved a household has been in multiple SHOUHARDO interventions, the better off it is in terms of food security, equality of power between female and male household members, and the nutritional status of young children.

### *Program Achievements by SO*

#### *SO1: Improved availability/economic access to food through strengthening livelihoods, entitlements and enhancing accountability of service providers;*

*Governance*

The SHOUHARDO program was particularly successful in establishing pro-poor community-based institutions as a means of increasing the capacity to coordinate development activities. Village Development Committees (VDCs) and Slum Development Committees (SDCs) have provided numerous opportunities for greater social participation among vulnerable target groups and have created improved linkages between rural communities and a range of development stakeholders (government ministries, locally-elected bodies, NGOs, etc.). VDCs/SDCs have also facilitated development of Community Action Plans (CAPs) in target areas, which have proven useful for informing investments in infrastructure, human capital, and financial resources required for sustainable development.

SHOUHARDO capacity building activities and interventions aimed at improving linkages with government and non-government service providers have contributed to an improved environment for pro-poor development. For instance, training in budgetary planning in support of CAPs as well as awareness building related to resource use rights will likely have a positive and long-term impact on the quality of services provided to PEP households by implementing partners.

Despite these and other successes, SHOUHARDO still faces some challenges that it should address in its final months and for the improvement of similar programs in the future. For example, preferred administrative procedures among VDCs/SDCs need to be clarified. Without further clarification, these potentially critical institutions could eventually come to be seen by PEP target populations as non-transparent and non-representative. Lessons learned regarding key program achievements and challenges need to be documented and analyzed, particularly with regard to the range and effectiveness of different development interventions carried out as part of CAPs.

*Infrastructure projects*

Improvement of flood mitigation schemes and road networks had a positive impact on several factors contributing to livelihood security. Newly established infrastructure has improved access to markets and other income generating opportunities and helped limit the loss of assets. The establishment of rural

markets has reduced the transaction costs for small producers and has created new opportunities for income generation, particularly among women. Investments in infrastructure have also reduced the exposure of target communities to the threat of natural disasters.

In general, selection of infrastructure projects supported by SHOUHARDO has been demand-driven and has been appropriate for meeting the development needs of target communities. While new infrastructure has thus far been adequately maintained, future maintenance would best be supported by the continuation of VDCs/SDCs. Maintenance of large infrastructure projects is likely beyond the capacity of target communities and will depend in part on support from government and/or non-government institutions.

Training provided by SHOUHARDO on improved agricultural production practices (such as improved seed, composting, integrated pest management) has enabled farmers to boost production with limited resources, particularly among homestead gardens. Despite short-term progress, environmental assessments will need to be carried out to better determine the sustainability of adopted practices.

Infrastructure interventions face future challenges directly related to issues of environmental quality. There is relatively little understanding of the proper handling of chemical pesticides, fertilizers and other farm inputs despite the fact that they are widely used throughout the program area. Similarly, income generating activities promoted by SHOUHARDO and partners should be considered in terms of both positive and negative environmental consequences. Future agricultural interventions will need to be based on thorough environmental assessments (as per Regulation 216) in order to maintain the health and safety of participating farmers as well as agricultural productivity.

*Food production and income generation interventions*

The intensive efforts made by the SHOUHARDO project to improve food availability and access for over 400,000 PEP households have made significant impacts when compared to the levels of food and livelihood insecurity documented in the project baseline. A significant percentage of households are more food secure in terms of access to sufficient food. Dietary quality has improved due to a combination of CHD and agriculture production activities, and behavior change messages underscoring the importance of eating fruits and vegetables. In addition, Pregnant and Lactating (PAL) mothers and young children have increased their consumption of eggs as a result of increased production of poultry, particularly ducks. Finally, households who received livestock (young cows) through the SHOUHARDO program are utilizing 40 to 60 percent of their milk supply to improve their children's nutritional status.

In urban slums, women participating in income generating activities promoted by SHOUHARDO are better able to contribute to their household's food security. That, together with the messaging to MCHN mothers about the benefits of a healthy diet provided in hygienic ways, has the potential to reduce stunting and wasting of children under two years of age.

As womens' incomes increase, their improved status within the home has led to greater participation in decision-making. In some cases, the building of women-friendly markets with water and sanitation facilities are encouraging women to control their own sales, as well as providing the opportunity for more women to shop in the market without fear of harassment or abuse.

These gains may be sustainable, so long as the project places more efforts on promoting market linkages and building the capacity of PEP households, particularly women, to better manage their businesses and invest for further growth.

SHOUHARDO and other programs will also be challenged in the future to put more effort on assisting PEP households to build their resilience to adapt to continuing climate change. PEP households need closer links with a range of research institutes interested in conducting operations research with rice and

crop varieties that may prove more resilient to unpredictable climate change, including drought, flood and cold.

SHOUHARDO and future programs should build on the lessons learned through its establishment of savings groups. In its remaining months, SHOUHARDO should identify best practice models and develop innovative ways of record keeping for low levels of literacy and numeracy, so that savings groups' processes remain transparent for all members. SHOUHARDO should collaborate with micro-finance institutions and NGOs interested in promoting savings country wide in order to develop a policy on savings approaches for PEP households that could be adopted by the national government.

***SO2: Sustainable improvement in the health and nutrition of project participants***

The overall goal for SHOUHARDO is reducing stunting among children in the target population 6-24 months old by four percent. This also serves as the main indicator for SO2, along with targets of reducing wasting by five percent and low weight for age (underweight) by six percent. The project greatly exceeded expectations for reducing stunting and underweight. Stunting was reduced by an impressive 15.5 percentage points, or 30% since the baseline. The results are especially notable because project interventions that could have accounted for this improvement have taken place for only a little over three years.

In terms of underweight, the reduction in the target population was 21%. This was much higher than the project's goal for this indicator. There was no statistically significant change in the prevalence of wasting. However, the fact that the endline was conducted toward the end of the lean season may have influenced this finding.

The changes in nutritional status spread across all four regions make it clear that all regions saw health improvements in terms of reductions in prevalence of stunting and underweight. Stunting rates declined the most in the coastal region, while underweight declined the most in North Char.

SHOUHARDO's achievements in reducing stunting are also impressive when interpreted in the context of similar programs. For example the World Vision Haiti project – which also used a preventive approach – reduced stunting by a total of 3.8 percentage points over three years, compared to SHOUHARDO's 15.5 percentage point reduction over a similar time period.

Dietary diversity was another area of notable improvement: dietary diversity scores for mothers of children under two improved from 5.1 to 5.7 respectively, and children 6-24 months also now have a good average dietary diversity score of 5.9. These scores indicate increased consumption of foods that provide critical nutrients for child growth and health. While mothers in the endline sample were not significantly heavier than mothers at baseline, their increased dietary diversity score and the fact that 84 percent took Iron Folic Acid (IFA) tablets during pregnancy and 79 percent received a post-partum Vitamin A supplement indicate an overall positive change in mothers' nutritional status.

SHOUHARDO also contributed to the adoption of key healthy practices. Baseline-endline comparisons show increased feeding of children and administering of Oral Rehydration Therapy during diarrhea. More mothers are taking increased food and rest and IFA supplementation during pregnancy. All of these changes contributed to improving the nutritional status of the young child. The greatly improved use of health services for immunizations and antenatal care likely contributed indirectly to the reduction in stunting.

Improved sanitation and reduction in diarrhea were other positive results of the project. The Community Led Total Sanitation (CLTS) not only increased access to latrines, but more importantly emphasized their use and cleanliness, both of which were significantly improved over the life of the project.

In terms of access to safe water, the baseline showed that Hoar and Coastal regions lagged behind other regions, especially in terms of access to potable water for cooking and washing. Significant improvements were achieved during the SHOUHARDO program, particularly in the coastal region. The percentage of households in the Coast with access to safe water for cooking increased from 56 to 88 percent, and access to safe water for washing increased from 34 to 67 percent. Gains in rural areas were also more marked compared to urban areas, particularly for safe water for washing, for which access increased by 28 percent.

***SO3: Enhanced empowerment of 400,000 women and girls from targeted vulnerable households***

SHOUHARDO activities carried out under SO3 have contributed to improved livelihood status of participating women and helped address traditional challenges to their social participation. Analysis of the baseline and endline surveys revealed commendable progress in women's decision making power within their households in SHOUHARDO's target areas. The impact analysis showed that this, along with improvements in women's freedom of movement and a reduction in patriarchal attitudes, was a direct result of project activities.

EKATA groups are highly valued by those attending and should be scaled up. Communities appear to be accepting of women's empowerment through their participation in VDC/SDC. SHOUHARDO interventions carried out under SO3 were also found to have contributed to increased solidarity among women and girls, as well as enhanced confidence regarding access to education and other key social services and prevention of domestic violence. A follow up program would benefit from a comprehensive empowerment strategy that sensitizes men and adolescent boys to gendered norms which contribute to inequitable entitlements between males and females.

***SO4: Targeted communities and institutions are better able to prepare for, mitigate and respond to natural disasters.***

SHOUHARDO has trained and facilitated the work of 510 Union and Pourashava Disaster Management Committees (UDMC/PDMC). The UDMCs visited showed great capacity to bring community members together to prepare for emergencies and to disseminate and utilize early warning information. Over 9,200 Disaster Volunteers (DVs) were trained and have formed a key cadre of individuals involved in raising awareness and helping communities prepare for emergencies, as well as being available for disaster response.

The DMCs and volunteers developed risk and resource maps and contingency plans in all 510 unions and *pourashavas*. This has helped the communities to clearly identify areas most at risk, and prepare plans for how households and communities can prepare for these risks. This has provided clear guidance for infrastructure improvements that may help mitigate these risks, such as embankments and improving roads. Additionally, these activities have helped the local authorities to respond quickly and effectively when disasters occur, coordinate smoothly with households to help them protect themselves and their assets, and greatly mitigate the costs, suffering and insecurity caused by the disasters.

Given the perennial vulnerability of many communities to hazards, many of the infrastructure projects undertaken in SHOUHARDO were directly related to protecting people and facilities from the worst effects of these hazards. Some of the key infrastructure improvements focused on raising homesteads and

community facilities, extending and constructing mound protection walls, maintaining and construction embankments, and constructing flood and cyclone shelters.

SHOUHARDO has supported national policy and capacity-building for disaster risk reduction by supporting the institutions of DMCs which were established by government were largely inactive.

### *Achievements in the Area of Program Processes*

*Management*
Overall, SHOUHARDO has made significant improvements in the general management of the program. Key issues that were addressed included: (a) restructuring staff composition to meet technical support needs and maintain program focus; (b) improving the working environment to reduce the potential for burnout and turnover; (c) improving the M&E system so that it could serve the purpose of identifying potential service gaps such that resources could be quickly focused to address the gaps and ensure all regions were meeting targets; and (d) promoting greater cross-learning across regions, and between regions and headquarters.

*Monitoring and evaluation*
The M&E system was improved substantially since the Mid-Term Review through the development of a system that includes all demographic information related to any beneficiary in the project, as well as their participation in various project activities. Setting up the database in Access allows SHOUHARDO to filter whatever information is necessary to populate the Indicator Performance Tracking Table (IPTT), over and above the information collected in the random household surveys. This system is then augmented by various Excel or Word-based systems used by the technical managers to track the project's progress. SHOUHARDO identified a sub-set of indicators that would provide the greatest information in assessing progress in outcomes. These indicators are now used both regionally and centrally to identify implementation gaps which are impacting on program outcomes.

*Partnerships with local NGOs*
In terms of partnerships, the organizational capacity of PNGOs has been improved through their participation with SHOUHARDO. As a result of the systems introduced by SHOUHARDO (planning, implementation, reporting, finance, accounting, and human resource management), PNGOs are now able to increase the level of service to other donors in these areas. In addition, ten partners said these systems (particularly the human resource and financial systems) have helped them access other donors' funds.

PNGOs now have well-defined links with local government. As a result of their participation in Program Advisory coordinating Committees, as well as increased contact with government service providers, PNGOs now feel they are developing stronger partnerships with local government departments. A few PNGOs with relatively low capacity confirmed that their formal relationship with SHOUHARDO improved their credibility in the eyes of local government.

Despite these positive gains, PNGOs expressed concern that the one year exit strategy was inappropriately focused on budgets and resources, and did not realistically consider the capacity development required for communities to sustain their efforts, particularly their linkages with local government. While all PNGOs participated in the development of the general exit strategy, it seemed to be primarily focused on downsizing the program to match decreasing funding flow, including eliminating staff positions from PNGOs, rather than a strategy to guide the graduation of the different groups (VDC/SDC, MCHN, EKATA, and ECCD). As a result, PNGOs were not convinced that one year was adequate to strengthen necessary capacities in preparation for handover.

*Commodity management*
CARE Bangladesh has done an excellent job in receiving, storing, transporting and distributing such a large quantity of Title II food commodities. Distributions were similarly well-managed at the community level. The standard practice has been for Community Health Volunteers to notify communities well in advance regarding distribution dates and times. Accordingly, beneficiaries have not had excessive waits to receive their rations. The number and physical location of distribution sites have also been deemed appropriate by the evaluation team given that beneficiaries reportedly do not have to travel excessive distances to receive their rations.

## Final Evaluation Recommendations

### *Overall Recommendations*

***Continue integrated programming that focuses on the structural dimensions as well as technical aspects of poverty:*** CARE Bangladesh should continue to implement this holistic preventive approach targeting the poor and extreme poor, which worked so well in sustainably improving food security, ameliorating poverty, and reducing chronic malnutrition among children 6-24 months of age.

***Provide ongoing support to community groups and local NGOs:*** Addressing the underlying structural causes of poverty requires a long-term strategy that goes beyond the five-year project cycle. Ongoing support to community groups such as VDC/SDCs, EKATA groups, PNGOs and others needs to be secured in order to ensure their continued existence as well as their effectiveness in fomenting positive change within the communities. Additionally, while local partner NGOs have gained significant capacity through SHOUHARDO, much work still exists to strengthen their abilities to effectively implement development activities at the community level. Without further support, much of SHOUHARDO's impact in building and strengthening community institutions could erode over time.

### *SO1 Recommendations*

***Revise guidelines for VDC/SDC formation and support ongoing learning:*** The guidelines available do not include procedures for elections, by-laws, and do not specify who will facilitate elections. The guidelines should be developed in conjunction with stakeholders (eg. Local Government Divisions) and should be easy for others to follow, including local government officials and other NGOs who may wish to use this model. As part of the exit strategy, a round of refresher training would be ideal to help the VDC/SDCs prepare for functioning in a more autonomous way, and renegotiate their relationships with service-providers, especially the UP/PS. Given the human rights claims and domestic conflicts that many VDC/SDCs are becoming involved in, the training could incorporate conflict resolution and counseling.

***Strengthen women's participation in the VDC/SDC:*** While women have become active members of the VDC/SDCs, they have some distance to go in achieving an equitable participation. As SHOUHARDO ceases operations, some of the ground gained in women's empowerment may be lost without more formal integration of women into community institutions like the VDC/SDCs.

***Strengthen role of and collaboration with UP/PS:*** While the pro-PEP focus of SHOUHARDO has been effective, as the program nears its end CARE Bangladesh should confer with UP/PS chairs, members and officers and seek their continued support to and nurturing of VDC/SDC and other related village level groups. In order to pursue this, SHOUHARDO should have a clear understanding of the UP/PS political interests, frame of thinking, and types of resources available to them.

***Create linkages between SHOUHARDO Groups:*** More specific links should be made between CHD COGs and MCHN so that the improved nutritional behaviors being learned are reinforced by suitable food production. This could include pairing pregnant and lactating mothers with CHD women, so that they can teach these new mothers the intensive gardening techniques that could lead to availability of more nutritious foods for their children.

### *SO2 Recommendations*

***Provide support to Growth Monitoring and Promotion (GMP) volunteers and link them with VDC/SDCs:*** Where mothers have already been identified in the communities to take over GMP and some health education activities, provide them with follow-up support to ensure they acquire the basic skills in weighing, filling out the growth chart and health forms, and providing feedback and counseling to the mothers. Create a linkage between this new volunteer and the VDC/SDCs.

***Link CHVs with Ministry of Health and Family Welfare (MOH and FW):*** For reasons of sustainability, link the CHVs with the MOH and FW for reporting and monitoring rather than just with a PNGO. The individual will be responsible for GMP, educational sessions, home visits, referrals to health services, and keeping the VDC abreast of health and nutrition indicators for the community. Mentor MOH and FW staff in how to provide support to the community worker.

***Modify training approaches for Pregnant and Lactating Women:*** Revise the current materials used in the courtyard sessions, putting each picture on a separate sheet to have them large enough for the groups to see clearly. Conduct some simple qualitative research to focus courtyard sessions on addressing barriers to adopting health and nutrition behaviors. Divide the courtyard sessions so that pregnant women meet to learn and discuss messages relevant to them, while in another group, lactating mothers receive messages and practice skills around infant and young child feeding. Limit the number of key messages to 12 or less (one per month) and spread the sub-topics out over two or three courtyard sessions.

### *SO3 recommendations*

***Increase scale of EKATA groups:*** A follow up phase should increase the number of EKATA groups. Although VDC/SDC and COG groups contributed to aspects of women's empowerment, EKATA groups appear to greatly contribute to a woman's awareness of her legal rights and interdependence with others. Greater awareness in these areas could contribute to increased participation and leadership within other groups.

***Monitor EKATA group performance:*** These groups and other women's empowerment activities should be monitored more accurately and regularly through the inclusion of indicators which measure outcomes in addition to current IPTT metrics for output. Output indicators such as women's level of participation in different committees, actions taken by women after receiving training, and increased women's solidarity, are suggested.

***Strengthen linkages between EKATA groups and other women's networking bodies:*** Ensure that economic empowerment activities are paired with consciousness-raising about legal rights, transformative action, political representation, and defense against gender abuse or harassment. Stronger links between EKATA and VDC/SDCs will help women to understand how they can address gender power relations in the broader context.

*Inclusion of men and adolescent boys in empowerment strategy:* SHOUHARDO's empowerment strategy could be significantly strengthened with modification. Building mass public awareness about gender disparity could increase impact. Including women and girls in EKATA learning circles is an important component to meeting this goal, but cannot on its own reduce the negative impacts of a patriarchal society. Most of the program's empowerment efforts target women and girls for economic capacity development and social awareness raising, but do not adequately sensitize men and adolescent boys to gendered norms which contribute to inequitable entitlements between males and females. In order to transform complex behavioral patterns and value systems, *all* contributors must increase their understanding of the patterns and systems, and the actions and reactions which perpetuate gender disadvantage.

*Training and follow up:* Critical aspects of effective empowerment advocacy such as negotiation skills, counseling, and business development are not included in the trainings provided by SHOUHARDO. A follow-up phase should include these elements as part of capacity development. Additionally, similar to the MTR recommendations, the final evaluation recommends that future training programs could be strengthened and reinforced by offering refresher and follow-up sessions. Training is not synonymous with learning, particularly when complex behavioral and systemic changes are the desired outcome. For these concepts take root, reinforcement will be necessary.

*Enhance leadership development*: SHOUHARDO could be strengthened by enhancing leadership development efforts. The present leadership process is working, yet the lack of a clear process of bringing in and developing additional leaders may limit its functionality in the long run. Committees are formed without a process of re-election or reformation and many women leaders participate in more than one committee which could potentially lead to power consolidation.

*ECCD:* A follow-up phase of SHOUHARDO should continue, expand, and enhance the ECCD model. Additional emphasis should be placed on raising community awareness of the importance of education for girls. The management committees of ECCD centers include women from the local community and their involvement is critical for girls' education. Women who have realized their own empowerment may be more pro-active in promoting gender equitable educational entitlements.

### *SO4 recommendations*

*Integrate SO4 with other SHOUHARDO SOs:* There is a strong need to horizontally integrate disaster preparedness and management in all of the sector activities being carried out by SHOUHARDO in its Title II programming. SO4 operates with considerable independence from other SOs. By not integrating Disaster Preparedness with other strategic objectives, SHOUHARDO is missing opportunities for a synergistic effect. To build resilient communities, a comprehensive approach is needed that combines risk reduction activities (infrastructure, appropriate seeds, livestock protection activities, etc.), early warning and disaster response, and livelihood recovery. The program may consider reducing the geographical coverage to implement a more comprehensive approach since resources will need to be more concentrated, while still operating in the wider area in terms of early warning and emergency response.

*Promote household level disaster preparedness:* SHOUHARDO has not adequately promoted disaster preparedness activities directly at the community or household level. Since other program activities operate at the household level, opportunities for mainstreaming disaster preparedness activities were missed. Building the capacity of households to do disaster preparedness planning allows these plans to be harmonized at the community level through the VDC to create a community plan. Community plans can then be rolled up into ward plans and union plans. Finally, these plans can be consolidated at the upazila level, making it a truly bottom-up participatory approach to disaster planning.

*Bring VDCs into disaster preparedness:* The apparent gap between DV and UDMC/PDMCs could be partially filled if VDC/SDCs are involved, as they are both more respected by the UP/PSs and they themselves may be more respectful of community volunteers. This involvement could take various forms, such as supporting the DMC and the ward member or commissioner with community level activities during which the VDC/SDC models the support to and respect for DVs.

# 1 Introduction

## *1.1. Background and Objectives*

After the successful completion of IFSP in 2003, CARE sought to build on its reputation and experience with food security, infrastructure and institution-building to implement a rights-based program focusing on challenging structural imbalances that perpetuate poverty in Bangladesh. SHOUHARDO (Strengthening Household Ability to Respond to Development Opportunities) is the largest development program in CARE Bangladesh and in the USAID Bangladesh Mission and represents a new approach in terms of the working areas targeted and the proportion of its interventions implemented by partner NGOs.

SHOUHARDO uses a bottom-up method of empowering some of the poorest and most marginalized populations of Bangladesh to attain their basic rights. By coupling this approach with the Household Livelihood Security framework (The Unifying Framework), CARE Bangladesh has proposed a model that truly tries to break the vicious cycle of poverty. Within this model, SHOUHARDO also addresses factors for which there is a well-documented relationship with improved nutritional status and survival of children, including education of women and girls, and women's empowerment and control of resources. The inclusion of more traditional interventions of health and hygiene promotion, water and sanitation, growth promotion, and increased food production along with distribution of food rations has created a synergy which has resulted in significant and sustainable impact.

The program operates in four major regions of Bangladesh – Kishoreganj, Rangpur, Tangail and Chittagong. Ninety-five percent of the implementation is through 46 local partner NGOs, the remaining 5% through direct delivery. While each of these four regions possess their own unique topography, they are populated by some of the most marginalized groups in Bangladesh due to their remoteness.

The overall program goal of CARE Bangladesh's FY 2005 – 2009 DAP is "to sustainably reduce chronic and transitory food insecurity of 400,000 vulnerable households in 18 districts of Bangladesh by 2009". This represents a target population of two million people. The overall program goal was intended to be accomplished using four specific objectives to address key behavioral and systemic (institutional) constraints related to food availability, access and utilization.

SHOUHARDO was organized into four distinct Strategic Objectives (SOs) listed below.

**SO1: Improved availability/economic access to food through strengthening livelihoods, entitlements and enhancing accountability of service providers.**
SO1 promotes increased and more equitable production of food crops and fisheries, by addressing underlying political and social risks while enhancing livelihood capabilities. The technical side of this is the provision of technical assistance and training via project staff and partners to promote sustainable farming and fishing practices. On the socio-political side, the effectiveness and accountability of both government and non-government institutions is enhanced, and the enabling environment changed to support livelihoods in a just and representative manner.

**SO2: Sustainable improvement in the health and nutrition of project participants.**
This SO seeks the sustained improvement in health and nutrition of the program participants. The intervention set has several components. The health component focuses on pregnancy and birth care, including pre- and post-natal care, birth attendant training, supplemental vitamins, family planning, vaccinations, diarrhea monitoring, and referral systems for emergencies; the nutrition component provides supplemental feeding for pregnant and lactating mothers and children under two, breastfeeding, and

weaning practices; and the hygiene component includes sanitation, sanitary practices, and safe, arsenic-free water.

**SO3: Enhanced empowerment of 400,000 women and girls from targeted vulnerable HHs.**
SO3 aimed to empower 400,000 women and girls in SHOUHARDO's targeted communities through a number of different approaches including: Empowerment, Knowledge and Transformative Action (EKATA), Early Child Care for Development (ECCD), Parent Teacher Associations (PTA), and School Management Committees (SMC). The program placed emphasis on increasing women's decision making power at household and community levels; reducing gender-based violence and acts which increase women's economic insecurity such as polygamy and verbal divorce; raising awareness of educational entitlements for women and girls; capacity development in leadership and advocacy; and strengthening the linkages between women's groups and the VDC/SDC, NGOs, legal assistance, and other bodies that address gender disadvantage which disproportionately affects women.

**SO4: Targeted communities and institutions are better able to prepare for, mitigate and respond to natural disasters.**
The goal of SO4 is to ensure adequate warning of the natural disasters that continually undermine the livelihoods of the SHOUHARDO communities and to put in place plans and structures to help mitigate their impact. The intervention set builds on the approach used under the previous DAP, the Integrated Food Security Program (IFSP), and other efforts of CARE to support the Government of Bangladesh's Flood Action Plan of 1989, though in a manner more specifically targeted to the poor and the extreme poor. It relies on training in early warning and disaster preparedness and response for Union Disaster Management Committees (UDMC) and Pourashava Disaster Management Committees (PDMC), the training of large cadres of volunteers at the ward and community level, and at the community level, the identification and reinforcement of coping strategies as well as skills in disaster preparedness. The intent is to include community groups and the private sector, with specific disaster roles for government, PNGOs, and other organizations within a *union* or *pourashava*.

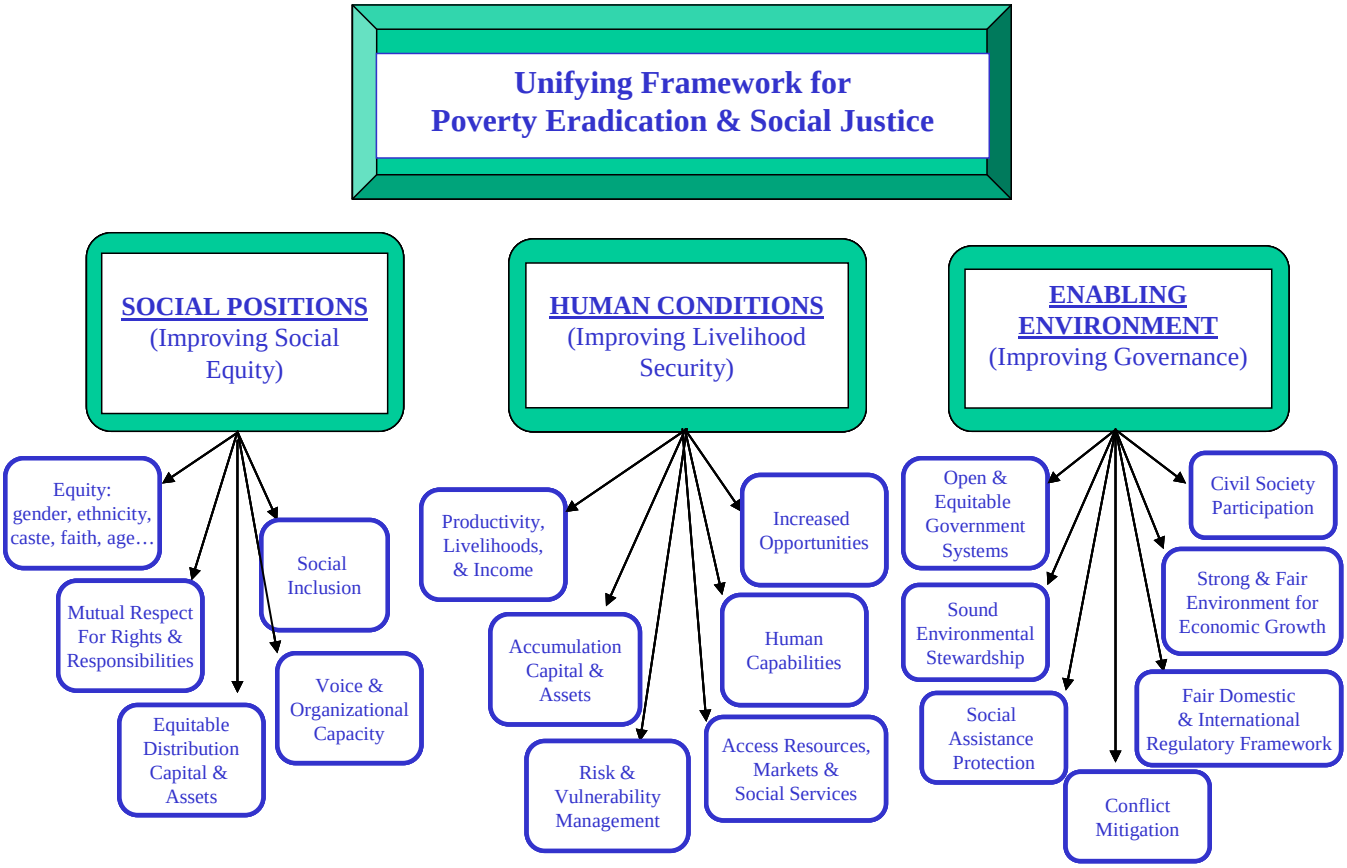
## *1.2. Unifying Framework*

The SHOUHARDO design was consistent with CARE's Unifying Framework for Poverty Eradication & Social Justice (see Figure 1). The Unifying framework was developed around three upper-level outcome categories that together ensure that the underlying causes of poverty are accurately analyzed and addressed from both needs- and rights-based perspectives. The following provides a definition for each outcome category.

1. **Improving Human Conditions:** Supporting efforts to ensure that people's basic needs are met and that they attain livelihood security with regard to such needs.
2. **Improving Social Positions:** Supporting people's efforts to take control of their lives and fulfill their rights, responsibilities and aspirations. Supporting efforts to end inequality and discrimination.
3. **Creating a Sound Enabling Environment:** Supporting efforts to create a sound enabling environment – public, private, civic and social institutions – that is responsive to and inclusive of constituents and that fosters just and equitable societies.

The three upper-level outcome categories bring together the breadth of CARE's work (e.g., Household Livelihood Security, Rights Based Approach, gender and diversity, income & asset generation, education, health, environment, partnership, civil society strengthening, advocacy, etc). The rectangles under each top outcome category represent some of the key intermediate outcomes or pathways that are necessary to lead to the upper-level development outcomes.

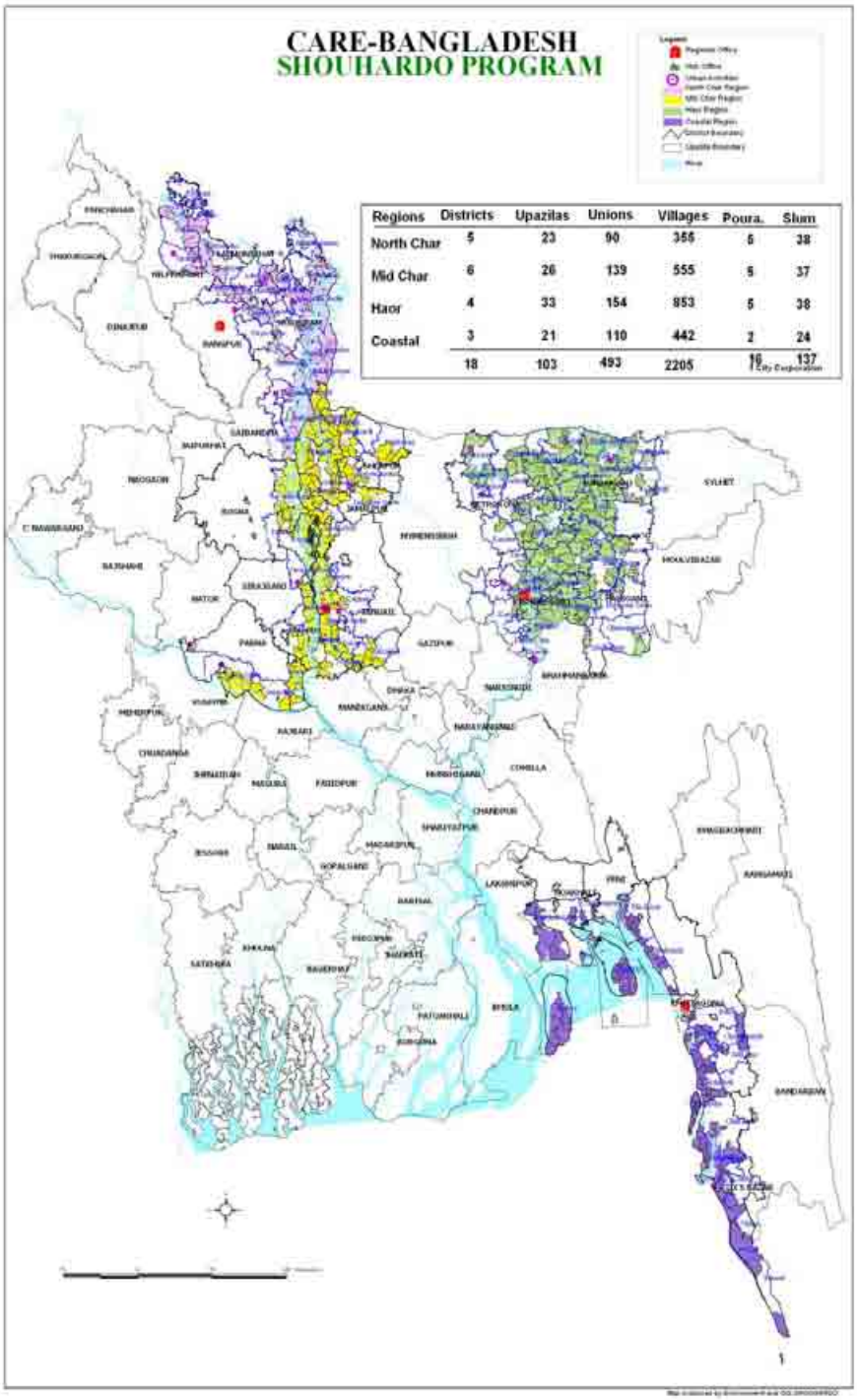
**Figure 1: The Unifying Framework for Poverty Eradication and Social Justice**




***Geographic Coverage of SHOUHARDO***

SHOUHARDO targeted 18 districts clustered in four food insecure regions of Bangladesh (North Char, Mid Char, Haor basin, and Coastal belts). Food insecurity in these remote areas is a function of natural and structural causes that manifests in the lives of poor and marginal poor. Targeted beneficiary and households were selected through a detailed vulnerability assessment, mapping, and well-being analysis process. In partnership with 46 partner NGOs, Local Government and Engineering Department (LGED), *pourashava* & city corporations and through direct delivery SHOUHARDO has covered the following administrative units and households.

**Figure 2: SHOUHARDO Coverage map**




**North and Mid Chars:** The *char* land areas constitute 2.1 percent of Bangladesh's total land area and is a home to about five percent of the population. *Char* lands are inhabited by some of the poorest and most vulnerable households in Bangladesh. *Char*s are composed of unstable and temporary land which appears and disappears with accretion and erosion of sandy soils in the riverbeds. Periodic flooding and

consequent river erosion disrupts food production in these marginal lands. The North Chars are situated around the confluence of the Brahmaputra and Teesta rivers, extending from the northernmost part of Rangpur District, near the border with India, to the southern limits of Gaibandha District. The Mid-Chars districts expand from the Jumuna river drainage system to the banks of the Padma River.

**Haor region:** *Haors* are tectonically depressed areas comprised of a river network and several channels that form a complex hydrological system fed by rainfall in the Indian hills. Most of the agricultural fields and much of road network remain submerged from May to October. In the monsoon season this vast water body turns into an inland ocean and isolates the human settlements, located on slightly elevated mounds. Consequently, the mounds are extremely congested areas for continuing regular livelihood activities. During the monsoon season, fishing becomes the only livelihoods opportunity for the *haor* inhabitants. However, elites usually control these water bodies and deny fishing rights of the marginal poor. The water recedes in November revealing the submerged road system and agricultural lands. People raise dry season (November – May) crops, including rice.

**Coastal Region:** This program region spread from the northernmost district of Noakhali to the southernmost district of Cox's Bazar, including the island populations of Kutubdia, Sandwip, *Hati*ya, and Moheshkhali. Unlike the southwest coastal zone, this region receives minimum silt deposition, making soil condition relatively poor and limiting agricultural opportunities. This region is highly susceptible to tidal waves and seasonal storm-surges. Tropical storms and cyclones are constant threats to the livelihoods of the coastal inhabitants. Seasonality determines employment opportunities in agriculture, fishing, and salt processing sectors. Land distribution is highly concentrated and the poor can only access productive agricultural land through sharecropping. Fishing is a major livelihood in the coastal areas, with poor fishers usually working as contract labor on sea-fishing boats. Other poor groups practice fish drying and shrimp larva collection in the coastal rivers. Salt production is emerging, although the establishment of saltpans can obstruct waterways and canals and subsequently cause water logging on agricultural lands and reduce land fertility.

## *1.3. Household Participation in Interventions*

Table 1 shows the percentage of surveyed households participating in different SHOUHARDO interventions. Across all regions, though much more common in rural areas, the type of Core Occupational Group (COG) intervention with the highest participation was Comprehensive Homestead Development (CHD) vegetable production (31 percent). The next highest participation rate agriculture (23 percent), followed by CHD livestock (20 percent). In urban areas, non-agricultural income-generating activities (IGAs) had the highest participation (45 percent) compared to other COG interventions. IGAs in agriculture were also more common in urban areas (21 percent in urban versus 11 percent in rural areas). Interventions in CHD fruit production and fisheries had the lowest participation across regions.

**Table 1: Percent of households participating in SHOUHARDO interventions in previous 12 months, by region and urban/rural area**

| | North Char | Mid Char | Haor | Coast | Urban | Rural | All |
|---|---|---|---|---|---|---|---|
| **Core Occupational Group (COG) interventions** | | | | | | | |
| Agriculture | 17.0 | 26.1 | 23.1 | 23.3 | 4.8 | 23.2 | 22.5 |
| CHD: Vegetable production a/ | 30.8 | 34.5 | 32.4 | 25.5 | 14.0 | 31.5 | 30.9 |
| CHD: Fruit production | 4.9 | 5.2 | 9.7 | 11.1 | 4.1 | 8.3 | 8.2 |
| CHD: Livestock | 23.0 | 20.7 | 15.9 | 24.2 | 10.3 | 20.6 | 20.2 |
| IGA: Non agriculture b/ | 3.2 | 11.4 | 18.1 | 14.5 | 45.2 | 11.8 | 12.9 |
| IGA: Agriculture | 7.7 | 7.2 | 12.0 | 15.2 | 20.6 | 10.6 | 11.0 |
| IGA: Livestock | 10.2 | 12.8 | 11.9 | 7.3 | 9.2 | 10.7 | 10.6 |
| Fisheries | 5.3 | 3.9 | 11.3 | 13.4 | 3.8 | 9.3 | 9.1 |
| **Sanitation and infrastructure** | | | | | | | |
| Assitance with access to a latrine | 13.4 | 13.4 | 10.7 | 22.1 | 32.9 | 13.8 | 14.5 |
| Assistance with access to a tubewell | 4.4 | 8.5 | 6.0 | 16.3 | 25.6 | 8.0 | 8.6 |
| Construction of a sanitation drain near home | 4.6 | 5.7 | 8.1 | 8.1 | 45.6 | 3.7 | 7.2 |
| Support for house raising | 1.0 | 2.5 | 2.3 | 0.9 | 3.3 | 1.7 | 1.7 |
| Support for mound protection/extension | 0.8 | 0.8 | 1.4 | 0.6 | 1.7 | 0.9 | 1.0 |
| **Early childhood development (ECD)** | | | | | | | |
| Child who attends preschool at an ECD center | 7.9 | 12.1 | 15.4 | 20.3 | 22.8 | 14.1 | 14.4 |
| **Participation in SHOUHARDO groups** | | | | | | | |
| COG group | 60.4 | 70.5 | 81.2 | 70.1 | 68.6 | 72.4 | 72.2 |
| Village/slum development committee | 7.8 | 12.1 | 23.6 | 12.7 | 25.0 | 11.6 | 14.2 |
| Savings group | 25.4 | 49.2 | 35.2 | 30.0 | 52.9 | 31.0 | 35.2 |
| EKATA | 9.3 | 12.6 | 15.2 | 20.6 | 10.5 | 32.3 | 14.6 |
| Mother's group | 99.0 | 94.7 | 96.9 | 89.2 | 98.0 | 94.0 | 94.8 |
| **Food assistance** | | | | | | | |
| For a pregnant mother | 64.3 | 65.3 | 79.0 | 68.4 | 80.7 | 70.7 | 71.1 |
| For a lactating mother | 93.7 | 93.4 | 92.4 | 89.5 | 93.9 | 92.1 | 92.2 |
| For a child 6-24 months old | 79.1 | 69.6 | 83.1 | 77.7 | 74.9 | 78.8 | 78.7 |
| Food -for-work | 4.1 | 3.4 | 8.9 | 2.7 | 3.9 | 5.4 | 5.3 |
| Cash-for-work | 9.9 | 8.8 | 11.6 | 5.6 | 6.7 | 9.4 | 9.3 |

a/ CHD: Comprehensive Homestead Development

b/ IGA: Income generating activities

Household participation in sanitation and infrastructure interventions were significantly more common in urban areas compared to rural ones. The most common sanitation and infrastructure intervention across regions was assistance with access to a latrine. In urban areas, construction of a sanitation drain near the home was by far the most common intervention type, with nearly half of households participating, followed by assistance with access to a latrine (33 percent of households). Extremely few households – no more than three percent in any region – participated in interventions providing support for house raising or for mound protection/extension.

Children attended preschool at Early Childhood Development centers in about one fifth of households in the coastal region, but in only eight percent of households in North Char. Participation was higher in urban than in rural areas. As shown in Table 2, regardless of region or urban/rural characteristics, about half of preschool children were boys and half girls, with attendance by girls just slightly higher.

**Table 2: ECD attendance, by gender**

| | % boys | % girls |
|---|---|---|
| All | 48.2 | 51.8 |
| North Char | 47.5 | 52.5 |
| Mid Char | 45.0 | 55.0 |
| Haor | 49.6 | 50.4 |
| Coast | 48.6 | 51.4 |
| Urban | 47.1 | 52.9 |
| Rural | 48.1 | 51.9 |

n=701

By far the type of SHOUHARDO group with the highest participation level was the mother's group; participation rates in the four regions ranged from 89 to 99 percent of households with at least one member participating. The second-most popular group type was the Core Occupational Group (COG), with 72 percent of households participating. The percentage of households participating in COGs was lowest in North Char (60 percent), and as high as 81 percent in Haor. The third-most popular group type across regions was the savings group (35 percent of households). Participation in any type of group was higher in urban areas with the exception of COGs, where it was slightly higher in rural areas.

Food assistance to lactating mothers was the most common form of food assistance, with participation rates of 90 percent and higher in all regions and in urban and rural areas alike. Comparing urban and rural areas, the main difference in food assistance participation was in assistance to pregnant women, which was more common in urban (81 percent of households) than in rural areas (71 percent). Participation in this form of intervention was especially high in Haor region (79 percent) relative to other regions. Food-for-work and cash-for-work projects had the lowest rates of participation compared to other forms of food assistance, though Haor, again, had higher participation rates in both these intervention types relative to other regions. These levels of participation suggest a higher level of need in Haor. The relatively high level of need in this region is also illustrated by data in Table 3, in terms of non-SHOUHARDO food assistance. Thirty-six percent of households in Haor received such food assistance, compared to 20 percent or less in other regions. These data also show that non-SHOUHARDO food assistance was more common in rural areas (24 percent) than urban ones (11 percent), whereas the urban/rural contrast for SHOUDARDO food assistance is not as pronounced (nor consistent across types of food assistance).

**Table 3: Households receiving non-SHOUHARDO food assistance**

| | % of HHs |
|---|---|
| All | 23.6 |
| North Char | 18.3 |
| Mid Char | 19.8 |
| Haor | 36.5 |
| Coast | 11.8 |
| Urban | 10.5 |
| Rural | 24.1 |

## *1.4. Evaluation Methodology*

TANGO International was contracted by CARE Bangladesh to carry out the final evaluation of SHOUHARDO in October 2009.

The main purpose of the evaluation was to assess: (see Annex 1 for full Terms of Reference)

- How effective SHOUHARDO was in meeting their objectives
- How the program utilized the three components of the CARE Unifying Framework (human condition, social position and enabling environment) to impact the power relationships and social exclusion which are underlying causes of poverty
- Which approaches and activities are most effective and which are least effective
- The strength of the partnerships
- The 'sustainability' of the positive changes

The final evaluation utilized both quantitative and qualitative data to measure the impact of SHOUHARDO. In close collaboration with CARE Bangladesh TANGO deployed a team to visit

communities in which SHOUHARDO was implemented to carry out a qualitative review of the program, while a team based in the US worked with the local research institute International Center for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) to conduct a quantitative endline survey representative of SHOUHARDO communities. To better inform and guide the evaluation, the team conducted a thorough review of all relevant program documents, including: the baseline study, project documentation with annexes, MTR, M&E guidelines, the 2009 annual report, various strategy documents, financial budgets and reports.

### 1.4.1 Methodology for quantitative data collection and analysis

The quantitative analysis of this report is based on data from ten household surveys: two baseline surveys, six periodic monitoring surveys, and two endline surveys (see Table 4). The population sampled for all surveys is poor and extremely poor (PEP) SHOUHARDO project beneficiaries identified prior to the baseline survey using Participatory Poverty Appraisal.

The first baseline survey, referred to as the "socio-economic survey" (SES), focused on household demographics, food security, economic security, agricultural production, crisis exposure and women's decision making power. It was administered to a random sample of *all* PEP households. The second baseline survey, referred to as the "health, hygiene and nutrition" (HHN) survey, was administered only to households with children 6-24 months old. It focused in on the health and nutritional status of children and their mothers. Both were conducted in February of 2006, before the start of SHOUHARDO project activities.

The baseline surveys were based on a two-stage stratified cluster random sampling design, where the strata were rural areas of the four SHOUHARDO regions and one overall urban area. Within each stratum, 45 villages or slums were randomly selected on the basis of probability proportionate to size (PPS), followed by random selection of households within each chosen village/slum. In the case of the SES survey 15 households were selected in each. The final sample size is 3,081 households. For the HHN survey a maximum of 17 households were chosen; if less than 17 households were available, all eligible households in the village/slum were included in the sample. The sample size is 3,092 households. The SES and HHN surveys were conducted by The Asia Foundation in partnership with Data International Ltd.[2]

The monitoring surveys were conducted at 6 month intervals from January/February 2007 to August 2009 by CARE staff. Data were collected on food security, economic security, agricultural production and women's decision making power. Stratified simple random sampling was employed to select households, where the strata are the four project regions. The sample sizes range from 1,152 to 1,729 households. Because of the simple random sampling the number of villages/slums is much larger than for the other surveys (see Table 4), and the number of households selected in each much lower (on average 1.6, typically ranging from one to three).

Turning to the endline surveys, for the first, conducted in July/August 2009, data was collected only on children's nutritional status. The sample consisted of children 36 to 60 months old in order to be able to

[2] For more details on the baseline surveys see the baseline report.

**Table 4: Information on data sets employed for quantitative analysis**

| Data set | Date of data collection | Sampling design | Number of villages/slums (clusters) | Number of households |
|---|---|---|---|---|
| **Baseline** | | | | |
| Baseline socio-economic survey (SES) | February 2006 | Stratified cluster random sampling a/ | 225 | 3,081 |
| Baseline health, hygiene and nutrition (HHN) survey | February 2006 | Stratified cluster random sampling (only households with 6-24 month olds) a/ | 225 | 3,092 |
| **Monitoring** | | | | |
| Periodic monitoring survey 2007, Round 1 | Jan/Feb 2007 | Stratified simple random sampling b/ | 937 | 1,480 |
| Periodic monitoring survey 2007, Round 2 | July/Aug 2007 | As above. | 729 | 1,152 |
| Periodic monitoring survey 2008, Round 1 | Jan/Feb 2008 | As above. | 962 | 1,331 |
| Periodic monitoring survey 2008, Round 2 | July/Aug 2008 | As above. | 903 | 1,410 |
| Periodic monitoring survey 2009, Round 1 | Jan/Feb 2009 | As above. | 941 | 1,443 |
| Periodic monitoring survey 2009, Round 2 | August 2009 | As above. | 947 | 1,729 |
| **Endline** | | | | |
| Endline August 2009 child nutritional status survey | July/Aug 2009 | Stratified cluster random sampling (only households with 36-60 month olds) a/ | 225 | 3,200 |
| Endline health, hygiene and nutrition (HHN) survey | November 2009 | Stratified cluster random sampling (only households with 6-24 month olds) a/ | 225 | 3,356 |

a/ The 5 strata are rural North Char, rural Mid Char, rural Haor, rural Coast and all urban areas.

b/ The 4 strata are North Char, Mid Char, Haor and Coast .

capture changes over time in prevalence of malnutrition among children who were under two years at the time of the baseline. Half of the sample was the same children who were sampled at baseline (a cohort) and half were from a new sample of children in the age group. The same villages/slums surveyed in the baseline HHN survey were selected. The sample size is 3,200 households. This survey was conducted by the ICDDR,B.

The final endline HHN survey of households with children 6-24 months old was conducted by the ICDDR,B with TANGO oversight in November 2009. It covered the same topics as the baseline HHN survey. Additionally, data were collected on food and economic security, women's empowerment, and participation of households in SHOUHARDO interventions. Similar to the baseline, the survey was conducted using stratified cluster random sampling with selection of villages/slums undertaken using PPS. A maximum of 17 households were selected in each village/slum; if less than 17 households were available, all eligible households were included. The sample size was chosen based on the method recommended in the FANTA Title II *Sampling Guide* (2007).[3] The final sample size is 3,356 households. Table 5 details the number of households selected within the five survey stratum compared to the number in the population.

**Table 5: Household sampling for the endline health, hygiene and nutrition (HHN) survey, by survey stratum**

| Stratum | Number of PEP households with children 6-24 months in population | Number of households in sample | Stratum-level sampling weight |
|---|---|---|---|
| Rural North Char | 17,791 | 658 | 1.0006 |
| Rural Mid Char | 17,270 | 694 | 0.9209 |
| Rural Haor | 31,878 | 653 | 1.8066 |
| Rural Coast | 20,642 | 716 | 1.0669 |
| All urban areas | 3,104 | 635 | 0.1809 |
| Total | 90,684 | 3,356 | |

When simple random sampling without stratification is employed for choosing survey households, each household in the population has the same chance of being selected, and each sample household represents the same number of households in the population. However, when a complex sampling design is used, as was done for the ten surveys employed here, households residing in each stratum represent a different number of households in the population. Calculations using the data (for example of the mean value of a variable) will not represent the population unless the data are weighted appropriately. Thus sampling weights are applied to the data prior to all sample-level calculations undertaken in this report.

The last column of Table 2 reports the stratum-level sampling weights employed for the endline HHN data set. Since households were substantially under-sampled in Haor, it has the largest sampling weight. Conversely, urban households were over-sampled and thus the urban stratum has a relatively low sampling weight.

In addition to strata-level sampling weights, it was necessary to apply a second layer of weighting to the endline HHN data based on the age of months of children in sampled households. While the intent was to select a random sample of children aged 6-24 months, household selection

[3] The sample size was chosen to be able to measure a 10 percentage-point reduction in the underweight prevalence from baseline to endline with 10 percent added for non-response.

within each village/slum was based on outdated beneficiary lists, and enumerators were not consistently successful in identifying the children who had been born since the lists were last updated. Thus children in the 6-12 month age group were considerably unrepresented (the age distribution is skewed to the left rather than uniform). To overcome this problem, within each stratum, sampling weights were applied to groups of children in three-month ranges.

***Data analysis***

Throughout the report descriptive analysis is undertaken in which summary statistics of variables (e.g., mean, percentage) are compared across baseline and endline surveys. In such cases the percentage change from baseline to endline is reported, calculated as the baseline minus endline value multiplied by 100 and divided by the endline value. Where appropriate, t-tests are used to test for the statistical significance of differences in means and proportions across groups of households. Regression analysis is used to provide quantitative evidence of the impact of SHOUHARDO interventions on beneficiary households. A wide variety of outcomes are examined, from indicators of child malnutrition to indicators of women's empowerment. Because data were not collected for a control group of households, it is not possible to estimate precisely how much impact specific SHOUHARDO interventions have had on beneficiary households. However, insight can be gained as to whether the project as a whole has had a positive impact by using regression analysis to look at whether the more involved households are in SHOUHARDO, as measured by the number of interventions participated in, the more they benefit. Doing so is the first strategy for the impact analysis. The second is to test whether household participation in specific interventions has had a positive impact on relevant outcomes. Logistic regression is employed for indicators measured as dichotomous variables and Ordinary Least Squares for those that are continuous. All analysis was undertaken using SPSS Version 15.0 and Microsoft Office Excel.

## 1.4.2 Methodology for qualitative data collection and analysis

The qualitative team consisted of a multi-disciplinary team, covering the main subject areas of SHOUHARDO. The team was gender balanced with three women and two men and composed of two Bangladeshis and three North Americans.

***Selection of villages for qualitative visits***

The in-country team aimed to obtain a balanced view of the program as implemented between the four diverse operating regions and visited 33 villages during the period of November 9-27. The villages were selected through a procedure which combined a random selection with a purposive selection to review specific features of the program[4]. The procedure involved:

- Ensuring balanced coverage of all 4 regions
- Excluding districts visited by the previous SHOUHARDO thematic studies
- Identifying first the unions where field visits would be conducted, defined by a random selection of villages using SHOUHARDO's database
- Unions with diverse village/slum gradings were prioritized, to enable sampling a spectrum of "strong", "moderate" and "behind" communities

[4] For one of the consultants, a slightly modified procedure was followed. Aside from one village selected by SHOUHARDO staff, the consultant randomly selected a village from each of the categories of "strong", "moderate" and "behind", within each of several clusters formed by the staff for logistic reasons.

- Unions with key interventions were prioritized: *khas* land titling, mass mobilization, early warning pilot, ALO & ORGAN, VDC direct fund pilot, EKATA groups, and remote conditions

Because of this selection procedure, carried out by the consultants without influence from the SHOUHARDO team, the findings can be taken to be broadly indicative of typical conditions obtained from the entire SHOUHARDO intervention area.

In each village, focus group discussions were held using semi-structured questionnaires to obtain some standardized feedback while also permitting participatory discussions in which respondents could openly share their perspective on the program. Because of the very tight timeframe, where each of the three teams only had six days of village visits (aside from travel days), the evaluation team split up to cover more communities, covering slightly different topics according to their areas of emphasis.
On-site verifications were done with a range of project outputs such as infrastructure, ECCD centers, businesses and VCD centers. The evaluation sought to make maximal use of the thematic studies carried out earlier in 2009, for which the consultants involved in these studies had spent considerable time in the field.

SHOUHARDO staff was given numerous opportunities to provide input and insight to the final evaluation, including CARE Bangladesh headquarters and at regional level. Interviews were arranged with senior staff, and numerous discussions were held at the field level as well. Interviews were held with PNGOs in three of the four regions and with a number of other key partners, including government partners, USAID, and other major food security players in Bangladesh such as Save the Children – USA (SCF-US). For a comprehensive list of all those interviewed please consult Annex 4.

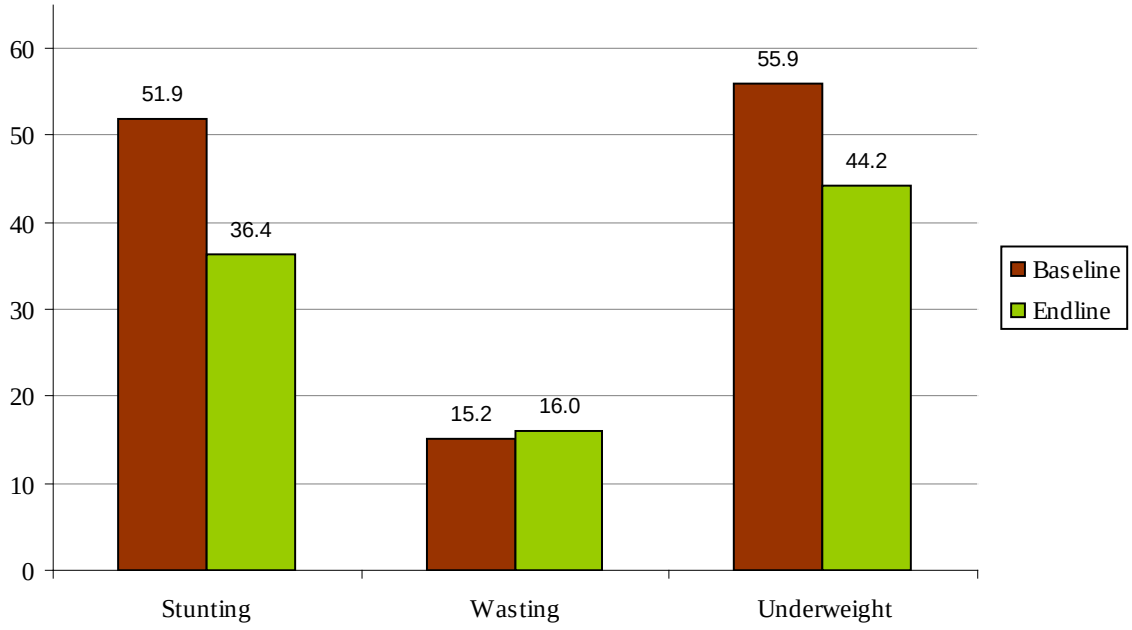
Qualitative research was particularly important to understanding the nuances and scope of the impact SHOUHARDO had on communities. For the governance and women's empowerment interventions qualitative research was crucial to exploring and fleshing out the program impact on the institutions and relationships involved and the subsequent effects on the human condition, social position and enabling environment within the communities. Compared to previous CARE Title II projects, these interventions are in more of a pilot status, and the causal chains are less well-understood or straightforward. Few people will doubt that building the capacity of a VDC/SDC can help empower the communities to undertake various activities that can lead to improved community and household food security. Presently there are very few indicators related to this and there is need to carry out more exploratory research to understand and measure the impact of these types of interventions and their contribution to project outcomes.

Consistent with the mixed methods approach adopted for the evaluation team, each interview, focus-group discussion, mini workshop, PRA exercise, etc. was facilitated by an expert member of the team. Experienced CARE staff not directly involved in local field operations assisted with facilitation by translating and interpreting for non-Bengali speaking facilitators. The individual data collection activities were guided by topic outlines, and the information was discussed in daily team debriefings. The team assured that the variation in perspective from beneficiary to partner to government official to CARE Bangladesh staff was adequately and validly documented as part of the evaluation. Team interpretations of the data collected was verified with the stakeholders at several levels as a means of assuring the accuracy of the findings.

## *1.5. Program impact*

The quantitative analysis for this report reveals striking improvements in key SHOUHARDO outcome indicators over the life of the project. Figure 3 shows a decline in the prevalence of stunting by 30 percent and in the prevalence of underweight by 21 percent. The analysis confirms that these changes are a direct result of SHOUHARDO project interventions, including food assistance, Core Occupational Group activities, and HHN interventions.

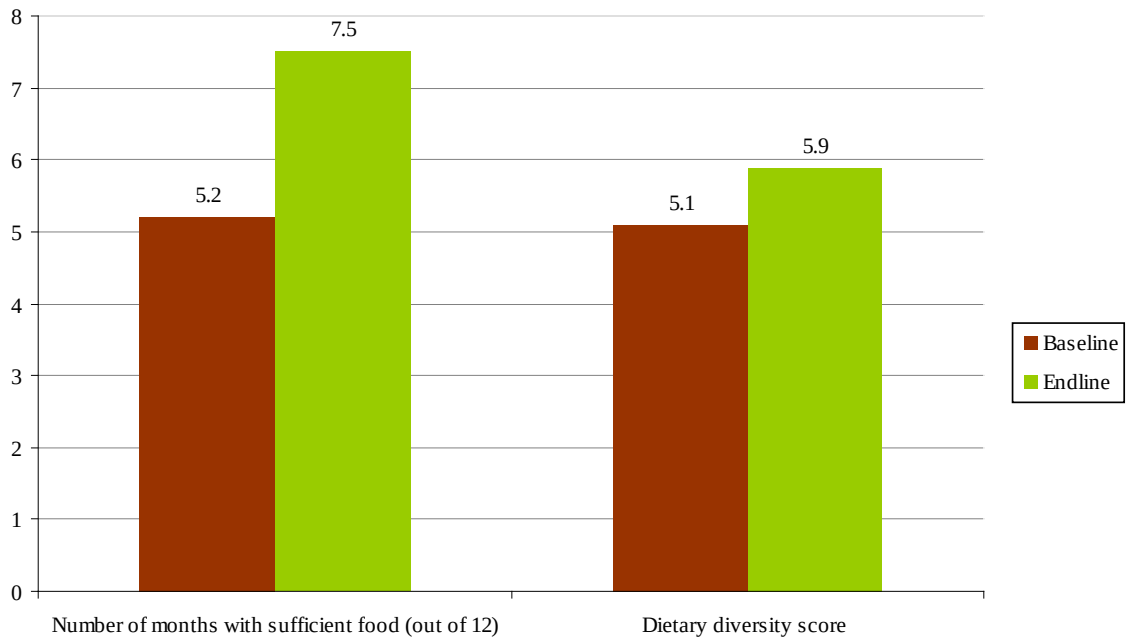
**Figure 3: Prevalence of stunting, wasting and underweight, baseline-endline comparison**




Sources: Baseline HHN survey and November 2009 endline HHN survey.

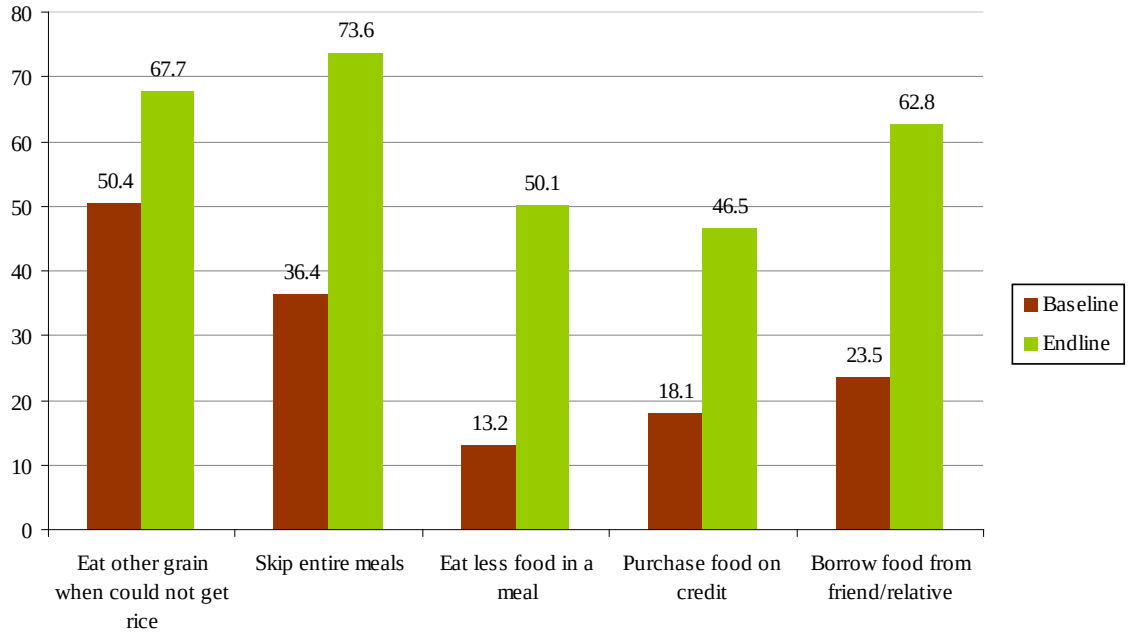
Figure 4 illustrates that there have also been great improvements in the two key SHOUHARDO project food security indicators: the number of months for which households have sufficient access to food and their dietary diversity. The number of months of sufficient food access increased from 5.2 to 7.5, and the dietary diversity score by 16 percent. Large numbers of households that were previously forced to resort to negative coping strategies to deal with food insecurity no longer need to do so, as can be seen in Figure 5. For example, the percentage of households who no longer skip entire meals has increased from 13 to 74 percent.

**Figure 4: Key SHOUHARDO food security indicators, baseline-endline comparison**




Sources: Baseline HHN survey and November 2009 endline HHN survey.

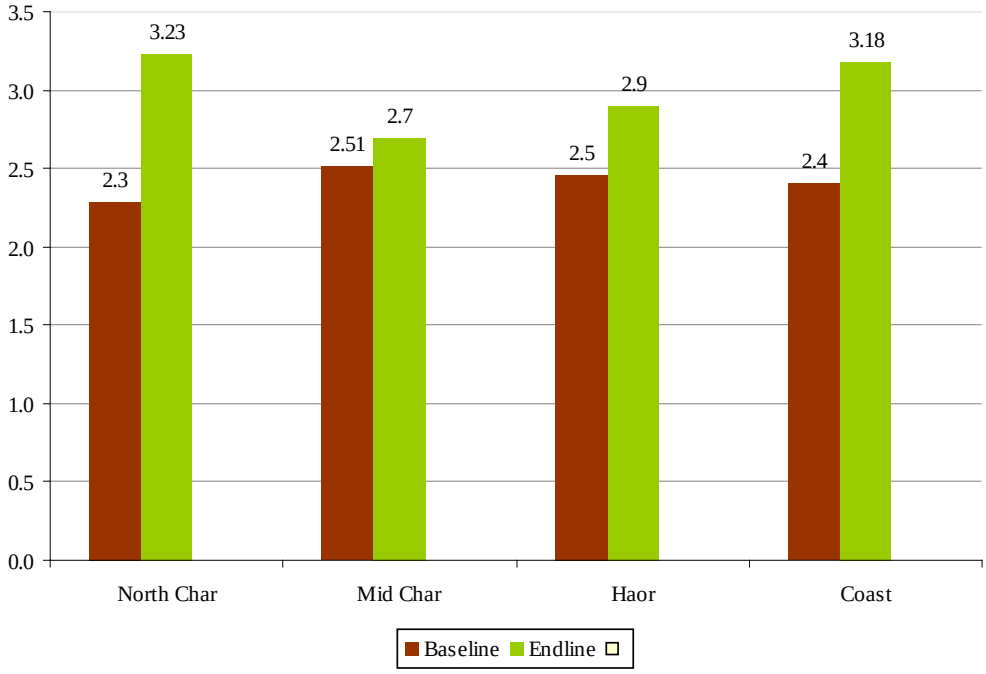
**Figure 5: Percent of households using food insecurity coping strategies never or only rarely, baseline-endline comparison**




Sources: Baseline HHN survey and November 2009 endline HHN survey.

Finally, as can be seen in Figure 6, women's decision making power within their households has improved. The North Char Region has made dramatic improvements; At the time the program began it had the lowest score, but at the time of the final evaluation it ranked highest. These improvements have been brought about by women's participation in groups such as EKATA and their involvement in COG activities.

**Figure 6: Women's decision making power score, baseline-endline comparison**




Note: The score is based the degree of women's participation in 12 types of decisions.
Sources: Baseline HES survey and August 2009 period monitoring survey.

The next sections of the report look at each of the program activities carried out by SHOUHARDO staff and partners to determine what factors are leading to the impacts previously described. This begins with a discussion of the program activities and findings implemented under SO1 (Governance, Infrastructure Projects, and Food Production and Income Generating Interventions), followed by a review of the main findings of SO2 associated with the Nutrition, Health and Hygiene Interventions. The report then presents the findings associated with SO3 interventions related to Empowering Women and Girls, followed by a discussion of program activities focused on Disaster Risk Reduction and Humanitarian Assistance (SO4). The next section discusses the program processes associated with implementing the project (management, monitoring and evaluation, partnerships, commodity management) followed by the impact analysis of SHOUHARDO interventions. The report concludes with a set of recommendations to be considered in future programming.

# 2 SO1: Governance, Infrastructure, Food Production and Income Generating Interventions

***Strategic Objective 1: Improved availability / economic access to food through strengthening livelihoods, entitlements and enhancing accountability of service providers***

SO1 promotes increased and more equitable production of food crops and fisheries, by addressing underlying political and social risks while enhancing livelihood capabilities. The technical side of this is the provision of technical assistance and training via project staff and partners to promote sustainable farming and fishing practices. On the socio-political side, the effectiveness and accountability of both government and non-government institutions is enhanced, and the enabling environment changed to support livelihoods in a just and representative manner.

The primary indicators of achievement for this strategic objective are: 1) average number of months of adequate food provisioning; and 2) number of different food groups consumed per day (household average dietary diversity score). Over the life of the project, SHOUHARDO has been effective in improving the status of target households with respect to each of these indicators. At baseline, the average number of months of adequate food provisioning was 5.2 months and an LOA target of 8 months was set. As of the endline survey, the average number of months of adequate food provisioning had increased to 7.5 months, still short of the target, but a significant improvement over baseline.

Similarly, the baseline assessment found that the average number of different food groups consumed on a daily basis by target households was 5.1, and a LOA target of 6 was set. The endline assessment found that average daily consumption of different food groups among target households had increased to 5.9 months, still short of the target, but a marked improvement over the baseline.

The following sections analyze endline findings in terms of three core components: 1) governance; 2) infrastructure; and 3) food production and income generation.

## *2.1 Governance*

*SSO 1.1 Targeted institutions*[5] *effectively mobilize and manage resources to reduce vulnerability to food insecurity.*

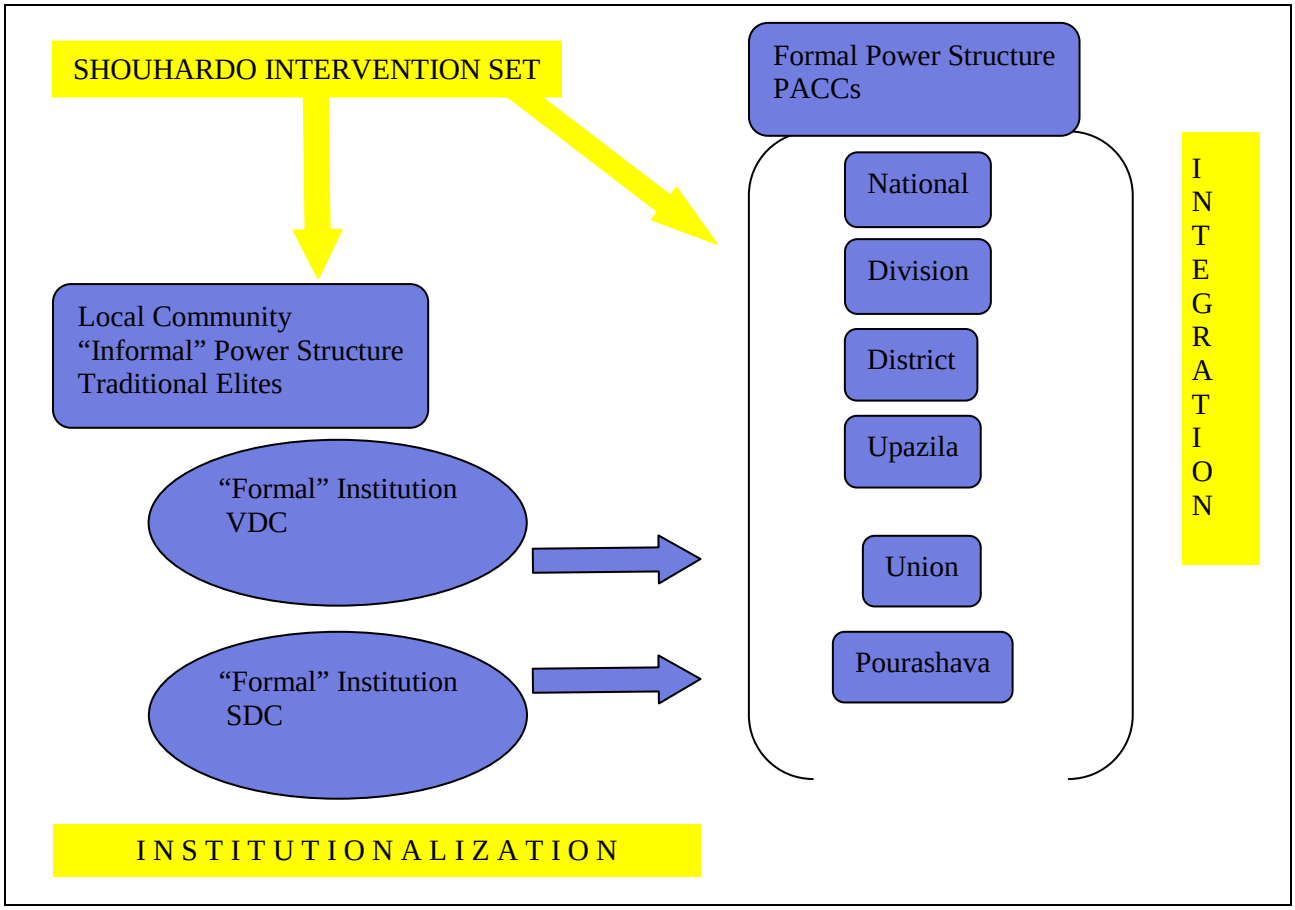
*SSO 1.2 Enabling environment of high-risk areas supports people's ability to improve their food and livelihood security.*

The sub-objectives and indicators for this component of SO1 highlight that institutions should exhibit capacity to effectively manage resources for the purpose of increasing the food and livelihood security of the poor. The MTR had found that SHOUHARDO partners were losing sight of this vision, and instead were reverting to an approach of mainly handing out food and assets. Thus, the review team recommended a refocusing on the "SHOUHARDO message" to

[1]Targeted institutions are 493 UPs, 17 *pourashava*, 1 City Corporation, and 44 Partner NGOs covering 2205 villages and 137 urban slums.

include creation of a formal institution comprised of peers from the poor and extreme poor in the local community. These community institutions were then to be integrated into the formal government administrative structure. This was graphically represented as follows:

**Figure 7: SHOUHARDO framework for integrating local institutions into formal governance structures**

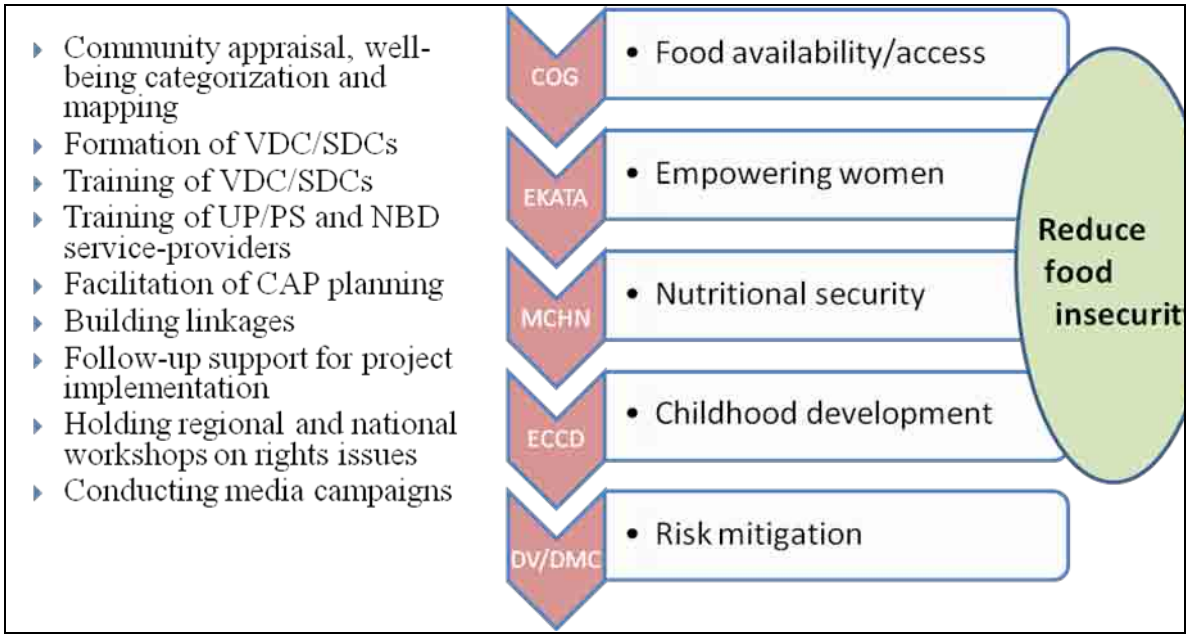



Good governance is defined in CARE Bangladesh's governance strategy paper as: "…the effective, participatory, transparent, equitable and accountable management of public affairs guided by agreed upon procedures and principles, to achieve the goals of poverty reduction and increasing social justice".[6] This aspiration is embedded in each of the SOs, and provides a foundation for developing roles and capacities, relationships, and rules among all project stakeholders. Under SHOUHARDO, the pivotal institution for representing PEP in the governance process is the Village Development Committee (VDC)/Slum Development Committee (SDC). In each target community, activities were coordinated through these institutions in an effort to ensure a sustained benefit from integrated community development efforts, rather than implementation of isolated, independent activities. Figure 8 illustrates the process through which community capacity-building initiatives were expected to contribution to SHOUHARDO's overall goal of reduced food insecurity. In summary, this strategy was intended to change prevailing power structures, and sought to "…go beyond the idea of advocating on

[6] CARE Bangladesh, Governance Technical Strategy Document, August 2009.

behalf of the marginalized to the practice of enabling and empowering the marginalized to speak for themselves".[7]

**Figure 8: Local institution-building as base for SHOUHARDO interventions**




## 2.1.1 Overall Findings and Recommendations

***Successful establishment of pro-poor community-based institutions***

VDC/SDCs have been formed in essentially all of the 2,342 villages and slums where SHOUHARDO has operated. The process through which this was done has reportedly contributed to a strong sense of community identity and facilitated the participation of PEPs and women in local planning and decision-making. The consultants found that in nearly all 33 communities visited, VDC/SDCs were adequately functioning as evidenced by their meeting minutes and Community Action Plans (CAPs). Findings also suggest that VDCs/SDCs have played an important role in helping to implement other interventions and forming links with government service-providers involved in educating community members in livelihood, health

***SDC in Chittagong area***

[7] People-Centered Advocacy: Empowering the Marginalized to Speak for Themselves. SHOUHARDO Advocacy Strategy. CARE Bangladesh Advocacy Unit. 2005.

and nutrition issues. Women were able to actively participate in VDC/SDCs (each had between 3 and 8 female committee members), and three are currently represented by female chairpersons. This represents a major step forward among the poor of Bangladesh, where women are commonly restricted to their homes and have relatively limited opportunity for social participation. Qualitative data also show that most communities have maintained positive relations between the poor and "elites", such as collaboration in community development projects where the latter make contributions from their own resources.

Despite these successes, the consultants feel it is important that SHOUHARDO further clarify preferred administrative procedures (such as term limits) for VDC/SDC members. Lacking further clarification, VDCs/SDCs may misunderstand their mandate and may lack the ability to plan for future development in a way that addresses the needs of all stakeholders. Similarly, while the VDC/SDCs have obviously learned a great deal, there was not a clear strategy for an ongoing learning process beyond an effort by field facilitators and government partners to support on-the-job training. SHOUHARDO's efforts to categorize VDC/SDCs as strong/moderate/behind did not led to a clearly differentiated strategy of capacity-building, nor did it meet the needs of VDCs/SDCs that were challenged by specific issues (such as conflicts arising from human rights interventions).

All of the VDC/SDCs visited had prepared CAPs, and these led to a range of projects, thus this sample indicates a very favorable level of activity across all of the village/slums. While the CAPs developed by each VDC/SDC facilitated implementation of a range of projects, the consultants were left with some doubt regarding community ownership of the plans, particularly given the low level of literacy.

### *Improved access to important livelihood infrastructure*

Many of the projects outlined in the CAPs focus on improved transportation, sanitation and community infrastructure. While some infrastructure projects involved thousands of community members, others were primarily implemented by contractors. Certain initiatives, such as construction of embankments, had tremendous value for preserving crops and safeguarding assets. Others focused on addressing thorny human rights issues, such as improving the access of PEP households to *khas* land and the prevention of violence against women. To date, little progress has been made in developing strategies to address rights issues that limit people's livelihoods, such as lack of access to water bodies for fishing.

### *Capacity building of key implementation partners*

Under SO1, training has been provided to some 9,341 members of *union parishads*, *pourashavas*, and Nation-Building Department service providers. Capacity building activities emphasize more effective means of service provision for PEP households. Accordingly, these capacity building sessions have contributed to a high degree of support for the CAPs in form of direct budget allocations and/or other forms of support. Many VDCs/SDCs also have played an important role in provision of tubewells, latrines, Vulnerable Group Feeding (VGF) and other government sanctioned initiatives. These and other achievements have made it clear to the consultants that establishment and training of VDCs/SDCs will likely have a positive and sustainable impact on the lives and livelihoods of poor and extremely poor (PEP) households.

### *Overall Recommendations for Governance Interventions*

This discussion of the SHOUHARDO program's results regarding governance ends with identification of the primary recommendations.

Future community-level governance initiatives should further clarify the roles and responsibilities of VDCs/SDCs to ensure that they are effectively supported and that they adequately respond to the needs of PEP households. This process should include clarification of the term limitations of committee members and processes for election of new members. Special attention should also be given to promoting the active participation of women on VDCs/SDCs.

Similarly, further efforts should be made to ensure that development and implementation of Community Action Plans (CAPs) allow participation by poor, illiterate individuals. This could be facilitated be developing a comprehensive database of CAP activities that have actually been implemented in target communities.

Prior to the termination of the project, SHOUHARDO should make final contact with target villages and slums in order to provide encouragement for continued capacity building efforts and promote the idea of contingency planning for coping with future challenges. One such challenge is the assertion of rights to productive resources such as water bodies and/or *khas* lands.

SHOUHARDO should make a concerted effort to document and synthesize lessons learned from its governance initiatives. In particular, effort should be made to identify 'positive deviant' VDCs/SDCs that have met with success in dealing with common development constraints. Given SHOUHARDO's emphasis on increased realization of rights among PEPs, particular focus should be placed on identifying proven approaches to conflict resolution and legal advocacy.

Finally, SHOUHARDO should look for means of increasing the strategic role of local governments (UPs/PSs) in the provision of livelihood support to PEP households, including greater access to water bodies for fishing.

### 2.1.2 Program Achievements

***Establishment of Community-Based Institutions***

SHOUHARDO reports that it has reached its LOA goal for training VDCs/SDCs, service providers and locally elected bodies. Focus group participants gave consistent accounts of transparent and democratic procedures among VDC/SDC and claimed that they were not overly influenced by vested interest groups. Community members nominated committee member candidates based on characteristics of honesty and leadership, and open elections were held by a show of hands. This is a good practice in that it protects against backroom arm-twisting, though at times people may be reticent to publicly show their opinion about other community members.

This transparent selection of VDC/SDC sets the tone for the COG group selection and other project interventions which are partly mediated by VDC/SDCs. For example, numerous communities stated that the process of establishing a VDC/SDC gave them confidence to undertake projects and to engage in dialogue with the UP/PS, request services from nation-building department (NBD) service providers, and work together with non-poor community members on development projects.

In the Haor region, many VDCs were reportedly collecting money to fund the construction of meeting facilities without direct financial support from SHOUHARDO. In one village[8], land for construction of the VDC office became available following mound extension activities coordinated by SHOUHARDO. This case illustrates the initiative taken by target communities to support local institutions charged with providing services and advocating for rights for PEP households.

[8] Rahmatpur village, Kewarjore Union, Mithamoin Upazilla, Kishoreganj district.

Unlike other project volunteers (health, agriculture, EKATA, ECCD teachers), VCD/SCD members did not receive any incentives, financial or otherwise, from SHOUHARDO. However, the lack of financial or other incentives for VDC/SDC members was not viewed by participants as an obstacle to their sustainability. This may be due in part to the fact that members commonly benefit from COG activities, which may serve as its own form of incentive for effective management.

### *Relations between PEP and Non-Poor*

VDCs/SDCs have shown themselves to be an effective means of addressing structural inequities at the grassroots level prior to looking for substantive change at higher levels of governance. As was the case regarding women's participation, SHOUHARDO's approach to community mobilization retained an explicit focus on PEP, and the first main activity was the identification of the PEP through a participatory well-being analysis. Community members talked comfortably about the well-being categories of "extremely poor", "middle class", "elites" and "influential people", and the program seemed to have promoted an open discussion which enabled it to promote practical actions.

While previous studies have pointed to relations between poor and non-poor populations as a reason for establishing homogenous PEP VDC/SDCs, SHOUHARDO chose to let communities determine appropriate means for nominating members. Respondents to the final evaluation suggested that no undue pressure was placed on community members from wealthy households or other vested interests during the establishment of VDCs/SDCs. Similarly, they reported that the emergence of VDCs/SDCs as important entities for community development had not contributed to instances of conflict between populations in different wealth categories. The avoidance of common sources of conflict may be due in part to SHOUHARDO's involvement of UP members throughout the process.

### *Capacity-Building Process*

The foundation of the capacity-building process of the VDC/SDC was the training courses delivered by field facilitators, the Institute of Development Initiative, and government officials such as livestock officers. While these activities clearly contributed to improved knowledge and skills among PEP members, findings suggest that capacity building activities could be more participatory and should more consistently draw on lessons learned from exemplary, "positive deviant" VDC/SDCs. For example, many communities came to visit the *haor* pilot communities of Kewarjore to see the first mass mobilization for construction of an embankment. Similar joint learning opportunities occurred during several advocacy workshops.

Following the MTR, the Village Grading System was piloted, in which the VDC/SDC (and other community groups) filled out a questionnaire together with SHOUHARDO staff regarding the existence and effectiveness of various aspects of community development. This provided the basis for grading the village/slum as strong, moderate or behind. One consequence of this grading was that it helped identify the two-three communities from each region that were incorporated into the pilot scheme to transfer funds for the VDC/SDC to manage directly. In one such village[9], the community used funds to implement a number of infrastructure projects outlined in their CAP, and returned a small unspent balance.[10]

[9] Char Varat Gopaljhar village, Shoulmari union, U

[10] It should be noted that this village has had the advantage of a previous project from RDRS prior to SHOUHARDO, and the concurrent support from other NGOs.

### *Planning and Implementation of VDC/SDC Projects*

Whereas the previous section outlines the establishment and structure of VDCs/SDCs, this section examines the extent to which SHOUHARDO effectively supported participatory planning and implementation of VDC/SDC projects for the benefit of PEP and women.

### *Community Action Plans*

A key feature of SHOUHARDO's local institution-building approach is the preparation of Community Action Plans (CAPs) by the VDC/SDC. VDC/SDC guideline documents recommend soliciting input on the plan through stakeholder workshops at the UP/PS level. While communities claim to have revisited the plans and underlying problem analyses on a periodic basis, there was no evidence that this had taken place in any community. Respondents did state, however, that the CAP's familiar and simple format enables partners to quickly grasp the plan, which can help mobilize support for it. The consultants overall assessment of the CAP process is that it has improved significantly since the MTR and that it has enabled VDCs/SDCs to more effectively set their own agenda for development, as opposed to being completely dependent on SHOUHARDO.

Community Action Plan from Ramu

### *Types of Projects*

There is a considerable range of actions being incorporated in the CAPs and undertaken by the VDC/SDCs in conjunction with SHOUHARDO, the UP/PS and other partners, and also on their own initiative. These actions are highlighted in some of the program's reports and success stories, as well as in thematic studies. Perhaps the most spectacular are the well-known reports of mass community mobilization to build embankments to protect homes and crops from flooding. The evaluation team randomly selected villages/slums, so the projects are broadly representative of what is taking place in target communities. A more detailed listing of infrastructure projects is provided in Section 2.2 – Infrastructure Projects.

Certain VDC/SDC initiatives, such as collaboration with EKATA groups to prevent unfair dowry and polygamy, and advocacy for inclusion of households on VGF eligibility lists, are focused on promoting rights awareness among PEP populations. Others, such as applications for *khas* land, focus on improving access to productive resources. Regarding community infrastructure, the construction and/or rehabilitation of roads has been common, especially in urban slums. In such initiatives, the VDCs/SDCs have proven effective in monitoring the performance of private contractors and protecting the interests of other project stakeholders including EKATA groups, ECCD parents and teachers, and participants in ALO IGA projects.

Embankment projects are an important form of infrastructure supported by SHOUHARDO. The most prominent examples of embankment projects were found in Kewarjore (Kishoreganj district) and Raipur (Netrakona district). SHOUHARDO estimates that these two projects alone have had a combined economic impact of $10.4 million, in terms of the crops that they may save from flooding.[11] By mobilizing and estimated total of 27,000 volunteers, these projects have also

[11] SHOUHARDO Presentation, CBHQ, 10 November 2009

demonstrated the willingness and ability of the poor to organize themselves in response to perceived livelihood risks.

In one community visited by the evaluation team, beneficiaries were implementing a social forestry project which involved planting 900 trees along the road. When trees are ready for harvesting, the profits will be divided in three equal parts between a religious institution, the VDC, and the poor. Fifty people were involved, with a mix of males and females, rich and poor. This may be a type of income-generating activity (albeit with only long-term returns) which could assist the VDC/SDC members in their efforts to sustain their community development role.

In a number of communities, respondents claimed that the VDC had contributed to installation of government funded tubewells and latrines by requesting additional allocations to their village. Similarly, some VDCs have helped improve targeting for UP-sponsored programs by assigning members to monitor the economic status of local households during the *monga* (lean) period.

***Integrated Food Security Program in Char Varat Gopaljha***

Located on a char established some 30 years ago, this village is only accessible from the union center by a boat in the heavy rainy season or by bamboo bridge, then down a two kilometer dirt road. The whole community met to discuss the idea of the bridge. They collaborated on the project with the nearby village, Char Varat Talouk Shoulmari. Villagers provided their labor and contributed bamboo. They estimated the cost to build the bridge would have been 84,000 *taka* if they had to pay laborers. Medical staff from the government health unit supported the project by providing treatment on-site as needed. The bridge was built by 1,200 volunteers.

Though the need had always been present, the community had never been able to come together to build a bridge like this before. Their success in this effort was attributed to their unity, and the fact that they were organized and not thinking just as individuals.

Participants explained the benefit of the bridge in terms of how it allowed pregnant and lactating mothers to cross over to the clinic, and increased the access of children to local schools. In terms of economic impact, the bridge greatly increased profits from production of jute, maize, rice and wheat. Previously, they would transport a number of sacks on bicycle to the edge of the river, but then had to carry them on their head while wading through the chest-height water. Because of the difficulties of transporting their product, they could not stay at the market for long. Now, they can continue with the bicycle on to the market without having to make repeated trips across the water, enabling them to easily carry several 40-kg bags, rather than only one bag. They can also take small livestock across. Because they have larger quantities, they are able to negotiate for better prices, such that villagers reported increases in their sale price from 400 *taka* per month (40 kg) to 420 *taka*. Thus they sold higher volumes, at a higher price per unit. Before the project, many people would have one meal per day in the lean period. Now most people have at least two meals daily.

Another project implemented in Char Varat Gopaljhar was construction of a pond that was commenced with the encouragement of another NGO in 2004, and was completed by a savings association with SHOUHARDO support in 2006. The VDC formed a savings association and IGA group for fish cultivation, as well as guava and eucalyptus plantation. Private land was made available by the landowner, who happens to be the UP Chairman. The savings association saved 25,000 *taka* to buy 70 kg of fish fingerlings, and the NGO MISUK (under SHOUHARDO) provided the guava saplings. Seventy-five percent of income earned from this project will be allocated to the 30 members of the association who are maintaining the project, and the remainder will be split between the owner of the land, the VDC, and a fund for community development

### *Linkages with Government and Other Partners*

SHOUHARDO monitoring documents suggest that the project has exceeded its LOA targets in terms of number of networks formed between various stakeholders as well as awareness of and uptake of assistance offered by local service providers. The consultants have determined that further integration of local elected bodies (LEBs) and nation-building department representatives is critical to the sustainability of VDCs/SDCs and the village level interventions. It should also be a critical element of the approach to promoting the rights of the poor in government. This will be discussed first in terms of relations with the UP/PS (LEB), then with ministry service-providers (NBD), and finally the SHOUHARDO coordinating committees.

### *Union Parishad and Pourashava (UP/PS)*

Relations between Union Parishad and Pourashava are in some ways key to the effectiveness of VDC/SDCs, and are given greater emphasis in the project document than relationships with NBDs. This is due to the fact that UP/PS is the level at which it is possible for local governance to build momentum for pro-poor development. While the MTR noted that this area required strengthening, the evaluation team found a relatively consistent relationship between VDC/SDCs and their respective UP/PS, which probably reflects the significant work invested by SHOUHARDO. In almost all village/slums visited during the evaluation, we found the VDC/SDC talking about the UP/PS in terms of a positive engagement, receiving participation in and support for their CAPs, and collaboration on projects. In conversation with UP/PS officials, they refer to the VDC/SDCs to some extent. This acknowledgement of informal, local development partners representing the poor represents a significant breakthrough for local government relations.

SHOUHARDO provided training for UP/PS staff through the National Institution for Local Government. In their final training report, NILG states that 9,341 officials were trained, including *union parishad* and *pourashava* members/commissioners (male and female) and chairmen, and field level staff from Agriculture, Livestock, Fisheries, BRDB, Health and Family Planning, Public Health, Social Welfare, and Education departments. The training was delivered at the NILG campus in Dhaka, and three other training centers in the country. Feedback from the participants reflected their high level of satisfaction with the training and comments highlight some of their particular areas of learning: the roles and responsibilities of the Union Parishad, coordination among the UP and NBDs, and issues of good governance, human rights, gender issues, local resource mobilization, prevention of trafficking of women and children, and dowry system. One question which the evaluation was not able to pursue is the extent to which this large investment in training has effectively linked with the actual work taking place at *union/pourashava* level. Consultants did note, however, that the UP/PSs seem to have an attitude conducive to supporting the development of the PEPs.

Regarding budgetary support for the CAP, several cases were identified in which CAPs were explicitly incorporated into UP/PSs budget planning procedures. Several VDC/SDCs described ways in which CAPs were having some leverage over the UP/PS budgeting process or how the UP/PS was providing support. The following illustrates some of the main ways in which UP/PS support has been observed during the evaluation:

- Budget support for the same projects as contained in the CAP;
- Extension of support in the form of materials or human resources;
- Incorporation into other programs that the UP/PS may be aware of;
- Intervening with NBD service-providers; and
- Providing moral support or authority to obtain some land (e.g. in the process of applying for khas land).

When looking at the SHOUHARDO strategy of leveraging greater support from the UP/PS to its communities, the question arises as to whether the empowerment of these VDC/SDCs is garnering additional support for those villages/slums at the expense of other communities. For example, within the same union, other villages may not be benefiting from SHOUHARDO interventions and the conditions there may be the same. The issue this raises is really whether the engagement can have a wider impact on the functioning of the LEBs as well as the NBDs.

SHOUHARDO does try to support this, through the training provided to them, through the stimulation of working with the VDC/SDCs, and also through work under SO4 with the Union Disaster Management Committees (UDMC).

One of the strategic actions taken by SHOUHARDO was to identify the Standing Committees as a place where the VDC/SDC members could also directly participate in UP decision-making, and take steps to help to activate those Standing Committees. There are 1,685 men and 2,208 women members of VDC/SDCs serving on standing committees in all program areas. It was reported in the MTR that these committees were not very active, but during the final evaluation field visits many VDC/SDC members reported that they were members of Standing Committees, and gave convincing answers about actually participating in their meetings. The mobilization of Standing Committees is likely due in part to the proposal made by SHOUHARDO to local government divisions of a set of roles and responsibilities for them. These proposed roles and responsibilities were given as instructions to all UP/PSs in the country, which represent a considerable policy advocacy impact of the program. No doubt, the actions by VDC/SDC members and by SHOUHARDO field facilitators to work on the Standing Committees has helped to activate them.

To some extent, however, SHOUHARDO has focused more on the VDC/SDC and the various activities taking place at village level, with a somewhat lower priority given to the UP/PS institutions. However, the SHOUHARDO project document does not make a real distinction between union and village levels, and foresees a program which has a strong focus on the UP/PS. In discussion with the former secretary of LGD[12] who had participated in the preparation of the SHOUHARDO proposal, he stated his belief that UP/PS should have a more central role than it currently does. This highlights the evolution of SHOUHARDO, which has taken the position that to emphasize a pro-poor development, it is necessary to work more with the poor at the village level, and build their capacity to pursue development and claim their rights. This evaluation team broadly supports that strategy.

SHOUHARDO seems to have struck a delicate balance here, because the possibility always exists that while establishing strong linkages with the UP/PS, they end up controlling the VDC/SDCs and reducing their drive for change. The intention of SHOUHARDO is to push for transformation of inequitable power relations, yet the UP/PS are major bulwarks of the status quo. As noted by an authority on local governance who was formerly director of the NILG and Principal Secretary in the Prime Minister's Office:

> "Most empirical studies on the power structure in Bangladesh clearly point out that all formal and informal institutions worth the name are firmly in the grip of the rural and the urban rich. Since the rich are generally anti-productive, this state of affairs has serious adverse implications for not only equity but also for production, domestic resource mobilisation… there is little effort to use the taxation power vested in these bodies since the rich who dominate these bodies cannot be expected to increase their tax burden… this implies a perennial dependence of local bodies on the national government for grants-in-aid, which in turn, leads to the continued dependence of the national government on foreign aid… such dependence heavily compromises the autonomy of local government bodies… there is a strong tendency for the affluent anti-productive class to perpetuate its domination with the help of resources obtained from the national government. Pilferage, corruption, nepotism… become endemic".[13]

[12] Mr. A.H.M. Qushur, Executive Secretary, LGS
[13] Siddiqui, K. (2008) Local Government in Bangladesh , Revised 3rd Ed. Dhaka: The University Press Limited. p. 297.

This highlights that not only are UP/PS "non-poor" (to use SHOUHARDO terminology), they do not have the same developmental stance as the VDC/SDC, which have shown a willingness to invest their own resources (time, labor, materials) at the same time that they seek resources from government. Thus, the SHOUHARDO approach seems appropriate for building capacity at village level, while gradually engaging more systematically with the UP/PS. Therefore, the degree to which the collaboration with UP/PS can facilitate the interests of the poor in the future is a matter to be borne out in practice.

Functioning of the UP/PS is evolving nationally, partly in response to other programs, as well as SHOUHARDO (which after all is co-financed by the Government of Bangladesh). LGD is paying attention to the performance of UP/PS, as it tries to activate them into playing a more proactive development role. In Lalmonirhat district, the team met with a UP chair who had won a competition among the UP chairs of the district, in terms of effectiveness of operation. The LGD joint secretary reported a new practice in which UP ward members must consult with people in their constituencies to obtain input for the setting of the union budget, something that was confirmed during our field visits. The new direction is for the practice of ward *sovas*, a kind of council at the ward level where members of each ward can meet with their ward member, have sub-committees of the Standing Committees, and have greater participation directly into the UP decision-making process. There are nine wards in each union, and generally several villages in each ward. If the ward level becomes an increasingly important focal point of local governance, it could make village-level structures somewhat incommensurate. Although much of the focus of SHOUHARDO has been with the VDC/SDC, the program has positioned itself well by not being rigid about the relationship of the VDC/SDC and other community groups with the UP/PS.

Another way in which SHOUHARDO has supported the building of UP/PS capacity has been with the construction of 18 UP complexes, under supervision of LGED. Some of these have been completed, while others are expected to be completed by May 2010. The key question about these complexes is whether they are actually used in the interests of the poor, for example, whether the NBDs do provide more services for residents of the area, and whether they can be used for better integration of LEBs and NBDs. Bearing in mind the concern cited previously, about the failure of local government to mobilize local resources and reduce its dependency on external funding, it would be important to see that the UP was actively using the local taxation avenues available to ensure that it could sustain the operations of the complex. If it can be shown that those facilities are used in this way, and that this has scope for sustainability, then the investment may be worthwhile.

### *Nation Building Departments (NBDs)*

During field visits communities spoke of a transformation of their relationship with officials of the various ministries or Nation-Building Departments. Many people commented that previously they had little or no knowledge of some of the NBDs. VDC/SDC and other groups reported that they had received regular visits from union-level officials (often based at the *upazila* level but working throughout the union) of the ministries of agriculture, livestock, fisheries, health and family planning, and social welfare. Often the relationship was on-demand; the community had contact phone numbers and the officers would come as needed. Most communities gave positive feedback on the technical training given by the service providers. Indeed, SHOUHARDO did arrange for many of them to provide training to the villages (for which the union-level GoB staff were not paid). It is a significant accomplishment for these officers to get out to the communities, which are often very remote.

One of the immediate issues one encounters when considering the NBD services is that while they may have a more positive orientation to the poor now, they are still overstretched in terms of

their capacity to attend to the existing needs. As discussed above with respect to the UP/PS, without a general increase of capacity there will be a limit to the sustainability of NBD service to SHOUHARDO communities, and the potential to extend similar services to other non-beneficiary communities.

A second issue is the degree of usefulness of inputs from service providers. We did obtain numerous positive indications from respondents that SHOUHARDO accomplished its main stated aim in this regard. But several points bear mentioning, related more to taking the intervention to the next logical step. In wrapping up SHOUHARDO and preparing for possible future phases, the question is, in what way can government best help sustain the initiative and continue to respond to the demands and needs of the communities? The SHOUHARDO approach supports the rights of the poor to better services, adjusting power imbalances, and engaging with government at all levels to make them more relevant to the needs of remote, PEP participants. It may be that a more concrete vision is now needed.

Evaluation findings suggest that SHOUHARDO has had a positive impact in terms of stunting and wasting, dietary diversity and improved income. These impacts are partly due to obvious inputs like MCHN rations, COG livelihood support, education and resulting behavior change, and improved access to water and sanitation. More responsive government and gradually changing power structures may help to sustain some of these effects, but it is necessary to try to detail the kind of service required as much as possible. The question is partly related to what CARE and its partners would like to see in terms of ongoing health and nutritional policy reform. To date, CARE and other partners have had some success in influencing policies through participation at consultative round tables at the ministry level such as the nutrition working group and breast feeding foundation.

Another key mechanism that SHOUHARDO uses to engage the various NBDs and LEBs involved is the series of Program Advisory Coordinating Committees (PACC) at *upazila*, district, division and national levels. This provides a reasonably strong linkage between the ministries and SHOUHARDO and at the same time provides openings for the program to share experiences and influence policy. After the MTR finding that these committees were sometimes not active, the program took steps to give them extra emphasis, and a Dhaka-based government liaison officer is now available to provide support to the regions to ensure their activation. What the experience has shown so far, however, is that often there is not a very in-depth discussion taking place at some of the levels, but rather it is taken as a forum for passing on information and light coordination. Perhaps the Program Advisory Coordinating Committees (PACCs) are lacking a vision and role which would allow them to engage more meaningfully. For example, they could serve not only as a base for jointly analyzing aspects of SHOUHARDO's implementation and sustainability, but could also be a forum for analyzing effectiveness of the LEBs and NBDs.

### *Human Rights Interventions for Enhancing Food Security*

*IR 1.2.1: Communities are aware of legal provisions and mobilized around their entitlements (land tenure, access to khas land, eviction, fishing, local government)*

SHOUHARDO aims to intervene in adjusting structures and power relations which impede people's progress in achieving livelihood and food security. The fulfillment of people's human rights is a pivotal aspect of this. The SHOUHARDO advocacy strategy, as referred to above, has set out a vision of people-centered advocacy, arising out of the experience of VDC/SDC capacity-building and engagement with LEBs and NBDs. The document states that it would help secure entitlements for marginalized people, particularly women and girls, through campaigns on:

- Violence against women;
- Access to *khas* land;
- Eviction;
- Access to open water bodies and fishing rights; and
- Campaign on salinity of water

### *Khas land*

Progress has been made in several areas, including securing rights to common resources of land and prevention of eviction. *Khas* land titling has been a pilot advocacy campaign, which has already born fruit in terms of assisting some 434 households to get title for 377 acres of *khas* land for a 99-year lease in the North and Mid-Char Regions. The foundation of this intervention has been the work of SHOUHARDO with its target communities, the development of capacity of VDC/SDC and other groups, and the instilling of a consciousness of their equal right to resources and services. The program purposefully targeted many of the prime areas in which *khas* land access would be an issue, particularly the north chars and mid chars. SHOUHARDO helped community members follow through with the process of application for *khas* land, a complex procedure that is initiated by the UP chair and involves several officials at *upazila* and district level, culminating with the district lands officer. SHOUHARDO's role is to encourage villagers to make this application, and to help follow up the application through these various levels to push for its speedy resolution.

The advantage of the *khas* land issue is that the issue has been highlighted for some years, and finally government has taken serious steps to award land to the poor, so SHOUHARDO picked an issue that was at the takeoff stage. This is an intelligent strategy, in that to working with and helping to steer the forces of positive change, rather than investing tremendous resources on an issue (such as fishing rights) for which there is little support for change. On the other hand, the confluence of a national policy opening and the interventions of numerous organizations makes it somewhat difficult to prove that SHOUHARDO's intervention was crucial to creating this change. When NGOs face this challenge with attributing their impact on policies, they can often demonstrate what their program has done and logically trace its impact. In this case, however, there is some useful evidence that SHOUHARDO was instrumental, namely that the SHOUHARDO participants were some of the first PEP to receive *khas* land leases in the country.

***Case Study - Kornapur Khas Land Titling***

As the Tista River is filled with water in Nepal and India during monsoons each year, it flows into Bangladesh and swells up, causing both flooding and river erosion. In the sandy soils, the river winds around, slightly changing course and cutting out portions of farm land and homes. In 2006, a number of villagers in Lalmonirhat district lost their homes to river erosion from one tributary of the Tista River.

As they were left landless and homeless, the villagers approached the UP chairman, who told them to occupy the *char* located across the river from their home. The name of the first man who moved out to the char in 2006 is Md. Abul Hossain. When he first moved onto the *char*, other people said he was crazy. Days after he built a home, the char flooded. He spent the first year in hunger, especially since the river provides little fish. After a year, he was able to cultivate the land, which was quite unfertile initially. Other homeless settlers came out to join him and his family, and formed the village of Kornapur.

They started the lengthy process of applying for *char* land through the UP chair, for 66 households. Close to this time, SHOUHARDO commenced operations in the area, and began to help form the VDC/SDC and start other interventions. The VDC/SDC members attended a national workshop organized by SHOUHARDO in 2008, and in front of the large gathering spoke out about their claim to the *khas* land.

Other people came around this time: "land-grabbers", influential elites from outside the union. They came with false papers claiming they had title, to which the Kornapur residents stated that they had made a legal claim to the land, and meanwhile they had a right to stay there. Again, these land-grabbers came back with a gang, the situation turned to violence and three villagers were injured. The VDC reported that since they were united, it was not possible for anyone else to come in and push them off the land. They attribute this unity to SHOUHARDO mobilization and the various community meetings held. Before the program they were not united because they had come from different places. The UP chair also supported them remaining in place in consultation with SHOUHARDO staff.

Comparing their situation with that before being dislocated by river erosion, villagers say they had smaller homesteads before but were economically better-off. Now they have higher costs of production, and the water supply is poor, though there is more land. Gradually the soil fertility is improving as they cultivate and spread compost, but frequent floods disrupt their agriculture.

The claim of Kornapur villagers to *khas* land was finally fulfilled, and they obtained a 99-year lease for their land.

What this case of Kornapur highlights is that in claiming their rights, SHOUHARDO participants may be putting themselves at considerable risk. The evaluation team heard the word "muscle men" on a number of occasions. It is not clear that the community groups or the program itself is prepared for the risk of severe intimidation and violent confrontations, or if at a minimum training has been provided on conflict resolution. While it is positive that the program works closely with the relevant ministries and is staying well within the boundaries of legality, it may be necessary in future programs to seek regular or permanent legal advice to deal proactively with difficult rights claims cases. The community may feel that they are protected by SHOUHARDO, particularly CARE which has international linkages. They may lose this protection if the program comes to an end, or even if in a subsequent program they are just not as present as they currently are. CARE and USAID may wish to bear in mind the possibility of potential lawsuits that could arise in the course of contentious rights claim campaigns.

Other human rights issues have also been pursued by the program. In particular, SHOUHARDO has joined forces with other networks to draw attention to the problem of violence against women. Several national conferences on the topic were held in conjunction with other partners, at which a number of members of EKATA groups and VDC/SDC members from across SHOUHARDO regions came and shared their experiences. As discussed above with respect to the VDC/SDC activities it was really the human rights education and empowerment efforts at village/slum level which provided much of the drive for campaigning and networking. It is also principally at the community level that the campaign is having the most impact. The SDC secretary of one slum reported that when she returned from this conference, she was totally transformed and it gave her a great deal of energy to continue her work.

### *Land eviction*

The right of people to live on land and avoid eviction is another area of human rights accomplishment. Several community groups are currently fighting eviction from land where their slum is located, including one on land adjacent to the airport in Cox's Bazaar, a railway corridor in Chittagong, and an embankment. In one case, the savings group gained many members who were contributing money to a common cause to pay legal fees in a court case to avoid eviction.

### *Access to water bodies*

One of the rights issues on which SHOUHARDO has shown less progress is the access of people to water bodies and fishing rights. This is a very complicated issue, since the interest groups involved in the sector are very entrenched, and the program considered it unlikely they would have much impact during the life of the project. However, in conversations with staff about fishing leases, it seemed that despite the complexity of the issue, there was actually some room for SHOUHARDO to make some modest but measurable progress towards securing this crucial right.

## 2.1.3 Program Challenges

### *Lack for clarity regarding administrative procedures for VDC/SDC*

While SHOUHARDO has useful guidelines for VDC/SDC formation and functioning, the documents do not address the terms of office for those elected. The evaluation team asked numerous VDCs if they had any expectation of a term of office in the VDC, and whether there was any plan as to how another election would be held. None of those asked had an answer to either question. SHOUHARDO has compiled some by-laws for VDC/SDC which do in fact stipulate the procedures, but many communities are not aware of this. This is a crucial aspect not only of sustainability but of the orientation that VDC/SDC members exhibit towards their work; they should understand that they are expected to achieve something during a certain period of time, and that they are accountable to the community in the sense that they will not be re-elected if they do not perform well. There is considerable expectation that the VDC/SDC structures can be sustained, but there should be more discussion of scenarios of how this might happen. The role of the VDC/SDC may also change, now that ward *sovas* may become an important part of local governance. Accordingly it would be beneficial for SHOUHARDO to help the VDC/SDCs and relevant stakeholders determine how they will deal with those possible changes.

### *Inconsistent approach to institutional learning*

While the VDC/SDCs have obviously learned a great deal already, there was not a clear strategy for an ongoing learning process, beyond an effort by field facilitators and government partners to support on-the-job training. The effort to grade the VDC/SDCs into categories of strong/moderate/behind has not led to a clearly differentiated strategy of capacity-building, and there remains a need to support certain VDC/SDCs with issues they were facing (such as conflicts arising from human rights interventions). Learning should really be a visible and dominant focus for the VDC/SDC and other community groups, as the primary means through which PEP households can improve their food security. While the project has carried out valuable training activities, it would be useful for SHOUHARDO to develop a learning strategy which pulls together the thinking of SHOUHARDO and its partners, taking into account the gradation of communities, and offering recommendations on how they might continue the learning process after SHOUHARDO has ended.

While the basic structure of the VDC/SDC is in place, the evaluation team found considerable variability in the quality of participation. In some village/slums, it was found that only one or two people tended to dominate the proceedings. It should of course be acknowledged that in such marginalized communities, some people are likely to be more comfortable speaking in public than others. But one finding, echoed in the governance thematic paper, was that it was not uncommon to find that some members of the VDC/SDC have less knowledge of aspects like the standing committees. Also, it was often found that the same people were found to have dominant positions in several or even most of the groups, which could indicate that these were the most capable people in the community and there were few others who could do as well. However, this is not conducive to the wider capacity-building in the community and the program should encourage the sharing and rotation of power.

***Limited analysis of the programmatic impact of CAPs***

The CAP is the result of translating local institution-building into concrete development initiatives and food security improvements, and the simple matrix format is well understood by many community members. However, while the CAP is a written document, literacy levels are quite low in SHOUHARDO target communities, so many people are not going to have a very good understanding of its contents. Not all VDC/SDC members were found to be able to explain the CAP, so it is even less likely that the average community member understands and feels strong ownership of it.

It is difficult to gain a clear sense of the overall impact of the VDC/SDCs' work solely through examination of CAPs. There was not an indicator included in SHOUHARDO to capture these projects, and so there is probably a considerable amount of activity taking place for which the program is not getting credit. Perhaps more importantly, the potential of VDC/SDCs to help the poor claim their rights and reduce poverty can only be superficially understood until these projects are properly analyzed. In order to analyze the scale and quality of impact of these actions, it would be necessary to catalogue these actions, and have a system for counting projects of a similar type. Now that the program has been underway, and there has been several generations of CAPs formed, it may be possible to categorize the types of projects which communities have undertaken. This would also help to see how other supporting agencies, from government service-providers to other NGOs, could help the VDC/SDCs now and in the future.

***Limited institutional linkages in support of VDC/SDC sustainability***

The VDC/SDC is a sound structure, and should be forming contacts with a range of organizations outside of SHOUHARDO, yet there was not much evidence of this taking place. Several communities visited had other NGOs present, working with the VDC/SDCs. But a wider networking process, including linking with other community groups, would really be a source of empowerment for them. There is an indicator under SO3 for women's networks which specifies linkages with other organizations, but there is no corresponding performance indicator for VDC/SDC. For example, in the North Char Region, the NGO RDRS has helped form community Federations, which are similar to VDC/SDCs but working at more of a union level. Having linkages with this kind of community groups (undoubtedly there are others) would support the learning process of VDC/SDC, and would help sustain them.

### 2.1.4 Sustainability

Sustainability of the VDC/SDC seems fairly promising given with the manner in which they have integrated with and claimed services from government. They all expressed their confidence in sustaining their activities, and made few demands for external incentives. Their basic form of

functioning is to rely on their own resources and request services from LEBs and NBDs, which are all fundamentally sustainable. Many of the VDC/SDCs are becoming registered, which will provide a stimulus for them to continue to function. Some of the VDC/SDCs have formed linkages with other NGOs, and this will be an opportunity to help them stay active. What is also possible is that the VDC/SDC structure per se may not endure, but that many people will apply their new-found capacity to participate in other areas of local governance.

A crucial question is whether the VDC/SDCs are prepared to continue to engage the UP/PS on their own, without losing their independence, pro-poor orientation and developmental focus, now that SHOUHARDO is ending. There is no simple answer to that question, and changes in the national political climate could negatively affect the gains made in SHOUHARDO. The positive signs, however, are that: there is considerable sustainability in the VDC/SDC structure, the UP/PS have seen some improvements in their mode of operation, and there are currently several conducive policy initiatives in government.

SHOUHARDO has contributed to raising the awareness of participants of their human rights, and avenues they can use to reach them. It is often difficult to suppress people's will to achieve their rights, once they understand them, so it is likely that the drive to get access to *khas* land and to reduce gender-based violence will continue. It is more difficult to know what will happen with regard to the countervailing forces, whether for example the powerful interests which traditionally control *khas* land will retreat or will experience resurgence. Certainly, national political conditions will have a major bearing on that, though the current government is trying to help the poor get access, it is conceivable that this could be reversed in future. However, there is definitely a need for more local capacity development, which will reinforce efforts to claim this right for the poor even if government reduces its current support.

Finally, the consultants found that in some communities, VDCs/SDCs were either seeking donations of funds or land for construction of community facilities, or had established fee schedules for use of constructed facilities (e.g. latrines). These community-led processes bode well for the financial and institutional sustainability of investments in infrastructure.

## *2.2 Infrastructure Projects*

***Intermediate Result 1.2.3*** *Improved infrastructure facilities to protect livelihood and reduce vulnerability*

### 2.2.1 Overall Findings and Recommendations

Homestead raising was by far the most common type of scheme (7,832 schemes), followed by household latrines (5,755 schemes), and tubewell platforms (2,877 schemes). Deep tubewells (1,278 schemes), raising of communal places (549 schemes), community latrine or mini-toilet (218 schemes), community latrines complex (142 schemes); and road maintenance schemes were also common. Overall, flood mitigation schemes accounted for 40 percent of all infrastructure schemes while water supply and sanitation accounted for 21 percent and 30 percent of all schemes respectively.

Improvement of flood mitigation schemes and road networks had a positive impact on livelihood security (SO1) by limiting the loss of assets and improving access to markets and other income generating opportunities. Infrastructure development has contributed to achievement of SO2 and SO3 by helping to limit water-borne illness and decrease the burden on women for collecting

water and maintaining household sanitation. Finally, investments in infrastructure have had a direct impact on SO4 (Disaster Risk Reduction) by decreasing communities' exposure to risk of natural disaster.

***Mound protection wall in Derai***

The consultants determined that infrastructure projects supported by SHOUHARDO have been appropriate for the needs expressed by target communities and that the selection process has tended to be both fair and demand-driven. While new infrastructure has thus far been adequately maintained, future maintenance would best be supported by the continuation of VDCs/SDCs. Maintenance of large infrastructure projects is likely beyond the capacity of target communities and will depend in part on support from government and/or non-government institutions.

Training provided by SHOUHARDO on improved agricultural production practices (such as improved seed, composting, integrated pest management) has enabled farmers to boost production with limited resources, particularly among homestead gardens. They said, however, the consultants recommend that environmental assessments be carried out to determine the sustainability of certain adopted practices.

Certain infrastructure development activities – especially homestead raising, mound extension and mound protection – ensured additional space for implementing IGAs in a more convenient and effective manner. Likewise, the establishment of rural markets has reduced the transaction costs of small producers by reducing the travel distance to markets. Specific market interventions, such as creation of women's market facilities have had a positive impact on income generation among those female participants able to take advantage of these facilities to sell their own produce.

While SHOUHARDO's infrastructure projects were found to be environmentally compliant, the consultants strongly recommend that future programs make a concerted effort to raise awareness of environmental health among PEP households.

Finally, while the SHOUHARDO project developed and benefitted from several GIS products during planning, implementation and monitoring periods, CARE will need to continue to develop its technical capacity in GIS in order to effectively monitor changing conditions while avoiding additional expenditures on externally-sourced GIS services.

### *Overall Recommendations for Infrastructure Projects*

Most of the recommendations regarding infrastructure are directly related to issues of environmental quality. For example, the consultants observed a relatively low understanding of the proper handling of chemical pesticides despite the fact that they are widely used throughout the program area. As such, it is strongly recommended that future agricultural interventions are

based on thorough environmental assessments (as per Regulation 216) in order to maintain the health and safety of participating farmers as well as agricultural productivity.

Similarly, IGAs promoted by SHOUHARDO and partners should be considered in terms of both positive and negative environmental consequences. Given the prospect of continued climate change, is increasingly important that projects such as embankments adhere to environmental standards so that infrastructure development does not exacerbate existing problems.

In order to improve the sustainability of future investments in infrastructure, CARE should directly involve program staff with specialized knowledge and skills related to environmental assessment and mitigation throughout all phases of the program.

### *Analysis of types of infrastructure projects*

*IR 1.2.3a Infrastructure projects completed through community process of planning and implementation through FFW, FFW, LCS and Contractors*

SHOUHARDO started implementation of infrastructure schemes in 2006, and by the end of the implementation period, had completed an estimated total of 21,557 infrastructure improvements. Homestead raising was by far the most common type of scheme (7,832 schemes), followed by household latrines (5,755 schemes), and tubewell platforms (2,877 schemes). Deep tubewells (1,278 schemes), raising of communal places (549 schemes), community latrine or mini-toilet (218 schemes), community latrines complex (142 schemes); and road maintenance schemes were also common. Overall, flood mitigation schemes accounted for 40 percent of all infrastructure schemes while water supply and sanitation accounted for 21 percent and 30 percent of all schemes respectively. Communication schemes accounted for only about 6 percent of all infrastructure schemes. Table 6 provides a comprehensive break down of infrastructure schemes developed under the SHOUHARDO program according to the organization responsible (CARE, PNGO, LGED or Pourashava).

**Table 6: Infrastructure Schemes Implemented under SHOUHARDO Program, by organization**

| Type of Infrastructure | Number of Infrastructures Implemented by | | | | Total Number |
|---|---|---|---|---|---|
| | CARE | PNGO | LGED | Pourashava | |
| Homestead Raising (# of HH) | 7,832 | | | | 7,832 |
| Mound Extension | 78 | | | | 78 |
| Community Place (School/ Madrasha, College, CRC, etc.) Development/ Ground Raising. (in addition to be used as Flood Shelter) | 549 | | | | 549 |
| Market Ground Raising | 7 | | | | 7 |
| Flood Shelter cum School/ Madrasha | 1 | | | | 1 |
| Road Maintenance/ Construction | 314 | | | | 314 |
| Embankment Maintenance/ Submergible Embankment | 37 | | | | 37 |
| Pond Excavation/ Re-excavation | 47 | | | | 47 |
| Canal Re-excavation | 1 | | | | 1 |
| Community Structure (School, Madrasha, College, etc.) Renovation / Maintenance | | 137 | | | 137 |
| BFS Road | | 23 | | | 23 |
| Box Culvert / U-Drain / Pipe Culvert | | 146 | | | 146 |
| Mound Protection Wall | | 42 | | | 42 |
| Dug Well | | 41 | | | 41 |
| Deep Tube Well | | 1,278 | | | 1,278 |
| Shallow Tubewell - New | | 69 | | | 69 |
| Tubewell Platform/ Old Tubewell Maintenance | | 2,877 | | | 2,877 |
| Surface Drain | | 88 | | | 88 |
| Dustbin | | 52 | | | 52 |

## Table 6: Infrastructure Schemes Implemented under SHOUHARDO Program, by organization

| Type of Infrastructure | Number of Infrastructures Implemented by | | | | Total Number |
|---|---|---|---|---|---|
| | CARE | PNGO | LGED | Pourashava | |
| House Repair | | 7 | | | 7 |
| Community Latrine Complex (Toilet) Construction / Maintenance | | 142 | | | 142 |
| Latrine Distribution (5 nos. Rings & 1-no. Slab-Set) | | 5,755 | | | 5,755 |
| Community Latrine/ Mini Toilet | | 218 | | | 218 |
| Bathroom Construction/ Maintenance | | 6 | | | 6 |
| Foot Path | | 51 | | | 51 |
| Motor / Water Supply Line | | 10 | | | 10 |
| Water Treatment Plant | | 33 | | | 33 |
| Stair (in hilly area) | | 3 | | | 3 |
| Ramp (in hilly area) | | 3 | | | 3 |
| Flood Shelter cum School Construction/ Renovation | | 13 | | | 13 |
| Flood Shelter Maintenance | | 2 | | | 2 |
| Market Development/ Renovation | | 44 | | | 44 |
| CRC/ VRC Construction | | 164 | | | 164 |
| CRC/ ECD Maintenance | | 12 | | | 12 |
| Protective Work/ Palisading / Slope Protection/ Rip Rap work | | 38 | | | 38 |
| Bamboo Bridge | | 98 | | | 98 |
| IGA Center | | 1 | | | 1 |
| Ghat Shed (Mobile) | | 9 | | | 9 |
| Water Tank | | 9 | | | 9 |
| Compost Chamber | | 20 | | | 20 |
| UP Complex | | | 18 | | 18 |
| Market Development | | | 27 | | 27 |
| Flood Shelter | | | 19 | | 19 |
| Wave Protection Wall | | | 5 | | 5 |
| Submergible Road | | | 4 | | 4 |
| Cyclone Shelter Maintenance | | | 45 | | 45 |
| Re-excavation of Canal/ Pond | | | | 2 | 2 |
| Protection Wall/ Retaining Wall/ Guide Wall/ Guide Wall with Pavement | | | | 20 | 20 |
| Community Latrine Complex, Twin Latrine, Women | | | | 98 | 98 |
| Single Latrine/ Urinal | | | | 6 | 6 |
| Bathroom | | | | 4 | 4 |
| Footpath Construction/ Maintenance - BFS | | | | 74 | 74 |
| RCC slab | | | | 428 | 428 |
| Slab Culvert/ Box Culvert/ Pipe Culvert | | | | 6 | 6 |
| Hilly Stair/ Staircase at PS Market | | | | 14 | 14 |
| ECCD/ CRC Construction/ Maintenance | | | | 8 | 8 |
| IGA Production Center | | | | | |
| Drain Construction/ Maintenance - Side, RCC, Brick, Slab/ with Soak Pit | | | | 104 | 104 |
| Dustbin | | | | 10 | 10 |
| Entrance Gate | | | | 2 | 2 |
| Market Shed | | | | 2 | 2 |
| Roof Construction- RCC Slab | | | | 1 | 1 |
| Riprap/ Palisading- with Earth Filling | | | | 7 | 7 |
| Deep TW/ TW Raising & Platform Construction | | | | 195 | 195 |
| Road Construction/ Repair - CC, HBB, BFS | | | | 108 | 108 |
| Carpeting Road | | | | 3 | 3 |
| Drain with Footpath/ Road | | | | 32 | 32 |
| Housing/ HH Floor Development | | | | 7 | 7 |
| School Construction/ Repairing/ Maintenance | | | | 4 | 4 |
| Earth Work/ Filling/ Slum Ground Raising | | | | 35 | 35 |
| Graveyard Maintenance | | | | 1 | 1 |

**Table 6: Infrastructure Schemes Implemented under SHOUHARDO Program, by organization**

| Type of Infrastructure | Number of Infrastructures Implemented by | | | | Total Number |
|---|---|---|---|---|---|
| | CARE | PNGO | LGED | Pourashava | |
| Low Cost Housing | | | | 2 | 2 |
| Construction of Ghatla- RCC | | | | 1 | 1 |
| Footpath with Guide Wall | | | | 4 | 4 |
| Road with Guide Wall | | | | 4 | 4 |
| | | | | **Grand Total** | **21,557** |

Implementation of infrastructure projects contributed to SO1 (strengthening livelihoods) by improving communications and transportation, by developing market places, and by investments in flood mitigation measures. Flood mitigation measures, such as wave protection walls, mound protection walls, plinth raising of households and community places, reduced disruption during floods, thereby providing scope to continue with livelihoods and service provision. Because of these improvements, markets can operate more efficiently throughout the year in providing food and other goods and services to target households as well as other people in the surrounding areas. Improved infrastructure also contributed to achievement of to S02 (Health and Nutrition) by ensuring access to safe water and sanitation throughout the year, as well as providing a flood-free household environment. The contribution of improved infrastructure to S03 (Women's Empowerment) was realized through improved access to safe water (collection of water is almost exclusively the responsibility of women) and safe sanitation (women face various constraints to adequate sanitation) as well as avoiding the need to evacuate homesteads and live in insecure distant communal places during floods. Women's participation in business was slightly increased due to improvement of rural markets keeping provision of shops for women. Finally, development of infrastructure contributed to achievement of SO4 (Disaster Risk Reduction) by helping vulnerable households avoid the need to evacuate homesteads during floods. In cases where evacuation was necessary, infrastructure projects supported by SHOUHARDO have helped improve access to secure community-based flood shelters.

The evaluation determined that infrastructure projects implemented through SHOUHARDO have been consistent with the needs expressed by members of target communities. Similarly, the selection process was fair and demand-driven from grassroots level poor and extreme poor people, whose demands for improvement of infrastructure were more adequately addressed through SHOUHARDO than ever before. In some cases, relatively small improvements in infrastructure within target communities resulted in major impacts for poor, vulnerable households.

Several infrastructure guidelines, such as those developed for LGED, partner implementing agencies, the Labor Contracting Society, Food for Work (FFW), and Cash for Work (CFW) were prepared in a systematic and orderly manner. In the opinion of the evaluators, adequate training was provided to relevant staff to enable dissemination of the guidelines and proper implementation of infrastructure development activities.

Both FFW and CFW activities brought direct benefits to poor and extreme poor households. The total number of CFW beneficiaries reported by the M&E database was 24,023 (11,598 women and 12,425 men). The SHOUHARDO program should be credited with taking the unprecedented step of providing the same CFW wage rate to disabled persons; a decision that was made based on humanitarian grounds. The SHOUHARDO TC-Infrastructure (Technical Coordinator-Infrastructure) contributed as a member of the coordinating committee for the safety net program (entitled '100 days employment generation') initiated by the Ministry of Food and Disaster

Management. Guidelines for this program were prepared in such a manner that maximized the potential benefit of infrastructure investments for poor and extreme poor households. Collaboration between SHOUHARDO staff and government representatives on this initiative should be viewed as a promising example for future GO-NGO coordination.

### *Maintenance of Infrastructures by Communities*

*IR 1.2.3c Communities maintaining infrastructure*

Sustainability of infrastructure largely depends upon proper and consistent maintenance. Throughout the life of the program SHOUHARDO has made consistent efforts to ensure that new infrastructure could be feasibly maintained, and the benefits sustained, by the target community. Data captured by the SHOUHARDO M&E system shows that 1,479 of 2,342 communities (63%) have thus far maintained newly established infrastructure. The evaluators believe that infrastructure maintenance will be further supported if VDC/SDC is continued in its current form. They also feel that target communities will be able to maintain community latrines and that market management committees will conduct necessary maintenance on market facilities. Likewise, maintenance of brick mound protection walls constructed through LCS is within the capability of target communities given that similar mound protection walls have been replicated and constructed by the same LCSs in many locations. Alternatively, maintenance of large structures developed by the LGED, City Corporations or *pourashavas* is likely beyond the capacity of beneficiary households. Accordingly, additional sources of funds for maintenance should be identified as part of the program exit strategy.

### *Improved Agriculture Production Practices*

*OP 4.5.2 (Ag) Households/ participants engaged in improved agriculture production practices*

Homestead raising has created opportunities for the PEP to practice more extensive home gardening and keeping poultry on home sites. PEP individuals received improved variety of seeds as necessary input as well as appropriate training from the program, which increased their capacity to improve agricultural production. They also received training on Integrated Pest Management (IPM), which enabled them to control pests and adopt more sustainable agricultural practices. However, IPM may not be completely successful in cases were access to, and use of pesticides is limited and/or controlled. Data shows that presently, PEPs often have inadequate knowledge regarding the proper use, and potential consequences of pesticide. In order to fully address this issue, the evaluators recommend that CARE commission a detailed study to identify pesticides suitable for home gardening, and promote greater awareness of their proper use.

### *Opportunities for IGAs*

*IR 1.3.1g (OP 3.3.3, SAPQ 1.2) Households/ participants practicing alternative Income Generating Activities (IGA)*

Certain infrastructure development activities – especially homestead raising, mound extension and mound protection – ensured additional space for implementing IGAs in a more convenient and effective manner. These interventions, combined with the provision of seed and technical training regarding fruit and vegetable production increased the ability of beneficiary households to earn income from the sale of home garden products (while simultaneously contributing to improved nutrition status). The establishment of markets in rural areas has also decreased the distance traveled by those looking to buy or sell products, with obvious benefits for income generation. Households are now more able to establish poultry farms for rearing chickens, ducks, etc. According to M&E data, 34.4 percent of all beneficiary households are currently engaged in

alternative IGAs, although the number of female participants is much greater than the number of male participants (108,711 versus 31,278). This disparity gives a clear indication of the participation of women among targeted PEP beneficiaries. The evaluation also revealed several instances of group IGAs where participants saved money in a group to invest in IGAs. However, despite the success, it was determined that in some cases, implementation of IGAs may create environmental concerns in the surrounding area. Therefore, environmental implications of planned IGA interventions should be identified and documented to enable development of appropriate guidelines.

***Development/ Improvement of Rural Markets***

*IR 1.3.2a Rural markets developed/ upgraded*

The development of rural markets in remote areas has had a positive impact on local economies and the livelihood security of PEPs. By reducing the distance to markets, the SHOUHARDO program has reduced transaction costs for both buyers and sellers of agricultural products. Likewise, SHOUHARDO has contributed toward the empowerment of women by ensuring their active participation in economic activities. Women can now easily reach nearby markets to sell products they produce in their homestead gardens and other products from cottage industry, and can act as role models for other women. In addition, where there are women sellers, social mores are likely to adapt so that women buyers can negotiate directly with them, rather than their husbands, brothers, fathers or sons. This enhances women's empowerment by increasing their income and facilitating their active participation in household and community decision-making processes.

Nonetheless, given the likely increase in individual access of rural market facilities, specific steps should be taken to ensure regular maintenance of water supplies and sanitation facilities within markets. Likewise, renovation of small existing markets in remote areas should include improvement of water supplies, sanitation facilities, drainage structures, internal roads, etc. Currently, maintenance of these rural market facilities is beyond the means of rural communities and is not provided for by the government.

## 2.2.2 Environmental Compliance

All activities implemented under the program were environmentally compliant with the strict procedures outlined under USAID Regulation 216, which was followed during planning and implementation. This has been a great challenge because the program was implemented in very harsh rural and urban contexts, and the number of staff with expertise in environmental issues was limited. Staff members with other responsibilities were also given responsibility for ensuring environmental compliance. The challenge of ensuring compliance was made greater by the fact that environmentally-related activities under different strategic objectives are widely diversified in nature, which requires expertise in specific fields.

Guidelines outlining acceptable environmental compliance procedures were prepared and followed by the staff. Adequate training was also arranged for building capacity of the staff in this issue. Pesticide Evaluation Reports and Safe Use Action Plans (PERSUAP) were also prepared for fumigation of commodities in warehouses in order to maintain an acceptable quality of food materials and ensure adherence with approved standards.

Given their association with the SHOUHARDO program, it is also important that initially unplanned community activities are also environmentally compliant. The evaluation identified several cases where this was not done adequately. For example several embankments

implemented in different locations should have been more thoroughly checked for environmental impact to ensure adequate cross drainage, regulation of water flow from either side of the embankment, etc. Meanwhile, the evaluators found inadequate awareness regarding the use of pesticides among PEPs. It was noted in at least one community that beneficiaries were seeking advice on pesticide use from a single pesticide supplier, rather than receiving the necessary information from SHOUHARDO staff or participating agriculture officers.

In *haor* areas, the program trained beneficiaries to cultivate vegetables in floating gardens, which is supplying vegetables for them during monsoon. This is very important in the remote haor areas because people cannot easily travel to distant market places to buy vegetables. In winter, the waste from floating gardens can be utilized as compost. However, the floating gardens may pollute stagnant water in adverse conditions. Therefore, it is recommended that CARE make arrangements for trial water quality testing for suspected cases of pollution to ensure avoidance of environmental problems resulting from project interventions.

### 2.2.3 Application of GIS

Geographic Information Systems (GIS) have been effectively utilized during planning, implementation and monitoring process of the SHOUHARDO Program. GIS-generated maps were prepared for the following purposes:

- Selection of geographic program area in Coastal, Haor and Char Regions;
- Establishment of Regional, and Team Offices;
- Identification of arsenic prone areas within SHOUHARDO Program Area;
- Establishment of floating gardens (ORGANS) in the *haor* area;
- Establishment of SHOUHARDO warehouses detailing the distances from Chittagong port; and
- Identification of Direct Delivery and PNGO operated areas.

The GIS Unit of the SHOUHARDO Program also prepared maps that effectively integrated information from both GIS and MIS databases. Risk and resource maps were prepared at the Union level by outsourcing GIS data collection under direct supervision and assistance from GIS Unit. However, the capacity of GIS staff could be further enhanced to ensure better quality output, as well as to avoid any additional expenditures incurred for externally-sourced services.

## *2.3 Food Production and Income Generating Interventions*

A minimum of two food availability and food access improvement activities under SO1.3 are implemented in each of the villages and slums in which SHOUHARDO operates. In total, the SHOUHARDO program has reached a total of 401,260 PEP households, representing 98.5 percent of the target achievement over the life of the project. The project activities under SO1 are implemented through all PNGO partners.

In order to achieve the strategic objective, SHOUHARDO has identified two intermediate results:

- *IIR 1.3.1: Improved Capacity of vulnerable households to identify new income options and skills enhanced*

- *IIR 1.3.2: Market Access Enhanced*

The strategy of SHOUHARDO has been to work through VDCs and SDCs to identify those households whose primary occupation, asset and knowledge base would be most suitable for participating in one of four COGs. These COGs include:

- Agriculture (including paddy and field crop production);
- Fisheries (open water and pond fisheries);
- CHD; and
- Income Generating Activities.

At the same time, SHOUHARDO technical partners established a working relationship with VDCs and service providers at the *union parishad* (UP), *pourashava* and *upazila* levels to raise awareness of the importance of service provision to the poor and extreme poor. Finally, SHOUHARDO staff (both CARE and PNGO) facilitated creation of linkages with community representatives and service providers which could continue beyond the life of the project, ensuring that services would continue to be provided over the long term.

Following the mid-term evaluation, SHOUHARDO also piloted two innovative initiatives. The first entailed collaboration with the Bangladesh Rice Research Institute (BRRI) to test the production of two high yield variety seeds with the potential to reduce farmers' vulnerability to early floods, a situation which is now occurring regularly in the North Char and Haor areas. In Rangpur, BRRI provided extensive technical and seed support to a group of farmers to plant and harvest a highly flood tolerant variety of seed. In the Haor area, BRRI provided extensive technical and seed input support to test a variety of *boro* (Dhan 45) with the potential to be harvested anywhere from 10-20 days earlier than traditional varieties, thereby saving *boro* harvest from early floods.

In collaboration with International Union for Conservation of Nature (IUCN) in the Haor Region, the SHOUHARDO program provided a total of 1,000 farmers with technical support for establishing floating gardens to promote vegetable production during the monsoon season. In both cases, groups of farmers are trained in improved agricultural techniques, and regular follow-up technical support is provided to maximize the productivity of both agricultural activities. In the case of the rice pilots, farmers will trade the seed to other farmers for equivalent paddy, thereby multiplying use of improved seed over time. In the case of the floating gardens, successful implementation is intended to promote replication by other farmers wishing to grow winter vegetables. These pilots are discussed in greater detail in subsequent sections of this report.

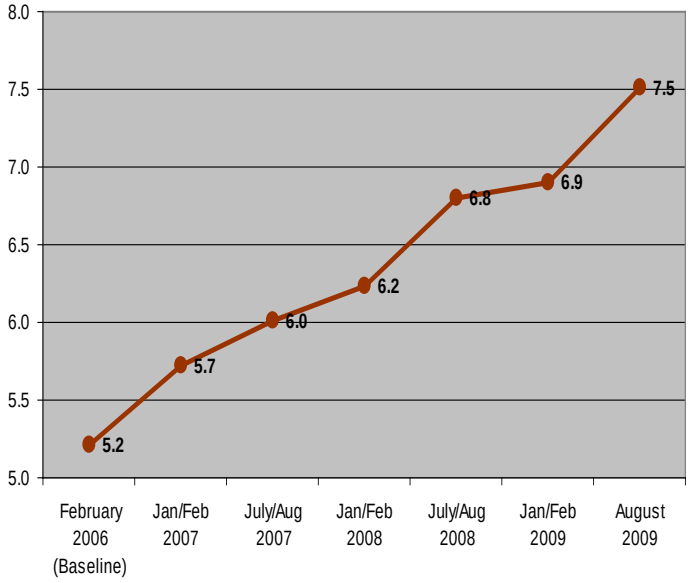
### 2.3.1 Overall Findings and Recommendations

Interviews with both female and male focus group participants in more than 30 villages in the four regions overwhelmingly confirmed that economic activities promoted over the life of the project have contributed significantly to improve the number of months of food self-provisioning as well as dietary diversity.

Equally important, PEP households confirmed that the need to resort to coping strategies such as seasonal migration, sales of advance labor and borrowing money from non-formal institutes (money lenders) has decreased over the life of the project, thereby reducing their overall vulnerability.

These findings are validated by information collected through SHOUHARDO's extensive Monitoring and Evaluation system, and have been used as the base for the analysis.

**Figure 9: Overall change in months of food self-provisioning**




As shown in Figure 9 months of food self-provisioning has increased on average from 5.2 months to 7.5 months since baseline (February, 2006). Variations occur by region, with the North Char showing the greatest improvement, although it was the least food secure at start of project (less than four months food security).

Variation across the four regions over the life of the project, is also likely due to the different agro-ecological conditions found in each region, as well as the timing of implementation. Soil and water access conditions vary widely, as does the ability to plant multiple crops over the year. In addition, the significant climate variability of the regions (floods in some areas, followed by droughts, river erosion, and changes of average temperatures during critical months of the year) has affected the potential for PEP households in each region to meet their food needs.

Table 7 shows that overall, urban households have shown greater improvement in the number of months of adequate food provisioning compared to rural households. Urban households showed an improvement over baseline of 4 percentage points, which may be attributable to improvements in access into the slum area, which increased the range of accessible markets, as well as the promotion of comprehensive gardening on rooftops, etc.

**Table 7: Number of months of adequate food provisioning, by survey period**

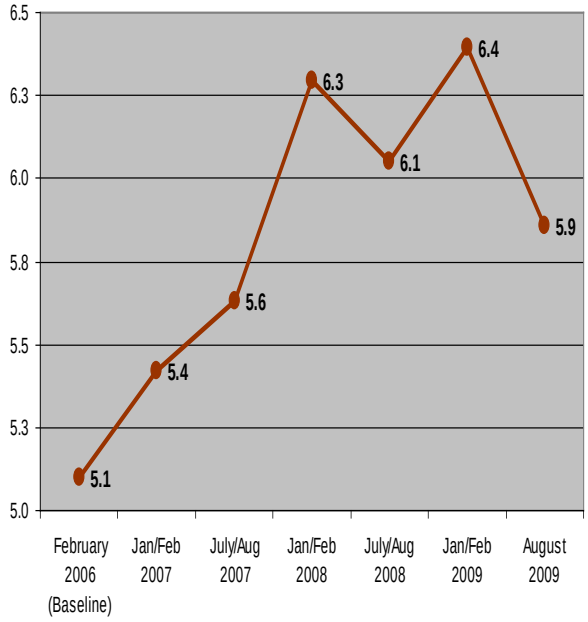
| | February 2006 (Baseline) | Jan/Feb 2007 | July/Aug 2007 | Jan/Feb 2008 | July/Aug 2008 | Jan/Feb 2009 | August 2009 (Endline) | Percent change (baseline to endline) |
|---|---|---|---|---|---|---|---|---|
| All | 5.2 | 5.7 | 6.0 | 6.2 | 6.8 | 6.9 | 7.5 | 44.1 |
| North Char | 3.4 | 6.2 | 6.1 | 9.0 | 8.9 | 6.9 | 7.6 | 125.0 |
| Mid Char | 5.0 | 6.0 | 6.6 | 7.0 | 8.2 | 5.8 | 6.8 | 37.3 |
| Haor | 5.6 | 5.2 | 5.5 | 4.7 | 5.4 | 7.3 | 7.6 | 36.1 |
| Coast | 6.4 | 5.4 | 5.7 | 4.8 | 5.0 | 7.7 | 8.1 | 26.6 |
| | | | | | | | | |
| Urban | 5.6 | 6.1 | 6.1 | 6.6 | 6.5 | 7.8 | 8.3 | 48.2 |
| Rural | 5.2 | 5.7 | 6.0 | 6.2 | 6.8 | 6.8 | 7.5 | 44.2 |

Sources: Baseline SES and periodic monitoring surveys.
Note: Data were not available for analysis from the 2007 Round 1 and Round 2 surveys. Values presented are means of the 2006 and 2008 values.

Of particular interest is the fact that in the North Char (and less in the Mid-Char) months of food self-provisioning was shown to have increased significantly in two of the household survey periods under analysis, Jan/Feb 2008 and July/August 2008. This may have been the result of the "100 Day Program" of FFW instituted by the caretaker government in response to the rising food and fuel prices in advance of the election. While the program was country-wide, it was implemented more heavily in the "monga regions", which are the North and Mid-Char.

Discussions with PEP households confirmed that while months of food provisioning has increased, it has not been sufficient to eliminate the use of other coping strategies such as seasonal migration and advance sales of labor, or borrowing from money lenders. However, all focus group participants confirmed that the number of months of food self-provisioning has increased as a result of comprehensive homestead gardening and animal rearing activities. Farmers interviewed reported that increased paddy production and field crop production has also contributed to improved self-provisioning.

**Figure 10: Changes in dietary diversity over life of program**




Changes in dietary diversity were also noted over the life of the project. Figure 10 shows that peak periods where dietary diversity was at its highest were in January/February, 2008 and January/February, 2009, which would have been peak vegetable production periods. While dietary diversity scores then declined, they remained higher than at baseline by more than 15 percent. While the change does not appear large (from 5.1 to 5.9), what was particularly encouraging was the change food quality as evidenced by changes in food groups being eaten by PEP households: (a) vegetables with yellow or orange inside are now being consumed by 52.4 percent of households, compared to 6.5 percent at baseline; (b) fruits with yellow or orange inside are now being consumed by 28.9 percent of households, compared with 2.2 percent at baseline; (c) eggs are now being consumed by 22.2 percent of households, compared to 8.6 percent at baseline, and (d) dairy products are now being consumed by 21.3 percent of households, compared to 8.8 percent at baseline.

Discussions with households confirmed that the additional consumption of these food groups has occurred primarily as a result of: (a) increased food production resulting from CHD activities; (b) increased paddy and field crop production which has reduced the need to purchase rice in the market; and (c) savings in costs due to adoption of organic fertilizer and integrated pest management which has reduced the costs of purchasing artificial fertilizers and pesticides.

As Table 8 demonstrates, dietary diversity drops over the summer months due to the monsoon, however, the pattern over time continues to increase. The only region where this is not the case is the Mid-Char. More information would be required to better understand the reason for the significant decrease in this region in August 2009.

**Table 8: Average dietary diversity score, by survey period**

| | February 2006 (Baseline) | Jan/Feb 2007 | July/Aug 2007 | Jan/Feb 2008 | July/Aug 2008 | Jan/Feb 2009 | August 2009 (Endline) | Percent change (baseline to endline) |
|---|---|---|---|---|---|---|---|---|
| All | 5.1 | 5.4 | 5.6 | 6.3 | 6.1 | 6.4 | 5.9 | 14.8 |
| North Char | 4.8 | 5.7 | 6.2 | 6.0 | 6.0 | 5.9 | 6.1 | 27.9 |
| Mid Char | 4.5 | 5.4 | 5.5 | 5.8 | 5.9 | 5.9 | 4.8 | 7.1 |
| Haor | 5.3 | 4.9 | 5.1 | 6.6 | 6.1 | 6.7 | 6.1 | 14.5 |
| Coast | 5.7 | 5.9 | 6.0 | 6.8 | 6.2 | 7.1 | 6.5 | 15.2 |
| Urban | 6.05 | 5.8 | 5.8 | 6.5 | 6.05 | 7.1 | 6.2 | 2.5 |
| Rural | 5.01 | 5.4 | 5.6 | 6.3 | 6.05 | 6.3 | 5.8 | 15.8 |

Sources: Baseline SES survey and periodic monitoring surveys.

As shown in Table 9 below, incomes showed significant increases over the life of the project. Discussions with male and female focus group confirmed that these increases were most likely due to a combination of increased levels of economic activity by each COG, and the FFW/CFW activities made available to PEP households over the project life. The largest increases in income were reported among households in the North Char, where the number of economic activities also showed the greatest gains (from an average of 1.32 per household to 2.03 activities). Aside from North Char, however, neither urban nor rural households saw much change in the number of economic activities a household engaged in, which is likely the result of the project's strategy to focus on reducing vulnerability through increased production/productivity of existing activities, rather than introducing new income related activities for a household.

Overall, rural households showed the greatest improvements in monthly income, although absolute incomes of PEP households in rural areas of the project did not reach the same income levels as were reached by urban households. At baseline, rural PEP households earned approximately 77 percent of the income of urban households. By July/August 2009, this had increased to 85 percent of the income of urban households.

**Table 9: Average monthly income and number of income sources, by survey period**

| | February 2006 (Baseline) | Jan/Feb 2007 | July/Aug 2007 | Jan/Feb 2008 | July/Aug 2008 | Jan/Feb 2009 | July/Aug 2009 | Percent change (baseline to endline) |
|---|---|---|---|---|---|---|---|---|
| **Average monthly household income** | | | | | | | | |
| All | 1,487 | 1,224 | 2,515 | 1,939 | 3,427 | 3,719 | 3,390 | 128 |
| North Char | 1,111 | a/ | 2,130 | a/ | 2,050 | 3,266 | 3,441 | 210 |
| Mid Char | 1,231 | 1,206 | 2,108 | 1,460 | 4,869 | 3,584 | 3,237 | 163 |
| Haor | 1,695 | 1,411 | 2,538 | 2,131 | 2,856 | 3,704 | 3,177 | 87 |
| Coast | 1,884 | 1,204 | 3,323 | 2,021 | 3,875 | 4,813 | 3,814 | 102 |
| Urban | 1,892 | 1,229 | 3,277 | 1,617 | 7,578 | 4,460 | 3,948 | 109 |
| Rural | 1,465 | 1,224 | 2,477 | 1,954 | 2,849 | 3,671 | 3,363 | 130 |
| **Average number of income sources** | | | | | | | | |
| All | 1.32 | 1.32 | 1.97 | 1.35 | 1.83 | 1.37 | 1.64 | 24 |
| North Char | 1.32 | | 1.55 | | 1.50 | 1.05 | 2.03 | 54 |
| Mid Char | 1.29 | 1.29 | 2.11 | 1.42 | 2.25 | 1.53 | 1.52 | 18 |
| Haor | 1.34 | 1.36 | 1.98 | 0.95 | 1.34 | 1.48 | 1.53 | 14 |
| Coast | 1.34 | 1.37 | 2.24 | 1.82 | 2.21 | 1.33 | 1.54 | 15 |
| Urban | 1.25 | 1.14 | 2.14 | 1.40 | 2.89 | 1.36 | 1.69 | 36 |
| Rural | 1.33 | 1.33 | 1.96 | 1.35 | 1.68 | 1.37 | 1.63 | 23 |

Sources: Baseline SES and periodic monitoring surveys.
a/ Data not available.

Income improvements did not lead to significant changes in assets of PEP households, as shown in Table 10 below. Increases in the number of sewing machines, bicycles, rickshaws, vans, and boats are likely explained by the distribution of these types of assets by the project for either fishing or income generating activities. They could also be explained by the distribution of grants which enabled households to leverage loans from an NGO or other MFI for asset purchase. What is most interesting, however, is the jump in ownership of mobile phones, pointing to the reduced costs of the technology, both for the hardware and airtime, and the benefits recognized by PEP households of having the ability to communicate with the outside world. This asset has greatly increased the ease with which PEP households are able to contact technical service providers, such as livestock, agriculture and health personnel, in addition to being able to contact their locally elected representatives to demand their support in accessing government services to which they have the right. Finally, this asset has improved the ability of PEP households across communities to consult with each other on various issues, thereby increasing their solidarity.

**Table 10: Percent of households owning various assets, including quality of housing materials, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Asset ownership** | | | | | |
| **Household items** | | | | | |
| Furniture | 71.4 | 81.9 | 14.7 | 0.000 | *** |
| Stove, lantern, flashlight | 44.3 | 64.1 | 44.8 | 0.000 | *** |
| Kitchen utensils | 90.6 | 97.7 | 7.9 | 0.000 | *** |
| Sewing machine | 1.0 | 1.6 | 60.8 | 0.006 | *** |
| **Information and communications technology (ICT)** | | | | | |
| Radio/cassette player | 5.5 | 5.1 | -7.5 | 0.085 | * |
| TV/VCP/VCR/VCD | 1.6 | 2.1 | 37.1 | 0.101 | |
| Mobile phone set | 0.4 | 14.5 | 3,863.3 | 0.000 | *** |
| **Means of transportation** | | | | | |
| Bicycle/rickshaw/van | 5.7 | 9.6 | 68.8 | 0.000 | *** |
| Motorcycle | 0.0 | 0.2 | | 0.005 | *** |
| Boats | 3.1 | 7.9 | 150.0 | 0.000 | *** |
| Wagon | 0.2 | 0.6 | 255.0 | 0.159 | |
| **Valuables** | | | | | |
| Jewelry | 40.0 | 43.5 | 8.9 | 0.094 | * |
| Watch | 19.9 | 21.0 | 5.3 | 0.340 | |
| **Quality of housing materials** | | | | | |
| Percent of households with walls materials from brick, corrugated iron, or wood | 28.6 | 38.1 | 33.2 | 0.000 | *** |
| Percent of households with roof materials of cement, corrugated iron, wood or tiles | 74.6 | 77.4 | 3.8 | 0.056 | * |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

The number of households for which indicators are calculated is:

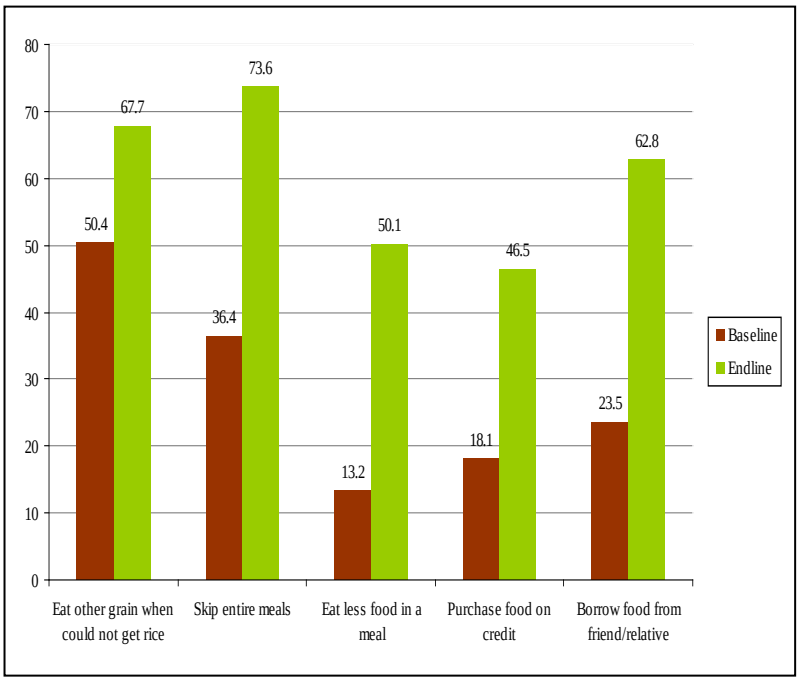
Asset ownership: baseline 697; endline 3,356.

Housing materials: baseline 669; endline 3,356.

Sources: Baseline SES survey (only households with 6-24 month olds) and endline HHN survey.

The endline survey completed by the International Centre for Diarrheal Disease Research, Bangladesh (ICDDR,B) in early December, 2009, has confirmed that a much larger percentage of households did not have to resort to various food coping strategies as a result of shortfalls in food production or food provisioning. As Figure 11 demonstrates, the number of households who did not have to resort to certain food coping strategies more than doubled, and in some cases, quadrupled over the life of the project. What was particularly encouraging was the increase in the percentage of households that did not have to borrow food (either purchasing on credit or borrowing directly) to meet household needs, as these coping strategies increase the indebtedness of PEP households and may significantly increase their vulnerability over time.

**Figure 11: Percentage of households who did not rely on food coping strategies, baseline to endline**




The percentage of households who did not have to skip entire meals due to food shortages in the previous 12 month period doubled compared to baseline, while the percentage of households who were not required to eat less food in a meal to make ends meet more than quadrupled, from 13.2 to 50.1 percent.

The number of households that did not have to purchase food on credit or borrow from friends/relatives also increased significantly. Almost 50 percent of households did not have to purchase food on credit, compared to baseline, when only 18.1 percent of households did not have to resort to this coping strategy. Similarly, at endline, 62.8 percent of all households did not have to borrow from friends or relatives, compared to 23.3 percent at baseline.

Data in Table 11 shows that improvements in food security were seen in all regions, and in both urban and rural households. Nonetheless, more than 50 percent of all households were not food secure year round because they had run out of food and did not have the money to buy more. Households in the North Char were the most vulnerable in this area, with only 38.1 percent of households having sufficient food, or money to buy food year round, compared to much larger proportions (between 49.9% and 58.6%) in other regions. This is likely attributable to the high levels of vulnerability of PEP households caused by the continuous floods and erosion of marginal lands. Although the project has supported a number of infrastructure initiatives to control flooding and reduce erosion, more effort is required in the North Char to address this.

This is particularly true in light of the increased number of floods, which has been attributed to climate change.

**Table 11: Indicators of improvements in food security, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent of households with three square meals a day most of the time or often in the last year** | | | | | |
| All | 32.2 | 74.1 | 130.0 | 0.000 | *** |
| North Char | 19.1 | 74.1 | 288.4 | 0.000 | *** |
| Mid Char | 24.3 | 71.9 | 196.3 | 0.000 | *** |
| Haor | 42.0 | 73.6 | 75.0 | 0.000 | *** |
| Coast | 41.4 | 76.8 | 85.2 | 0.000 | *** |
| Urban | 38.5 | 71.8 | 86.6 | 0.000 | *** |
| Rural | 31.9 | 74.2 | 132.6 | 0.000 | *** |
| **Percent of households that over the last year *never or only rarely* ran out of stored food and had no money to buy more** | | | | | |
| All | 10.3 | 52.0 | 405.1 | 0.000 | *** |
| North Char | 10.8 | 38.1 | 252.4 | 0.000 | *** |
| Mid Char | 8.0 | 49.9 | 527.2 | 0.000 | *** |
| Haor | 9.4 | 56.5 | 503.7 | 0.000 | *** |
| Coast | 14.0 | 58.6 | 317.4 | 0.000 | *** |
| Urban | 11.9 | 52.1 | 338.5 | 0.000 | *** |
| Rural | 10.2 | 52.0 | 409.1 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

Note: The number of households for which indicators are calculated is: baseline 3,092; endline 3,356.

While PEP households are still required to resort to other coping strategies to meet food needs over the full year, the percentage of households relying on them has been reduced over the life of the project.

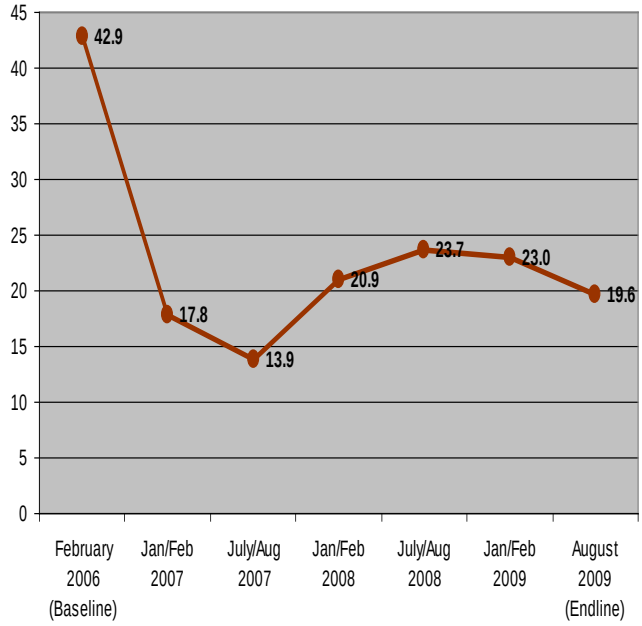
Household surveys conducted among a random sample of SHOUHARDO beneficiaries during the period August 2006 to August 2009, have indicated that the number of households with a family member who seasonally migrated at any point in the last twelve month period declined by more than 50 percent, from 42.9 percent to 19.6 percent. The period in which the households were least likely to engage in seasonal migration was July/August, 2007. This may have been the result of two events: (a) SHOUHARDO's FFW and CFW activities were under full-scale implementation during the period, reducing the need to migrate; and (b) COG and MCHN rations were also started, which would have reduced the need to seasonally migrate to earn an income.

Discussions with focus group participants (both men and women) confirmed that migration continues to be used as a coping strategy. What is not captured in the data above are claims made by focus group participants that the length of time required to be away to earn an income has been

reduced since the start of SHOUHARDO, although no specific estimates were provided to the consultants. Table 12 provides data on household migration disaggregated by program area.

The Haor region, which had the largest percentage of households with one family member migrating over the last twelve month period, by region, at baseline, showed the greatest improvement, an 82 percent decrease overall. This may have been attributed to the large number of CFW projects that were implemented in the last two years of the project in this region. CFW activities were designed to reduce household vulnerability through improved mound protection and building of embankments to control water during periods of floods.

**Figure 12: Percentage of Households Using Seasonal Migration as a Coping Strategy**




Despite significant reductions in migration in the Mid-Char in 2007, the percentage of families reportedly relying on this coping strategy rose once again to a peak in January/February 2009, before declining again in August 2009. It is difficult to determine the reason for the temporary increase, but it may have been due to greater opportunities for households in the Mid-Char to migrate to participate in electoral campaigns and mass meetings because of the region's proximity to Dhaka.

**Table 12: Percentage of households with one family member migrating over last 12 month period, by region**

| | February 2006 (Baseline) | Jan/Feb 2007 | July/Aug 2007 | Jan/Feb 2008 | July/Aug 2008 | Jan/Feb 2009 | August 2009 (Endline) | Percent change (baseline to endline) |
|---|---|---|---|---|---|---|---|---|
| All | 42.9 | 17.8 | 13.9 | 20.9 | 23.7 | 23.0 | 19.6 | -54.2 |
| North Char | 53.0 | 10.9 | 10.3 | 22.2 | 23.9 | 17.6 | 9.1 | -82.8 |
| Mid Char | 37.3 | 16.7 | 12.0 | 24.9 | 23.8 | 36.5 | 27.2 | -27.1 |
| Haor | 49.9 | 23.2 | 19.8 | 19.2 | 27.7 | 20.5 | 22.6 | -54.7 |
| Coast | 31.1 | 20.3 | 12.9 | 17.1 | 17.8 | 14.9 | 16.3 | -47.5 |
| Urban | 16.2 | 8.6 | 3.2 | 5.7 | 3.1 | 12.2 | 16.5 | 1.9 |
| Rural | 44.2 | 18.6 | 15.0 | 21.6 | 24.7 | 23.7 | 19.8 | -55.2 |

Sources: Baseline SES and periodic monitoring surveys.

The percentage of urban households with one family member migrating for work remained relatively unchanged at approximately 16 percent, whereas the percentage of rural households relying on this strategy was cut in half. This is not surprising given that COG activities in rural areas primarily focused on food production, whereas activities in urban areas focused more on income generating activities. COG activities may not have provided the same level of food security in urban areas as households rely primarily on the purchase of food and have no control over variability in food prices.

Advance labor sales and borrowing from non-formal institutes are two coping strategies that have also continued to be used, albeit to a lesser extent than they were prior to SHOUHARDO. Focus group participants in all regions provided the following explanations for declines in reliance on this coping strategy: (a) increased demand for agricultural labor in SHOUHARDO communities as a result of intensive homestead gardening and field crop production; (b) increased FFW/CFW opportunities; and (c) increased incomes.

**Figure 13: Percentage of households with one member selling labor in advance in last 12 month period**

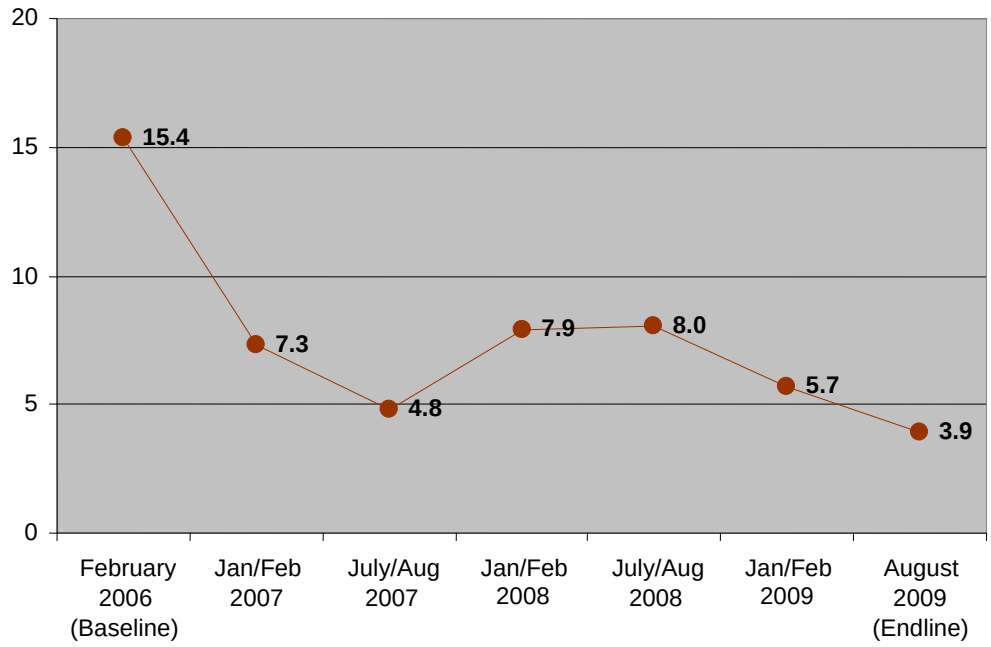



Table 13 shows that trends in selling advance labor continued to decline across all regions, and across urban and rural, with spikes occurring in Jan/Feb of each year. The percentage of urban households reportedly selling labor in advance fell to 0 percent over the life of the project and declined to just over 4 percent in rural areas. Given that food for work activities were ended in July/August, 2007, and that cash for work activities were undertaken during the lean season (summer) months, it may be that the need to sell advance labor as a coping strategy will increase again after the project ends.

**Table 13: Percent of households with a member who sold labor in advance in the last 12 months, by survey period**

| | February 2006 (Baseline) | Jan/Feb 2007 | July/Aug 2007 | Jan/Feb 2008 | July/Aug 2008 | Jan/Feb 2009 | August 2009 (Endline) | Percent change (baseline to endline) |
|---|---|---|---|---|---|---|---|---|
| All | 15.4 | 7.3 | 4.8 | 7.9 | 8.0 | 5.7 | 3.9 | -74.6 |
| North Char | 11.0 | 5.1 | 3.3 | 6.8 | 2.7 | 0.9 | 1.3 | -87.8 |
| Mid Char | 9.1 | 10.4 | 6.4 | 6.2 | 4.6 | 8.4 | 2.7 | -69.8 |
| Haor | 19.6 | 8.1 | 4.0 | 8.9 | 15.1 | 4.4 | 5.3 | -73.3 |
| Coast | 21.7 | 4.2 | 5.5 | 9.8 | 7.7 | 8.6 | 5.9 | -72.6 |
| Urban | 4.4 | 3.5 | 1.6 | 5.7 | 1.6 | 6.6 | 0.0 | -100.0 |
| Rural | 15.9 | 7.6 | 5.1 | 8.0 | 8.4 | 5.6 | 4.1 | -74.2 |

Sources: Baseline SES and periodic monitoring surveys.

The endline survey also collected information on the extent to which households relied on non-formal sources of loans over the previous twelve month period. Data in Figure 14 suggest a significant decline in the percentage of households relying on this coping strategy (from 48.8% at baseline to 21.4% at endline). After declining to a low of 18.1 percent in July/August 2007, the reported reliance on loans from non-formal sources peaked again at 26.9 percent in January/February 2008, before declining again to 21.4 percent.

**Figure 14: Percentage of households who took a loan from a non-formal source in last 12 month period**

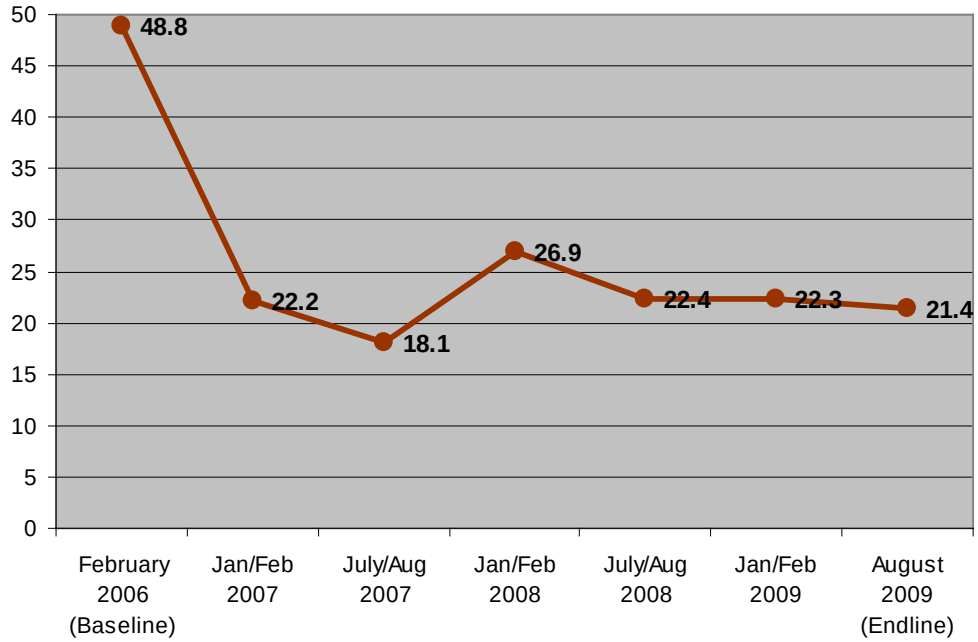



Table 14 shows that the declining trend in the reliance of households on non-formal lenders did not vary significantly by region, although the total percentage of households borrowing was

slightly higher in the Haor Region. This is likely due in part to alternative credit opportunities from micro-finance institutes or micro-credit projects. The decline in borrowing from non-formal institutes was most striking in urban areas (78.3%), likely due to increased incomes resulting from COG and CFW activities.

**Table 14: Percent of households with a member who took a loan from a non-formal source in the last 12 months, by region**

| | February 2006 (Baseline) | Jan/Feb 2007 | July/Aug 2007 | Jan/Feb 2008 | July/Aug 2008 | Jan/Feb 2009 | August 2009 (Endline) | Percent change (baseline to endline) |
|---|---|---|---|---|---|---|---|---|
| All | 48.8 | 22.2 | 18.1 | 26.9 | 22.4 | 22.3 | 21.4 | -56.1 |
| North Char | 49.4 | 23.4 | 18.1 | 21.2 | 15.2 | 14.4 | 15.6 | -68.5 |
| Mid Char | 43.8 | 18.5 | 18.4 | 32.6 | 24.3 | 27.9 | 20.8 | -52.5 |
| Haor | 63.1 | 30.2 | 25.6 | 30.4 | 27.2 | 27.0 | 29.7 | -53.0 |
| Coast | 35.6 | 15.1 | 7.7 | 19.9 | 19.6 | 16.2 | 16.8 | -52.7 |
| Urban | 31.4 | 27.4 | 21.0 | 20.8 | 8.0 | 23.9 | 6.8 | -78.3 |
| Rural | 49.7 | 21.8 | 17.9 | 27.1 | 23.1 | 22.2 | 22.2 | -55.3 |

Sources: Baseline SES and periodic monitoring surveys.

### *Overall Recommendations for Agricultural Production and Income Generating Interventions*

This discussion of the SHOUHARDO program's overall impact in the areas of agricultural production and income generating activities ends with identification of the consultants' primary recommendations.

First, future replication of SHOUHARDO agricultural activities, such as integrated pest management and floating gardens, should include a thorough assessment of what, if any negative environmental consequences may result from these activities, and how they might best be managed. This will likely entail increased awareness raising among, as well as improved technical support for participating PEP households.

Secondly, the consultants felt that the successes realized through the Comprehensive Homestead Development initiative should be more explicitly linked with MCHN activities so that improvements in nutritional behaviors and agricultural practices can be mutually reinforcing.

Regarding the sustainability and effectiveness of savings groups established by SHOUHARDO, much greater emphasis must be placed on skills training among the participants to ensure that accounting practices are transparent and that all participants can play an equal and active role in decisions regarding the use of funds.

Finally, while the SHOUHARDO program is commended on its success in improving women's access to rural markets, continued work needs to be done to ensure that women involved in market activities have adequate opportunities to participate in Market Management Committees. Such representation is crucial for ensuring that the limited number of local markets adequately serve the needs of PEP women.

## 2.3.2 Program Achievements

***Achievements in IIR 1.3.1*** Improved capacity of vulnerable households to identify new income options and skills enhanced

As of September 30 of 2009, a total of 401,260 PEP households had participated in activities intended to improve availability and access to food. Activities focused upon agriculture support, fisheries support, homestead gardening support and income generating activities. Achievements and challenges for each of these activities are discussed below.

### *Agricultural Production*

A total of 121,503 PEP households were selected by VDCs to participate in the Agriculture Production Core Occupational Group. Within this group, select farmers were provided with improved varieties of seed. In addition, farmers were provided with technical training in improved farming methods to maximize productivity and reduce costs wherever possible through the use of organic fertilizers and integrated pest management (IPM) techniques. Farmers interviewed reported that productivity gains had been achieved as a result of: (a) improved seed quality; (b) improved techniques, such as optimum fertilizer use (in the South), or the use of compost in lieu of artificial fertilizers (in the Haor); (c) improved cropping methods (e.g. planting in rows, seed spacing, intercropping); and (d) improved linkages with reputable seed dealers, *upazila* and UP agricultural officers to ensure continued agricultural advice on demand.

***Using floating garden material for mulching***

Farmers had the opportunity to test improved seeds and techniques and observed productivity gains, particularly when compared to using local seed varieties purchased in nearby markets. Farmers were then linked with reputable seed dealers, such as Metal, Laltir, United and Namdari, who have agents in nearby towns. As a result of the benefits of using higher quality seed, farmers' groups are purchasing high quality seed jointly. Together with the VDC members, these farmers collectively determine seed demand. They then nominate one person to purchase the seed on their behalf. Although high quality seed has a higher cost, the benefits from the better germination rates (local varieties may have germination losses between 20% and 40%) far outweigh the cost. It appears very likely that this linkage will continue into the future as it is in the interests of both the private seed dealers and the farmers to maintain it.

Linkages made with upazila and union parishad agriculture officers during training have also continued. Farmers have contact numbers, and whenever concerns over pests, or other agricultural problems arise, they contact these officers by mobile for advice or follow-up

technical support. The demand-driven approach is working well, according to farmers interviewed.

**Strengthening Resiliency through Adaptive Technologies**

In FY 2008/09, the Bangladesh Rice Research Institute (BRRI), together with the project, provided support to 38 farmers in 5 villages in Kisheraganj and Habiganj Districts to test yields of a new high yield boro variety that could be harvested earlier, thereby reducing farmers' risks to early flooding.. Of the 38 farmers, farmers averaged yields of 6.8 tons/hectares, by harvesting at approximately 141 days, compared to the average of 160-165 days for traditional boro varieties in use in the area. The pilot was considered successful and in FY10 the project distributed 2.5 kgs. of the Dhan 45 seed to a select number of farmers who had additional land that they were willing to crop using new techniques. The consultants visited one village in Sunamganj where 7 farmers received seed. Three farmers were available for discussion, who advised that, if successful, they would trade the seed for other paddy to increase number of farmers' planting this rice, so long as proper farm management techniques are applied (including proper use of irrigation and fertilizer).

When asked to estimate changes to income as a result of participation in SHOUHARDO activities, farmers' estimates varied. However, those farmers who are planting boro, and who have used their profits to purchase equipment (e.g. low-lift pumps) seem to have made the greatest income gains from participation in SHOUHARDO. This is due to their organization around common concerns and willingness to pool profits to purchase critical assets. This group organization continues to serve participating farmers as they are also able to estimate irrigation needs, and share the costs of operating their own irrigation systems rather than having to hire a low-lift pump for short-term periods. These farmers have also received training in equipment maintenance and are confident that this knowledge will continue to serve them well into the future.

### *Fisheries Production*

A total of 49,021 fishing households were provided support under SHOUHARDO through a series of initiatives: (a) support to fisheries groups to lease water bodies, thereby securing their livelihoods over the term of the lease; (b) inputs and technical advice for cultured fish production, including fish production in conjunction with boro production; and (c) nets, fish fingerlings, and in some cases, boats, to improve fish capture. Originally, the project intended that 30 percent of all PEP households would be provided with fisheries support, however, following the mid-term review this was decreased to less than 13 percent due to limited opportunities for accessing water bodies.

Discussions with fishing groups revealed that the major constraint for improved fisheries production by PEP households was the lack of access to common water bodies, either *khas* ponds or open water. The project was successful in working with a group of 50 PEP fishing households who collaborated with 8 non-poor households to obtain a three year lease for open water fishing.

Fishers participating in focus group discussions did not mention whether the project provided technical advice on fresh fish management and storage, or the most efficient and safe indigenous techniques for conserving dried fish.

Over the life of the project, SHOUHARDO did not have the opportunity to develop a comprehensive strategy for guiding interventions in the fisheries sector, nor did they try to influence national level policy to improve equitable access to common water bodies. During the

remainder of the project, the project could begin developing such a strategy so that future livelihood security activities, particularly for PEP fishers, will be strengthened in a sustainable manner.

**Success for PEP Fishers in the Haor**

One of the most interesting activities with fishers was a fishers' savings group in SHOUHARDO who was supported to pool their savings and create a samity which would enable them to apply for a fishing body lease. 58 members have joined, for 1,000 *taka* each – 50 members are PEP, others are non-PEP, who assisted in accessing the lease. Some members borrowed the money to buy into the Samity. Men also save on a monthly basis and deposit it to the Samity to increase the group's capital. They have taken a 3 year lease of a water body from the government (4 acres, 13 decimals) with fees of 12,196 *taka* payable on a yearly basis. All registration and lease papers were reviewed and found in order. After spending some of their savings to prepare the water body for fishing, fishermen now keep 50% of their catch and return the remainder to the Samity. The groups expect to make a profit of 20,000 – 25,000 this year, after all expenses are paid. More than 20 other persons from the village have expressed interest in becoming part of the Samity, have provided the President with their identification cards, and the Samity is reviewing their documentation prior to accepting them as members. Other examples like this should assist to guide SHOUHARDO in building an advocacy and implementation strategy to improve access for PEP fishers.

### *Comprehensive Homestead Development*

As of September, 2009 Comprehensive Homestead Development (CHD) had been promoted by the SHOUHARDO program within a total of 90,747 PEP homesteads, an achievement of nearly 100 percent of the project target.

Comprehensive Homestead Development is a highly intensive, homestead gardening project that teaches women and their families to intensively manage their homesteads to maximize food production for home consumption, with the surplus being used to generate additional income. In line with the project's emphasis on improved nutrition, CHD emphasizes production of a wide variety of leafy green vegetables (some, like Indian spinach and kang kong are new to the area), vegetables with red and yellow insides (such as sweet gourds, or pumpkins), and fruit with red and yellow insides, such as mango, grapefruit and papaya. CHD also provided a number of households with a small number of ducks or chickens and goats, along with technical support and linkages to upazila and UP agriculture and livestock officers. In some cases, individuals (both women and men) have been trained as paravets, and they provide services on demand to both PEP and non-PEP households, with the latter expected to pay a larger fee.

Focus group participants advised that the following have had the greatest impact on their increased food production, consumption, and sales: (a) use of high quality seeds; (b) improve pit and raised bed systems to promote drainage and reduce weed infestation; (c) proper plant spacing; and (d) use of organic pesticides. Households referred to the introduction of fruit trees, and red/yellow vegetables as key improvements in their diets, in addition to the increased availability of eggs for both children's and mothers' diets. To a lesser extent, poultry production has slightly increased protein consumption, such as when a male ducks or roosters are slaughtered to be eaten when guests come to the home.

This CHD initiative has also significantly contributed to the improvement of diet messages being delivered to MCHN mothers during courtyard sessions, and has provided food for mothers to bring to the demonstration feeding sessions. In future projects, VDCs (who identify households to participate in this COG) should be the focus of awareness raising efforts highlighting the importance of nutritious foods. Doing so would help ensure that all PEP families with small children are provided with some means to promote intensive gardening. New mothers should be encouraged to collaborate with women practicing comprehensive homestead development so that they too can cultivate these nutritious foods for their families.

**A Pilot to Improve Dietary Diversity in the Haor Area During Monsoon**

In 2007, in collaboration with IUCN, SHOUHARDO introduced floating garden technology in 2007 in some villages in the Haor Region. This technology, which has engaged primarily women, allows households to produce vegetables during monsoon season when *haor* lands are under water and continue to winter season. Field crop seedlings can also be grown on the platform and transferred to land when the monsoon water recedes. The practice gave an opportunity to PEP households to harvest early crops and get better price.

In one community visited, 7 participants received training on floating garden technology in 2007 by a cross-visit to Barisal, where they had the opportunity to see the gardens first hand. In 2009, nearly 13 households established floating garden and produced vegetables, monsoon and winter variety. First year training recipients/adopters trained the later groups, and the participants informed they were continuing the process of technology transfer. Upazila and UP extension workers have continued to provide advice to participants to ensure that the floating platform is well prepared.

Participants advised that, to set a garden on a floating platform of 3feet X 5feet required an investment of Tk 500-700, plus labor. Due to the materials used (water hyacinth) and the bed preparation, the technology does not require fertilizer. From this, a household can early between Tk. 2000 and Tk 2500, selling crops and seedlings, in addition to the crops consumed at home. This has helped them to both produce and consume enough vegetables during monsoon season to increase dietary diversity, in addition to generating income for children's other needs, such as education.
At present, there is little emphasis on marketing as local demand does not exceed supply. However, as uptake continues to increase, the project will need to address this shortfall, so that local markets are not saturated.

Floating gardening technology is environmentally friendly; the residue of the garden is used as soil nutrient in the next planting season. However, as these ponds dry up, the excessive nutrient matter may make water anoxic, which could affect *haor* fish population. This will need further study, so that this innovative technology could continue to be promoted without negative environmental effects.

### *Income Generating Activities and Alternative Livelihood Opportunities*

In addition to participating in COGs, a total of 139,989 PEP households, or approximately 35 percent of the target PEP households, were provided with support in implementing Income Generating Activities (IGAs). In urban slums, activities focused on improving household market access and support for income generating activities including: tailoring, cane mat and stool making, candle making, homestead (roof) gardening, hotels (restaurants) and petty trade.

In rural areas, the project focused on livestock production (cattle, goats, ducks/chickens) and skills for which there is demonstrated market demand (tailoring, petty trade). Households were provided with inputs ranging from 2,000 *taka* (in a few cases, as direct cash), to 10,000 *taka*. Given the level of investment for large livestock and ruminants, disaster preparedness plans developed by communities need to clearly identify areas where livestock can be protected during

floods or monsoons. In addition, this should be part of the livelihoods training) so that individual households have their own contingency plan to fall back on in the event of floods.

***Women with healthy calf in Urugaon Sunamganj***

Focus group participants confirmed that VDCs identified those PEP households with the skills and asset mix to participate in various IGA activities. They received one day's business management training, and, in some cases (such as tailors) were linked with training courses at the upazila level to improve their skills. Upazila and UP youth officers and livestock officers who provided initial training with SHOUHARDO support are continuing to provide support to IGA participants.

Income improvements from these activities have varied widely, in terms of the time required to earn profits and the potential for income. For example, households that received small cows (valued at up to Tk 10,000) are required to vaccinate and feed these animals for a period of up to 1 ½ years before they will calve and begin to produce milk. Focus group participants advised that anywhere from 40-60 percent of the milk is consumed in the home, providing a critical source of calcium and protein for children, while the remainder is sold in the local market for anywhere from Tk 40 – Tk 60 a day (during the cow's milk production period). The promotion of paravet services through the training of both males and females has also supported continued good health of the animals.

Goat rearing also has a longer period before returns are realized due to the time required for goats to give birth and raise kids for ultimate sale or herd expansion. Interestingly, goat milk is not seen as a source of calcium and protein, which may be due to the local variety of goat. While the animals are prolific, hardy and disease resistant, they produce little in the way of milk for human consumption.

Households that received ducks and ducklings also received technical support on feeding and poultry management. The birds provided through SHOUHARDO are extremely hardy, produce eggs daily, and are providing an important source of protein, as well as source of income to PEP households. While chickens were originally promoted under the project, the avian flu epidemic halted both chicken and poultry distribution until 2009.

Tailoring has had mixed success in the project. In one remote village in Sunamganj, one woman who received tailoring training and a sewing machine is making up to 3,000 *taka* a month, with peak business during post-harvest periods and during the Eid festivals. Another young woman, who received a *taka* 2,000 grant, used it to leverage a Grameen loan which has allowed her to own her own sewing machine. She too is making between 2,000 and 2,500 *taka* a month, and her Grameen loan has been repaid. In another village in Habiganj, on the other hand, a widow who received tailoring skills development and a sewing machine advised that her income is too uneven to support her livelihood adequately. In pre-harvest periods, she may not make even 50 *taka* a day. Such cases argue for improved market analysis prior to future activities in order to maximize the impact of livelihood support.

In response to a recommendation made in the Mid-Term Review, SHOUHARDO collaborated with CARE Bangladesh's Economic Development Unit (EDU) to promote alternative livelihood options (ALOs) in certain regions of the country. These alternative livelihood options were intended to enable existing businesses to become more profitable. Alternative livelihood support was also provided to groups of individuals working cooperatively to produce goods for a larger market.

As of November 2009, SHOUHARDO records show that 124 individuals were participating in these ALOs, which ranged from small businesses (spice selling, cloth selling) to beef fattening and marketing.

In Chittagong, for example, 8 business persons (4 males and 4 females) were provided technical and business support, as well as grants ranging from Tk 7,000 to Tk 10,000 to either start or expand their business. Grants were provided for a range of activities including a hotel (restaurant), spice selling, cloth selling, and fish (fresh and dried) selling.

Households made their own contributions ranging from approximately Tk 500 to Tk 2,300 in order to implement the business plan, over and above the grant funds provided by the project. A review of the simple balance sheets and profits/expenditures statements since these businesses started in March, 2009, indicates that households are earning monthly profits ranging from Tk 1,600 to Tk 3,400 a month.

The consultants were also provided with a review conducted on SHOUHARDO's behalf in January, 2009.[14] This review included the assessment of two ALOs in Tangail, both of which were being operated by women's groups operating out of a market built by the project. The new markets included separate spaces for women. The review commended the progress made by these groups in the time they had been operating, in terms of leadership and organization. However, in order to transform these newly formed small businesses into sustainable productive enterprises, the report arrived at the following conclusions:

- Both groups required additional capacity building in group management and in understanding the marketplace;
- Neither group had a business strategy or strategic plan for the next 2-3 year period, with quarterly benchmarks which could be used to identify gaps for capacity building. This strategy should have been developed with support from the Economic Development Unit (EDU) based on each group's vision of the business; and
- SHOUHARDO staff and EDU staff seconded to SHOUHARDO need to spend significantly more time providing mentoring support to these ALOs so that they can evolve into sustainable businesses. Ongoing support is needed to increase members' capacity to manage the group fairly and profitably. Specific attention should be paid to ensuring quality control (and not just quantity control) and the identification of new markets as opportunities arise.

This pilot seems to hold promise for improving the livelihoods of more households, particularly in urban areas. However, the consultants' observations mirrored those of the previous review conducted in January 2009. Focus group participants had minimal business skills, and were not able to provide consultants with information on their inventory, time requirement to draw down inventory, alternative sources of materials to maximize profits, etc. In addition, bookkeeping

[14] Lohr, Reid: CARE Field Trip – January 18 & 19, 2009: Economic Development Unit (EDU) and the SHOUHARDO Program

methods did not make it possible to determine whether sales were subsidizing home consumption, thereby overestimating net profits. Significantly more support should be sought from the EDU so that these businesses can develop long-term plans, as well as learn the skills necessary to manage inventory effectively.

**"It gave us life, now we must continue with this"**

In a village in Habiganj, the project has supported an embroidery /*karchupi* group project, composed of 15 participants, mostly young adult girls. The team is being organized by Shohana. This group received 5 days training from the project, and then trained another 85 women and girls. Training was received on tailoring, embroidery work, accounts management and market assessment organized by the PNGO and the EDU/CARE project.

After completion of the training, the original 15 participants received Tk. 5,000 each to start their group business. The group, which originally produced for local vendors, was also assisted in conducting a market study which helped them see the additional opportunities from producing for the Habiganj and Dhaka markets. As a result, they established contact with the traders in these areas, and started to do contract work which is resulting in much higher profits (from initial monthly profits of Tk 500 to current profits ranging from Tk 2,000-3,000 per month). Even the newly trained members are making Tk 1,500 per month.

Now, the group is planning to start its own production, instead of pure contract work, and has talked with Hobiganj Chamber of commerce for a space allocation in the market. While the group does not have a common savings/bank account they all have savings or bonds ranging from Tk 5,000 – Tk 8,000 a month.

Core group members have been working for approximately 1 ½ years. Previously, they had no income earning options. Most of them were at home spending idle time, and sometimes felt like a burden to the family. Now they are earning income, which some are using to help their parents and younger brothers and sisters. In addition, two female headed households (one of whom heard of the initiative through her VDC) who had limited or no income are now making Tk 2,000 – Tk, 3,000 per month and their social condition has improved considerably.

### *Savings Groups*

Over the life of the project, SHOUHARDO has helped establish a total of 2,320 savings groups. While there is no information to confirm how many of these are still functioning, CARE and PNGO staff have reported that the majority of these groups continue to collect savings, and, in many cases, are lending funds to PEP members to meet emergency needs and new business opportunities.

The consultants had the opportunity to interview 14 savings groups during the field visits. Levels of activity varied widely. In the Coast Region, 4 of 6 groups interviewed were non-functional, with no decision as to what will be done with money. In one of these groups, where funds were held by the VDC, neither the EKATA Group who collected the money, nor the VDC cashier could advise how much money was held by the women's group.

In the Haor Region, on the other hand, 6 of 8 savings groups are currently lending – in two cases to both members and non-members. Interest rates vary significantly, from free loans for emergencies to interest rates as high as 5 percent a month, plus a principal repayment. While this may seem good "business" and a means to establish parity with the elites, it was unfortunate when the consultant heard from one female member of the savings group, who borrowed 1,000 *taka* to pay her husband's medical expenses. She was required to pay 5 percent interest per month until she repaid.

In the case of two remaining Savings Groups, both have begun to invest in group business activities. So long as group solidarity is strong, and each member is clear about the amount of moneys saved and participates in group decisions about the funds, group businesses are likely higher value alternatives than lending funds, which entails the risk of non-payment.

PEP households need savings to fall back on during emergencies. In addition, they need ways in which they can pool their resources to leverage new business opportunities. In the remaining life of the project, SHOUHARDO should document the best practices of existing savings groups so that they can be transferred to other groups who may consider lending to be the only means of increasing their savings.

**Group Businesses as an Alternative to Lending**

In a mixed Hindu/Muslim Village in Sunamganj, a group of 40 women began to save money in 2007, when women began to save 20 *taka* a month.. By early 2009, they had almost Tk 20,000 savings and decided to invest it in purchasing boro immediately after harvest at a low price, and sell it for a higher price later in the season. Ten members were not interested in taking this risk, so their savings was returned to them.

This savings group used Tk 10,000 to purchase boro paddy, and within a few months, sold the paddy at 50% profit. They have used part of these profits to provide a no-interest emergency loan to one household (payable before boro harvest next spring) , and are holding the remainder as cash in their cash box, in case another monga season loan will be required of a member. The remaining capital of Tk 10,000 is back in the back, and savings between now and boro season, plus whatever additional cash is available (including the repaid loans) will be reinvested in paddy next year.

The group were able to explain the reasons for savings-increasing income earnings, children's education, buying food during lean season, etc., Each member has a passbook and is able to show her own savings balance.

***Achievements in IIR 1.3.2*** Market access, particularly for women, is enhanced.

SHOUHARDO improved the business skills of more than 6,500 female entrepreneurs. In addition, a total of 64 markets were built, and, within each market at least 20 percent of the space was set aside to encourage women to market their own production in the marketplace.

Markets are expensive to build, but are often critical to promote women's economic participation for two reasons: (a) the allocation of a separate space where women vendors can operate is much more acceptable in conservative areas, and husbands are much more comfortable with their wives trading in the market if they will be working side by side with other women; and (b) women vendors increase the acceptability of women travelling to market and purchasing their own goods, particularly those products sold by the women vendors.

In addition to these market-related benefits for women in particular, it must be emphasized that these markets are being built only when alternative markets are a significant distance away, so that as much as a day is required to travel to market and back. This means that access to food could be limited for households who are reliant on daily labor payments, but are not able to go to market more than once a week. In these remote areas, where refrigeration is not an option, purchase of vegetables which have been harvested the same day will provide better quality product which has retained its nutritional value.

**A Market to Serve Two Remote SHOUHARDO Villages in Upazila Duarabazar, Sunamganj**

In Dourabazar Upazila VDCs from two SHOUHARDO villages that were isolated and far from a local market, agreed to include a market in one of their CAPs, and to work jointly to purchase and prepare the land for market construction. The two communities purchase land for Tk 1,400,000, and constructed a guide wall and earthworks for *Taka* 700,000, as well as free labor.

The market is now serving these two villages, and receives approximately 1,000 visitors from up to 10 villages in the surrounding area every day. A total of 100 vendors pay Tk 2 to sell in the market, which is open from 6:00 a.m. to 12:00 noon.

Women participating in focus groups reported that this market has provided them with many benefits. First, because the market has a separate space set aside for women, as well as a latrine and well, women from the nearest village are comfortable selling their produce themselves. The 15-20 women who sell their produce explained that, at the height of their production, they are able to make up to Tk 200 a day in profit, which they can then save to meet emergency needs.

Second, because there are now women vendors in the market, husbands are more confident that women can purchase goods without being considered that they may be abused or cheated. In both cases, women's position in the community has improved.

The market is managed by a Market Management Committee (MMC), formed of 11 members from the two villages. Unfortunately, none of these members are women. VDCs should encourage the participation of women on the Committee, so that the concerns and needs of women, particularly pregnant and lactating mothers, are met.

### 2.3.3 Program Challenges

The project has successfully overcome many of the challenges highlighted in the mid-term review. However, the wide range of activities being undertaken under this IR has resulted in gaps being created in certain areas, which need to be addressed if the project is to maximize impact.

First, many of the activities referred to above have environmental health implications. For example, while the project does not promote artificial pesticide use, in some cases it is still required, and service providers are usually the pesticide production companies themselves. Farming households are not trained in proper handling of pesticides, nor in storage techniques that prevent or minimize negative environmental impacts. Improved environmental stewardship would require that the project become familiar with the various pesticides and undertake awareness raising campaigns to reduce personal and environmental health problems.

In the same way, floating gardens have the potential to have a significant and beneficial impact on PEP household nutritional status and incomes in the Haor. However, these gardens have a high level of plant material, and, as ponds dry up, they may negatively affect indigenous fish stocks. More work is needed to understand the ecological implications of promoting these gardens for the long-term health of the *haor* and its species.

Second, inadequate attention seems to have been paid to the "business" side of the agriculture, fisheries, CHD and even IGA interventions. With the exception of certain Alternative Livelihood Options (such as the embroidery group in Habiganj), business training is extremely limited, and PEP households often are unable to explain their future business plans, inventory levels, and overall balance sheets. Much more work is required in this area if IGAs are to sustainably

contribute to food availability and access. Even in the ALO groups, who received five days' training, need more capacity building to be sustainable and profitable over time.

Third, savings groups have definitely not received the attention required to insure that they are well managed, and that savings are used in the manner intended by the group. In addition, all savings group members need to have an equal voice in decisions regarding the use of accumulated savings. Whenever someone wishes to withdraw their savings for an emergency, there should be a provision that helps them do this, without them having to borrow money from the group at interest to meet this emergency. During the life of SHOUHARDO, many different savings modalities have been tested. It's now time to identify the best practices and use them to develop a strategy around savings generally. In addition, SHOUHARDO should collaborate with micro-finance NGOs to learn their experiences and determine how the micro-finance community can help inform a national policy that promotes savings for PEP households.

Fourth, there does not appear to have been any research done into opportunities for growing protein-rich beans (such as a local faba bean) as alternative crops with both high nutrition value, and the ability to fix nitrogen in the soil. The project should identify research institutes doing formative research in this area to see if they would be interested in collaborating with future projects to promote this alternative food source.

Finally, market construction does not appear to have been accompanied by full-scale market assessments, nor a determination of how linkages could be improved with other markets, both upstream and downstream. Until this is done, the impact of these markets may not reach their full potential.

### *Climate Change*

Throughout the field visits, consultants were reminded by focus group participants about the immediate impact of climate change being felt by PEP households in all regions. The project has invested considerable effort in supporting mound protection, mound embankments, and other techniques to protect PEP households from the effects of increased flash flooding or water level change.

In addition, the project has formed collaborative arrangements with BRRI to pilot different rice varieties that are more resistant to early inundations, or that can be harvested earlier than existing varieties, thereby reducing the risk of late harvest loss. Both of these initiatives are very important to increasing PEP household resiliency and should be enhanced and replicated wherever possible.

While the consultants were in the field, they learned about a local variety of tree (the Koroch tree) which has historically been used along embankments to reduce soil erosion. Because it grows a number of trunks from one root source, it has an extensive root system that is extremely successful in protecting banks. In addition, these multiple branches would be amenable to use as fuel wood, without the need to cut the whole tree. The SHOUHARDO project has promoted the use of these trees to protect embankments. This is a good example of a local coping strategy that SHOUHARDO is promoting to build community resilience to climate change. Wherever possible, models like this should be promoted throughout the project area.

More effort needs to be placed in the coming months on identifying indigenous strategies to building household environmental resilience so that PEP households can continue to adapt to changing climate conditions while protecting their assets and investments.

**Losing Assets – A Key Vulnerability of PEP Households Facing Changes to Climates**

In Rajpur, focus group participants referred to the losses of livestock and poultry during the 2007 floods. Again in 2009, focus group discussions identified 3 out of approximately 30 participants who lost goats or chickens during the early floods.

For PEP households who rely on these investments as savings, this loss could eliminate whatever livelihood security gains were made in the last year.

Unless PEP homesteads are raised to protect their assets, or unless a safe place is identified for them to move their livestock and poultry, this will continue to challenge the sustainability of gains made in the project.

### 2.3.4 Sustainability

How sustainable are the benefits that are presently being enjoyed by PEP households? Can the gains made in agriculture production, fisheries, CHD and micro-businesses be sustained over the life of the project?

The consultants are cautiously optimistic. First, the organization of PEP households into COGs has created a level of solidarity and mutual support which is still going on in many places, as evidenced by the field visits. COG groups collaborate, with support from the VDC, in purchasing inputs jointly and managing business activities for the benefit of a larger group.

Second, the links forged with *upazila* and UP agriculture, livestock, and even women social welfare and youth officers, will likely continue beyond the project life. It has been suggested that communities would have difficulty in making direct links with research institutes without the support of PNGOs or CARE. If this turns out to be the case, it will limit the ability of households to remain at the forefront in using high quality varieties of rice, fruit and vegetables. For this reason, greater emphasis needs to be placed on linking technical service providers at the UP and upazila level with research institutes working in these areas.

There are three issues which may compromise the sustainability of the project's economic activities. First, PEP households, particularly in remote communities, benefited significantly from the FFW and CFW activities implemented by the project. CFW activities, which have been ongoing since the mid-term review, provide needed sources of income during the lean seasons. Once these activities have ended, it may be that household's vulnerabilities will once again increase, as a result of losing this income stream.

Second, discussions with a number of key informants raising livestock suggested that they often consider livestock and ruminants as "savings on the hoof", to be available in the case of emergency, rather than businesses to support cash flow needs of households. Households do not seem to be considering this activity as a business, capable of contributing on a regular basis to household incomes. Much more support in "livestock raising as a business" is needed to maximize the potential of these activities for contributing to sustainable increases in income.

Third, variation in the operation of savings groups makes it nearly impossible to comment on the sustainability of the present model. SHOUHARDO needs a strategy that clearly lays out to all staff the long-term vision of a savings group program, and the different modalities that could be considered by PEP households when establishing these groups.

Finally, more work will be required at the national level to ensure that ministries continue to provide resources sufficient for meeting the basic needs of PEP households.

# 3 SO2: Health, Hygiene and Nutrition

**SO2: Sustainable improvement in the health and nutrition of project participants**

## *3.1 Overall Findings and Recommendations*

***Overall findings***

The overall goal for SHOUHARDO is reducing stunting among children in the target population 6-24 months old by four percent. This also serves as the main indicator for SO2, along with targets of reducing wasting by five percent and low weight for age (underweight) by six percent. The project greatly exceeded expectations for reducing stunting and underweight. Stunting was reduced among children 6 to 24 months of age in the target population by an impressive 15.5 percentage points, or 30 percent since baseline, as shown in Table 15. In terms of underweight, the reduction in the target population was 21%. This was much higher than the project's goal for this indicator.

These results are especially notable because project interventions that could have accounted for this improvement have taken place for only a little over three years. For example, distribution of food rations started in August 2006 and ended in July 2009, and other SO2 interventions were phased in by mid-2007. However many SO1 activities that may have improved household food security, as well as SO3 activities intended to improve women's status, did not initiate until late 2007 or into 2008.

**Table 15: Prevalence of Stunting and Underweight among Children 6-24 Months Old**

| | Baseline | Endline | Percent difference | Percentage Point Reduction |
|---|---|---|---|---|
| Stunting | 51.9 | 36.4 | -29.9 | 15.5 |
| Underweight | 55.9 | 44.2 | -20.9 | 11.7 |

Note: Malnutrition rates calculated using the <-2 zscore NCHS cut off .

SHOUHARDO's achievements in reducing stunting are also impressive when interpreted in the context of similar programs. A paper produced by FANTA[15] compared stunting data for 16 different Title II programs ending in 2000 or 2001. These programs reduced stunting by an average of 2.4 percentage points per year. The average stunting at the baseline for these programs was 53 percent, which is comparable to the level found in the SHOUHARDO baseline. SHOUHARDO has succeeded in reducing stunting by an average of 4.3 percentage points per year.[16] By comparison, the World Vision Haiti project[17] – which also used a preventive approach

[15] Swindale, A, et al. *"The Impact of Title II Maternal and Child Health and Nutrition Programs on the Nutritional Status of Children."* Occasional Paper No. 4, USAID FANTA Project, 2004

[16] This is calculated for the total time between the baseline and endline surveys, i.e., 44 months.

[17] Menon, P., and M. T. Ruel, et al. *Prevention Is Better than Cure. Final Report of the Evaluation: Prevention or Cure? Comparing Preventive and Recuperative Approaches to Targeting Maternal and Child Health and Nutrition Programs in Rural Haiti.* Submitted to the Food and Nutrition Technical Assistance Project, AED**,** Washington, D.C. July 2007.

– reduced stunting by a total of 3.8 percentage points over three years, compared to SHOUHARDO's 15.5 percentage point reduction over a similar time period.[18]

A concerning finding is that there was no statistically significant change in the prevalence of wasting using the <-2 SD cutoff. However the fact that the endline was conducted toward the end of the lean season may have influenced this finding, which is further discussed in the next section.

Dietary diversity was another area of notable improvement: dietary diversity scores for mothers of children under two imcreased from 5.1 to 5.7, and children 6-24 months also now have a good average dietary diversity score of 5.9. These scores indicate increased consumption of foods that provide critical nutrients for child growth and health. The Title II food ration, which provided nearly two-thirds of the recommended caloric intake for pregnant and lactating women and between 175 and 250 calories per day to children 6-24 months old, also improved mothers' and children's caloric intake. While mothers in the endline sample were not significantly heavier than mothers at baseline, their increased dietary diversity score and the fact that 84 percent took Iron Folic Acid (IFA) tablets during pregnancy and 79 percent received a post-partum Vitamin A supplement indicate an overall positive change in mothers' nutritional status.

SHOUHARDO also contributed to the adoption of key healthy practices. Baseline-endline comparisons show increased feeding of children and administering of Oral Rehydration Therapy during diarrhea. More mothers are taking increased food and rest and IFA supplementation during pregnancy. All of these changes contributed to improving the nutritional status of the young child. The greatly improved use of health services for immunizations and antenatal care likely contributed indirectly to the reduction in stunting.

Improved sanitation and reduction in diarrhea were other positive results of the project. The Community Led Total Sanitation (CLTS) not only increased access to latrines, but more importantly emphasized their use and cleanliness, both of which were significantly improved over the life of the project.

***Key recommendations for future programming***

- Provide a clear understanding to VDC/SDCs of the relationship between pregnant mothers' and infants' nutritional status and the child's future learning capacity and physical productivity, in order to emphasize the future benefits of improving practices today.

- For reasons of sustainability, rename the CHVs and link them with the MOH and FW for reporting and monitoring rather than just with a PNGO. The individual will be responsible for GMP, educational sessions, home visits, referrals to health services, and keeping the VDC abreast of health and nutrition indicators for the community. Mentor MOH and FW staff in how to provide support to the community worker.

- Provide separate courtyard sessions to pregnant women and lactating mothers so that each group receives messages and skills training in areas of highest relevance. Limit the number of key messages to 12 or less (one per month) and spread the sub-topics out over two or three courtyard sessions. Revise the current materials used in the courtyard sessions, putting each picture on a separate sheet to have them large enough for the groups to see clearly.

[18] Exact comparison is not feasible due to differences in sampling design.

- Demonstration feeding sessions should be held at least monthly in all communities for mothers with children six months to two years of age. Assure that the food prepared is of the appropriate consistency and nutrient density. Have participants propose ways to create a food from what they normally cook.

-The folic acid in the IFA tablets is most critical during the first weeks of the pregnancy. Even though mothers may not be enrolled for food distribution until their fourth month of pregnancy, encourage much earlier identification, and support the women to seek ANC, TT, and particularly IFA tablets as soon as pregnancy is confirmed.

- Continue to emphasize the importance of the local community in promoting environmental health and preventing diarrheal disease. It is important that local communities define, understand and act to ensure environmental health, including the maintenance of sanitation infrastructure and safe drinking water. Future programming should strive to help communities systematically conduct and act on an assessment of environmental health status in their localities. A long-term goal would be to develop a protocol to support the development of community capacity, leaving in place a sustainable development process that local government can promote and support.

## *3.2 Findings on the Nutritional Status of Children 6-24 Months and diarrhea prevalences*

***Nutritional status***

This section discusses in fuller detail the changes in malnutrition that took place between the baseline HHN survey (February 2006) and the endline HHN survey (November 2006). Table 16 illustrates the project's good performance with relation to reducing stunting[19] and underweight.

[19] Baseline and endline distributions of the height-for-age z-scores underlying the stunting prevalences presented are given in Figure 34 of Annex 3.

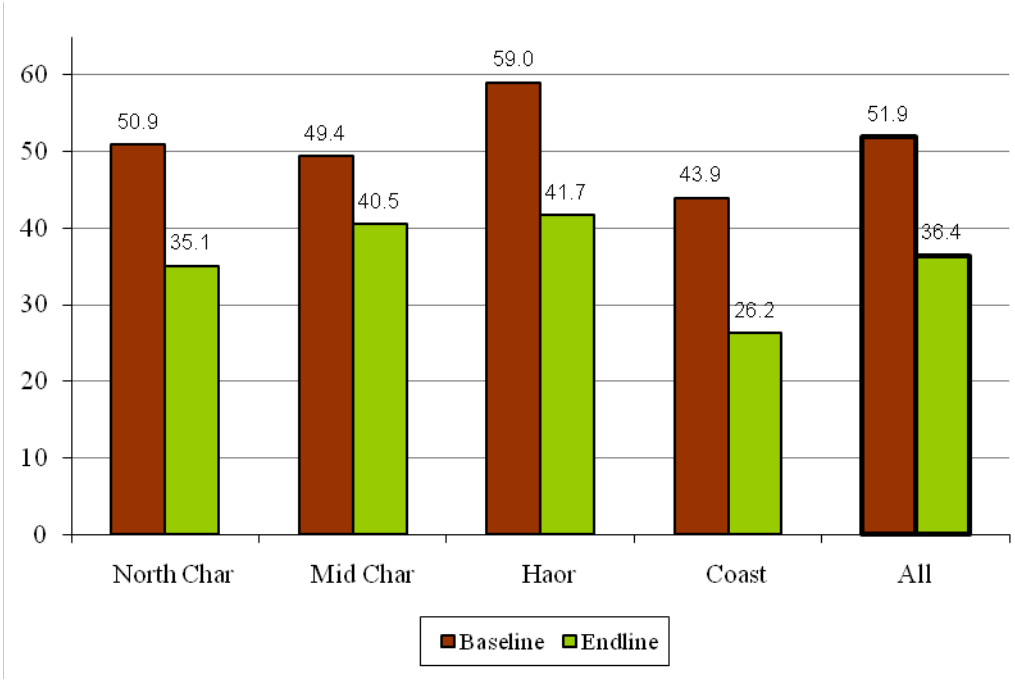
**Table 16: Prevalence of malnutrition among children 6-24 months old, at <-2 z scores using NCHS standards**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Stunting (HAZ)** | | | | | |
| **All sample children** | **51.9** | **36.4** | **-29.9** | **0.000** | ******* |
| | (50.1, 53.6) | (34.7, 38.0) | | | |
| North Char | 50.9 | 35.1 | -31.0 | 0.000 | *** |
| Mid Char | 49.4 | 40.5 | -17.9 | 0.007 | *** |
| Haor | 59.0 | 41.7 | -29.4 | 0.000 | *** |
| Coast | 43.9 | 26.2 | -40.2 | 0.000 | *** |
| Urban | 48.2 | 39.0 | -18.9 | 0.000 | *** |
| Rural | 52.0 | 36.3 | -30.3 | 0.008 | *** |
| Number of children | 3,089 | 3,266 | | | |
| **Wasting (WHZ)** | | | | | |
| **All sample children** | **15.2** | **16.0** | **5.2** | **0.029** | ****** |
| | (14.0, 16.5) | (14.8, 17.3) | | | |
| North Char | 13.6 | 15.9 | 16.9 | 0.030 | ** |
| Mid Char | 12.4 | 14.7 | 18.5 | 0.011 | ** |
| Haor | 13.1 | 14.2 | 8.2 | 0.738 | |
| Coast | 22.4 | 19.9 | -11.1 | 0.840 | |
| Urban | 14.1 | 16.3 | 15.4 | 0.088 | * |
| Rural | 15.3 | 16.0 | 4.9 | 0.134 | |
| Number of children | 3,066 | 3,209 | | | |
| **Underweight (WAZ)** | | | | | |
| **All sample children** | **55.9** | **44.2** | **-20.9** | **0.000** | ******* |
| | (54.1, 57.6) | (42.5, 45.9) | | | |
| North Char | 54.9 | 40.0 | -27.2 | 0.000 | *** |
| Mid Char | 53.2 | 41.9 | -21.2 | 0.004 | *** |
| Haor | 59.0 | 47.4 | -19.6 | 0.000 | *** |
| Coast | 54.1 | 44.6 | -17.5 | 0.015 | ** |
| Urban | 53.2 | 43.8 | -17.6 | 0.000 | *** |
| Rural | 56.0 | 44.2 | -21.1 | 0.019 | ** |
| Number of children | 3,084 | 3,321 | | | |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.
Note: Confidence intervals (95%) are reported below each sample-level malnutrition prevalence.
Sources: Baseline HHN survey and November 2009 endline HHN survey.

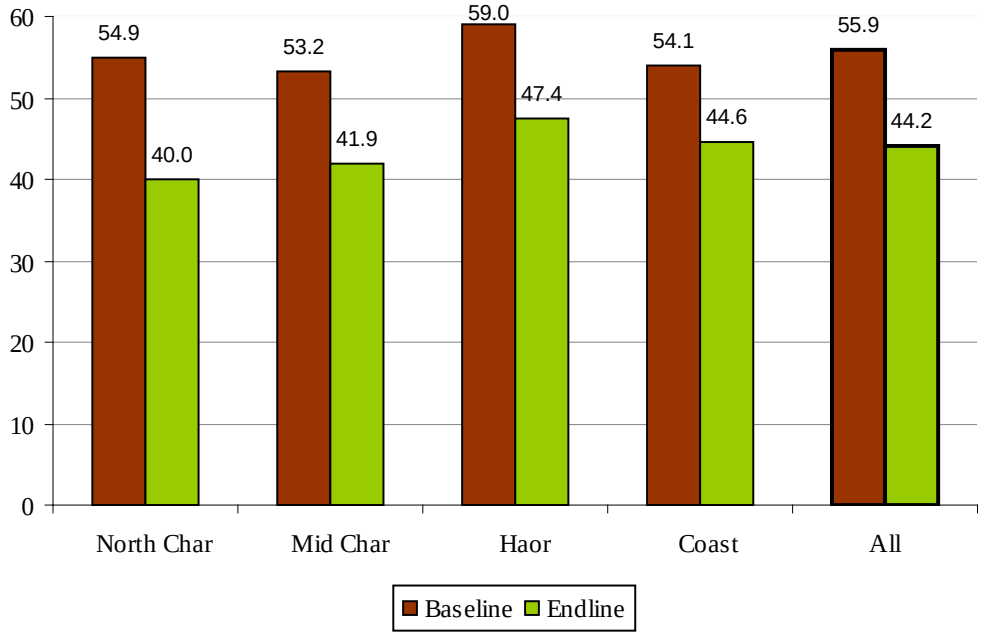
To more easily compare baseline and endline results, the changes in malnutrition prevalences for the four regions are presented graphically in Figures 15, 16 and 17. Figures 15 and 16 make clear that all regions saw health improvements in terms of reductions in prevalence of stunting and underweight. Stunting rates declined the most in the coastal region, and underweight declined the most in North Char.

**Figure 15: Prevalence of stunting among children 6-24 months old, baseline-endline comparison by region**




Sources: Baseline HHN survey and November 2009 endline HHN survey.

**Figure 16: Prevalence of underweight among children 6-24 months old, baseline-endline comparison by region**




Sources: Baseline HHN survey and November 2009 endline HHN survey.

While SHOUHARDO significantly reduced the prevalence of low weight for age, nearly half of the children in the endline sample are still moderately or severely underweight for their age. We

know that weight for age is a composite of both thin children and children who are short for their age (stunted) but not thin. A cross-tabulation of the SHOUHARDO data shown in Table 17 shows that 61 percent of the underweight children are among those found to be stunted.

**Table 17: Crosstabulation analysis for underweight and stunting and for wasting and stunting using endline HHN survey data**

| | WHZ <-2 | -2 ≤ WHZ < -1 | WHZ > -1 |
|---|---|---|---|
| Stunted <-2 z | 35.4 | 35.6 | 37.3 |
| Not stunted | 64.6 | 64.4 | 62.7 |

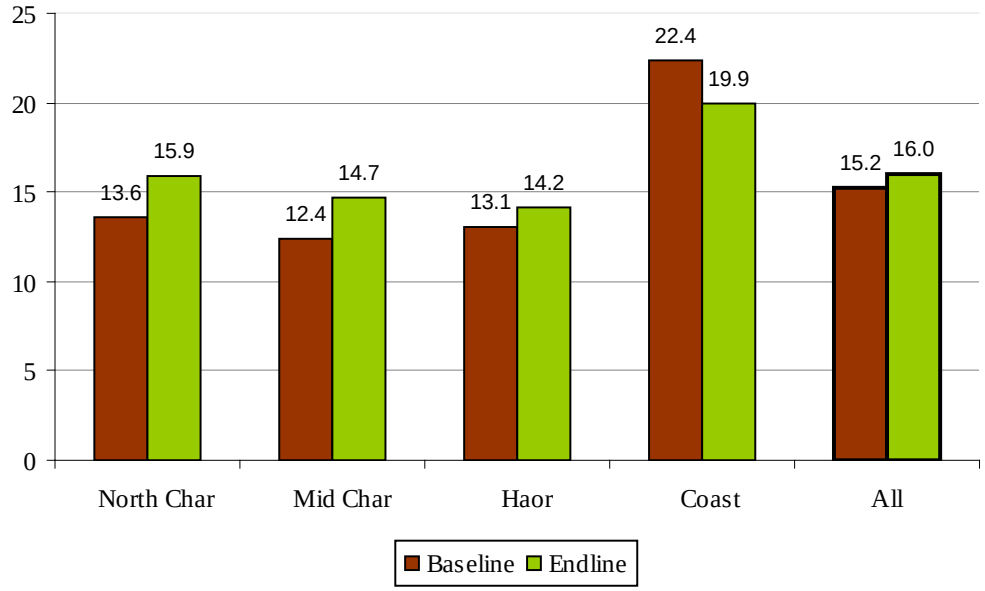
*p=.603

| | WAZ <-2 | -2 ≤ WAZ < -1 | WAZ ≥ -1 |
|---|---|---|---|
| Stunted <-2 z | 60.9 | 22.0 | 8.9 |
| Not stunted | 39.1 | 78.0 | 91.1 |

*p<.001

Of concern is the finding that there was no statistically significant change in the prevalence of wasting using the <-2 SD cutoff (see graphic presentation in Figure 17). In fact there was a slight increase in wasting prevalence in all regions except the coast, which saw a small decrease. Overall, 16 percent of the surveyed children age 6-24 months among the target population remain wasted compared to 15.2 percent at baseline. This, however, compares to 21 percent wasting found in the same socio-economic group in the 2007 DHS. The endline survey for SHOUHARDO was conducted at the very end of the lean or hungry season, which may have been a factor. The baseline was conducted in February, which is a month of good food security across much of the country.

**Figure 17: Prevalence of wasting among children 6-24 months old, baseline-endline comparison by region**




Sources: Baseline HHN survey and November 2009 endline HHN survey.

Table 18 shows that severe malnutrition decreased for both stunting and underweight while wasting was unchanged. SHOUHARDO refers the cases of severe wasting to appropriate hospitals for treatment. GOB protocol for treating severe acute malnutrition remains undefined in spite of much advocacy by CARE and others.

**Table 18: Prevalence of severe malnutrition among children 6-24 months old, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| Stunting | 20.7 | 12.4 | -40.1 | 0.000 | *** |
| Wasting | 1.6 | 1.9 | 18.8 | 0.280 | |
| Underweight | 18.0 | 10.0 | -44.4 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.
Sources: Baseline HHN survey and November 2009 endline HHN survey.
Note: Severe malnutrition is defined as z-score <-3 standard deviations from the reference median.

As shown in Table 19, there were greater nutritional gains for girls compared to boys, with the difference both statistically significant and particularly evident in the prevalence of stunting.

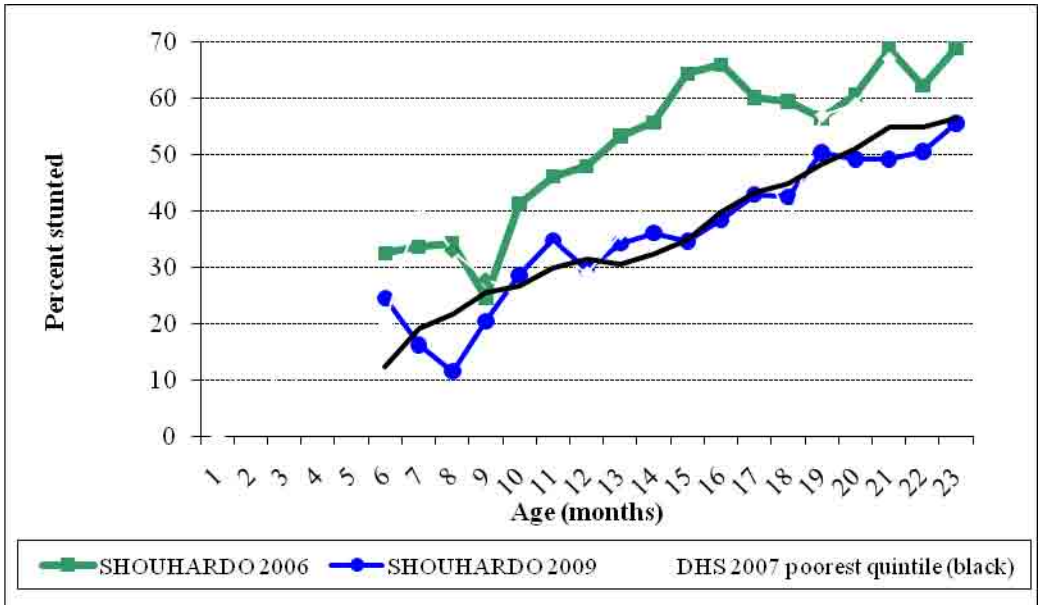
**Table 19: Prevalence of malnutrition among children 6-24 months old, baseline-endline comparison by sex of child**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Stunting** | | | | | |
| Girls | 52.3 | 33.6 | -35.7 | 0.000 | *** |
| Boys | 51.5 | 38.8 | -24.6 | 0.000 | *** |
| **Wasting** | | | | | |
| Girls | 12.7 | 14.4 | 13.5 | 0.190 | |
| Boys | 17.6 | 17.5 | -0.3 | 0.071 | * |
| **Underweight** | | | | | |
| Girls | 55.7 | 43.7 | -21.5 | 0.000 | *** |
| Boys | 56.0 | 44.6 | -20.4 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.
Sources: Baseline HHN survey and November 2009 endline HHN survey.

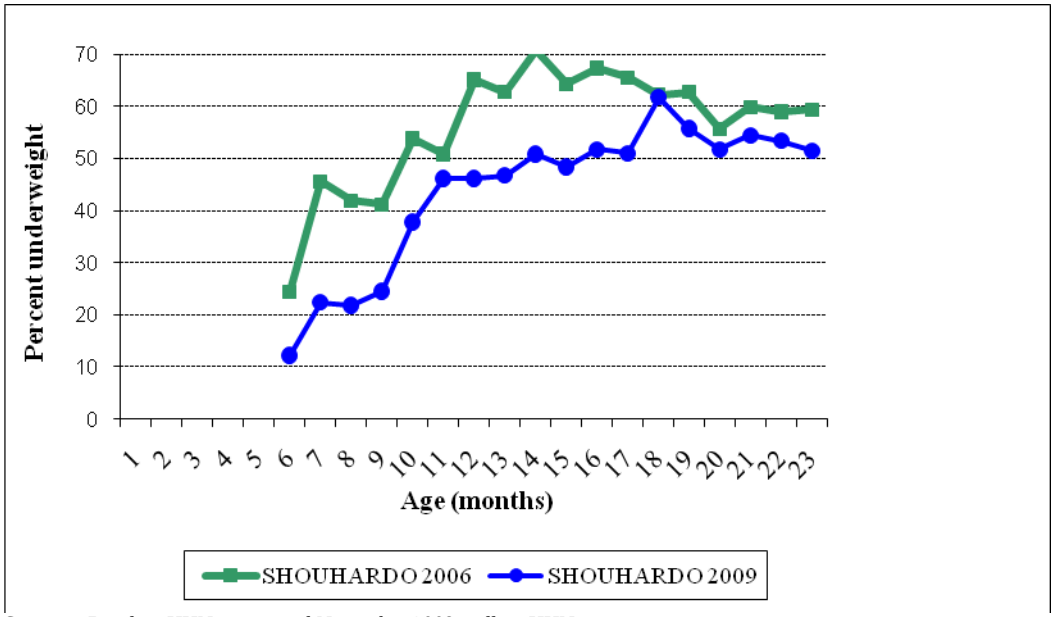
Figures 18, 19 and 20 show how malnutrition prevalences have changed from baseline to endline by age group. In the cases of stunting and underweight there were reductions for all age groups, with the possible exception of 18-23 month olds, for which underweight rates show little decline. The wasting prevalence shows minimal change across all age groups (Figure 20).

**Figure 18: Stunting prevalence among children 6-24 months, baseline-endline comparison by month of age**



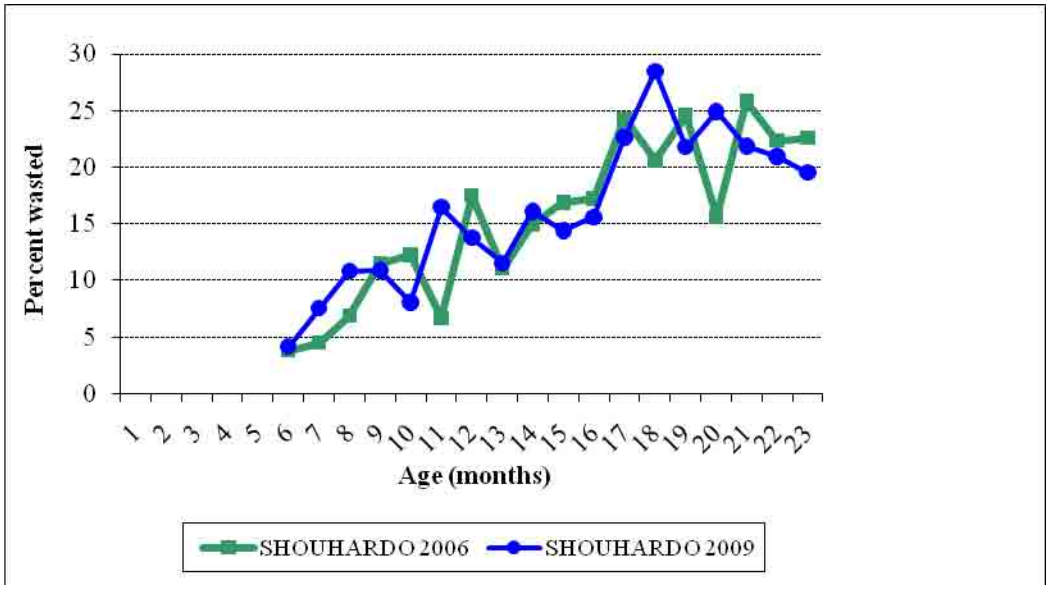

Sources: Baseline HHN survey and November 2009 endline HHN survey; Bangladesh Demographic and Health Survey 2007.

**Figure 19: Underweight prevalence among children 6-24 months, baseline-endline comparison by month of age**




Sources: Baseline HHN survey and November 2009 endline HHN survey.

**Figure 20: Wasting prevalence among children 6-24 months, baseline-endline comparison by month of age**

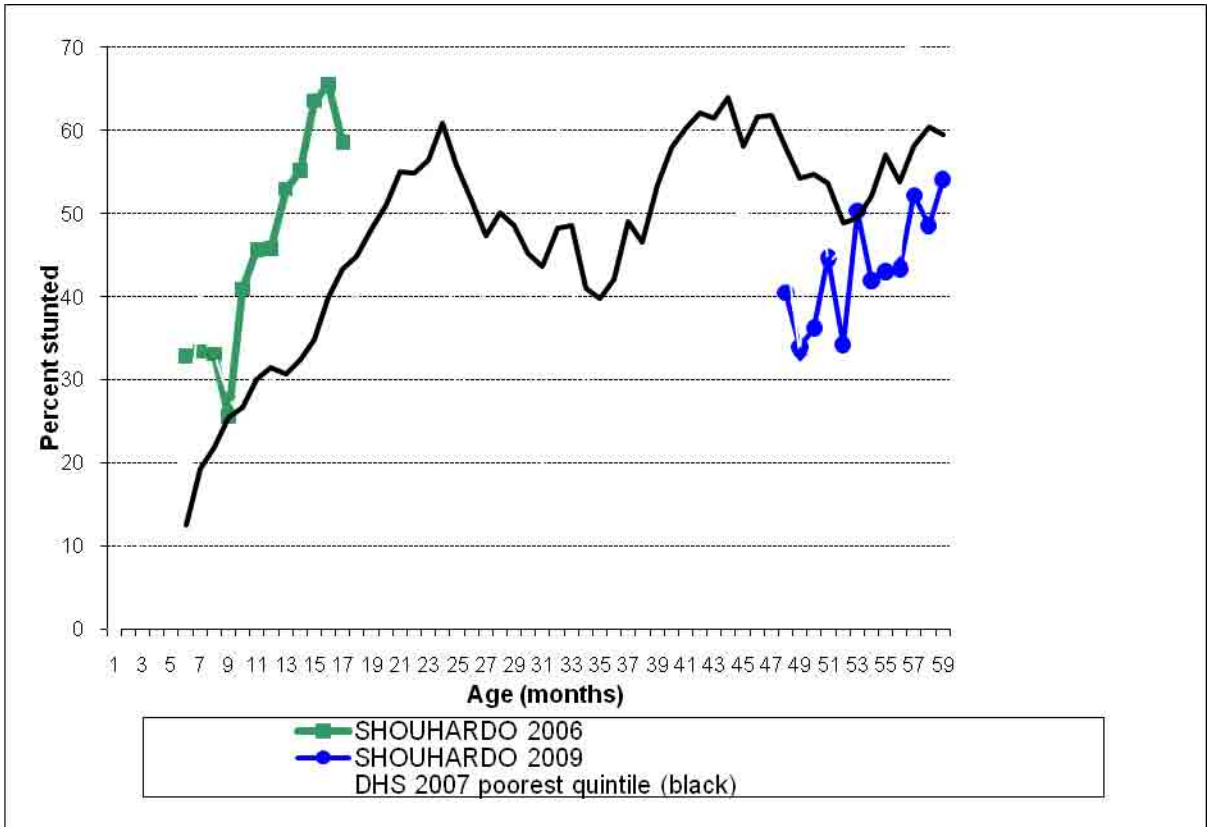



Sources: Baseline HHN survey and November 2009 endline HHN survey.

In August of 2009, CARE commissioned an anthropometric survey intended to be longitudinal, by re-measuring children who were measured in the 2006 baseline along with an equal-sized random sample of other participant children the same age. There were various limitations with the design of this study, which is described in detail in Annex 2. First, the study did not satisfy the project outcome indicator, which specifies children 6-24 months of age (the survey measured children 36-59 months). Secondly, it is not possible to directly compare malnutrition rates between different age groups, that is, between children at a younger age and children at an older age.

However the data collected are useful for comparing the status of the children at baseline and endline to the Bangladesh Demographic and Health Survey (BDHS) data for children of the same ages, as is done for stunting in Figure 18 below. The DHS data presented are for the poorest quintile of households in the country.

**Figure 21: Comparison of baseline and endline SHOUHARDO stunting prevalence with DHS 2007 prevalence for the poorest quintile of Bangladeshi households**




Sources: Baseline HHN survey, August 2009 endline child nutritional status survey and Bangladesh Demographic and Health Survey 2007.

It is important to note that stunting usually increases dramatically from about 6 to 24 months and remains at its highest prevalence up to 60 months. Thus we would normally expect to see an increase in stunting for the group of children examined from baseline to endline. Instead there has been a slight decline, from 46 to 43 percent (see Annex 3, Tables 54 and 55 for details). A higher percentage of children of families targeted by SHOUHARDO were stunted at baseline than those sampled in the BDHS at the same age; stunting prevalence was lower than the BDHS sample by the endline. This implies that the SHOUHARDO project's interventions have been successful in preventing the normal increase in stunting seen among 0-5 year-old Bangladeshi children as they get older.

These results must be interpreted with caution: any children 18 months or older at the baseline were too old by the time food distribution started to have benefited from a food ration; economic and food security interventions began to be implemented with their families even later. In any case, it is generally believed by the scientific community that stunting incurred before two years of age cannot be reversed.

***Diarrhea prevalence***

The change in prevalence of diarrhea is another successful outcome, with a 60 percent reduction from the baseline to the endline survey. Both surveys were conducted in the dry season, so the

results shown below in Table 20 were not affected by seasonality. The change in this indicator may reflect hygiene education, the Community-Led Total Sanitation approach, and increased access to and improvements in water and sanitation infrastructure, which will be described under SO 2.2. Improvements in diarrhea prevalence were most dramatic in Mid Char, with an 81 percent decrease in the percentage of children in the target age group experiencing diarrhea in the two weeks prior to the survey. Improvements were more marked in rural as compared to urban areas (a 61 percent decrease in diarrhea prevalence in rural areas, versus a 48 percent decrease in urban ones).

**Table *20*: Percent of children 6-24 months old with diarrhea in the last two weeks**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| All | 22.9 | 9.1 | -60.1 | 0.000 | *** |
| North Char | 27.6 | 8.7 | -68.4 | 0.000 | *** |
| Mid Char | 19.9 | 3.8 | -80.8 | 0.000 | *** |
| Haor | 21.3 | 10.7 | -49.7 | 0.000 | *** |
| Coast | 24.0 | 11.6 | -51.8 | 0.000 | *** |
| Urban | 19.9 | 10.5 | -47.5 | 0.000 | *** |
| Rural | 23.0 | 9.1 | -60.5 | 0.000 | *** |
| Number of children | 3,092 | 3,356 | | | |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

## *3.3 SSO2.1 Health, Hygiene and Nutrition (HHN)*

***SSO 2.1: Targeted households have adopted appropriate health, hygiene and nutrition practices***

The final SO2.1 HHN strategy consisted of the following components:

- Growth monitoring and promotion
- Courtyard sessions and Demonstration Feeding sessions to promote behavior change
- Referrals to service providers and home visits by the community health volunteer (CHV)
- Linkages to health services or to bring key health providers to the community
- Birth planning and community emergency funds for obstetric and other emergencies
- Provision of food commodities to improve dietary intake

The components were divided between two intermediate results, as described below. (The original IR 2.2 relating to Early Childhood and Development Centres is discussed under SO3.) When combined with the SHOUHARDO interventions in SO1, SO3, and SO4, these components were appropriate choices for a preventive model to improve the health and nutrition status of the target population.

The strategy ultimately implemented to achieve SO2.1 underwent some adaptation from what was originally proposed. While CARE did not follow through to implement PD/Hearth to

promote behavior change, they did adopt the concept of positive deviance for health across other SOs, for example identifying farmers already adopting new practices and having them teach others. In some villages, SHOUHARDO implemented Demonstration Feeding Sessions (DFS) that followed the "hearth" concept, that is, serving as a means for mothers to learn together to practice active feeding, good hygiene, and preparation of affordable locally available foods into appropriate meals for very young children. The participating mothers contributed all the food and materials used in these sessions, held once or twice a month. During the final evaluation, mothers repeatedly expressed their appreciation for the DFS and the learning, and their desire to continue the sessions.

The DAP proposal indicated that growth monitoring and the early childhood development centers (ECCDs) would be integrated, with the ECCDs serving as a focal point for other educational activities directed at pregnant women and young mothers. In actuality, the ECCDs component shifted to SO3, and will be further discussed in detail in that section of this report. There has been little integration with SO2 activities, other than to teach hygiene to the participating children.

A fortuitous change in strategy occurred when CARE decided to offer MCHN food rations to all pregnant women and lactating women with children under two rather than only to families with malnourished children. Thus, the ration of wheat, oil, and lentils became a preventive ration, providing around 1800 calories per day, rather than a recuperative ration. The rations also served as an incentive for families to participate in key activities and to adopt specific health care practices. The recipients were required to complete three prenatal consults, tetanus toxoid (TT) vaccination, birth planning, post-natal care, and immunizations for their child, and they participated in monthly growth monitoring as well as either two courtyard sessions or one courtyard session and one demonstration feeding session per month.

*IR2.1.1: Members of 400,000 HHs (pregnant women, lactating mothers and adolescent girls) and opinion leaders of community trained and able to understand health, hygiene, safe motherhood and nutrition practices and strengthen linkages with health service providers*

The IR above mentions only training with an outcome of understanding, and strengthening linkages with service providers, neither of which would necessarily achieve the sustained behavior change of SSO2.1 in health, hygiene and nutrition practices. Project activities obviously went farther than this toward effecting behavior change as can be seen in the following results, which were equally positive in both slum and rural areas.

### 3.3.1 Caring Practices, Immunization and Dietary Diversity of Children 6-24 Months

As shown in Table 21 completion of three antenatal care (ANC) visits increased by 258% over baseline. CARE Bangladesh drew on their extensive experience promoting maternal health to accomplish this level of adoption of ANC. This required building linkages with health service providers and having communities define and solve barriers. One example of this is the construction of a long bamboo bridge, which enables women living on a *char* to easily cross to the village where the health sub-center is located. However, the most significant increase was among the urban population, where access was not as much of a barrier as socio-cultural issues.

Other measures of antenatal care also demonstrated dramatic improvements. The percent of mothers taking more food than usual during pregnancy increased 745 percent across the entire sample, with even more striking improvements in Haor and Coast Regions (over 1100 percent

increases) and in rural areas. The percent taking more daytime rest during pregnancy also had significant increases, ranging from a 28 percent increase in North Char to 156 percent in the Coast.

**Table 21: Selected indicators of antenatal care for mothers of children 6-24 months old, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent having at least 3 antenatal visits during last pregnancy** | | | | | |
| All | 16.4 | 58.6 | 258.0 | 0.000 | *** |
| North Char | 27.5 | 60.1 | 118.7 | 0.000 | *** |
| Mid Char | 14.8 | 48.4 | 226.7 | 0.000 | *** |
| Haor | 12.1 | 60.0 | 394.2 | 0.000 | *** |
| Coast | 14.9 | 63.7 | 328.5 | 0.000 | *** |
| Urban | 30.9 | 81.4 | 163.2 | 0.000 | *** |
| Rural | 15.8 | 57.8 | 265.9 | 0.000 | *** |
| **Percent taking more food than usual during last pregnancy** | | | | | |
| All | 6.4 | 53.7 | 744.5 | 0.000 | *** |
| North Char | 7.7 | 46.5 | 501.1 | 0.000 | *** |
| Mid Char | 12.0 | 54.0 | 350.2 | 0.000 | *** |
| Haor | 3.3 | 54.0 | 1516.0 | 0.000 | *** |
| Coast | 4.9 | 59.2 | 1107.9 | 0.000 | *** |
| Urban | 10.9 | 49.9 | 359.2 | 0.000 | *** |
| Rural | 6.2 | 53.9 | 770.9 | 0.000 | *** |
| **Percent taking more daytime rest than usual during last pregnancy** | | | | | |
| All | 25.2 | 45.9 | 82.0 | 0.000 | *** |
| North Char | 33.8 | 43.2 | 27.8 | 0.000 | *** |
| Mid Char | 29.4 | 47.0 | 59.9 | 0.000 | *** |
| Haor | 22.6 | 46.1 | 103.7 | 0.000 | *** |
| Coast | 18.3 | 47.0 | 156.6 | 0.000 | *** |
| Urban | 23.7 | 42.4 | 78.7 | 0.000 | *** |
| Rural | 25.3 | 46.1 | 82.0 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

Note: The number of women for whom indicators are calculated are:

Percent having at least 3 antenatal visits: baseline 3,092; endline 3,356

Percent taking more food: baseline 3,087; endline 3,355

Percent taking more daytime rest: baseline 3,085; endline 3,356.

Table 22 shows changes in selected types of caring practices. The percentage of mothers breastfeeding at 18-24 months was already high at baseline, at 90 percent. The increases seen in this indicator are small. Achieving full immunization by one year old showed a substantial increase (22 percent) across the sample and will be discussed further per a more detailed graphic presentation in the next figure. The percent of children 12 to 24 months old having received Vitamin A supplementation during the previous six months increased from 38 percent across the sample, from 63 to 86 percent, considered very good coverage. The highest increase in Vitamin A supplementation was seen in the coastal region, and there was an especially marked positive change in rural areas (38 percent increase).

**Table 22: Selected indicators of caring practices for children 6-24 months old, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent still breastfed at 18-24 months** | | | | | |
| All | 89.4 | 92.7 | 3.7 | 0.016 | ** |
| North Char | 94.5 | 95.6 | 1.1 | 0.192 | |
| Mid Char | 91.7 | 97.7 | 6.6 | 0.004 | *** |
| Haor | 87.2 | 92.3 | 5.8 | 0.146 | |
| Coast | 85.9 | 86.5 | 0.7 | 0.508 | |
| Urban | 89.5 | 94.0 | 5.0 | 0.111 | |
| Rural | 89.4 | 92.6 | 3.6 | 0.053 | * |
| **Percent fully immunized by one year old** | | | | | |
| All | 68.9 | 84.0 | 22.0 | 0.000 | *** |
| North Char | 65.3 | 80.1 | 22.6 | 0.000 | *** |
| Mid Char | 67.7 | 80.6 | 19.0 | 0.000 | *** |
| Haor | 71.7 | 88.1 | 22.9 | 0.000 | *** |
| Coast | 68.3 | 83.9 | 22.8 | 0.000 | *** |
| Urban | 72.0 | 92.5 | 28.6 | 0.000 | *** |
| Rural | 68.7 | 83.7 | 21.7 | 0.000 | *** |
| **Percent receiving a Vitamin A capsule in the last six months** | | | | | |
| All | 62.6 | 86.0 | 37.5 | 0.000 | *** |
| North Char | 61.6 | 79.4 | 28.9 | 0.000 | *** |
| Mid Char | 56.7 | 81.6 | 43.9 | 0.000 | *** |
| Haor | 65.5 | 87.5 | 33.4 | 0.000 | *** |
| Coast | 63.5 | 93.1 | 46.7 | 0.000 | *** |
| Urban | 74.3 | 88.7 | 19.4 | 0.000 | *** |
| Rural | 62.1 | 85.9 | 38.3 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

The number of children for whom indicators are calculated are:

Percent still breastfed at 18-24 months: baseline 1,082; endline 1,118

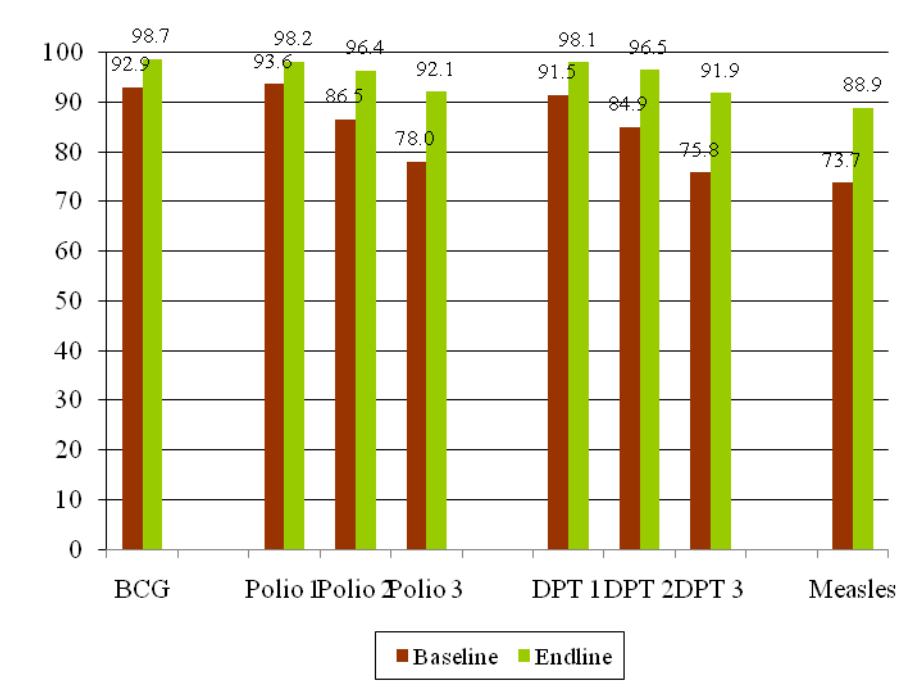
Percent fully immunized by one year old: baseline 2,055; endline 2,178.

Percent receiving a Vitamin A capsule in the last 6 months: baseline 2,047; endline 2,218.

Sources: Baseline HHN survey and November 2009 endline HHN survey.

The following graph (Figure 22) shows the comparison between baseline and endline for immunization coverage of children who had completed one year of age. It is only after a child reaches this age that we can ascertain complete coverage, since immunizations take place on a schedule throughout the first year of life. Data for this indicator was taken from child vaccination cards, which are in the family's possession since they were required to be presented every month during ration distribution. Eighty-four percent of children were fully immunized compared to 69 percent at baseline. Gains of about 15 percent were seen completing vaccinations for the Diphtheria Pertussis Tetanus series, measles and polio.

**Figure 22: Percent of children receiving recommended vaccinations by one year old, baseline-endline comparison**




Achieving such high rates of immunization coverage, particularly for DPT3 and measles, is truly an accomplishment. This is a testament not only to the role of community-level tracking of each child, but also to the linkages built with the government health services. While national coverage rates have increased considerably in recent years to 82 percent, SHOUHARDO accomplished even higher levels of coverage in the areas of the country with some of the most limited access to health services.

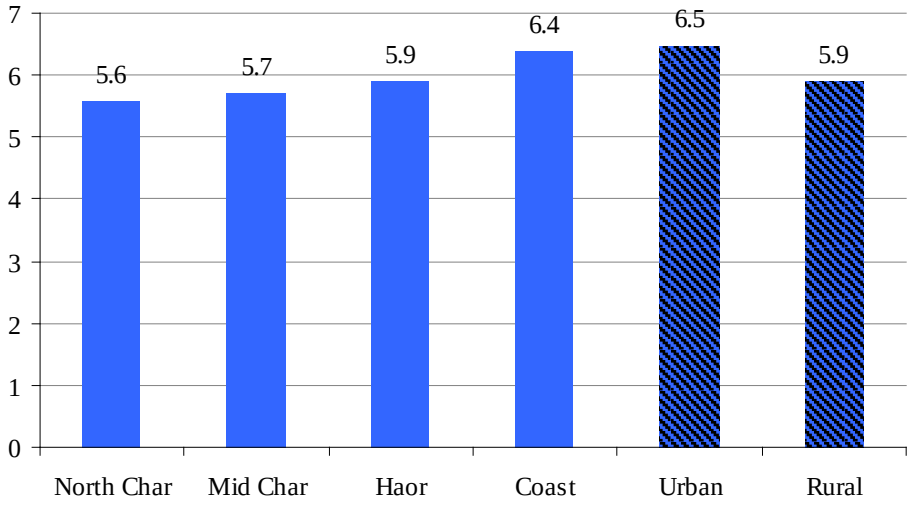
The CHV monitored the behaviors above on a monthly basis when she reviewed maternal and child health cards to assure compliance before the mother received her food ration. Therefore, receipt of the food was a major incentive in assuring that families adopted the behaviors discussed above. How well sustained the behavior change will be without the food incentive will need to be investigated later.

Through the baseline and endline surveys, SHOUHARDO measured some other behavior changes that were not monitored by the CHV and not linked to eligibility for food in the minds of the mothers. While these behavior changes are not as dramatic as those above, they are all significantly improved.
Improvements were also seen in various care practices for children age 6-24 months with diarrhea, particularly in terms of the increase from baseline to endline in the percentage given more to eat (368 percent increase across the sample) and the percent given oral rehydration therapy (61 percent increase). The latter change was especially evident in rural areas, where the percentage of children 6- 24 months given oral rehydration increased from 57 percent at baseline to 92 percent at endline. Interestingly, the rural-urban contrast was the opposite in terms of the percent given more to drink (a 51 percent increase in urban areas compared to only an 11 percent increase in rural ones). Details are provided in Annex 3 in Table 56.

In addition, substantial increases were seen in the percentage of women taking more food than usual during the last pregnancy, which increased from six percent to 54 percent from baseline to endline, and in the percentage taking more daytime rest than usual during the last pregnancy, which increased from 25 to 82 percent.

Dietary diversity scores for children 6-24 months of age were available only for the endline survey. These are shown in Figure 23 below. Scores for the coastal region were slightly above average, and there was slightly more diversity in urban areas than rural. Detail regarding consumption by food group in the previous 24 hours is found in Table 57 in the Annex 3. Key observations of these data are that the most commonly consumed food in this period was cereals, with over 90 percent of children 6-24 months eating cereals, followed by foods with fats (67 percent), "other vegetables" (60 percent), dark green leafy vegetables (52 percent), and fish and seafood (47 percent).

**Figure 23: Dietary diversity score of children 6-24 months, by region and urban/rural area**




Note: The sample mean dietary diversity score is 5.9.
Source: November 2009 endline HHN survey.

### 3.3.2 Promoting Behavior Change

The community health "volunteer" served as the principal change agent and also had some role in assisting the Project Implementation Committee with food distribution. Awareness was raised among other community members, including those forming the VDC or SDC, religious leaders, and TBAs, but none of these others was specifically tasked with promoting family-level behavior change. CHVs have at least primary school education and are from the village where they work. Those who started early in the project received a four-day training, but others who entered later did not have formal training. They learned from another CHV or through mentoring by PNGO staff. Capacity of CHVs was quite variable, as indicated by brief assessment by the evaluation team and by the thematic study of the HHN component commissioned by CARE earlier in 2009. The variation was due not only to training, but also to the level and kind of technical support received from the PNGO.

A woman in one of the slum areas in Chittagong was holding a nice fat little girl, about one year old. When asked about what participation in the program did for the health of the children, she explained that she had a boy also, who had been malnourished from birth. Although she is now feeding him properly, he is still more prone to illness and is not as "strong" as her new baby. She said she just needs to look at the two to see the impact of the program.

When asked what attitude had changed with her family, she said, "Before, these were my children - now they are our children." She said that the husband and mother-in-law now shared equal responsibility in making sure that sufficient food went to her (as a lactating mother), and while trying to increase the food for the son, the right complementary foods were available for her young daughter.

The CHVs convened educational sessions, known as Courtyard Sessions, for all women in the target population who were pregnant or had a child under age two. The sessions were held once or twice a month in the community. CARE selected twenty topics to be presented one at a time at Courtyard Sessions with the idea that each woman would hear each topic at least three times during the two years she was participating. The messages and educational material were drawn from other CARE projects, which is good, but messages were not necessarily selected based on audience needs, for example, the list contains messages on avian flu and types of diarrhea. Of more concern, is the amount of information or sub-topics presented in many of the sessions, which may have been too much for participants to internalize. The educational materials consisted of charts that were possibly more appropriate for individual use, as their small size did not make them useful in the large group settings. In spite of these critiques, the Courtyard Sessions seemed to succeed in transferring considerable knowledge to the women.

In some villages and slums, SHOUHARDO initiated Demonstration Feeding Sessions (DFSes) as an alternative to one of the monthly Courtyard Sessions. (DFSes were never implemented in North Char and were implemented in only 20 to 25 percent of the communities in other project areas.) As described earlier, the DFS engaged the mothers in active learning and in practicing new behaviors and skills. Women enjoyed the DFSes for the social aspect and noted that children learned to eat better in the presence of peers. Since all the inputs for the DFS are provided by the mothers, this is an activity that can be perpetuated by the community with very little oversight. The objective would be to include all new, young mothers for a few months when their children reach the age for introduction of complementary foods. Besides learning what and how to feed the child, the camaraderie creates a support group where

**Themes of Awareness Raising Campaigns**

- Sanitation, stopping open defecation
- Arsenic in drinking water
- Personal hygiene
- Utilization of food ration by the intended beneficiaries
- Monimix for micronutrients

the new mothers can ask questions and get advice on health and nutrition concerns from the experienced mothers who participated in the project.

The CHVs conducted growth monitoring on a monthly basis. Initially, they took both weight and height measurements, but since measuring height accurately is so challenging, this was dropped in response to an MTE recommendation. The current evaluation found inconsistency in the method used for weighing small children and that CHVs were not well-prepared to provide counseling related to observed growth faltering. However, mothers understood the growth charts well and seemed motivated by knowing their child's nutritional status. The CHVs were good at plotting on the growth charts and record keeping, but the different PNGOs had provided different formats for reporting data. This raises concerns about the reliability of the monitoring data collected from the CHVs. Overall, growth monitoring and promotion can be a very useful mechanism for motivating families and communities to eliminate malnutrition, as has been shown in other Title II programs in other parts of the world. With some additional training and guided counseling materials, community volunteers could easily maintain a GMP program with minimal support from a PNGO or government health staff. The challenge is motivating the mothers to participate.

### 3.3.3 Building Linkages

One of the most obvious barriers to adopting better health care-seeking practice is access to health services. To address this barrier, the project mapped all available health services in and around the target villages. The mapping was up-dated after the mid-term evaluation to become a working document in creating the needed linkages. In most cases, the linkages were with government health services, but where these did not exist or were not staffed, SHOUHARDO identified NGO services. SHOUHARDO provided sensitization training to the health workers to orient them to being pro-poor in their service delivery.

For their part, the health workers were pleased to have the mapping and project census because they did not have accurate information on the population, particularly those families who relocated part of the year due to flooding. Having the VDC organization as their point of contact helps the health workers have an entrée into the village, and someone to assist with mobilizing the community for immunizations, etc. They are especially appreciative of having the centers from which to offer services on designated days.

In Bangladesh, performance of health workers is evaluated, in part, by coverage they achieve, for example number of women receiving prenatal care, children immunized, family planning users, etc. In the project villages where linkages were established and health workers now visit on a regular schedule to deliver services, they have greatly increased coverage. This is a significant incentive for them to continue service delivery to the village.

Table 23 shows changes in access to and use of health services. The data suggest that overall there was little change in access to or use of health services, however it should be noted that both access and usage rates were already quite high at the baseline – at least 79 percent of households and usually much higher. For the sample as a whole, improvements (increases) in access and utilization did not exceed six percent; the improvements, though small, were more evident in rural areas than urban ones. The region with more pronounced improvements in both indicators was Haor, with an 11 percent increase in access to health services as well as in utilization. Haor also had the lowest baseline figures, so the notability of the increases for this region is not necessarily unusual.

**Table 23: Percent of households with access to and who use health services, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent with access to health services b/** | | | | | |
| All | 87.1 | 92.1 | 5.7 | 0.000 | *** |
| North Char | 90.4 | 97.2 | 7.5 | 0.000 | *** |
| Mid Char | 84.0 | 94.6 | 12.6 | 0.000 | *** |
| Haor | 79.3 | 87.7 | 10.6 | 0.000 | *** |
| Coast | 98.6 | 92.3 | -6.5 | 0.000 | *** |
| Urban | 99.7 | 97.6 | -2.1 | 0.001 | *** |
| Rural | 86.5 | 91.9 | 6.3 | 0.000 | *** |
| **Percent having access that actually use health services** | | | | | |
| All | 93.6 | 98.8 | 5.5 | 0.000 | *** |
| North Char | 96.7 | 98.7 | 2.0 | 0.091 | * |
| Mid Char | 97.0 | 99.1 | 2.2 | 0.008 | *** |
| Haor | 88.3 | 98.2 | 11.2 | 0.000 | *** |
| Coast | 93.0 | 99.4 | 6.9 | 0.000 | *** |
| Urban | 98.2 | 98.7 | 0.5 | 0.442 | |
| Rural | 93.3 | 98.8 | 5.8 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

b/ "Health services" refer to primary health services.

Note: The number of households for whom indicators are calculated are:

Percent with access to health services: baseline 3,075; endline 3,342

Percent that use health services: baseline 2,679; endline 3,093.

While SHOUHARDO was not able to achieve this direct service delivery to every community, the requirements participating families had to fulfill in order to receive food rations served to motivate families to overcome real or perceived barriers to access health services on their own. Some VDCs or savings groups also got involved by establishing special funds to help with transport costs, particularly for medical emergencies. In other communities, infrastructure such as bridges built by the community, resolved the issue of access to health services.

Health sub-centers are chronically understaffed, and in the remote areas targeted by the project, often suffer from frequent staff turn-over. It is unlikely the health staff will assume any of the community activities such as growth monitoring or the courtyard sessions in the short term. VDCs will have to make a concerted effort to maintain the linkages and advocate for fixed-day service delivery to the community where that has now been established.

### 3.3.4 Adult Health

SHOUHARDO's intent was not just to improve the health and nutrition status of children, but rather to impact health of all family members. CARE Bangladesh had data from their livelihood assessments prior to the design of SHOUHARDO showing that family members lost an average of eight working days per month due to illness and this impacted their economic security, and hence, their food security. Furthermore, the adults weakened by illness and poor nutrition were thought to be less productive, particularly in agricultural endeavors. While SHOUHARDO did not have a specific outcome indicator to measure improved health and nutrition status of adults, we do have baseline and endline comparisons for various indicators for adult women showing positive behavior changes, which should lead to improved health outcomes.

The percentage of mothers of children 6-24 months practicing various hand washing behaviors was one area of improvement. Washing hands before food preparation saw the greatest positive change, increasing from 61 percent of the sample at baseline to 94 percent in the endline; the second-highest increase in target hand washing behavior was in washing before feeding children (74 percent at baseline versus nearly 100 percent at endline). The significantly improved hand washing behaviors of women, who are those most often responsible for food preparation, will help to reduce the incidence of diarrhea among all family members. (Detailed regional and urban/rural breakdowns are shown in Table 56 in Annex 3.

**Table 24: Hand washing behaviors of mothers of children 6-24 months, baseline-endline comparison (summary)**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent washing hands before food preparation** | | | | | |
| | 60.9 | 94.2 | 54.8 | 0.000 | *** |
| **Percent washing hands before eating** | | | | | |
| | 93.7 | 99.9 | 6.5 | 0.000 | *** |
| **Percent washing hands before feeding children** | | | | | |
| | 73.6 | 99.8 | 35.5 | 0.000 | *** |
| **Percent washing hands after defecation** | | | | | |
| | 97.2 | 100.0 | 2.9 | 0.000 | *** |
| **Percent washing hands after cleaning baby's bottom** | | | | | |
| | 79.9 | 99.8 | 24.9 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***) level.

Note: The number of women for whom indicators are calculated is: baseline 3,092; endline: 3,356.

Significant improvements in dietary diversity scores (DDS) were also found in the August endline survey among a random sample of households, which was not limited to those with children under two years of age. Those results confirm the findings shown here for mothers of children under two. The DDS for the sample overall improved by about 13 percent, with a more larger improvement for rural areas compared to urban. The regions of North Char and the Coast had particularly marked improvements, both about 18 percent.

**Table 25: Dietary diversity score for mothers of children 6-24 months old, baseline-endline comparison**

| | Baseline | Endline | Percent difference* | p-value for difference a/ | |
|---|---|---|---|---|---|
| All | 5.1 | 5.7 | 12.7 | 0.000 | *** |
| North Char | 4.6 | 5.4 | 17.7 | 0.000 | *** |
| Mid Char | 5.2 | 5.5 | 5.9 | 0.000 | *** |
| Haor | 5.2 | 5.7 | 10.7 | 0.000 | *** |
| Coast | 5.3 | 6.2 | 17.6 | 0.000 | *** |
| Urban | 5.9 | 6.4 | 7.9 | 0.000 | *** |
| Rural | 5.1 | 5.7 | 12.9 | 0.000 | *** |
| Number of mothers | 3,092 | 3,356 | | | |

* Slight differences due to rounding.
a/ Stars indicate a statistically significant difference at the 1% (***), 5% (**) or 10% (*) levels.
Sources: Baseline HHN survey and November 2009 endline HHN survey.

The improved dietary diversity of women is expected to lead to improving their health status as well as birth outcomes.

The Nutritional Surveillance Project Bulletin of 2006[20] reported that nearly half of all adult women in Bangladesh have iron deficiency anemia. For the women, anemia results in fatigue, reduced mental concentration, and lowered resistance to illness. The estimated loss in productivity may be almost eight percent of the Gross Domestic Product. SHOUHARDO collaborated with local health services for IFA supplementation for women during pregnancy. As shown in Table 26, the endline data indicate that 81 percent of women took IFA during the last pregnancy, compares to only 28 percent in the baseline survey – a significant improvement. This reflects quite substantial improvements particularly in regions that had fairly low rates of taking IFA in the baseline (ranging from 21 to 29 percent): Mid Char, Haor and Coast. The increase was also very marked in rural areas, where the percentage of mothers taking IFA during pregnancy nearly doubled over the period.

[20] Helen Keller International, Nutritional Surveillance Project Bulletin No. 6, 2006

**Table 26: Pre-natal and post-natal vitamin supplementation among mothers of children 6-24 months old, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent taking iron/folic acid during last pregnancy** | | | | | |
| All | 27.8 | 80.9 | 191.3 | 0.000 | *** |
| North Char | 44.6 | 83.3 | 86.7 | 0.000 | *** |
| Mid Char | 20.8 | 74.7 | 259.7 | 0.000 | *** |
| Haor | 21.7 | 78.5 | 261.9 | 0.000 | *** |
| Coast | 29.1 | 87.5 | 200.9 | 0.000 | *** |
| Urban | 45.1 | 90.8 | 101.4 | 0.000 | *** |
| Rural | 27.1 | 80.5 | 197.2 | 0.000 | *** |
| **Percent taking iron/folic acid for at least 6 months during last pregnancy b/** | | | | | |
| All | 5.6 | 6.3 | 12.2 | 0.155 | |
| North Char | 3.8 | 8.3 | 115.6 | 0.007 | *** |
| Mid Char | 10.6 | 4.3 | -59.4 | 0.066 | * |
| Haor | 4.2 | 1.7 | -58.1 | 0.089 | * |
| Coast | 6.4 | 12.3 | 92.2 | 0.004 | *** |
| Urban | 5.2 | 5.7 | 8.2 | 0.853 | |
| Rural | 5.6 | 6.3 | 12.2 | 0.161 | |
| **Percent taking Vitamin A supplement within 1.5 months after delivery** | | | | | |
| All | 9.7 | 79.0 | 712.2 | 0.000 | *** |
| North Char | 10.6 | 76.6 | 625.9 | 0.000 | *** |
| Mid Char | 6.3 | 80.5 | 1183.2 | 0.000 | *** |
| Haor | 9.2 | 75.1 | 718.5 | 0.000 | *** |
| Coast | 12.9 | 85.8 | 563.6 | 0.000 | *** |
| Urban | 17.4 | 80.5 | 362.4 | 0.000 | *** |
| Rural | 9.4 | 78.9 | 737.8 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

b/ Indicator only calculated for mothers reporting they had taken iron/folic acid during the pregnancy.

Note: The number of women for whom indicators are calculated are:

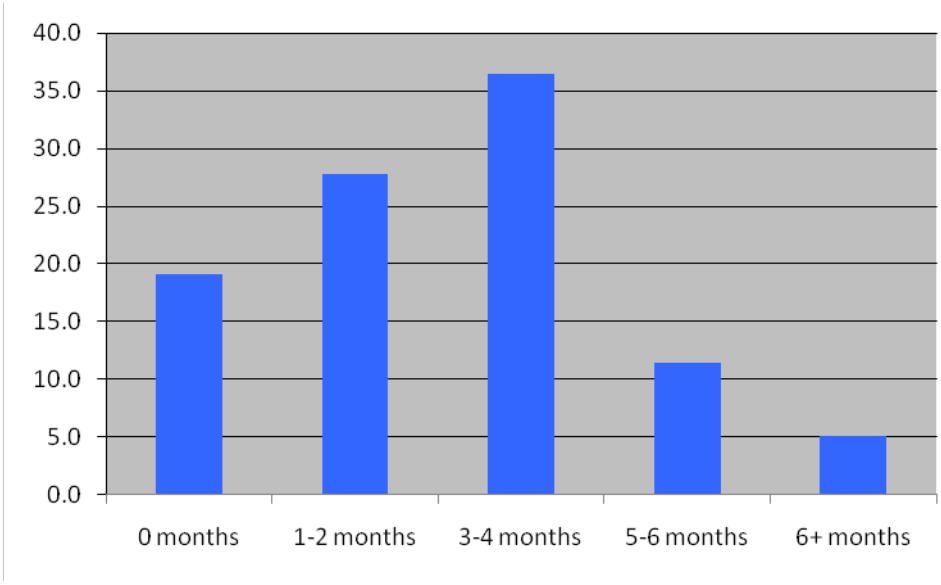
Percent taking iron/folic acid: baseline 3,081; endline 3,356

Percent taking iron/folic acid for at least 6 months: baseline 848; endline 2,710

Percent taking Vitamin A supplement within 1.5 months after delivery: baseline 3,080; endline 3,356.

Perhaps most importantly is that over 35 percent of mothers in the endline sample took IFA supplementation for three to four months, which is a sufficient period of time to have an impact on the anemia. Figure 24 shows further detail regarding the duration of IFA supplementation.

**Figure 24: Percent of mothers taking iron/folic acids for given amounts of time**




Source: November 2009 endline HHN survey.

Returning to Table 26, also quite noteworthy is the increase in the percentage of women receiving timely postpartum Vitamin A supplementation. This serves as a proxy indicator for post-partum contact with a health service worker, as well. From an almost non-existent practice at baseline, with only nine percent of mothers of children 6-24 months taking Vitamin A within 90 days after delivery, 79 percent were doing so at endline. Percentage change across regions ranged from 564 percent to over a thousand percent. The increase in Mid Char was especially impressive, from six percent to 81 percent. Rural areas saw over a seven-fold increase over the period, and urban areas, over a three-fold increase.

Data on mothers' weight is another indicator collected in both surveys that gives some picture of mothers' health status. At endline, mothers' weight was about 43 kg in the sample, with little variation across regions. Table 27 shows only slight changes in mothers' weight from baseline to endline.

**Table 27: Weight of mothers of children 6-24 months old (kgs), baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| All | 42.5 | 42.7 | 0.5 | 0.048 | ** |
| North Char | 42.0 | 41.9 | -0.3 | 0.972 | |
| Mid Char | 42.8 | 41.7 | -2.5 | 0.003 | *** |
| Haor | 41.7 | 42.3 | 1.5 | 0.002 | *** |
| Coast | 44.0 | 45.0 | 2.1 | 0.002 | *** |
| Urban | 43.2 | 44.4 | 2.7 | 0.004 | *** |
| Rural | 42.5 | 42.7 | 0.4 | 0.520 | |
| Number of mothers | 3,084 | 3,348 | | | |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.
Sources: Baseline HHN survey and November 2009 endline HHN survey.

## *3.4 SSO2.2 Water and Sanitation*

***SO2.2: Hygienic environment established through development of infrastructure and improved hygiene practices in 60 percent of villages and urban slums***

The second component of SO2 contains infrastructure and behavioral components relating to sanitation and hygiene. Both the baseline and endline surveys collected data on access to clean water and sanitation infrastructure in SHOUHARDO communities. These are critical components of public health in general, and provide context within which to interpret the potential for improvements in health status as well as the actual changes.

***Washing line in Chittagong Slum***

The first table in this section, Table 28 provides data about access to safe water for different uses. At baseline, the majority of households had access to safe water, and in some regions access to water for all uses was quite high or nearly complete, such as in North Char and Mid Char. While the baseline showed that Haor and Coastal Regions lagged behind other regions, especially in terms of access to safe water for cooking and washing, significant improvements were achieved during the SHOUHARDO program, particularly in the coastal region. The percentage of households

in the Coast with access to safe water for cooking increased from 56 to 88 percent, and access to safe water for washing increased from 34 to 67 percent. Gains in rural areas were also more marked compared to urban areas, particularly for safe water for washing, for which access increased by 28 percent.

**Table 28: Percent of households with access to safe water, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Safe water for drinking** | | | | | |
| All | 97.4 | 99.7 | 2.4 | 0.000 | *** |
| North Char | 100.0 | 99.9 | -0.1 | 0.318 | |
| Mid Char | 100.0 | 99.9 | -0.1 | 0.333 | |
| Haor | 93.5 | 99.4 | 6.3 | 0.000 | *** |
| Coast | 98.9 | 99.9 | 1.0 | 0.027 | ** |
| Urban | 100.0 | 100.0 | 0.0 | - | |
| Rural | 97.3 | 99.7 | 2.5 | 0.000 | *** |
| **Safe water for cooking** | | | | | |
| All | 79.4 | 88.2 | 11.0 | 0.000 | *** |
| North Char | 99.6 | 98.4 | -1.1 | 0.040 | ** |
| Mid Char | 98.8 | 98.5 | -0.3 | 0.055 | * |
| Haor | 72.5 | 76.5 | 5.6 | 0.000 | *** |
| Coast | 56.1 | 88.4 | 57.7 | 0.000 | *** |
| Urban | 96.8 | 97.0 | 0.1 | 0.851 | |
| Rural | 78.7 | 87.9 | 11.6 | 0.000 | *** |
| **Safe water for washing** | | | | | |
| All | 58.6 | 73.9 | 26.0 | 0.000 | *** |
| North Char | 94.4 | 87.3 | -7.6 | 0.000 | *** |
| Mid Char | 94.3 | 94.7 | 0.4 | 0.960 | |
| Haor | 34.6 | 58.4 | 68.9 | 0.000 | *** |
| Coast | 34.3 | 68.6 | 100.2 | 0.000 | *** |
| Urban | 91.1 | 90.8 | -0.3 | 0.794 | |
| Rural | 57.4 | 73.3 | 27.8 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

Note: Safe water sources are hand tube well, tara pump, deep tube well, shallow tube well, ring well/indara, piped water, pond sand filter and rainwater harvesting system.

The number of households for which indicators are calculated is: baseline 3,092; endline 3,356.

Sources: Baseline HHN survey and November 2009 endline HHN survey.

While arsenic testing of tubewells was not consistent across regions at the time of the baseline, all regions saw improvements in this area. Initially, only 45 percent of households in the overall sample had received arsenic testing, and at the baseline this increased to over a quarter of households. Testing in urban areas more than doubled. The most substantial improvements in

testing were seen in North Char (from 14 to 48 percent households tested) and the Coast (from 33 to 88 percent).

Of those households tested, even at the baseline, a very high percentage of tubewells were arsenic-free: no fewer than 87 percent. Again, urban households showed greater improvements from baseline to endline compared to rural households, though the increases were not as dramatic given the already high levels at baseline.

**Table 29: Percent of households using tubewells for whom water is arsenic-free, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent for whom tubewell has been tested for arsenic** | | | | | |
| All | 45.0 | 78.6 | 74.6 | 0.000 | *** |
| North Char | 14.0 | 48.4 | 246.6 | 0.000 | *** |
| Mid Char | 41.8 | 79.3 | 90.0 | 0.000 | *** |
| Haor | 72.0 | 88.9 | 23.4 | 0.000 | *** |
| Coast | 33.1 | 87.9 | 165.7 | 0.000 | *** |
| Urban | 22.4 | 81.9 | 265.2 | 0.000 | *** |
| Rural | 45.9 | 78.5 | 70.9 | 0.100 | * |
| **Percent with testing for whom water is arsenic-free** | | | | | |
| All | 88.5 | 90.9 | 2.8 | 0.015 | ** |
| North Char | 92.1 | 91.7 | -0.4 | 0.752 | |
| Mid Char | 86.5 | 83.9 | -3.0 | 0.373 | |
| Haor | 88.5 | 91.9 | 3.8 | 0.004 | *** |
| Coast | 89.9 | 94.8 | 5.5 | 0.013 | ** |
| Urban | 83.5 | 91.6 | 9.7 | 0.025 | ** |
| Rural | 88.6 | 90.9 | 2.6 | 0.100 | * |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

Note: The number of households for whom indicators are calculated is:

Percent with arsenic testing: baseline 2,631; endline 3,133.

Percent with testing for whom water is arsenic-free: baseline 1,183 ; endline 2,397.

Sources: Baseline HHN survey and November 2009 endline HHN survey.

The next table provides data about latrine access and latrine conditions. In the overall sample, the percentage of households with access to a latrine increased from 85 to 96 percent. North Char Region had a significantly smaller percentage of households with access to a latrine at the time of the baseline survey relative to other regions, but caught up to the levels of other regions by the time of the final evaluation. Similarly, by the end of the program, rural areas had reached approximately the levels of urban areas.

All regions made significant gains in the percentage of households with access to a latrine for whom the latrine is functioning. This improvement was especially notable in the Haor Region and in rural areas. Households in virtually all regions at baseline showed signs of use; interestingly there were slight decreases in this indicator, ranging from one to six percent, by the time of the endline survey.

***Sealed Latrine in Sunamganj***

Cleanliness of latrines and surrounding areas had both been problem areas at the time of the baseline survey. The percentage of households with a latrine for which the latrine was clean had increased more than four-fold by the endline, with significant improvements in all regions, especially Haor. Similarly, all regions showed substantial improvements in terms of the percentage of households with a latrine for whom the area surrounding the latrine is clean.

North Char made greatest gains in the percentage of households with a latrine that had an unbroken water seal. Despite positive trends in many other indicators, the Haor region dropped significantly in this area. At endline, just under half the sampled households had latrines with an unbroken water seal.

**Table 30: Percent of households with access to a latrine and condition of latrine, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent with access to a latrine** | | | | | |
| All | 85.0 | 96.4 | 13.4 | 0.000 | *** |
| North Char | 67.8 | 94.0 | 38.7 | 0.000 | *** |
| Mid Char | 84.5 | 94.1 | 11.3 | 0.000 | *** |
| Haor | 92.8 | 98.2 | 5.8 | 0.000 | *** |
| Coast | 87.9 | 97.4 | 10.9 | 0.000 | *** |
| Urban | 93.0 | 96.7 | 4.0 | 0.002 | *** |
| Rural | 84.7 | 96.3 | 13.8 | 0.000 | *** |
| **Percent of households with a latrine for whom the latrine is functioning** | | | | | |
| All | 33.3 | 91.9 | 175.9 | 0.000 | *** |
| North Char | 71.5 | 93.8 | 31.2 | 0.000 | *** |
| Mid Char | 37.3 | 90.4 | 142.1 | 0.000 | *** |
| Haor | 11.2 | 89.9 | 704.5 | 0.000 | *** |
| Coast | 41.2 | 94.9 | 130.1 | 0.000 | *** |
| Urban | 54.8 | 97.5 | 78.1 | 0.000 | *** |
| Rural | 32.4 | 91.7 | 183.2 | 0.000 | *** |

| | | | | | |
|---|---|---|---|---|---|
| **Percent of households with a latrine for whom the latrine shows signs of use** | | | | | |
| All | 97.0 | 94.1 | -3.0 | 0.000 | *** |
| North Char | 97.8 | 95.9 | -1.9 | 0.003 | *** |
| Mid Char | 97.8 | 93.2 | -4.7 | 0.000 | *** |
| Haor | 97.9 | 97.2 | -0.7 | 0.246 | |
| Coast | 94.6 | 88.7 | -6.2 | 0.000 | *** |
| Urban | 98.2 | 93.8 | -4.5 | 0.000 | *** |
| Rural | 97.0 | 94.1 | -2.9 | 0.000 | *** |
| **Percent of households with a latrine for whom the latrine is clean** | | | | | |
| All | 10.7 | 60.1 | 460.1 | 0.000 | *** |
| North Char | 15.2 | 58.4 | 284.3 | 0.000 | *** |
| Mid Char | 10.6 | 50.9 | 382.0 | 0.000 | *** |
| Haor | 6.5 | 59.3 | 815.4 | 0.000 | *** |
| Coast | 14.1 | 70.3 | 399.7 | 0.000 | *** |
| Urban | 16.1 | 69.6 | 331.8 | 0.000 | *** |
| Rural | 10.5 | 59.8 | 469.8 | 0.000 | *** |
| **Percent of households with a latrine for whom the area surrounding latrine is clean** | | | | | |
| All | 9.9 | 59.8 | 502.8 | 0.000 | *** |
| North Char | 19.6 | 65.0 | 232.2 | 0.000 | *** |
| Mid Char | 8.3 | 50.1 | 502.0 | 0.000 | *** |
| Haor | 5.1 | 57.6 | 1021.9 | 0.000 | *** |
| Coast | 12.8 | 66.7 | 421.8 | 0.000 | *** |
| Urban | 17.5 | 68.1 | 289.8 | 0.000 | *** |
| Rural | 9.6 | 59.5 | 520.2 | 0.000 | *** |
| **Percent of households with a latrine for whom the latrine has an unbroken water seal** | | | | | |
| All | 44.2 | 47.6 | 7.7 | 0.218 | |
| North Char | 47.4 | 60.2 | 27.0 | 0.004 | *** |
| Mid Char | 34.8 | 34.3 | -1.5 | 0.892 | |
| Haor | 52.3 | 45.9 | -12.3 | 0.005 | *** |
| Coast | 42.3 | 50.0 | 18.1 | 0.296 | |
| Urban | 49.0 | 50.3 | 2.5 | 0.446 | |
| Rural | 43.5 | 47.5 | 9.3 | 0.101 | |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

Note: The number of households for whom indicators are calculated is:

Percent of households with access to a latrine: baseline 3,092; endline 3,356

Percent of households for which latrine is function: baseline 2,626; endline 3,232

Percent of households for whom latrine shows signs of use: 2,627; endline 3,231

Percent of household for whom latrine is clean: baseline 2,444; endline 3,231

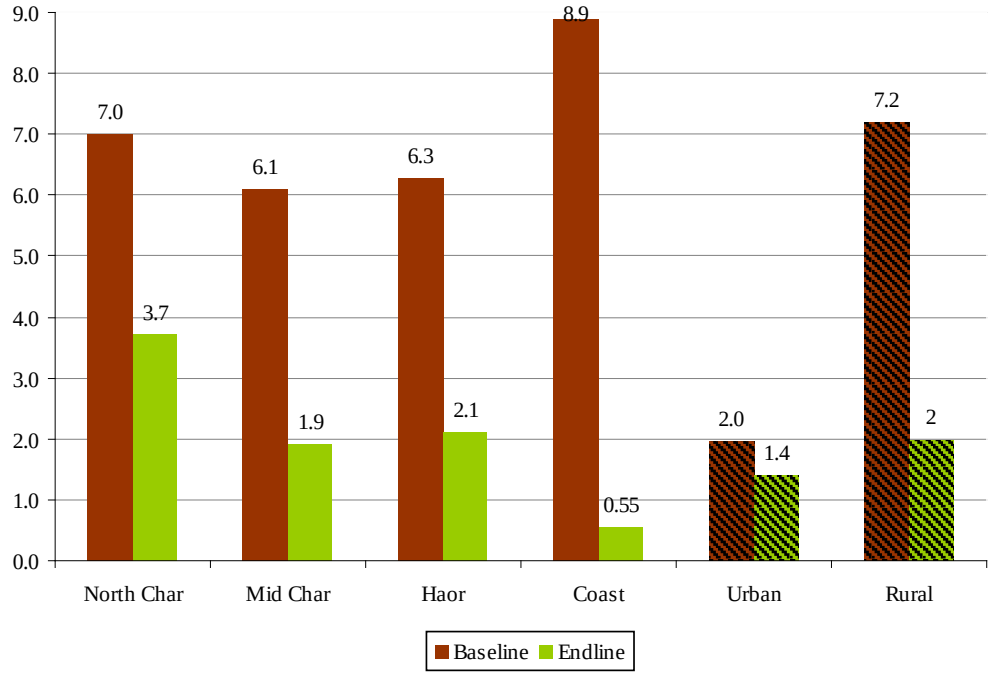
Percent of households for whom area surrounding latrine is clean: baseline 2,626; endline 3,228

Percent of households for whom latrine has unbroken water seal: baseline 445; endline 2,309.

Sources: Baseline HHN survey and November 2009 endline HHN survey.

The improvements seen in latrine access, functioning and cleanliness correspond to a decline in open defecation. The figure below demonstrates dramatic decreases in open defecation, particularly in the coastal region.

**Figure 25: Percent of households with a member using "open defecation" rather than a latrine**




Sources: Baseline HHN survey and November 2009 endline HHN survey.

## *3.5 Missed Opportunities*

### 3.5.1 Engaging VDCs to Improve Nutritional Status

To varying degrees, VDC/SDC members have received some overall orientation to the key health and hygiene messages. In some cases, the CHV was attending VDC meetings and, in fewer cases, sharing the results of growth monitoring or immunization coverage with them.

When asked about their successes, most VDCs cited infrastructure projects, many of which were truly impressive and responded to felt needs of the community. However such groups often lack adequate orientation and information to prioritize non-infrastructure actions to improve health and nutrition. Only one out of eight VDCs in Mid-Char had any idea of the malnutrition situation in their community. The CHV does bring them a monthly report. Sharing this information did not seem to be a PNGO expectation of either the CHV or the VDC. When VDCs in other programs have been provided orientation and information on the causes and consequences of malnutrition, they have become mobilized to take actions, such as ensuring that the families of the malnourished children have employment or an income generation activity, or

assisting those families with contributions from the rice harvest, etc. VDC members could also provide support for other health actions such as assuring participation in immunizations – if they were provided coverage data and understood the importance of getting all children immunized. The VDCs could have included reducing the prevalence of malnutrition as a goal in their action plans.

### 3.5.2 Sustaining Behavior Change by Changing Social Norms

In all communities, in order for the new behaviors to become fully entrenched, there is a need to change not just individual behaviors, but community norms. SHOUHARDO deliberately chose to work with the poor and very poor in each community, and this meant excluding the more well-off women from the health and nutrition education activities. Yet often, poor mothers want to emulate the better-off mothers. So in spite of having learned new behaviors through SHOUHARDO, they may be more influenced by what the better-off women who didn't participate are continuing to practice.

Obviously, the CHV had limited time, and the courtyard sessions were already often too large for good discussion and learning. For these practical reasons it may not have been feasible to include the better-off women. There are many other possibilities for getting the key messages to this wider audience such as using print materials and broadcast messages, and having participating women share what they are learning directly with a neighbor or relative. Another option would be to hold occasional social events with dramatizations of the key messages performed by VDC members or participating mothers.

### 3.5.3 Integration with Other Project Components

While SHOUHARDO was providing a comprehensive package of interventions to the community, it seemed as if there could have been stronger integration of the components in support of each other. For example, EKATA group members who do not have children under two did not receive the key health , hygiene, and nutrition messages. Clearly, this may have been due to a time constraint because there were other topics programmed for EKATA, but there are certain overlapping themes in women's health and empowerment that could be added to the agenda for the future. On the other hand, the majority of EKATA groups were reportedly involved in organizing community emergency medical support plans and Community Led Total Sanitation.

**The Link between Anemia and Empowerment**

HKI estimates that nearly 50 percent of adult women in Bangladesh suffer from anemia, and this is not only during pregnancy. Women who are moderately or severely anemic lack energy, which inhibits them from participating in activities other than those required. These women are not likely to participate in women's groups, assume leadership roles, or participate in literacy classes.

The obvious enthusiasm of parents and VDC members for early childhood development centers is evidence of a strong desire for the children to learn well as a portal to a better future. If parents and VDC members were aware of the impact of the nutritional status of a pregnant woman and the infant on the child's future learning capacity, this might spread some of the enthusiasm to improving maternal and infant nutrition as preparation for doing well in ECCD and, later, in formal school.

There was a method for dividing households into the Core Occupational Groups, but it did not take into account the nutritional status of the family members. Where some flexibility of choice

existed, it may have made sense to assign families with malnourished children to Comprehensive Homestead Development (CHD). With CHD, they soon would have access to goats or ducks to provide animal protein, zinc, and increased calories for the malnourished child, and eventually, have the opportunity to produce nutrient-dense vegetables for vitamins and minerals.

*IR 2.1.3: Pregnant women & mothers with children (0-2 years old) utilize take-home rations to improve nutritional status*

The strategy for food distribution required pregnant and lactating women and the mothers of children 6-24 months to participate in certain activities and comply with specified recommended behaviors in order to receive rations. In this way, the rations served as an incentive, but their distribution in sufficient quantity to all children under two and their mothers in the target population also qualifies them as a preventive ration. CHVs monitored to assure that recipients completed prenatal care, TT vaccination, birth planning, post-natal care, immunizations for their child, and that they participated in monthly growth monitoring and either two courtyard sessions or one courtyard session and one demonstration feeding session per month. CARE adapted maternal and child health cards for this purpose. These nicely adapted versions could serve as models for the government or other NGO programs.

> "At first, the [commodity] food was a real blessing as it seemed we had never before had enough to eat. Now, we have the means and skills to produce enough food for ourselves."
>
> *Mother in Mid Char*

During the three years rations were distributed, 219, 246 women received a monthly ration of 12 kg of wheat, 1.5 kg of oil, and .5 kg of lentils. This ration provided approximately 1800 kilocalories daily. Project staff and CHVs emphasized to the woman that the food was for her and the child, not to be shared with the rest of the family. CHVs made home visits to reinforce this message, mostly with mothers-in-law. Women ground the wheat to make flat bread *roti*, which when fried in the oil, is called *parata*. In some communities they ground the lentils with the wheat; others consumed lentils separately. Used in this manner, the women reported that their ration lasted about 26 days. Women said their child would eat only about a half a *roti*, which would be about 175 calories or 225 if fried.

During pregnancy or before the child started eating, most of the women claimed they ate the ration without sharing, but this may have been because they had heard the message not to share. If they did consume the entire 1800 calories per day, this left them little room to consume other foods needed for a properly varied diet during pregnancy and lactation. It may have resulted in much better weight gain during pregnancy and good birth weights, but the project was not able to track either of these possible outcomes.

During the final evaluation, mothers were asked to calculate the monetary value of the ration they had received and whether this had resulted in savings in their family food budget. When asked how they used these savings, no one said it was used to buy other foods, rather, they reported using it for purchasing school supplies and uniforms, putting it into a medical emergency fund, or investing in a small income generation activity such as raising chickens in order to sell eggs.

## *3.6 Sustainability*

Behavior change happens in stages, and relapse to an earlier stage is common. A mother may have practiced better feeding behaviors with the current child, but may go back to doing things "the old way" with the next child if she does not receive reminders and encouragement. During

the course of SHOUHARDO, participating mothers heard each of the 20 topics, with three to seven subtopics each, about three times. Continuation of growth monitoring with counseling and some regular educational sessions would provide repetition and reinforcement to help assure sustained behavior changes. Unfortunately, this was not considered in the SHOUHARDO design and there was no expectation of continuing HHN activities in the communities once food distribution stopped. The CHVs were paid for their work, and are being rapidly phased out as part of the exit strategy. The exit strategy document mentions the possibility of the community assuming the payment of CHV salaries as an option, but this had not occurred to the VDCs/SDCs interviewed during the final evaluation, even though many of them were making plans to pay the ECCD teacher.

While the PNGOs and some CARE staff have proposed having a mother who is already practicing the appropriate behaviors take over for the CHV, there is very little time left to provide sufficient training and supervision. The latter would help assure that the mother will have the skills necessary for not only conducting growth monitoring and educational sessions, but also to be able to help mothers problem-solve. The question remains as to whether these women will be willing to take on the responsibility as true volunteers, when they know the CHV was paid. Additionally, there are three forms that are key to helping the volunteer monitor and to supporting the mother in adopting new practices; these forms are for use with pregnancy, lactation, and the child, including the child health card. Without a plan for reproducing these in the future, it will be difficult for the volunteers to carry out the work and to sustain the behavior changes.

# 4 SO3: Empowerment of Women and Girls

***Enhanced empowerment of 400,000 women and girls from targeted vulnerable households***

SO3 aimed to empower 400,000 women and girls in SHOUHARDO's targeted communities through a number of different approaches including: Empowerment, Knowledge and Transformative Action (EKATA), Early Child Care for Development (ECCD), Parent Teacher Associations (PTA), and School Management Committees (SMC). Frequency of groups formed is listed in Table 31. The program placed emphasis on increasing women's decision-making power at household and community levels; reducing gender-based violence and acts that increase women's economic insecurity such as polygamy and verbal divorce; raising awareness of educational entitlements for women and girls; capacity development in leadership and advocacy; and strengthening the linkages between women's groups and the VDC/SDC, NGOs, legal assistance, and other bodies that address gender disadvantage affecting women.

**Table 31: Frequency of various approaches relative to SO3.**

| Groups/networks | Number |
|---|---|
| EKATA | 408 |
| ECCD | 300 |
| PTA | 394 |
| SMC | 343 |
| Networks between groups | 50 |

In addition to the strategic long-term needs addressed by participation in the various groups mentioned, the program aimed to increase women's empowerment through income-earning opportunities covered under SO1.

## *4.1 Overall Findings and Recommendations*

The final evaluation team believes SHOUHARDO activities have increased both individual and institutional agency for women. The cumulative impact from a) activities aimed at awareness

raising and consciousness building about women's rights and b) participation in economic activities, has contributed to women's livelihood status and helped break traditional barriers. Economic activity allowed women to contribute to the payment of household expenses, and as a result, decision-making power increased. Women experienced increased solidarity in EKATA, MCHN and COG groups. Adolescent girls reported increased awareness about the negative impact of early marriage and dowry, and through participation in ECCD programs, cultural awareness of the importance of education for both girls and boys increased. Quantitative and qualitative data suggest that the strategies used by SHOUHARDO to address unbalanced gender power are contributing to increased agency for women and increased social sensitization to women's entitlements in the targeted regions.

SHOURHADO's efforts to enhance empowerment are commendable, considering the social structures and norms in Bangladesh that disadvantage women. A follow-up program would benefit from a comprehensive empowerment strategy that sensitizes men and adolescent boys to gendered norms that contribute to inequitable entitlements between males and females. Men and boys were rarely included in the program's empowerment activities. Their inclusion could help to reduce the patterns and systems that perpetuate gender disadvantage. Furthermore, increasing existing linkages between women's empowerment objectives and governance objectives would enhance the impact of SO3, as an enabling environment is critical to long-term change in this area.

EKATA groups were highly valued by those attending and should be scaled up. Currently, a small proportion of women (14 %) attend these groups. Increasing linkages between the various groups that target women could help to catalyze interest. Attendance is high for savings and MCHN groups, which offers a venue for outreach. Training sessions for all groups could be strengthened through follow-up capacity development. Critical elements necessary for effective empowerment advocacy such as negotiation skills, counseling, clear processes for group sustainability and leadership development have not received sufficient attention in the trainings provided by SHOUHARDO. In most cases training sessions are offered once. Reinforcement will be necessary to help these concepts take root.

### 4.1.1 Household Decision-Making Power

***Women's focus group discussion***

Women's status, that is to say, their decision-making power relative to men's, can contribute to a myriad of outcomes linked to food insecurity. "Women with low status tend to have weaker control over household resources, tighter time constraints, less access to information and health services, poorer mental health, and lower self-esteem. These factors are thought to be closely tied to women's own nutritional status and the quality of care they receive, and, in turn, to children's birth weights and the quality of care they receive".[21]

[21] Smith, Lisa C. et al. 2000. *The Importance of Women's Status for Child Nutrition in Developing Countries.* International Food Policy Research Institute (IFPRI).

The endline evaluation indicated commendable progress in women's household decision-making power in SHOUHARDO's target areas. Female adult respondents were asked to rate their level of participation in a number of common household decisions as compared to their husband or other adult male family member. The data in Table 32 show how women's decision making power in the household has changed over time, and compare the mean scores across regions, urban and rural areas, gender of household head, and individual types of decisions made. Interviews with women in CARE's target areas verified that SHOUHARDO helped to remove constraints to women's decision making power.

The data in Table 32 and Figure 26 illustrate that statistically significant increases in women's household decision-making power occurred in all regions (average change is 23 %). Qualitative data help to validate that SHOUHARDO activities have contributed to increases, as most of the women, in EKATA, COG and VDC/SDC groups stated that their decision-making status at household level has increased. Marked increases are noted in the North Char Region (41 % change) where women attend EKATA group meetings more often than those other areas, and in the Coast Region (32% change) which has a much higher percentage (20.6) of women attending meetings than all other regions. This progress is praiseworthy as both regions had the lowest mean baseline scores for women's decision making power.

**Table 32: Score for women's decision making power in the household, by survey year and type of decision**

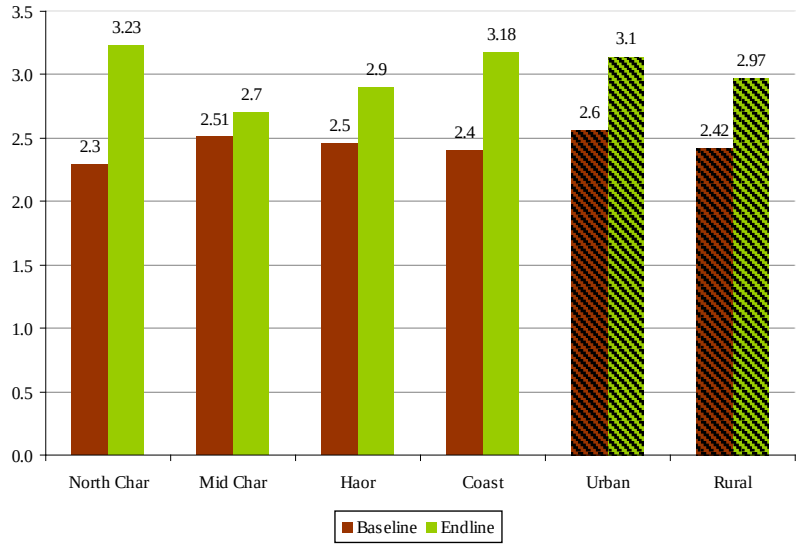
| | February 2006 (Baseline) | Jan/ Feb 2009 | August 2009 (Endline) | Percent change (Baseline to Endline) | p-value | |
|---|---|---|---|---|---|---|
| | | (mean) | | | | |
| **Decision making power score** | | | | | | |
| All | 2.42 | 2.72 | 2.98 | 22.83 | 0.000 | *** |
| North Char | 2.29 | 2.53 | 3.23 | 41.42 | 0.000 | *** |
| Mid Char | 2.51 | 2.70 | 2.70 | 7.68 | 0.000 | *** |
| Haor | 2.46 | 2.73 | 2.90 | 18.19 | 0.000 | *** |
| Coast | 2.40 | 2.93 | 3.18 | 32.29 | 0.000 | *** |
| Urban | 2.56 | 2.84 | 3.14 | 22.38 | 0.000 | *** |
| Rural | 2.42 | 2.72 | 2.97 | 22.90 | 0.000 | *** |
| Female headed household | 3.50 | 3.00 | 2.99 | -14.46 | 0.000 | *** |
| Male headed household | 2.30 | 2.70 | 2.98 | 29.41 | 0.000 | *** |
| **Scores for individual types of decisions** | | | | | | |
| Buying small food items, groceries, toiletries | 3.1 | 3.2 | 3.4 | 9.6 | 0.000 | *** |
| Buying clothing for yourself and your children | 2.4 | 2.8 | 3.3 | 35.2 | 0.000 | *** |
| Buying or selling jewelry | 2.2 | 2.6 | 3.2 | 46.6 | 0.000 | *** |
| Medical expenses for yourself or your children | 2.5 | 2.8 | 3.0 | 17.3 | 0.000 | *** |
| Expenses for family planning (contraceptives) | 2.2 | 2.9 | 3.0 | 36.6 | 0.000 | *** |
| Expenses for your children's education | 2.5 | 2.8 | 3.0 | 22.2 | 0.000 | *** |
| Expenses for your children's marriage | 2.3 | 2.6 | 2.7 | 15.8 | 0.000 | *** |
| Buying or selling major household assets (land, livestock, crops) | 2.1 | 2.6 | 2.8 | 31.3 | 0.000 | *** |
| Spending money that you yourself have earned | 3.0 | 2.9 | 3.2 | 6.8 | 0.000 | *** |
| Use of loans or savings | 2.2 | 2.6 | 3.1 | 40.5 | 0.000 | *** |
| To move to shelter during time of disaster | 2.5 | 2.6 | 2.5 | -2.4 | 0.000 | *** |
| Active participation and involvement in *salish* decision making | 1.4 | 2.2 | 2.3 | 56.8 | 0.000 | *** |
| Number of applicable decisions | 8.5 | 10.6 | 10.8 | | | |
| Number of households (women) | 2,859 | 1,443 | 1,729 | | | |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.
Note: The scores for individual decisions are calculated by taking the mean across womens' individual scores. They are calculated using the following categories and score values from 1 (least power) to 4 (most power): "Can decide alone" (4), "Can decide with husband or other adult male family member" (3) "Husband makes decision after discussion with wife" (2), and "Not involved" (1). The overall decision making score for a woman is the mean of the scores for the decisions the woman felt were applicable to her situation. Only women reporting that at least 5 types of decision are applicable were included in this analysis.

Sources: Baseline SES and periodic monitoring surveys.

The percent of change is slightly higher for rural areas than urban areas, yet the mean score for urban areas is slightly higher than that of rural areas (2.97 compared to 3.14). The scores are represented graphically in Figure 26. A score of four indicates that women are able to make a decision completely on their own; a score between three and four indicates that women decide with their husband or other adult male family members; a score between two and three indicates that men ultimately make the decision, but do discuss the topic with their wife, and; a score between one and two indicates that a woman is not involved in decision making. As many of the questions relate to topics that would normally be discussed by both partners in equitable relationships (medical and educational expenses, use of loans and savings, etc.), a score of four is, perhaps, an unrealistic goal.

**Figure 26: Mean score for women's decision-making power in households, baseline-endline comparison, by region and urban/rural**




Sources: Baseline SES and periodic monitoring surveys.

Scores for individual types of decision making show that women in the targeted regions are now contributing to all topics asked about in the endline survey, and are able to make a decision with their husband or other adult family member in eight of the twelve individual types of decisions.

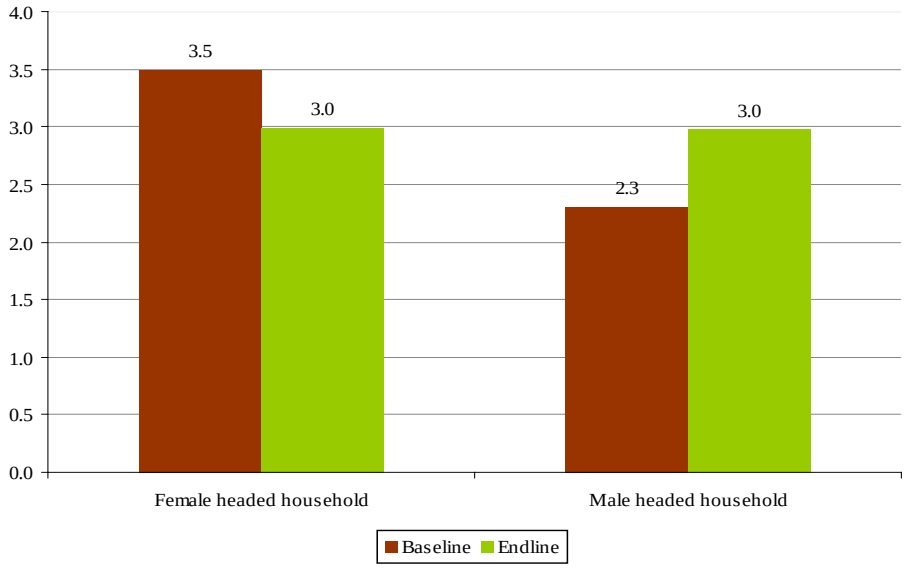
Bangladeshi social norms commonly dictate that decisions about family finances are determined by the male of the household. As shown in Table 32, in SHOUHARDO's target areas statistically significant increases in women's decision-making power occurred with respect to the use of loans or savings (41% increase); decisions about buying or selling major household assets (31% increase); and expenditures for clothing and personal items for themselves and their children (35 % and 47 % increase, respectively). Also noteworthy is the marked increase in women's contribution to decision making about expenses for family planning (37 %).

The greatest increase (57%) occurred in women's active involvement in *salish* decision making. While the score of 2.3 indicates that this an area still dominated by males in the targeted areas, the baseline score of 1.4 shows that at the program's beginning, very few women participated in community arbitration. As noted in Table 34, the proportion of women participating in EKATA and VDC groups is generally less than 15 percent, making it difficult to attribute the marked

increases directly to SHOUHARDO. However, qualitative data show that in some cases when the program has only directly involved a few women, they have shared their new knowledge with family members, friends, and other women. It is reasonable to assume then, given the content and consciousness raising that takes place in VDC/SDC, EKATA and other groups that SHOUHARDO has contributed to the increases noted in women's decision-making power.

The data in Table 32 and Figure 27 show that women's decision making power within households has increased by almost 30 percent for women that live in male-headed households, but has decreased for women in female headed households (FHH). Data was not collected on the status of FHH (widowed, divorced, husband has migrated, etc.) making it difficult to draw conclusions for this drop.

**Figure 27: Score for women's decision making power in households, baseline-endline comparison, by gender of household head**




Sources: Baseline SES and periodic monitoring surveys.

Data in Table 33 show that patriarchal attitudes about family life are held not only by men, but are ingrained in women's opinions of their own rights. Although the majority (68%) of women believes that a woman has the right to express her opinion even when she disagrees with her husband, the vast majority (70 %) of women believe that important family decisions should be made by men in the family. This is supported by data in Table 32, which show that the majority of important decisions (i.e. expenses for marriage, and the sale of major assets) have scores between 2 and 3, indicating that the male in a family has the final say.

Close to half (47 %) of women surveyed believed that domestic abuse should be tolerated in order to keep a family together. Less than half of the women surveyed agreed that a married woman should be allowed to work outside the home. The belief in educational entitlement for girls is more prevalent than most of the other attitudes about gender equity, yet still nearly a third of women (29%) surveyed stated that it was better to send a boy to school than to send a girl.

**Table 33: Percent of women who agree with various statements revealing patriarchal attitudes about family life**

| | Percent agreeing |
|---|---|
| **Statements implying a less patriarchal attitude** | |
| *If the wife is working outside the home, the husband should help her with household chores* | 56.3 |
| *A married woman should be allowed to work outside the home if she wants to* | 43.8 |
| *The wife has a right to express her opinion even when she disagrees with her husband* | 67.7 |
| **Statements implying a more patriarchal attitude** | |
| *Important family decisions should be made by the men of the family* | 70.0 |
| *The wife should tolerate being beaten by her husband in order to keep the family together* | 47.1 |
| *It is better to send a son to school than it is to send a daughter* | 29.0 |

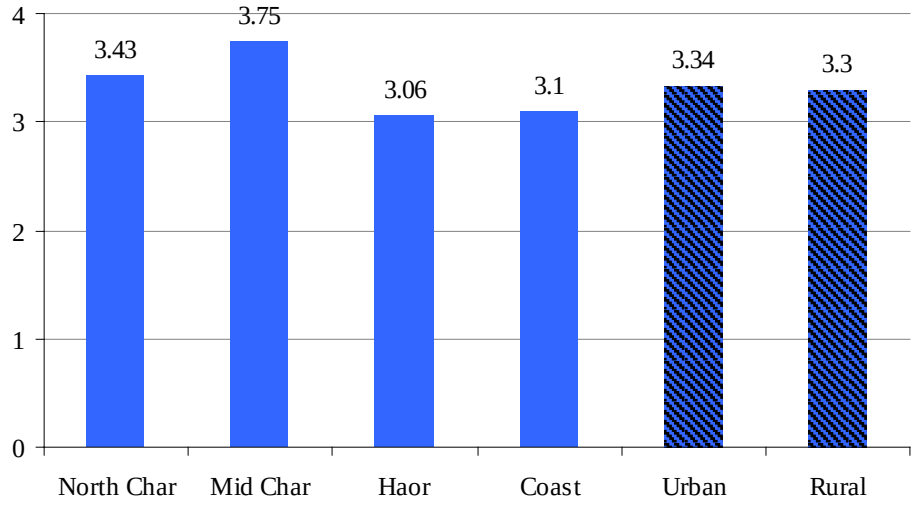
The number of households for which indicators are calculated is: 3,356.

Source: Endline HHN survey.

Figure 28 presents the data as a mean score of women's individual answers. The scores for freedom from patriarchal attitudes are calculated by taking the mean of the values assigned to women's individual scores. They are calculated using score values of 1for attitudes that are not patriarchal and 0 for attitudes that are viewed as patriarchal. The maximum score is 6.

The data show that patriarchal attitudes prevail in both urban and rural regions. Women surveyed in Mid and North Char Regions are more likely to agree with statements that support equity in gender relations than women surveyed in Haor or Coast Regions.

**Figure 28: Score for freedom from patriarchal attitudes, region and urban/rural area**




Source: Endline HHN survey.

### *Women's Participation in Interventions*

Initially, there were barriers to women's active participation in SHOUHARDO activities: their own lack of confidence as well as the opinions expressed by their husbands, male guardians, or mothers-in-law that they should not leave the house. SHOUHARDO has encouraged women's participation during the process of VDC/SDC formation, and sympathetic men's as well as

women's groups were cited as important factors in helping women overcome these cultural sources of resistance. The evaluation team sensed that the communities visited were quite accepting of women's empowerment through the VDC/SDC, though it was difficult to thoroughly assess this in the short timeframe available. During the field visits, women were viewed as active members of the VDC/SDC, with VDC/SDC membership found to be ranging from three to five, to as many as eight. Out of 33 villages visited, four had a woman chairperson. This is an improvement on practices at the UP/PS level, but also leaves much room for further progress.

Table 34 reflects the responses of women, regarding their participation interventions, in surveyed SHOUHARDO households with children between 6 and 24 months of age. Overall, 14 percent of women in SHOUHARDO households were members of an EKATA group, with participation rates higher in Coast and Haor Regions (21 and 15 percent, respectively). Women's EKATA membership is far more common in urban areas than rural ones: 32 percent versus 11 percent, respectively. Groups in all regions and in both urban and rural areas met almost weekly in the previous 12 months. Women's attendance at EKATA meetings was much higher in urban areas: women in urban SHOUHARDO households attended 40 percent of meetings, while rural women attended only 21 percent. Attendance was markedly higher in North Char, where women attended 37 percent of meetings, compared to the other regions, where women attended about one quarter of meetings or less.

**Table 34: Women's participation in SHOUHARDO interventions in previous 12 months, by region and urban/rural area**

| | North Char | Mid Char | Haor | Coast | Urban | Rural | All |
|---|---|---|---|---|---|---|---|
| **EKATA** | | | | | | | |
| Member of an EKATA group | 9.3 | 12.6 | 15.2 | 20.6 | 32.3 | 10.5 | 14.6 |
| Average number of weeks EKATA group usually meets | 49.1 | 52.0 | 48.6 | 47.3 | 50.7 | 48.4 | 48.7 |
| Percent of EKATA meetings attended | 37.1 | 20.3 | 16.6 | 26.2 | 39.8 | 20.8 | 23.2 |
| **Other SHOUHARDO groups** | | | | | | | |
| Village/slum development committee | 5.9 | 7.1 | 18.0 | 10.5 | 20.9 | 11.3 | 11.6 |
| Savings group | 20.7 | 39.2 | 29.3 | 31.0 | 49.4 | 29.3 | 30.0 |
| Mother's group | 98.8 | 90.8 | 94.9 | 84.8 | 96.6 | 92.3 | 92.5 |
| **Daughter's school committees (PTA/SMC) a/** | | | | | | | |
| Percent with a school-aged daughter attending school | 23.9 | 22.9 | 20.2 | 36.3 | 26.2 | 25.3 | 25.3 |
| Percent with attending daughter who attended any PTA meetings | 31.1 | 32.2 | 40.6 | 43.4 | 51.8 | 37.3 | 37.9 |
| Percent with attending daughter who attended any SMC meetings | 26.0 | 21.5 | 27.0 | 30.2 | 38.2 | 26.5 | 27.0 |
| **Health, hygiene and nutrition activities** | | | | | | | |
| Attended "courtyard" sessions | 95.1 | 93.5 | 98.4 | 92.5 | 96.7 | 95.3 | 95.4 |
| Attended demonstration feeding sessions | 82.3 | 75.4 | 94.9 | 81.9 | 91.4 | 85.2 | 85.4 |
| Growth monitoring and promotion | 99.2 | 95.9 | 98.9 | 95.4 | 98.3 | 97.1 | 97.3 |
| **Food assistance** | | | | | | | |
| For pregnant mother | 64.3 | 65.3 | 79.0 | 68.4 | 80.7 | 70.7 | 71.1 |
| For lactating mother | 93.7 | 93.4 | 92.4 | 89.5 | 93.9 | 92.1 | 92.2 |

a/ PTA: Parent-teacher association; SMC: School Management Committee

b/ CHV: Community Health Volunteer

Note: Unless otherwise noted, all values reported are percentages.

The mother's group had by far the highest participation of women in SHOUHARDO households compared to other group types, with participation rates ranging from 85 percent in the Coast region to 99 percent in North Char. Savings groups had the next highest participation of SHOUHARDO mothers, with 30 percent participation across regions. Across group types, participation was higher in urban areas, with the most marked contrast in savings groups: about half of the women in program households participated in savings groups in urban areas, compared to only 29 percent in rural areas.

About a quarter of SHOUHARDO households had a daughter attending school. The percentage of households with daughters in school was about the same in urban and rural areas, however it was markedly higher in the Coast region (36 percent) relative to other regions (around 22 percent). Of those households with daughters in school, the percentage of women in the household attending at least one PTA meeting was higher in urban areas (51 percent) than rural ones (37 percent), and higher in the Coast and Haor regions than in North Char or Mid Char. Women's participation in PTAs was higher than for SMCs: between 31 and 43 percent of women with daughters in school attended at least one PTA meeting, compared to a range of 22 to 30 percent attending at least one SMC meeting. Participation in SMCs was lowest in Mid Char and around the same for the other three regions.

Women's attendance at "courtyard sessions" – a health, hygiene and nutrition activity – was strong across the board, with no less than a 93 percent attendance rate regardless of region or urban/rural area. Attendance at demonstration feeding sessions was also high – at least three quarters of women in attended these in any given region – it was markedly high in Haor (94 percent). On average, 95 percent of women in SHOUHARDO households participated in courtyard sessions, and 85 percent in feeding demonstrations.

The majority of women in SHOUHARDO households participated in food assistance for pregnant and lactating mothers. Overall, 71 percent of pregnant women received this assistance, with higher participation in urban areas. Haor Region had a higher level of participation (79 percent) compared to other regions, where participation ranged from 64 to 68 percent. Ninety-two percent of lactating women received food assistance, with about the same level of participation in urban and rural areas.

## *4.2 Achievements*

### 4.2.1 SSO3.1 Women and girls are participating in enhanced educational opportunities.

*IR 3.1.1: Women and girls trained and practicing life skills and functional literacy in formal and non-formal settings*

*IR 3.1.2: Participation of women in 300 SMCs/PTAs increased, and the committees are demonstrating responsiveness to promote women and girls education*

***Empowerment, Knowledge and Transformative Action Groups***

SHOUHARDO formed and trained 408 EKATA groups, an approach seen as key to women's empowerment. Using ActionAid's *Reflect* approach, [22] EKATA's learning model aims to improve

[22] Reflect is transformative and awareness raising learning technique originally developed by Action Aid in the 1990s. It is currently used by 500 organizations in more than 70 countries. Organizations using the Reflect methodology won UNESCO literacy prizes in 2003, 2005, 2007 and 2008 (see: www.reflect-action.org).

adult functional literacy and numeracy, raise consciousness of gender issues (violence against women, early marriage, dowry, verbal divorce), and assist adolescent girls to prepare for later stages of their life. SHOUHARDO develops the EKATA learning model with technical support from the Education Unit (EU). Thirty participants generally comprise each group (20 women and 10 adolescent girls).

The final evaluation team visited eight villages where EKATA groups had formed. Group members appeared active and confident and qualitative evidence suggests that the groups are accomplishing their roles. Focus group discussions imply the EKATA model is successful in establishing a forum where women and girls can freely and openly express themselves. Through this process, women and adolescent girls are able to make plans for the future, make plans for transformative actions, and participate in leadership development.

### *Increased solidarity*

Adolescent girls are learning from elderly women's practical life experience and are able to talk about their own plans for the future. In group sessions, older women commit to protecting the adolescent girls from violence. Inclusion of adolescent girls in EKATA groups engenders a new approach to traditional age-structure practices. Qualitative data suggest that solidarity—necessary for women's empowerment—is increasing as barriers among women are declining.

Women described how increased agency has allowed them to address violence against women. When domestic violence occurs, EKATA members first go to the victim's home and try to stop the behavior. If unsuccessful, they enlist the support of VDC management committee members, who accompany the women and attempt to stop the beatings. If violent behavior continues, EKATA and VDC members request *salish (*customary mediation). Public admonition, by way of sitting in the home, is the main strategy adopted to end domestic violence.

Group members related they that have resisted 11 early marriages, and have taken action to stop domestic violence, the practice of dowry, and verbal divorce. Group members in several villages also spoke about how they had gone to court and sought legal action for wife beating and dowry-related violence, in some cases with assistance from the Bangladesh Rural Advancement Committee's (BRAC) local legal aid group (See Table 35).

**Table 35: Successful interventions by EKATA group members**

| **Behavior** | **# of time actions have successfully stopped behavior** | **Location: Village/ Urban slum** |
|---|---|---|
| Early marriage | 11 | Namakuniagacha, rajpur, Shibpasha, and Bashbari slum |
| Dowry | 7 | Namakuniagacha, Shibpasha, Rajpur, and Bashbari slum |
| Polygamy | 2 | Hijuli |
| Wife beating | 2 | Namakunigacha, Shibpasha |
| Legal action against wife beating | 2 (actions promoted behavior) | Rajpur & Shibpasha * in both cases EKATA members took assistance from BRAC legal aid cell |

***Enhanced educational opportunities for adolescent girls***

Education for adolescent girls was promoted in EKATA groups in numerous ways. At group meetings girls had access to reproductive health education and received awareness messages about the negative effects of early marriage, dowry, violence against women, eve teasing (public sexual harassment), and other forms of gendered abuse. Following meetings, girls indicated that they shared these messages with their peers. EKATA groups make a point of including adolescent girls who have dropped out of school, and help them to reenroll and become advocates for encouraging other girls to stay in school. During focus group discussions, girls spoke about the importance of obtaining education, delaying marriage, and developing life skills, but the most frequent responses when asked about recent personal achievements were that knowledge gained through the EKATA group had helped them to prevent early marriages and reduce the incidence of dowry. Most of the adolescent girls confirmed that they will not get married at a young age and furthermore, they will try to stop others from marrying early. When asked how they will become self-reliant and how they will work through the deep-rooted social practices of dowry, preference of young brides, and domestic violence, they could not answer clearly.

The girls' lack of clarity on these issues raises questions. Discussions suggest that not all the adolescent girls are involved in SHOUHARDO-supported income earning activities. Delaying adolescent girls' marriage without guiding them to methods that will help them to be self-reliant could potentially lead to increased vulnerability. In the Bangladeshi patriarchal society, dowry is firmly rooted. Moreover, the price of dowry correlates to the bride's age; the older the bride the higher the dowry price (See Table 36). Women who are not self-reliant could be viewed as a greater burden to their families if they do not marry at a young age, and thus be subject to increased dowry-related violence.

**Table 36: Average dowry paid for brides**

| | % who paid dowry at marriage | N | Average dowry Paid (Taka) | N |
|---|---|---|---|---|
| **Marriage distance** | | | | |
| *Married outside village* | 73 | 86 | 11,898 | 63 |
| *Married in village* | 67 | 39 | 8,701 | 26 |
| **Level of education of bride** | | | | |
| *Less than primary* | 79 | 63 | 9,323 | 50 |
| *Primary or greater* | 39 | 62 | 13, 069 | 62 |
| **Age of bride at marriage** | | | | |
| *Less than 15* | 63 | 24 | 9,406 | 15 |
| *15-16* | 75 | 72 | 9,560 | 54 |
| *17-19* | 69 | 29 | 15,925 | 20 |

Source: Sajeda A & L. Huq 2008)

During discussions it was noted that dowry has a new 'face'. Because the EKATA and VDC members are trying to eliminate dowry, families are not paying it publicly. Further investigation with EKATA and VDC members determined that if the bride's parents give dowry as a gift it is accepted. The gift amount is relatively high for PEP households. The EKATA members in Rajpur village stated that, "*stopping dowry is very challenging, we are working against dowry. It will take long time to stop. We think it's been stopped but later we hear about a transaction*". The Thematic Study on Women's Empowerment includes an interview with a father who confessed that he had given "voluntary gifts" to his daughters at marriage. He stated that dowry

amounts ranged between Tk. 20,000 to Tk. 200,000. The Thematic Study on Women's Empowerment also documented that dowry gifts are still taking place. Combined, this evidence suggests that to eliminate dowry, outreach will need to extend beyond EKATA and VDC members. Strategies should include economic empowerment of adolescent girls and the inclusion of adolescent boys in awareness-raising activities.

### *Early Child Care for Development*

The Early Child Care for Development (ECCD) strategy made a noteworthy contribution to SSO3.1. Developed with technical assistance from the Education Unit, ECCD offers pre-school services, a learning process traditionally denied to very young Bangladeshi girls (0-6 years). Grade one is at times included in the program when access to primary school is challenging due to distance or densely populated urban settings. Through ECCD centers, SHOUHARDO addressed an important livelihood security aspect – education security. Literacy in Bangladesh is notoriously low among poor and disadvantaged communities. ECCD provided a means to increase both parents' and children's interest in education and to prepare children for formal education.

***ECCD Meeting***

The final evaluation found that the ECCD centers offered well-organized and child-friendly learning environments. Discussions with ECCD center management committees suggest that this model has been well accepted by the community. The volunteers and ECCD management committee stated that students who graduate from ECCD programs and enter formal schools are doing better than students who have not had the opportunity to attend pre-school. Those interviewed additionally claimed that local primary schools value having ECCD participants as their students.

Effective handover and sustainability of ECCD operations appears likely, as in most cases the management committees have generated funds from parent contributions to run the schools once SHOUHARDO ends, and the volunteers have committed to continue their jobs even when their honorarium is reduced (from *Taka* 1200 to *Taka* 1000). Moreover, parents are willing to pay for the pre-school and *shishu bikash kendro* service. The data confirm that the program is successfully raising awareness about education and is engaging girls (as well as young boys) in enhanced educational opportunities. Attendance at ECCD shows over half (52%) of the households surveyed in all regions have girl children enrolled in ECCD preschools. Girls' attendance is, in fact, slightly higher than that of boys (48%) in the surveyed regions.

Overall, one can argue that the gap in school enrollment for girls and boys, both at primary and secondary levels, has been narrowed significantly through well-designed stipends and incentives, however Bangladesh is still a male-dominated society where girls' education can be ignored or denied. Although CARE has devoted significant energy to placing an emphasis on girls' education, the data in Table 33 show that nearly a third of all women surveyed believe that it is better to send a son to school than it is to send a daughter. Men who are unaware of educational entitlement for girls can also be most influential in blocking a girl's desire to attend school. The Woman's Empowerment Thematic Review documented a father's view of his adolescent

daughter's future, "… you will only get married. There is no need for you to go to school." [23] Inertia often goes hand in hand with complex embedded cultural beliefs. Despite CARE's attention to gender disadvantage in education, substantial transformational changes to traditional power structures and cultural norms will undoubtedly take longer than one program cycle.

Geographic proximity to a school presents additional constraints to realizing enhanced educational opportunities for all. The ECCD management committee and parents in Namakuniagacha and Rajpur villages reported that because the nearest school is two miles away it is difficult for parents to send children to school, particularly their daughters. They believed that if a school was present in the village, parents may be more inclined to allow their daughters to obtain an education. Respondents expressed some concern that parents living in remote villages may be more inclined to send only their boys to school once SHOUHARDO ends.

Follow-up phases of SHOUHARDO should continue, expand, and enhance the ECCD model. Additional emphasis should be placed on raising community awareness of the importance of education for girls. The management committees of ECCD centers include women from the local community. Women's involvement is critical for girls' education: women who have realized their own empowerment may be more pro-active in promoting gender-equitable educational entitlements.

***Parent Teacher Associations /School Management Committees***

SHOUHARDO helped to reactivate PTA/SMC at the UP level, however final evaluation discussions did not generate a thorough understanding of impact. Participants stated that they are involved in PTA/SMC committees, yet the level to which they are contributing was not fully determined. Time constraints prevented the evaluation team from assessing the PTA and SMC in detail, but in two villages (Adarshagram and Char Vorat Gopaljhar) the VDC members who are also members of UP Education Standing Committee were asked how often they met with the SMC and how they had contributed to the committee decision-making process. Their responses indicated that they talk with parents and try to motivate them to send their children to school. When they notice a young boy or girl not attending school, they check with the parents to understand the reasons for non-attendance. While these responses indicate increased community efforts to raise public awareness of education, they also suggest that some PTA/SMC members may not be clear about their roles in influencing institutional decision making.

### 4.2.2 SSO3.2 Entitlement of women/girls improved whereby they can effectively voice concerns, mobilize resources, and influence decisions.

*IR 3.2.1: Targeted areas are sensitized on women's entitlements*
*IR 3.2.2: Enhanced capacity of 400 women's groups to identify, analyze problems/opportunities, develop action plans, access/mobilize resources*
*IR 3.2.3: 50 women's groups establish linkages with Regional/National women's networks for greater voice in policy, laws related to reproductive rights, family laws and violence against women*

Endline qualitative data indicate that SHOUHARDO has contributed to shifts in institutional mechanisms that will lead to increased women's social and economic empowerment. Using the CARE Empowerment Framework as a guide, the program advanced women's empowerment

[23] Magar, Veronica and Ferdous Jahan. 2009. Women's Empowerment Thematic Review. SHOUHARDO, CARE Bangladesh.

through EKATA, VDC/SDC, ECCD, MCHN and women's IGA groups. The program has created opportunities for women to be in leadership positions and has fostered capacity and skill development. Women have learned to recognize opportunities, develop action plans, and mobilize resources. The final evaluation team was impressed by the level of women's participation and active involvement in the various groups.

### *Impact in the context of CARE's Women's Empowerment SII Framework: Agency, Structure, Relation*

**Agency**

The final evaluation team believes that EKATA and VDC have increased both individual agency and institutional agency. Qualitative data collected during the final evaluation indicate that after participating in SHOUHARDO's groups, women are taking action, gaining self-esteem, increasing their mobility, and becoming aware of legal rights and women's entitlement to education. At the institutional level, membership and leadership positions in EKATA, VDC/SDC and ECCD management committees have provided forums for disadvantaged women to express their views and demonstrate their inherent but subdued leadership quality.

When women mobilize to participate in community affairs, it represents a significant transformation in Bangladesh. One PNGO director pointed out that traditionally, while young girls are allowed to play outside the home, upon reaching adolescence they become restricted to staying at home for the most part. Through economic activities, women's mobility has been enhanced. Previously husbands would not allow women to go outside for work. In most of the villages studied, women were quite busy with their own economic activities. By specifically targeting women for involvement in economic activities (under SO1), SHOUHARDO helped them to break traditional barriers.

***Case example:***
*A widow (LCS member) with two daughters used to face daily livelihood difficulties. As the result of new income-earning opportunities, she has saved Tk.10,000, mortgaged five decimals of land, produced vegetables and is currently earning decent wages. She states that her status in society has improved; previously she was never invited to the homes of neighbors. Now she receives invitations to neighbors' homes for marriages and people speak to her with respect.*

Interview with SHOUHARDO participant. November 2009.

Women interviewed during the final evaluation stated that their mobility and visibility in wider society has increased due to LCS involvement, skill development training through ALO, and other efforts. For example, female LCS members who worked for Khansama Bazar reported that they have started new and have strengthened existing livelihood activities with the income earned from working as a LCS member. Participants have used income earned to invest in tree sapling nursery businesses, sewing machines, cow fattening businesses, and grocery stores. Because of income earning status, some participants have been able to obtain credit to purchase land for cultivation.

The baseline survey found that women only made basic decisions about running a household. Issues involving larger sums of money or social norms were decided by male relatives even when the household was headed by a woman. As women's skills have improved and their earnings have contributed to the family's budget, women have experienced an improved role in household decision making. EKATA members in Basbari slum, who were also COG members, viewed themselves as powerful. They stated that as they have become more involved in economic activity their role in household decision making process has increased. They are now contributing to decisions about household budget management, children's education, and planning for new investments. Importantly, respondents also stated that their consumption levels have increased, as has their mobility.

A vital component of agency is self-image and self-esteem. Participants repeatedly mentioned an improvement in their confidence and skills. With new employment opportunities, women stated they had gained the confidence needed to bargain against wage discrimination, and are now earning a similar wage as men and have more work.

### *Improved Food and Livelihood Security*

Overall, qualitative data indicate that increased economic activity has increased food security and nutrition for women. Respondents stated that prior to participating in income-earning activities it was difficult to consume 2-3 meals a day and starvation, especially during *monga* period, was common. These women now report considerable improvement in daily food intake. For example, women working in the trades report increased wages. As mason's helpers they used to earn Tk.40 per day. As skilled laborers, they now earn Tk. 120/day. Women who opened shops in Khansama Bazar also state that their income has increased, and as a result their household consumption and livelihood security has improved. They can afford fish or meat at least once a month, are able to buy new clothes, and pay for their children's education. Some of the women have been involved in institutional credit programs with Grameen and Association for Social Advancement (ASA).

> *"Previously our situation was no work-no food, but now we can have a buffer for 1-2 days.*
>
> Participant in SHOUHARDO LCS group

SHOUHARDO is to be commended for the empowerment that has resulted from improvements in women's income earning capacity. To augment these initial changes, business capacity development needs more attention. Interviewed women entrepreneurs stated that they participated in one day of accounting and business management training. Endline evaluation discussions suggest that the women believe one day of training is not enough, and that they need more information on inventory management and accounting. Because they did not fully understand these processes, they had been turning them over to their husbands, thereby diluting, somewhat, the empowerment gains.

### *Women's Freedom of Movement*

Data in Table 37 show that 47 percent of surveyed women can go to the local market alone, 53 percent can go to the local health center alone, 72 percent can travel alone to the home of neighborhood friends, and 37 percent can go to a mosque or shrine unaccompanied. The baseline survey did not collect data on freedom of movement, so no comparison can be made in the final evaluation. While the data show that great disparity in women's freedom of movement still exists, the fact that the percentages of women who can travel alone to various local places are higher in all categories than the percentages of women who must be accompanied, offers hope to the long process of social change in Bangladesh that could lead to freedom of mobility for all women.

**Table 37: Women's freedom of movement: Percent of women who can go to various local places alone, accompanied or not at all**

| | Can go alone | Can go only if accompanied | Cannot go at all |
|---|---|---|---|
| Local market to buy things | 46.6 | 43.4 | 10.0 |
| Local health center or doctor | 52.5 | 45.7 | 1.8 |
| Home of friends in the neighborhood | 71.6 | 25.1 | 3.3 |
| Nearby mosque/shrine | 37.1 | 30.6 | 32.3 |

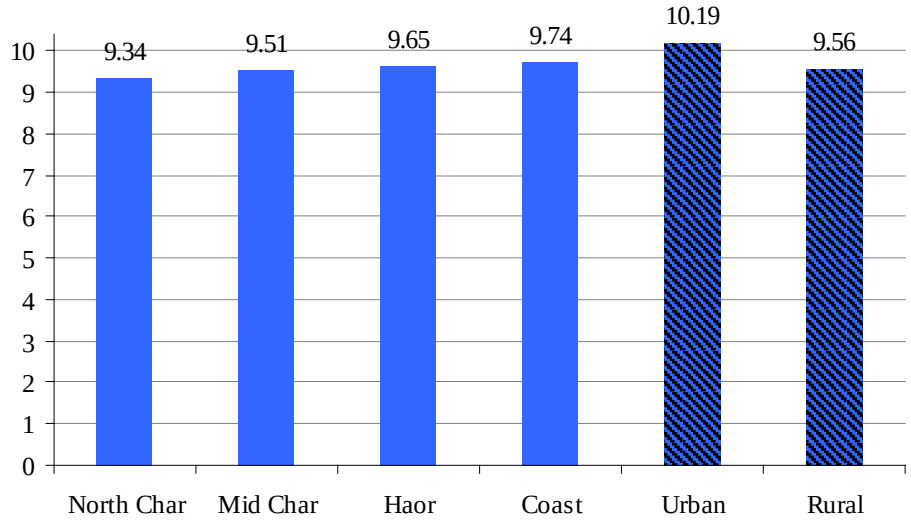
The number of households for which indicators are calculated is 3,356.

Source: Endline HHN survey.

Figure 29 presents the data as a mean score of women's individual answers. The scores for freedom of movement are calculated by taking the mean across women's individual scores. They are calculated using the following categories and score values from 3 (most mobile) to 1 (least mobile) : "Can go alone" (3), "Can go only if accompanied "(2), and "Cannot go at all" (1). The maximum score is 12.

The data show that women in urban areas have greater freedom of movement than women in urban areas. Women's freedom of movement score is highest in the Coast Region (9.7), and lowest in North Char (9.34). It is worth noting that, based on endline survey data, the proportion of women who attend EKATA groups is highest in the Coast Region (21%) and lowest in North Char Region (9 %) (Table 34).

**Figure 29: Score for women's freedom of movement, by region and urban/rural area**




Source: Endline HHN survey.

### *Alternative Livelihoods Option as a contributor to increased mobility*

The Alternative Livelihoods Option (ALO) group in Vadauri village in Baniachong Union presents a fine example of SHOUHARDO's efforts to empower women to motivate and mobilize one another. The group appeared organized and active, and members were very committed to their businesses. The program provided training and Tk. 5000 to only 15 adolescent girls, yet these young women have transferred the new skills among 85 women and adolescent girls. Mobility, aspirations, and capabilities have been expanded for the women in this group. Team leaders are now traveling to Dhaka from Hobigonj searching for new markets and businesses.

The success of this activity could have been strengthened by linkages to EKATA groups or other women's networking bodies. When ALO members were asked how they would protect themselves if they encountered a problem while traveling or if they faced gender harassment, they could not answer. The women stated they had not received training on women's empowerment and had no linkage to any women's networking body, and linkages with the VDC appeared weak.

## Structures

The structural dimension of women's empowerment is concerned with the environment that surrounds and conditions a woman's choices and the social norms that differentially treat women and adolescent girls. By increasing women's participation in economic activity, local political bodies, and justice systems SHOUHARDO helped women to break structural barriers. As shown in Figure 29, many women are now able to leave the house; many of them are even able to cross district boundaries. Access to information, services and justice has increased, and women's status within the family and the community has been enhanced.

### *Political Representation*

The program contributed to changes in traditional gender roles with respect to political representation. The VDC, EKATA, and other standing committees created spaces for women to have greater voice in policy and development action plans. Awareness of women's rights and gender violence has been increased, yet the skills to adopt this knowledge in the wider social context are not always present. Qualitative discussions indicated that EKATA members are aware of how to stop early marriage and dowry at the individual level, but are not always aware of how to address rights and empowerment in the broader context. Strengthening linkages between EKATA and VDC/SDC groups, and increasing awareness of gender power issues with VDC/SDCs, as related in the paragraph below, could address this problem.

The example of the SDC reelection mentioned in Section 2.1 relates how the SDC reacted against a dominant male, and was able to bring the voice of the women and PEP to the fore. This appeared to be a critical breakthrough for the position of women in that community (in conjunction with work of the EKATA group). SDC members also participated in a national gender violence workshop which further reinforced their determination to challenge gender power relations. The active participation of women on the VDC/SDC is a crucial ingredient in the empowerment of women in the community. In a number of villages, people explained that the women VDC members encouraged other women to take part in community projects.

### *EKATA and VDC Linkages*

Most of the EKATA groups are cited for bringing in public resources and services, such as latrines, Vulnerable Group Development (VGD) cards, CFW works, health services, and other benefits. Strong linkages between EKATA and VDC correlate to target communities that have experienced increases in public resources and services. Moreover, both VDC women and EKATA members have successfully extended their mobility, and many are members of standing committees affiliated with the UP. These societal changes suggest that SHOUHARDO strategies have effectively enhanced the capacity of women and women's groups to voice concerns, mobilize resources, and influence decisions.

The experiences of two EKATA presidents and one female VDC president, all of whom showed strong leadership capacity, support this observation and show how EKATA and VDC groups have helped to develop natural female leaders who are skilled at problem solving. The EKATA president of the rural community of Namakuniagacha facilitated the inclusion of local road and embankment improvements in the Union Parishad development plan and budget. This local

leader also acquired eight VGD cards and five latrines for her village. Road work in Char Vorat Gopaljhor is currently underway as the result of the VDC president's request that it be included in the UP's ADP. In the urban slum of Bahbari, the EKATA secretary, who is also the SDC president, presented a request to the mayor of Syedpur Paurosava for improved drainage and the allocation of food ration cards.

***MCHN as a contributor to women's empowerment***

Women state they have gained greater prestige within their families due to increased awareness of health and nutrition issues. Women who participated in MCHN programs gained information about health, hygiene, nutrition and pre- and post-natal care. Many of them communicated that because they are now aware of these important issues, they are able to share their new knowledge with their in-laws and husbands and apply it to their life. Moreover, based on data in a 2002 IFPRI study[24] indicating that improvements in women's status in South Asia strongly influences children's nutritional status, the status gained from women's increased health, nutrition and child care knowledge is likely contributing to the positive outcomes noted in SO2.

Women also related feeling empowered by their ability to contribute to household needs as a result of savings in consumption expenses. MCHN ration recipients stated that food rations had helped them save money from their day to day consumption budget and that they had used the savings to buy school supplies and uniforms, pay for medical expenses, and put into emergency medical funds.

Courtyard health information sessions also appear to be contributing to increased mobility and socialization for women. Women are allowed to leave their homes and spend time with their peers. While waiting for sessions to begin, there are opportunities to discuss non-health ideas and problems. This allows women to learn through experience to speak up in a group and share their opinions in an unstructured manner. Some women commented that they used to be too shy to speak out, but now they are not.

**Relations**

The quantitative and qualitative data indicate that the power relations through which women are negotiating their path are improving overall. As in most societies, there is much room for further growth.

The power of women to negotiate is increasing although qualitative interviews suggest that additional capacity development in this area would greatly strengthen women's participation in business, PTA/SMCs, and overall contributions to society. Women are pursuing new opportunities and new social forms have been catalyzed through women's contacts with the SHOUHARDO program, as evidenced by women's increased participation in economic activities. Relationships and behaviors are beginning to change, as evidenced by the data in Table 32 although data in Table 37 and 33 point out that there is still much room for growth in this area.

## *4.3 Program Challenges*

Without mass awareness about patriarchal value systems, one wonders how much can be attained with respect to inequitable gender power relations. The data in Table 33 indicate that the majority (70%) of women agree that important family decisions should be made by the men in the family.

[24] Smith, Lisa C. et al. 2000. *The Importance of Women's Status for Child Nutrition in Developing Countries.* International Food Policy Research Institute (IFPRI).

Forty-seven percent of women believe that a wife should tolerate domestic abuse in order to keep the family together. A case example related in The Women's Empowerment Thematic Review highlights how difficult it is to thoroughly rely on reported data as an indication of social change. It is always possible that respondents have learned how to answer 'correctly' when presented with prickly human rights questions. The study relates how one father gave contrasting responses to two interviewers when asked about attitudes toward his daughter's early marriage. In one interview the father indicated he would allow his daughter to wait until she was 18 years of age; in the second response, he stated he would not wait until his daughter is 18, regardless of EKATA's advice. [25] Collectively these data suggest that while improvements are noteworthy, Bangladeshi women still face powerful social constraints to attaining full and equal human rights.

While acknowledging that women's involvement in economic activities, MCHN groups, and water and sanitation activities have helped women to improve their status in the family and their living conditions, it is important to develop capacities that will sustain these advances in the long term. As acknowledged by SHOUHARDO, both immediate and strategic empowerment strategies are needed. Both the final evaluation and the Women's Empowerment Thematic Study assert that more focus on the strategic components of empowerment—capacity building, participation, breaking traditional barriers, and access to knowledge are needed. EKATA groups are the model by which this could be attained, but as long as they are limited in scope, the likelihood of systemic change as a result of SHOUHARDO activities is slim.

The present strategies used in communities to reduce gender-based violence, such as public admonition, do not allow for an understanding of the underlying causes of domestic violence. Threats or shaming someone publicly have not been effective. A similar observation is made in the Women's Empowerment Thematic Study: "In Char Varot women's empowerment activities are carried out by PNGO staff rather than an EKATA group. While dedicated and hardworking, the PNGO staff had insufficient technical knowledge of issues related to violence to effectively deal with complex women's empowerment issues and used legal threats to control men's behavior". [26]

Linkages between EKATA groups and other women's networking bodies are not as strong as they could be. Women who have been economically empowered have not always received training on legal rights, political representation, or how to defend oneself in the case of gender abuse or harassment. Women who have become aware of the negative effects of early marriage, dowry and other forms of gendered abuse, have not always been provided with opportunities for economic empowerment that will assist them to remain unmarried for a longer period of time. And while awareness of women's rights and gender violence has increased and EKATA members are aware of how to stop early marriage and dowry at the individual level, the skills to adopt this knowledge in the wider social context are not fully developed.

## *4.4 Sustainability*

**ECCD:** The ECCD model is likely to be sustainable, as management committees have developed plans, generated funds, and above all, both parents and communities have showed significant commitment to children's education. For example, community leaders have offered spaces for schools; the Nama Kuniagacha committee with assistance from the VDC has already included an ECCD center in the UP development plan; local elites have donated land for a school, and qualitative interviews found the volunteers to be committed to children's education.

[25] Magar, Veronica and Ferdous Jahan. 2009. Women's Empowerment Thematic Review. SHOUHARDO, CARE Bangladesh.
[26] Magar,Veronica and Ferdous Jahan. 2009. Women's Empowerment Thematic Review. SHOUHARDO, CARE Bangladesh.

**EKATA:** Sustainability of all EKATA groups looks promising, but is difficult to determine. Some groups are well prepared to continue functioning in the long term, while others may struggle. Interviewed SHOUHARDO Technical Coordinators stated that 16 EKATA groups are currently registered with the Women and Social Affairs Department and several more group registrations are in process. The evaluation team met with registered EKATA groups. Getting registered is one step toward having a recognized identity, but sustainability will ultimately hinge on enhanced leadership skills and the capacity of groups to organize themselves and take initiatives. Clear guidelines and operational policies would also contribute to the sustainability of EKATA groups. At the time of the final evaluation, some groups were generating savings funds and others were planning for savings funds, yet there were no clear guidelines or policies for operating these funds. In addition, EKATA group members would benefit from capacity development in negotiation and leadership skills so that women are able to raise their voice more effectively.

# 5 SO4: Disaster Risk Reduction and Humanitarian Assistance

*Targeted institutions and communities are better able to prepare for, mitigate and respond to natural disasters*

Global experience in disaster risk reduction has enabled many people to adjust to the rising threats of natural disasters and greatly minimize their negative impact in recent years. Although Bangladesh has made crucial strides forward in this regard, natural disasters still pose a threat to household food security. The intention of SHOUHARDO's SO4 is to reduce the risk of these disasters and increase the preparedness of communities and government agencies to cope with recurring hazards.

The communities included in SHOUHARDO are vulnerable to frequent disasters and hazards. The baseline showed that 64.5% of rural beneficiary households and 58.4% of urban households had experienced crisis situations in the previous 12 months. While 38% of households reported illness to be the most prevalent type of crisis, other important crises mentioned were flood, food shortage, and tidal surges. Other serious hazards mentioned during consultations with PNGOs were river erosion, drought, and cold waves. The joint secretary of the Ministry of Food and Disaster Management (MoFDM) stated that earthquakes represent a significant risk, in part because they are so infrequent that people are unlikely to prepare for them. Cyclones represent another serious hazard to communities and their occurrence has increased in recent years. Of the previous six severe cyclones since 1970, three have occurred since 2004.

The interventions in SO1, SO2 and SO3 have limited potential to help vulnerable communities to sustainably increase their food security without addressing the risks posed by natural disasters. Good early warning systems and contingency planning are needed to mitigate the negative impact of disasters on livelihoods, food stocks, and human suffering. The periodic floods that affect many parts of the *chars* and the *haors* frequently cause crop loss, increase human and animal disease, damage homes and disrupt communications. Wave action in the inland sea of the *haor* areas erodes the mounds, homes and undermines people's productive and income-generating activities. Cyclones and tidal surges in the coastal region can wipe out infrastructure and result in fatalities. Without physical protection of their village or the raising of the plinths of their homes, it is extremely difficult for people to make substantial improvements in their livelihoods.

## 5.1 *SO4 Overall Achievements*

Bangladesh suffers from annual emergencies, from flooding to erosion to cyclones and other hazards. The frequency of these emergencies has increased in recent years, with global climate change appearing likely to continue this trend. This disaster risk reduction component has focused on developing local institutional capacity for preparing for and responding to disasters, maintaining and deploying a capacity for quick response to disasters, developing appropriate infrastructure for disaster mitigation, and working to support national policy development.

Despite preliminary setbacks to this SO, SHOUHARDO built up momentum after the mid-term review and has trained and facilitated the work of 510 Union and Pourashava Disaster Management Committees (UDMC/PDMC). Activating the UDMC/PDMCs was a major undertaking on its own, but the UDMCs visited showed great capacity to bring community members together to prepare for emergencies and to disseminate and utilize early warning information. SHOUHARDO trained 9,272 Disaster Volunteers (DVs) and provided them safety clothing and gear. They constitute a key cadre of people involved in raising awareness and helping communities prepare for emergencies, and are available to meet disaster response needs.

The DMCs and volunteers worked to develop risk and resource maps and contingency plans in effectively all 510 unions and pourashavas. This has helped the communities to clearly identify areas most at risk, and prepare plans for how households and communities can prepare for these risks. This has provided clear guidance for infrastructure improvements that may help mitigate these risks, such as embankments or improving roads. Additionally, it helps the local authorities to respond quickly and effectively when disasters occur, coordinate smoothly with households to help them protect themselves and their assets, and greatly mitigate the costs, suffering and insecurity caused by the disasters.

Given the perennial vulnerability of many communities to hazards, many of the infrastructure projects undertaken in SHOUHARDO were directly related to protecting people and facilities from the worst effects of these hazards. SHOUHARDO helped raise 7832 homesteads, which not only provides protection for those households, they also serve as flood shelters for nearby households. Seventy-eight mounds were extended, and 42 mound protection walls constructed, which likewise serve as a habitable space for *haor* communities subject to annual flooding. The program raised 549 community facilities, constructed or maintained 37 embankments, and constructed 19 flood shelters and 45 cyclone shelters.

SHOUHARDO has supported national policy and capacity-building for disaster risk reduction, firstly by supporting the institutions of DMCs which were established by government but many of which were inactive. A lasting contribution has been made through the establishment and NIRAPAD network, which included making critical contributions to the development of a national disaster policy and law. Another important contribution to national disaster preparedness is the development of a long-lead forecast mechanism which will greatly augment early warning systems by giving up to 10 days of advance notice of imminent flooding. SHOUHARDO's emergency response facility enabled the program to initiate response to emergencies anywhere in the country within 24 hours, with a stockpile of supplies and a standing fund. The program provided assistance and relief in response to landslides in Chittagong, monsoon floods, Cyclone Sidr and Cyclone Aila. With all of these national level disaster interventions, it is important to note that SHOUHARDO was having an impact far beyond its targeted 2205 villages and 137 slums.

## *5.2 DRR Institutional Strengthening*

*SSO 4.1: Enhanced capacity of communities and targeted institutions to overcome and manage disaster situations.*
*SO4a: management capacity matrix score UPDMC*
*IR 4.1.1a: DMC receive training*
*IR 4.1.1c: disaster volunteers trained*
*IR 4.1.1: Targeted institutions and communities trained and capacitated on disaster preparedness, response and mitigation.*

Because of disaster preparedness efforts, the death toll from cyclones has declined dramatically. In 1970, the Bhola Cyclone struck Bangladesh and 300,000 people perished. Cyclone Sidr of 2009 had greater intensity than the Bhola Cyclone, yet the number of casualties was extremely limited. Bangladesh has made great strides in reducing risks[27], but the toll in human misery and shocks to food security is still a significant challenge that will require ongoing development work.

The evaluation team met with several UDMC and groups of disaster volunteers, and discussed issues of disaster preparedness with UP members, *upazila* and district officials, and the joint secretary of the Ministry of Food and Disaster Management. In contrast to other SHOUHARDO components, which work primarily at the village level, SO4 works mainly with the DMCs at union/*pourashava*/city corporation level. The UDMCs interviewed seemed relatively active and able to articulate what they had learned and how they were applying it. The UDMC is made up of many of the most prominent people in the union, and there was some indication that this posed some challenges with regards to their relationships with DVs. However, this engagement provides a key area for ownership by the UP/PS, and works through a linkage channel with the *upazila* and district.

The disaster volunteers are an important resource for building community disaster preparedness. One man and one woman volunteer were selected from each of the nine wards in each UP. The selection is done mainly by the ward members, but is approved by the entire UDMC. In the case of urban slums, five volunteers from each slum are identified and trained to be disaster volunteers.

Feedback from a number of sources has shown that the relationship between DMCs and volunteers frequently causes challenges to program implementation. The volunteers do not feel that the DMC in general, and the UP in particular, give them sufficient recognition for the disaster preparedness work that is being done. On one level, the UP/PS members probably wish to accentuate their own role and capacity, so as to increase their profile and the likelihood of being reelected. This may also simply reflect the dominant social hierarchy, as disaster volunteers usually come from poor backgrounds.

The disaster preparedness thematic study also mentioned that some DVs were requesting incentives, like other volunteers in SHOUHARDO. However, the disaster volunteers receive less intensive training than agriculture or health volunteers who also carry out regular training activities on their own. Activities carried out by DVs are typically low-level activities that are carried out over the long-term under the guidance of the UDMC. The issue of honoraria for DVs

[27] M. A. Wazed, Joint Secretary, MoFDM. 6 December 2009.

working under the Cyclone Preparedness Program was raised by the minister of MoFDM, but budgets have not allowed for this. The Ministry understands the need for recognition of volunteers, and provides certificates to acknowledge their contributions.

## *5.3 Planning and Implementing Mitigation Measures*

*IR 4.2.1: Community-led disaster preparedness plans developed or updated in 500 unions and 19 urban committees –*
*IR 4.2.1a: contingency plans developed*
*SSO 4.1a: communities integrate local coping mechanisms to reduce risk of disasters*

The baseline report showed that there were little or no early warning systems in existence in the targeted communities prior to the program, with fewer than 25 percent of households receiving any early warning before a natural disaster. Prior to the SHOUHARDO program, the most common sources of early warning were friends, neighbors, radio and television.

### *Risk and Resource Maps*

Through the facilitation of the UDMC/PDMC members and with assistance of the DVs, the program reports that risk and resource maps were developed at the level of 510 wards, unions and *pourashavas*. These maps illustrate the locations of disaster vulnerability, prioritize the risks, and identify resources that can mitigate risks. The maps have helped people to identify the most vulnerable areas to flooding, and to design plans for seeking shelter during disasters. Regular meetings are held to increase awareness of these plans amongst the population. These maps were visible outside UP offices and in prominent locations inside meeting rooms. The risk maps were professionally prepared, and their usage echoes best international practice in terms of providing participatory and transparent governance in focusing mitigation efforts. As one UP chair reportedly stated, his job of disaster preparedness was made easy, as he just had to know where the 'reds' (areas of high risk) were on the map of his union, and try to take measures to reduce the risks by undertaking projects of embankments, plinth raising, etc. For example, during the current 100-Day program of the GoB, the risk maps provided a transparent means of prioritizing public works projects related to food relief. Previously, such infrastructure projects would commonly be directed at improving roads and flood protection for UP members, but the maps helped create a more equitable and rational basis for planning.

***Risk resource map, UDMC, Shoulmari Union***

Risk and resource maps and contingency plans are prepared at the ward level or slum level, and these are then incorporated into the UDMC/PDMC level maps and plans (for unions and

pourashavas). Given the unique conditions of urban communities, specific technical support was provided in conjunction with the Asian Disaster Preparedness Centre (ADPC), to two PDMCs and a city corporation (Jamalpur, Cox's Bazaar and Chittagong, respectively). Training was provided to the PDMCs, and municipal workshops held. Vulnerability assessments were done on the municipal level, and policy discussions held to disseminate these results.

### 5.3.1 Early Warning Systems

The program reports that it has established early warning systems in 1,117 communities, including early warning equipment and the presence of disaster volunteers who can disseminate messages for early warning. One UDMC visited in Rangpur region talked about various measures they are using for early warnings, including flood pillars that show high water by color codes, and the receipt of early warning SMS messages. In the Coastal region, a community was using flags for communicating early warning messages.

### 5.3.2 Disaster Preparedness

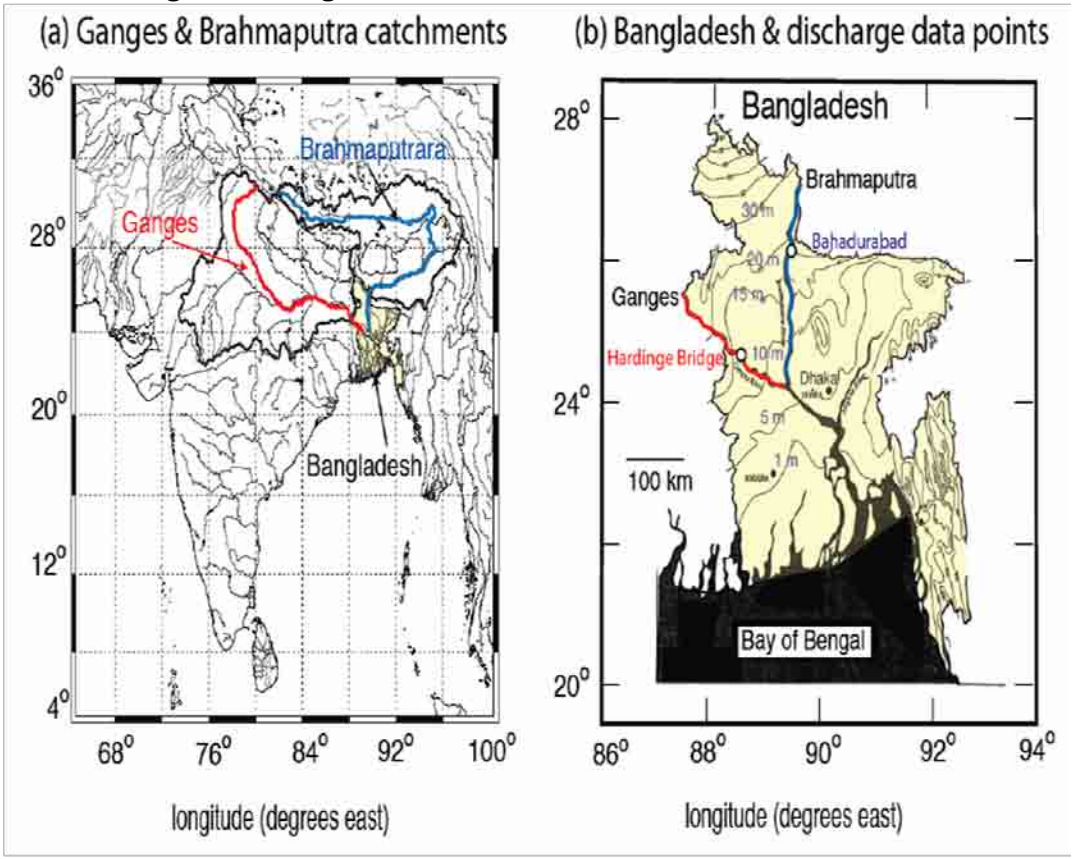
Discussions with the evaluation team revealed that the DMCs and disaster volunteers were much more prepared for disasters than they had been prior to the program. Through the planning process, a number of measures were prepared to mitigate the impact of disasters. Cattle, poultry, homestead vegetables and fishery equipment are protected, and cooking stoves, small vessels, firewood and animal dry fodder will be transported to highlands and embankments in the event of a natural disaster. The Department of Agricultural Extension complemented mitigation efforts by helping to prepare work plans for relief and rehabilitation activities. Communities have organized for the rescue of people and livestock from the *char* areas. Plans have also been made to store dry food and safe drinking water, and communities understand that they will need approximately ten days worth of supplies, as relief is not likely to reach affected areas until seven days after the initial flooding. DMCs have also prepared for alternative livelihood options to take place immediately after flooding (small scale fishing, boat making, seedling raising, jute retting)[28].

Some of the disaster preparedness equipment was also on display during the evaluation team visits to the communities. Helmets and shoes had been given to the volunteers, and public announcement equipment was given to UP and the target villages/ slums. Not all equipment, however, was found to be functioning and ready for use in an emergency. Electronics, for example, were sometimes found to be lacking batteries.

Flooding is a significant impediment to the development of Bangladesh, which is home to two of the largest river systems in the world, the Brahmaputra and the Ganges (see Figure 30). Previously, forecasts were limited to 48, or no more than 72 hours, in part because they could only access data from within Bangladesh[29]. Two of the main data centers (Hardinge Bridge and Bahadurabad) are shown on Diagram B below. ADPC is a regional initiative that can increase the viability of information systems shared with upstream countries.

[28] December 2009.
[28] Webster, et. Al. Georgia Institute of Technology. Medium range and seasonal probabilistic prediction of the Ganges and Brahmaputra discharge. http://www.ecmwf.int/newsevents/meetings/workshops/2007/ensemble_prediction/presentations/webster.pdf . Accessed 16 December, 2009.
[29] "Flood Forecasting in Bangladesh", Bangladesh Meteorological Department, http://na.unep.net/flood/BANGLADE.pdf. Accessed 16 December 2009.

**Figure 30: Diagram of River Catchments and Traditional Data Points30**




## 5.3.3 Flood Forecasting

Under SHOUHARDO, an innovative flood forecasting system was developed together with ADPC, Georgia Tech, the European Centre for Medium-Range Weather Forecasts (ECMWF), and other actors. The initiative is called the "Flood Forecast Technology for Disaster Preparedness in Bangladesh: Climate Forecast Applications". This project has developed a model to give long lead forecasts, which is now being used by the Flood Forecasting Water Commission (FFWC). SHOUHARDO invested considerable energy in developing this long-lead forecast undertaking, in full partnership with the FFWC and the Bangladesh Meteorological Department (BMD), and helping to build their capacity in the process. The system functions by obtaining ECMWF data on flooding on a real-time basis, which provides warning up to ten days in advance of floods. The FFWC and BMD are then able to interpret and relay that data to regional and local authorities through email and by phone. Ultimately, the information is relayed to the communities through the UDMC/PDMC and disaster volunteers. Text messages sent to cell phones allows for multiple updates to be sent on a daily basis. The ease of this transmission method and the earlier arrival of warnings enable organizations and communities to prepare for imminent floods by safeguarding crops and animals, storing water, food and shelter items, etc. SHOUHARDO has now completed its role in the FFWC and has handed it over to the Government of Bangladesh.

[30] Webster, et. Al. Georgia Institute of Technology. Medium range and seasonal probabilistic prediction of the Ganges and Brahmaputra discharge. http://www.ecmwf.int/newsevents/meetings/workshops/2007/ensemble_prediction/presentations/webster.pdf. Accessed 16 December, 2009.

The system is currently being tested at some high-risk locations, and the impact on food security of households in these areas should prove to be substantial. Based on the 2008 post-flood review[31], the new system could have prevented household loss of 33,000 *taka* in livestock, 18,000 *taka* in savings, 12,500 in agriculture and 8,800 in fisheries. However, the system is still quite new and it may be difficult to support these claimed impacts, without further verification.

The evaluation team visited Rajpur union, which was supposed to be a site of the piloting of the new early warning system. Yet the UDMC did not seem to know much about new arrangement, and they were talking of early warning in terms of 24 to 48 hours. They confirmed that they received regular weekly text messages, and that the frequency of messages increases during high water risk periods. It is possible that some aspects of the pilot project have been carried out, such as the mitigation measures, but the long-lead early warning aspect seems to have been left out or forgotten.

SHOUHARDO staff confirmed that some of the pilot sites were not as active as others. As indicated above, SHOUHARDO had a challenge in activating some of the UDMCs, and it is not likely that the challenge of retaining the interest and commitment of these community leaders will be completely eliminated.

## *5.4 Infrastructure for Disaster Preparedness*

*SSO 4.2: Appropriate infrastructure implemented to minimize disaster risk and losses.*
*IR 4.2.2: Appropriate structures developed to mitigate against disaster.*

### 5.4.1 Cyclone/ Flood Shelters Having Easy Access

*SSO 4.1b Shelters which provide easy access to women, elderly and the disabled*

Maintenance and repair of cyclone shelters (45) and flood shelters (15) have been done to make them suitable for use during disasters. Minor repair works including plastering, painting, renovation of water supply and sanitation facilities have been accomplished. School management committees in the cyclone shelter expressed their intention to take the initiative to contact the Local Government Engineering Department in case of any necessary maintenance in the future. However, any arrangement for easy access like ramps for the old, women and disabled persons was not possible, as this would require major renovation work including basic changes in design features.

### 5.4.2 Completion of Infrastructures for Disaster Mitigation

*IR 4.2.2a Infrastructure projects completed*
*OP 5.2.2 USG assisted communities have constructed/ developed physical infrastructures to mitigate the effect of shocks*

The SHOUHARDO Program implemented many infrastructure projects (21,557 nos.), and approximately 40% of them are related to disaster mitigation. Major infrastructure projects relevant to disaster mitigation undertaken by SHOUHARDO include: homestead raising (7832), mound extension (78), community place ground raising (549), market ground raising (7), road maintenance and construction (314), embankment maintenance and submergible embankment

[31] CARE Bangladesh. Data from an ADPC analysis, quoted in SO4 presentation, CBHQ, November 2009.

construction (37), mound protection walls (42), flood shelter maintenance (2), flood shelter construction (19), wave protection wall building (5), cyclone shelter maintenance (45), and protection wall building (20). The improved infrastructure under the program are compliant with the adaptation measures to be undertaken to deal with climate change issues. All this infrastructure had a positive influence on disaster mitigation, and people in the community are now more confident about the possibility of taking refuge during disasters. Flood shelters were utilized by SHOUHARDO beneficiaries in *char* areas during recent floods. However, the sustainability of these structures will depend upon proper and timely maintenance.

By supporting target communities in developing relevant infrastructure like flood shelters, cyclone shelters, mound protection walls, raised households above anticipated flood levels, the SHOUHARDO program has improved their capability to respond and mitigate any shocks and disasters.

### 5.4.3 Case Study on Dhulpushi Village

Although the SHOUHARDO program was scheduled to begin in October 2004, the actual implementation of the program activities started in 2006 after the enrollment of implementing partners. Communities first identified their major problems and prime needs through consultation and drew it out in the social map. Based on that concept, the Dhulpushi Village Development Committee (VDC) prepared the Community Action Plan (CAP) for their village based on the priority of their needs. Taking into consideration the utmost requirements of the community as well as the CAP activity, SHOUHARDO approved the construction work of the mound protection wall in the budget of FY-2007 for first two parts (*Hati*) of the village. Previous destruction caused by turbulent wave action during the monsoon was analyzed prior to construction. Following the process as per guidelines, implementing partner organization Swabolombi Unnayan Samitee (SUS) completed the design and specifications through the involvement of a Local Contracting Society (LCS) in FY-2007. The LCS approach was very beneficial to the community, as the people within the village worked themselves without taking any assistance from outside contractors. A financial benefit of Tk. 150,000 went to the community, which had a positive impact in alleviating poverty.

Before the construction of a mound protection wall, the villagers were living in vulnerable conditions as every year turbulent wave action severely damaged their village. The community addressed this problem by placing bamboo fencing, *binna*, and *chailla bon* to protect the village from damage caused by waves, but this method was generally not effective. On an average, every household spent Tk. 6000 per year and worked for a minimum of 15 days during the monsoon, decreasing their net total annual household income. Because of the damage caused by waves and erosion, Dhulpusi village gradually grew smaller and the community people suffered a loss of assets and money. Some of the villagers migrated from the village to save their remaining assets from future damage. Other residents continued to suffer a loss of income and assets, and slipped gradually into poor and extreme poor demographic categories.

Considering all the pros and cons, villagers undertook the repairs and extension of a mound protection wall, contributing Tk. 1, 80, 000 of their own funds. Then VDC of Dhulpusi village communicated with the implementing organization to construct the mound protection wall to the design and specifications of the community.

Because of this communication, finally the villagers completed the mound protection wall through an LCS with the assistance of implementing organizations and SHOUHARDO. The total length of the mound protection wall of these two *Hati*s is 1000 feet. They also feel the need for

extension of the mound protection wall for the remaining *Hati*. For that purpose they have communicated with the Government and other local service providing agencies. As requested in the statement of the community people and the LCS, this mound protection wall will last at least 100 years and can be extended in the future because of the community's new knowledge of mound protection wall construction.

The LCS and the community did not face any difficulties during the implementation of the mound protection wall project as they were all united in purpose. The Union Parishad has recognized the project for its impacts and for mobilizing the community for public works. Several people have used the skills the acquired working on this project to build livelihoods as masons and have already constructed similar mound protection walls in the nearby villages Bijoynagar, Pangaon, Kaikkerpar, Bahadurpur, Roypur and Ghagutia. They have used the money earned from this occupation to improve their lifestyle as well as their homesteads. The owners of most of the households in Dhulpushi village have now maintained or repaired their homes by replacing traditional leaf roofs with new tin roofs.

The VDC would like to continue their efforts to promote community disaster preparedness by constructing an emergency shelter. Already, they have communicated with local Government and service providing agencies for this purpose. Community people of the Dhulpushi village are now continuing their practice of preparing the Community Action Plan each year. They hope to continue the best practices of the SHOUHARDO program to make the program sustainable with or without support from CARE and the implementing partner organization.

## *5.5 DRR National Policy Development*

*SSO 4.3: National-level bodies facilitate appropriate disaster policy formulation, amendment and reinforcement.*
*IR 4.3.1: NIRAPAD strengthened as a network to coordinate, raise awareness and disseminate best practices.*

SHOUHARDO has collaborated closely with the Disaster Management Bureau of MoFDM, to strengthen national capacities for disaster management. CARE Bangladesh is one of the leading organizations in the field and helps provide a bridge between NGOs and government.

NIRAPAD is a network that arose during the previous Title II program, IFSP, when the need became apparent for information sharing on disaster risk reduction. NIRAPAD was initially an outgrowth of IFSP's attempts to facilitate that sharing, and is now a network organization composed of 24 member NGOs. NIRAPAD has become a national advocacy organization for disaster preparedness and response. Initially it was housed in CARE Bangladesh, but recently it has also been receiving support from other organizations and operates as an independent entity. The GoB has proposed that NIRAPAD serve as a coordinating platform under the Hyogo framework rather than individual NGOs. NIRAPAD is recognized by the UN and other organizations and is undergoing talks with the UNDP regarding future collaboration.

NIRAPAD facilitated a workshop at which NGOs met with officials of the law and disaster ministries. The consultation highlighted the need for a law and policy on comprehensive disaster management. This helped set in motion a process that appears likely to produce the first law of this kind in Bangladesh. The sustainability of NIRAPAD is important because it has been well situated in the nucleus of activity of many NGOs, and it enjoys the confidence of the GoB, which has stated its preference to deal with one NGO umbrella rather than many different NGOs. CARE

Bangladesh has a long history in the sector and is trusted by both NGOs and the government, so it is a natural fit for this initiative to play a central facilitating role. SHOUHARDO has continued to provide support to NIRAPAD long enough for it to acquire a profile and prove its usefulness, and this has helped maximize its chances for sustainability.

## *5.6 Emergency Response*

*OP 5.1.2: Emergency Supplies to Disasters*

Under this sub-component of the program, SHOUHARDO retains a capacity to respond to emergencies. Supplies are stockpiled for 20,000 families and a response time of 24 hours can be achieved, delivering food and shelter to disaster victims within three to four days. A standing fund of USD 150,000 is available to quickly facilitate relief efforts. In an emergency context this kind of flexibility is crucial to cutting through lengthy financial procedures. A portion of SHOUHARDO's 49,776 MTs of food commodities was distributed to the population affected by the recent Cyclone Sidr. 2,542 MTs was kept for emergency response, and has recently been distributed to people affected by river erosion and Cyclone Aila.

Part of SHOUHARDO's work in this component has been the capacity building of local institutions and community members, as discussed above. This work has helped communities to identify areas of risk and resources that are available to them and plan actions needed during times of emergencies on a household and community level. Thus, in the 2,342 targeted communities (and their enclosing unions) participating in the SHOUHARDO program, these capacities have been built and plans made such that the impact of natural disasters is reduced. In some cases, such as the river erosion during the past two rainy seasons, the program has already had a positive impact in its normal area of operations.

Most notably, SHOUHARDO has responded through its emergency response facility to 2007 landslides in Chittagong, 2007 monsoon floods, Cyclone Sidr in 2007, an Cyclone Aila in 2009. The full range and type of responses is given in the table below:

| Year | Disaster | Activities | # of beneficiaries | Geographic Area |
|---|---|---|---|---|
| 2005 | Flood (October'05) | Food and non food ration<br><br>( Per family: Rice, pulse, Edible oil, iodized salt, potato, ORS) | 7,000 families | Rangpur, Nilphamari, Gaibandha |
| 2007 | Cold wave (January07) | Blanket | 30,080 families | Kishoregonj, Netrokona, Hobigonj, Sunamgonj, Rangpur, Lalmonirhat, Kurigram, Gaibandha, Nilphamari, Tangail, Sirajgonj, Pabna, Jamalpur, Ishwardi |
| | Land slide and Flash flood (June'07) | Food and non food ration<br><br>( Per family: Rice, pulse, edible oil, Iodized salt, onion, potato, flattened rice, molasses, soap, match, candle, gamcha, water bottle, plastic sheet, rope) | 2,500 families | 8 wards under Chittagong city areas |
| | Flash Flood | Food and non food ration | 2,500 families | Chokoria under Cox's Bazar |
| | Flood (July '07- August'07) | Dry food ration distribution<br><br>(Per family: Rice, pulses, Edible oil and | 20,771 families | Gaibandha, Kurigram, Jamalpur, Sirajganj, Sunamganj, Netrokona |

| Year | Disaster | Activities | # of beneficiaries | Geographic Area |
|---|---|---|---|---|
| | | Iodized salt)<br><br>Water distribution through 3 Water Treatment Plants | 466,788 litres of water to 28,223 families | |
| 2007-2008 | Cyclone-Sidr response, 2007-2008 | Food distribution | 1,500 families | Bagerhat district |
| | | Non Food distribution | 13,000 families | Bagerhat district |
| | | Food distribution | 39,252 families | Barguna district |
| | | Shelter | 825 family shelter + 3 community Shelter | Bagerhat and Barguna districts |
| | | Livelihoods | 4,500 families | |
| 2009 | AILA Responses 2009 | Non food and Shelter materials | 920 families | Nijhum Dwip of *Hati*ya Upazila under Noakhali district |
| | | Emergency safe water distribution | 8,51,662 liters | Satkhira, Khulna and Bagerhat |
| | | Food support | 38,255 families | Shayamnagar and Ashasuni Upazila of Satkhira District, Koyra Upazila of Khulna District |
| | River Erosion and Mongha in Northern Bangladesh | Food support | 4,662 families | Rangpur, Kurigram, Gaibandha, Niphamari and Lalmonirhat. districts |
| | | | | |

One advantage of having this facility as part of SHOUHARDO is that it has allowed both CARE staff and partner NGOs to have the constant interplay between emergency response and disaster preparedness. Building organizational capacities before, during, and after disasters occur is important to improve Bangladesh's ability to respond to its high risk environment and improve its food security in spite of this challenge. For people and organizations to be effective in both preparation and response to natural disasters, it is important that they learn in this holistic sense. Because of SHOUHARDO's mode of working through multiple local NGOs and local government institutions (including not only the DMCs but also its coordinating work through the PACCs), SHOUHARDO was able to help raise awareness, increase knowledge, and put in place physical assets with many of these partners.

## *5.7 SO4 Challenges*

Feedback received in community interviews and from PNGOs pointed out that the Disaster Volunteers often feel uncomfortable with their relationships with DMCs, and do not feel that they receive recognition for the volunteer work they do. The DMCs are composed of Union Parishad and Pourashava political and community leaders and are dominated by community elites, so the pro-poor dynamic is different from the VDC/SDC and village level groups. Unlike many of the other categories of volunteers who worked under SHOUHARDO, the DVs did not receive a regular allowance, which may exacerbate their feeling of being under-appreciated.

The long-lead flood forecast system shows considerable potential, but one of its pilot villages visited[32] did not display much awareness of this, and were talking about early warning in terms of 24 or 48 hours. Another isolated instance was found of neglected emergency equipment which had been issued to a UDMC.

[32] Rajpur village, Rajpur union, Lalmonirhat Sadar upazilla, Lalmonirhat district.

SO4 has not been as successful in empowering PEP as other elements of the SHOUHARDO program. This is likely due in part to the lack of involvement of the VDC/SDCs with the UDMC or in the selection process for DVs. The class prejudices ingrained in the UDMCs should be addressed through training and direct discussion initiated by SHOUHARDO. Another factor contributing to SO4's slow progress in empowering PEP may be the limited number of activities that the UDMCs and DVs need to undertake. Without continuing projects, these groups lack the forward momentum necessary to achieve lasting improvements in disaster preparedness and PEP empowerment.

Contingency plans for disasters were reported to have been developed by the 510 DMCs, but these were not visible during the visits of the evaluation team. This was also the finding of the disaster reduction thematic study.

# 6 Program Processes

## *6.1 General Management*

### 6.1.1 Program Achievements

Overall, SHOUHARDO has made significant improvements in the general management of the program. As a result of the mid-term review, SHOUHARDO met with all PNGOs over a three day period to prepare a new strategy for managing the project. Key issues that were addressed in the strategy included: (a) restructuring staff composition to meet technical support needs and maintain program focus; (b) improving the working environment to reduce the potential for burnout and turnover; (c) improving the M&E system so that it could serve the purpose of identifying potential service gaps, so that resources could be quickly focused to address the gaps and ensure all regions were meeting targets; and (e) promoting greater cross-learning across regions, and between regions and headquarters.

> "*In a program this large, management is most effective when it is adaptive—willing to adjust current systems and to create information flows that enable reflection on management practices*."
>
> SHOUHARDO MID-TERM REVIEW TEAM, 2007

The net effect of these key management changes are discussed in the sections below.

***Restructuring Staff Composition***

The two major restructuring changes that occurred were: (a) the elimination of field facilitators to provide oversight to PNGO activities in the field, and replacing them with Program Officers; and (b) increasing the number of technical advisors working at the regional and hub levels to provide support to both CARE direct delivery sites and PNGO sites. The first change eliminated redundancies in job responsibilities (particularly between CARE and the PNGO) while improving the quality of support to PNGOs that could improve their management capacities. It also provided the cost savings that enabled the significant increase in technical advisors, including advisors located within PNGOs, so that the quality of program outputs and outcomes could be improved. Annex 7 provides a list of staffing positions within CARE SHOUHARDO, and how these positions were changed following the mid-term review.

However, discussions with central and regional technical staff suggest that field staff continue to be challenged in their understanding of the vision of SHOUHARDO, and the way in which they field work can promote this vision. Given the increase in technical officers at the field level, a

follow up program may wish to consider orientation periods when a newly hired staff would "shadow" a very competent counterpart in another region who managed their workload so that the objective of reducing household vulnerability would remain front and center of any activity undertaken with any group. Regional meetings which emphasize this message on a quarterly basis could also provide valuable capacity building to staff of CARE and PNGO. While SHOUHARDO has instituted program level meetings in the regions and hub offices once every six weeks, it is not clear whether these meetings focus primarily on administrative and logistics issues, or whether they could focus on opportunities for staff to better understand how their work contributes to the overall program objective. It may be that the only opportunity to focus on programmatic issues is the quarterly meetings where headquarters staff travel to one region to learn more about programming.

Another challenge to the existing staff structure is the reporting lines for Technical Coordinators at CBHQ and for Technical Assistance Managers or Technical Managers in the Regions. First, CBHQ has a national technical coordinator, but he is not responsible for providing oversight to either the Technical Coordinator responsible for Humanitarian Assistance, or the Technical Coordinator responsible for Large Infrastructure. This is most likely to result in missed opportunities to increase the integration of humanitarian and large infrastructure activities with the food and economic activities. Second, CBHQ Technical Coordinators have no linkage, organizationally, with the Technical Managers at the regional level. These Technical Managers report to the Regional Program Manager (RPM), who reports to the Regional Program Coordinator (RPC). However, as RPCs report to the DCOP, there is no real opportunity for Technical Coordinators to provide performance feedback on either Technical Managers at the field level, or the RPM who is managing the Technical Managers' workload. This disconnect may be limiting the ability of technical staff to work in a more integrated way, both within and across regions.

Finally, technical staff (Technical Coordinators at CBHQ and Technical Managers at the regional level) do not feel that their responsibilities to build capacity of PNGO staff are recognized in the grading system of these positions. While these staff do not appear to have supervisory authority, their responsibility to strengthen capacity of PNGOs is not captured in the job description to the extent they feel is warranted. As PNGOs manage more than 90 percent of the resources of SHOUHARDO, technical staff feel that this responsibility should be considered in the grading scheme, and then accountability could be demanded in the performance assessments by comparing improvements in PNGOs capacity on an annual basis.

### *Improving the Working Environment*

The Mid-Term Review highlighted the excessive responsibility burden faced by frontline staff, which was contributing to burnout and staff turnover. Part of this was addressed by clarifying job responsibilities, and, in some cases, adding additional positions, such as described above. The issue of inadequacy of compensation, particularly for staff in remote areas, was addressed by the adoption of new human resource policies designed to encourage staff retention, including allowing greater flexibility in physical placement of staff, introducing more flexible working hours, increasing field allowances, increasing monthly allowances for mobile phones, providing for solar energy in locations where electricity was unavailable, subsidizing staff rent, and increasing leave time. All staff based in UPs were able to benefit from the increased field allowances, which was doubled (from USD 14.60 to USD 29.20) following the review. In addition, staff based in UPs and Program Officers working with PNGO staff in UPs, were provided with double the allowance for mobile phone calls (from USD 4.38 to USD 7.20)

following the review. Both of these increases improved the compensation package, and encouraged retention.

Several staff availed themselves of the other benefits introduced after the MTR. Nine solar panels were purchased, of which five were being used by CARE staff and four were being used by PNGO staff. In addition, 18 staff took advantage of the rental subsidy offered by SHOUHARDO in remote areas, which improved their quality of housing. Most importantly however, the policy change that allowed staff to determine where they wished to stay, so long as they were in the general vicinity of their program area, provided much greater flexibility, allowing PNGO staff to room together instead of being placed in two different locations, which improved the overall security of women working for the project.

The policy change which allowed staff to be more flexible with their work schedules (working a longer number of days, and then taking more than 2 days off at once so they could return to their families or could take care of other business) was not used to its maximum benefit because the policy did not come from the HR Department of CARE. Because of this, some staff did not feel comfortable applying for this benefit. The consultants have been advised that this has been rectified in the last quarter through a formal announcement from HR.

### *Increasing the Capacity of Staff to Meet Project Needs*

The MTR confirmed that capacity development of both CARE and PNGO staff was inadequate to enable them to meet their responsibilities effectively. The MTR recommended that more training was required, but needed to be adaptable based on specific regional needs, and should also include more cross-visits. SHOUHARDO responded by taking two actions: (a) training activities were increased for both CARE and PNGO staff; and (b) introducing semi-annual cross visits to promote information flow across regions.

Following the MTR review, CARE and PNGO staff received training on a number of different topics including the following:

- Problem solving
- Entrepreneur development & business management,
- Alternative livelihood options
- TOT on UDMC training
- Financial capacity building
- Emergency preparedness planning
- TOT on ECCD
- Documentation
- Financial management and compliance
- Orientation to procurement policies
- Commodity management and distribution
- Environmental compliance management
- Infrastructure management
- Community based arsenic assessment & safe water supply
- TOT on PDMC training
- Gender and Diversity
- TOT on VDC/SDC capacity development

- TOT on saving group management
- Orientation to Market Management Committee training module
- Human Rights and legal aid

The introduction of semi-annual cross visits from one region to another has been particularly useful to SHOUHARDO's management for two reasons. First, preference is given to communities that are more isolated than others, which allows CARE and PNGO staff as well as VDCs and LEB to see exciting new initiatives which they would not likely ever hear about, due to their isolation. Second, these cross-visits, which include a wide range of actors, provides opportunities for networking both within and across participant groups and staff, a critical element for assisting communities to identify new opportunities which they may not have considered in isolation.

### *Improving the M&E system*

The MTR highlighted the lack of a comprehensive M&E system that would serve the function of tracking progress on output delivery and achievement of outcomes. While a system existed to track management of commodities, including food distribution to beneficiaries, this was inadequate to meet the needs of the project.

A consultant was hired to provide support to SHOUHARDO which resulted in the development of a system that included all demographic information related to any beneficiary in the project, as well as their participation in various project activities. Establishment of a project-specific database allowed SHOUHARDO to obtain a wide range of information relevant to the IPTT. This system is then augmented by various Excel or word-based systems used by the technical managers to track the project's progress, but these systems are not linked to the master database file in a way that would make them accessible centrally.

The beneficiary master list has a number of shortfalls that could be easily rectified by adding additional fields to the database:

- A code identifier so that each household is unique from all other households. This code identifier would also be included in all other databases, including the commodity management database, so that information could be synthesized easily by household.

- The demographic household data was not changed since baseline. This means that SHOUHARDO is unable to determine whether program outcomes may have been affected by demographic changes. For example, it would have been useful in analyzing changes in household composition over time, particularly if there had been changes in a significant number of households. And, given the fact that between 20-25 percent of all beneficiary households received food rations for pregnant and lactating mothers with children under the age of two, the consultants are aware that dependency ratios will likely have shifted, but are unable to access data which might assist explaining changes on the effect of income or food consumption.

- The field that includes whether or not input support is provided should be modified so that it includes the year that input support was provided. This would be more useful to managers planning next quarter's activities than a field that simply says yes or no.

- MCHN information in the database was inadequate to support consultants' inquiries regarding timing of ration support for beneficiary households. While a separate database is managed by Commodities staff, this database does not have a field code that would

link with the field code in the beneficiary master list. Well-being numbers apply to either all households in a given village or slum. However, if a village or slum is too large to manage as a single geographic area, these may have been split into two or three areas for the purposes of numbering off the households, and then providing support services. This means that well-being numbers cannot be used as a common field because they are dependent upon the names of villages/slums being written exactly the same. A review of databases indicated that villages/slums are often spelled very differently, depending upon who is entering the data, so the M&E system actually needs a common field identifier that can link ration distribution to the beneficiary master list.

- Other fields attempt to capture whether a beneficiary has "adopted some practices" related to food and income security activities, with a "yes/no" field. This provides little information to managers and staff on which activities are being adopted easily, and which activities are more problematic. Modification of this field to include codes which identify specific practices, instead of a "yes/no" response, would be much more helpful in planning additional training or refresher training.

- The fields that identify EKATA group membership, ECCD participation and savings group membership are only useful for providing cumulative values of individuals who have participated in these activities. However, it does not identify the year when membership began, or ended, if the individual is no longer participating in these activities. For all of these activities, there should be two fields, with one listing the start date and one providing the end date, if a beneficiary has withdrawn from participation.

Initially, the project only had dedicated M&E staff at headquarters level. However, following the Mid-Term Review, which recommended that the M&E system be improved, this was modified so that M&E officers were located at hub level and regional level. PNGOs were provided with additional resources to enable them to meet their M&E responsibilities. However, in some cases, new M&E responsibilities were simply added to those of existing staff which inevitably led to inadequate time spent on M&E. In other cases, staff were hired who were not experienced with M&E systems and the project did not provide sufficient levels of training to enable them to do their jobs correctly. In both cases, the net effect has been that CARE staff are sometimes required to provide much more hands-on support than should be required to undertake this function.

In addition, the primary focus of the M&E system was to report on the many output indicators required by USAID. Thus it contained too much information to assist management in tracking progress made towards outcomes. As a result, SHOUHARDO identified a sub-set of indicators that would provide the greatest information in assessing progress in outcomes. These indicators are now used regionally and centrally to identify implementation gaps which are impacting on program outcomes. This information is used at six week and quarterly meetings (either at HQ or in the regions) to determine what needs to be done to fill this gap. Because the quarterly meetings are held in different geographical areas on a rotational basis, this also provides the opportunity to HQ staff to gain a better understanding of field realities, which helps them to better understand and provide support to field staff. These quarterly meetings are also excellent opportunities to draw lessons from more progressive communities that could be transferred to other regions.

## *6.2 Partnerships in SHOUHARDO*

The SHOUHARDO program engaged in three types of partnership to carry out activities:

- implementing partners (local and regional NGOs and LGED);

- technical partners to provide assistance services outside and inside of CARE, and;
- partnership with the Government of Bangladesh, the program's lead ministry and alliance for supporting and implementing project activities.

Four of the PNGOs were long-term partners of CARE Bangladesh.

***Partnership with the Government of Bangladesh:***

The Ministry of Local Government Rural Development and Cooperatives (MLGRD&C) was the line ministry under which this program operated. The Local Government Division, including the Local Government Engineering Department, has been a long-term partner with CARE in implementing USAID-funded food aid programs. The ministry and the division provided important support to SHOUHARDO program implementation by establishing and leading the Program Advisory Coordinating Committee (PACC) at different levels of government which facilitated the course of program implementation.

In order to understand the quality of the partnership, the evaluation team conducted key informant interviews with different government representatives, from headquarter to *upazila* level. The interviews suggested that individuals from government departments participating in program activities have benefited because they have been able to pro-actively demonstrate their support to the government's development agenda, including food security, health, nutrition and women's empowerment, and that the relationship between VDC/SDCs and relative elected bodies would continue for this reason.

The National Institute of Local Government (NILG) suggested the 417 training sessions they provided to 10,000 elected representatives of UP and Pourashava Councils in four regional training centers changed the way in which these service providers viewed their responsibilities towards the poor and extreme poor in Bangladesh.

Equally important, SHOUHARDO acted as a model which has been adopted by Local Government Divisions (LGD) in other projects. For example, an LGD headquarters representative related that two of the government's programs, REOPA[33] and HYSAWA[34] have adopted SHOUHARDO's participatory planning and decision-making approach.

The Local Government Engineering Department (LGED) under the LGD is an implementing partner for large scale infrastructure in the SHOUHARDO program. LGED has the capability at the *upazila* level to meet all technical specifications when implementing large infrastructure projects. LGED relied on CARE and its partner NGOs to manage the participatory aspects of project identification. Selected and funded infrastructure schemes were then handed over to LGED for implementation. LGED contributed staff to manage these activities. Historically, the partnership has been primarily contractual. Given the government's commitment to the poor and the power it has to implement projects, it would be in the interest of all parties to continue this partnership, particularly to: (a) ensure that locally-contracted societies (LCSs)[35] are favored over

[33] Rural Employment Opportunities for Public Assets (REOPA), a six year long program (2006-2011) funded by UNDP&UNCDF and being implemented by UPs.

[34] Hygiene, Sanitation and Water (HYSAWA) a 5 year (2005-2010) community based project of Water Supply and Sanitation Sector Program under LGD funded by GOB and Danida and being implemented by local government institution (UPs and *pourashava*)

[35] The traditional contractor dependent working strategy does not allow LGED to involve in a community-based implementation process by engaging labor contracting societies (LCS) or other community institutions. In 2009, with support from SHOUHARDO program, LGED implemented one market (Khansama bazaar of Haragach union in Rangpur region) and one mound protection wall (in Fulpur village of Kewarjore union in Haor region) through LCSs. Though it was a new strategy for LGED they completed both the projects in due time. Work was regularly supervised and follow up visits occurred. According to CARE, LGED's engagement in these two sites was unusually high. In

private contractors; and (b) to ensure that LGED budgets and planning processes integrate priorities identified by PEP households, in addition to traditional stakeholders.

Discussions with CARE staff at CBHQ revealed that partnership relationships have improved since the MTR. The addition of an active team leader at LGED HQ and a government liaison within CARE, both significantly enhanced the responsiveness of the program. Some delays continued, but given the historical relationship between CARE and LGED, it would be more productive to address these as they arise in follow-up phases, rather than question the relevancy of the partnership with LGED.

***Technical partners***

A range of organizations and institutions from national and international institutes, academia, the private sector, issue-based consortia, and federations comprise the sixteen external technical partners that contributed to the SHOUHARDO program. In addition, two internal CARE mission units (Education and Economic Development) were collaborating partners.

Involvement of partners enriched the program with diverse technical capacity and better positioned the program to pilot and implement innovative components in the program areas. Examples of collaboration which enriched the ability of other institutes to deliver greater services to their constituents include:

- The technical partnership with the Asian Disaster Preparedness Centre (ADPC) resulted in the development of a flood forecasting system based on latest technologies. This system was piloted in five areas, and then was handed to the Bangladesh Meteorological Department (BMD) for maintenance. It enabled the project to reduce asset losses from floods, particularly in certain areas of the North Char, but more importantly it increased the government's capacity to reduce household vulnerability.
- SHOUHARDO linked with the Bangladesh Rice and Research Institute (BRRI) to pilot the growth of two new *boro* varieties in the Haor and North Char areas. Once the institute is linked directly with agricultural advisors at the upazila and UP levels, operations research to benefit vulnerable households could be continued.
- IUCN is linked with communities in the Haor Region, and will now be able to continue to develop and implement new conservation models that will support resiliency in the face of climate change.

The collaboration between SHOUHARDO and CARE's Economic Development and Education Units has helped SHOUHARDO to access high levels of specialized technical expertise as required to meet program goals. Individuals from the Economic Development Unit were seconded from CARE and placed in each region with the particular responsibility of market analysis and business development. While the training and support provided by the EDU has been appreciated, discussions with business entrepreneurs suggests that the EDU could be significantly more involved in training upazila staff and UP/pourashava technical staff in business mentoring, particularly for PEP women and adolescent girls and boys.

***Implementing Partner NGOs (PNGOs)***

At the beginning of the program, SHOUHARDO established implementing partnerships with 46 local and regional NGOs. Until recently, all PNGOs have continued to implement projects through the program's end. [36] One objective of the program was to strengthen the capacity and

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follow up phases, CARE may wish to leverage this experience by negotiating more interventions using this approach. Involvement is a pro-poor approach and CARE has been successfully utilized in infrastructure schemes implemented by PNGOs.

[36] In the last year, 2 PNGO contracts were not renewed due to issues of transparency.

outreach of PNGOs, while being able to draw on the experience of a wide body of actors involved in the development process. Thus, NGOs were selected through a detailed assessment process.

The MTR identified the number of partners, and the way in which the partnership was being managed, as problems. Accordingly, SHOUHARDO held a 3-day strategy meeting where a number of changes were introduced to improve the balance in the relationship, and to identify the PNGO's existing capacities which could strengthen overall program impact.

PNGO and CARE staff were interviewed and participated in focus group discussions to gain a better understanding about this mode of partnership. Seventeen PNGO staff (from director to project manager level staff) participated in the FGD sessions and 32 PNGOs responded to the survey questionnaire. Thirteen CARE staff (from Rangpur and Kishoregonj region) participated in FGD and key informant interviews.

Partners expressed their view that, generally speaking, there has been a significant improvement in the partnership relationship since the MTR. They described these improvements as follows:

> *"The management difficulties associated with the coordination of so many partners are manifested in many areas of program implementation… It is very difficult to maintain uniform quality across all PNGOs in the budgeting process, even though a single, consistent budget must be ultimately presented to the donor….[on the other hand, partners feel that CARE views] partnership as a type of out sourcing***"….***[SHOUHARDO] does not take advantage of [PNGOs] resident capacity, but imposes a system from outside to which the partners must adapt*"

- *Organizational capacity of PNGOs has been improved through their participation with SHOUHARDO:* As a result of the systems introduced by SHOUHARDO (planning, implementation, reporting, finance, accounting, and human resource management), PNGOs are now able to increase the level of service to other donors in these areas. In addition, ten partners said these systems (particularly the human resource and financial systems) have helped them access other donors' funds.

- *SHOUHARDO monthly sessions provided learning opportunities among partners*: Monthly sharing sessions took place in every region, where both CARE and partners reviewed their performance, achievements, problems encountered during implementation and measures to overcome that problem. This approach offered a good learning environment for all parties. These meetings were held by committees known as a *samadan* (a Banga word for solution) which is chaired by one PNGO and co-chaired by CARE. Major implementation and management related decisions, such as procurement and vendor selection, were made at the meetings. The forum offered the partners a space where they could express themselves and make participatory decisions, building solidarity across PNGOs and enhancing their sense of ownership over the program.

- *Partners' diversity and expertise is now valued:* PNGO representatives stated that in the initial phase of the project CARE did not seem to value their experience, but rather imposed an external system on them. This frustrated PNGOs because they felt that their capacities, experience, and potential were not being fully harnessed to the benefit of the project. However, the view expressed at the time of the final evaluation suggests that the situation improved significantly. Partners were allowed to prepare their own plans and budget, and had the flexibility to adjust the number of interventions and number of villages to be served based on their ability. In addition, PNGO representatives indicated

that they had contributed to project design, such as the ALO pilot, VDC pilots, disaster preparedness volunteer training, and strategy formulation since the MTR. Most of the PNGO participants felt that CARE's attitude about their areas of expertise has improved since the MTR.

- *PNGOs now have well-defined links with local government:* As a result of their participation in PACCs, as well as increased contact with government service providers, PNGOs now feel they are developing stronger partnerships with local government departments. A few PNGOs with relatively low capacity confirmed that their formal relationship with SHOUHARDO improved their credibility in the eyes of local government.

In addition to these positive views, some critical program and management issues emerged from the PNGO consultation process:

***Challenges within Partnerships***

- *Exit strategies did not consider capacity development and sustainability.* PNGOs expressed concern that the one year exit strategy was inappropriately focused on budgets and resources, and did not realistically consider the capacity development required for communities to sustain their efforts, particularly their linkages with local government. While all PNGOs participated in the development of the general exit strategy, it seemed to be primarily focused on downsizing the program to match decreased funding levels, including eliminating staff positions from PNGOs, rather than a strategy to guide the graduation of the different groups (VDC/SDC, MCHN, EKATA, and ECCD). As a result, PNGOs were not convinced that one year was adequate to strengthen necessary capacities in preparation for handover. All PNGOs felt that the PEP were just starting to see themselves as collective groups/institutions, but were not yet sufficiently mature to be able to continue to negotiate with duty bearers for their rights. PNGOs stated they would need follow up and guidance and suggested that CARE might think of a "low-cost follow-up program strategy" to sustain these groups.

- *PNGOs do not have sufficient capacity to enable them to provide support to communities to access khas lands and common water bodies.* The project addressed different rights based issues, by developing a strategy to assist PEP households to access these lands, and even gain 99-year leases. However, many more households, particularly those living on mounds and embankments subject to erosion, remain highly vulnerable and PNGOs are concerned that they will be unable to sustain the current level of advocacy with government departments and support to communities. For example, with relatively few activities which improved water body access, and without a strategy on how PEP fishing households' rights to water access could be improved, PNGOs felt that they will definitely not have the capacity to continue to support communities in this area.

- *Geographic scattering makes the management of some activities costly and burdensome:* A PNGO could be implementing programs in three *upazilas* of different districts, while another PNGO is working in only one or two unions in a single district, which increases the management burdens in terms of travel time. CARE staff in focus group discussions felt that the number of partners should be determined by a combination of PNGO capacity and expertise. When a PNGO does not have the capacity to manage communities efficiently through geographic targeting, or a PNGO does not bring any

specialized expertise to support the program's overall goal, they should not be considered as a project partner.

- *Staff turnover and inadequate training continues to plague partner NGOs:* Partners confirmed that they continue to face problems in program implementation due to high staff turnover and the lack of training materials to orient new staff. In many cases, consultants spoke with PNGO staff that were not clear about SHOUHARDO's goals and objectives. PNGOs stated that both staff turnover and one-time training events present challenges for program implementation.

- *Monitoring & Evaluation capacities of both CARE and PNGOs remain relatively weak:* Despite project efforts to improve M&E systems and increase the overall capacity for managing this system successfully, performance remains weak. This is also attributable to the limited training opportunities, especially for PNGO staff, which is reducing overall program quality assurance.

## *6.3 Financial Management*

The consultants reviewed the latest audit conducted by Ernst & Young India in November, 2009. CARE's cash management system, a particularly crucial aspect of the project considering the shift from FFW to CFW in 2007, was found to be satisfactory, with no recommendations provided for improving the system. Both non-compliance and internal control issues raised by the audit have already been corrected, or are in the process of being corrected.

Two comments, however, are worth mentioning. First, SHOUHARDO's commitment to working with the PEP in remote areas of Bangladesh is requiring new systems of controls to be put in place to ensure that USAID policies are being followed, whether it be human resource or finance related. Second, SHOUHARDO's commitment to decentralizing operational aspects of the project, a crucial element in speeding up decision making and service delivery, has provided additional management challenges because field level managers may not have had previous experience in reviewing documentation, approving changes to documentation, etc. The benefits of the decentralization process, however, far outweigh the costs of these additional systems, and CARE should be applauded for taking on this extra supervisory burden, so that decentralization can continue.

## *6.4 Commodity Management*

CARE Bangladesh was allocated an estimated quantity of 69,070 metric tons of Title-II food commodities (consisting of wheat, yellow split peas and vegetable oil) to be programmed through the SHOUHARDO program. In addition, a quantity of 296,712 MTs of wheat was planned under the monetization program.

CARE Bangladesh provided a ration that consists of 12 kg of wheat, 1.5 kg of vegetable oil and 0.5 kg of yellow split peas. Rations are distributed to each participant monthly. Qualified beneficiaries include pregnant and lactating mothers with children less than 2 years of age selected only from poor and extreme poor target households of the SHOUHARDO Program.

### 6.4.1 Overall findings

It is the opinion of the evaluators that CARE Bangladesh has done an excellent job in receiving, storing, transporting and distributing such a large quantity of Title II food commodities. Distributions were similarly well-managed at the community level. The standard practice has

been for CHVs to notify communities well in advance regarding distribution dates and times. Accordingly, beneficiaries have not had excessive waits to receive their rations. The number and physical location of distribution sites have also been deemed appropriate by the evaluation team given that beneficiaries reportedly do not have to travel excessive distances to receive their rations.

The planning and approval process for management of commodities was found to be fast and effective as all the decisions were taken in the region under the direct guidance of the Regional Coordinator. The warehouses were found to be clean, neatly painted and well-maintained. All necessary equipment (e.g. weights, weighing scales, fire extinguishers, etc.) were in place, commodities were neatly stacked and stack cards were maintained and updated on a regular basis. Fumigations were also conducted on a regular basis and there were no signs of leakage and/or infestation.

The warehouse control mechanism was rigorous. At the time of the final evaluation, CARE Bangladesh had a double locking system for control of warehouses and ensuring safety and security of the commodities. In this system, two locks are put on the doors of each warehouse, with the Commodity Accounting Officer holding the key to one lock, and the District Warehouse Manager holding the key to other lock. This procedure requires that both persons are present at the time of opening and closing the warehouse each day.

Food monitors conducted end-use monitoring to make sure that the commodities reached targeted beneficiaries and were used for the intended purpose. Food monitoring results were recorded using a standard format which was signed by the beneficiary and kept as a record and future reference.

***Commodity Management Team***

SHOUHARDO established a Commodity Management Team headed by the Commodity Manager stationed at CBHQ in Dhaka while the field teams were headed by Regional Commodity Logistic Managers stationed within each of the four regions of Chittagong, Kishoreganj, Tangail and Rangpur. There are four Regional Commodity Accounting Officers and 18 Commodity Accounting Officers, 19 Warehouse Managers, and 11 Warehouse Officers who are primarily responsible for maintaining food distribution and tracking records, updating the database and managing logistics. Warehouse Managers are responsible for warehouse management and are supported by Warehouse Officers. A total of 33 Food Monitors checked inventory, monitored distributions and conducted end-use monitoring. A Beneficiary Information System (BIS) has been utilized for registration of beneficiaries. Also another software system (Commodity Accounting and Management System-CAMS) has been used for tracking records of receiving and distribution of commodities.

While the total number of commodity staff (102) may appear high, the arrangement was found to be reasonable given the considerable geographic distribution of the project sites throughout the four regions. At times over the project life, it has been necessary to maintain as many as 19 warehouses to adequately preserve the commodities.

CARE Bangladesh has invested considerable effort in the design and implementation of the CAMS and BIS software for maintaining and accessing records related to commodity management. This software has been developed by the staff of CARE Bangladesh and has proved to be an effective tool in commodity management. This automation has resulted in the efficient management and reporting of commodities.

## 6.4.2 Commodity Logistics

Commodities earmarked for the program first arrive at the port of Chittagong, where they undergo a series of surveys (hatch survey, ex-tackle and shed surveys) which are conducted on a daily basis. All sound commodities are then transported to the 19 warehouses located in 18 districts of the SHOUHARDO Program area by means of land and waterborne transport. Commodities from these warehouses are then transported to the 704 Distribution Points (DPs) by truck and/or boat.

***Commodity warehouse in Chittagong***

The SHOUHARDO program has a rigorous process for managing commodity tracking and distribution. The first phase constitutes preparation and approvals. Using information on attendance of MCHN and GMP sessions, MCHN program staff established a list of eligible food assistance beneficiaries. These individuals were then given a nutrition card, and were verified for eligibility by cross checking data previously entered in CAMS software with the attendance lists from the GMP and MCHN sessions. The resulting beneficiary list was then used to prepare a commodity distribution and delivery plan for each village, which was forwarded to the Regional Offices. At that point, the Regional Coordinator approves the list and forwards it to CARE Bangladesh Headquarters. Finally, a Dispatch Authorization Memo (DAM) is approved by the Regional Coordinator and sent directly to the corresponding warehouses. The Warehouse Manager based on the DAM, issues commodities to different DPs through waybills.

The second phase includes distribution from the 704 DPs. Each DP is equipped with a weighing scale, enabling transparent monitoring of the amount of commodities distributed to beneficiaries. The distributions are organized based on convenience of the MCHN and PIC and thus the recipients come in batches to take their rations. A complaint box was also kept in front of each DP for recipients to submit any grievances, complaints and/or concerns. The SHOUHARDO program instituted a mechanism whereby all complaints are reviewed and subsequent feedback is provided to or action taken within the respective community. SHOUHARDO staff also conduct post-distribution monitoring on a random basis.

## 6.4.3 Commodity Summary

Prior to the evaluation, the SHOUHARDO program had distributed approximately 95 percent of the total amount of commodities planned for distribution over the life of the program (49,776 metric tons of a planned total of 52,220 metric tons for distribution). Commodities have been distributed throughout MCHN, FFW, and SIDR assistance. The remaining 2,444 MTs had been kept for emergency response, but has since been distributed in an effort to mitigate riverbank erosion and to support households affected by Cyclone Aila. Table 38 provides a detailed summary of commodities distributed by the SHOUHARDO program.

**Table 38: Summary of Commodity Receipts and Distribution, in metric tons (MT)**

| Description | Wheat | Vegetable Oil | Peas, YS |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Call Forward Quantity | 44,844.0 | 5,581.0 | 2,016.0 |
| Quantity as per B/Ls | 44,836.0 | 5,579.0 | 2,012.3 |
| Less: Ocean & Port Loss/ Deviation* | 161.7 | 15.0 | 2.3 |
| Add: Excess landed/ as per survey excess | 13.1 | 14.3 | 2.1 |
| Quantity as per Survey | 44,687.5 | 5,578.4 | 2,012.1 |
| Less: Laboratory Test Quantity | - | 0.1 | 0.0 |
| Total received quantity at port | 44,687.5 | 5,578.3 | 2,012.0 |
| Add: Excess (in country) | 5.3 | - | 0.2 |
| Less: Loss quantity (in country) | 48.2 | 14.9 | 0.1 |
| Total received quantity at WHs: | 44,644.7 | 5,563.4 | 2,012.1 |
| Add: Excess at WH (in country) | 159.8 | 0.9 | 0.9 |
| Less: Loss quantity (in country) | 56.6 | 0.4 | 7.0 |
| Less: Distributed quantity | 42,601.9 | 5,339.6 | 1,834.3 |
| Balance Quantity | 2,145.9 | 224.3 | 171.7 |

*Note: * Considered 1 carton vegetable oil = 22 kg.*

***Commodity Loss***

The table below (Table 39) summarizes commodity losses for the SHOUHARDO program. Although there were ocean losses, the Government of Bangladesh monetizes commodities based on the Bill of Lading and thus CARE Bangladesh is not affected by ocean losses for monetized commodities. According to SHOUHARDO commodity tracking information, there has been no recorded loss for distributed commodities anywhere in the system. Regarding loss of commodities during in-country transit, losses were reportedly highest for wheat (18.59 MT). By comparison, in-country losses of vegetable oil and peas have been minimal over the life of the program (1.06MT and 0.13MT, respectively).

**Table 39: Commodity Loss Information, in metric tons (MT)**

| Ocean/ Marine/ Port (Short Landed/ Damage/ Sample Test) | | | | | |
|---|---|---|---|---|---|
| **Fiscal Year** | **Wheat** | **Veg. Oil** | **Pea** | **Total** | **Remarks** |
| FY-2005 | - | - | - | - | Started from FY-2006 |
| FY-2006 | - | 0.21 | 0.14 | 0.35 | |
| FY-2007 | 169.35 | 3.33 | 8.90 | 181.58 | Including 49.75 MTs Wheat & 6.9 MTs Peas were Mixed* |
| FY-2008 | - | 0.06 | 0.17 | 0.23 | |
| FY-2009 | 42.05 | 0.06 | 0.06 | 42.17 | |
| **Total** | 211.40 | 3.66 | 9.27 | 224.33 | |
| **In Country (Transit/ Short/ Damage/ Pilferage)** | | | | | |
| FY-2005 | - | - | - | - | Started from FY-2006 |
| FY-2006 | 11.60 | 0.35 | 0.05 | 12.0 | |
| FY-2007 | 6.57 | 0.57 | 0.07 | 7.22 | |
| FY-2008 | 0.32 | 0.12 | 0.00 | 0.43 | |
| FY-2009 | 0.11 | 0.02 | - | 0.13 | |
| **Total** | **18.59** | **1.06** | **0.13** | **19.78** | |

*Wheat has been donated to Regional Poultry Farm of GOB and Peas were dumped in the solid waste disposal site of Chittagong City Corporation

Table 40 demonstrates that wheat was monetized in much greater quantities than was crude degummed soybean oil (CDSO). The majority of wheat commodities were monetized by the Government of Bangladesh. Alternatively, while the amount of CDSO monetized was relatively small compared to wheat, all of CDSO was monetized in the private market. CDSO was only monetized during FYs 2005 and 2006.

**Table 40: Annual Quantities of Commodity Monetization, in metric tons (MT)**

| Fiscal Year | Commodity Type | Quantity Received (MTs) | | | Remarks |
|---|---|---|---|---|---|
| | | GoB | Private | Total | |
| FY-2005 | Wheat | 40,000 | - | 40,000 | |
| | CDSO | - | 16,818 | 16,818 | |
| FY-2006 | Wheat | 32,000 | - | 32,000 | |
| | CDSO | - | 8,606 | 8,606 | |
| FY-2007 | Wheat | 25,862 | 19,131 | 44,993 | |
| FY-2008 | Wheat | 41,360 | - | 41,360 | |
| FY-2009 | Wheat | 42,860 | - | 42,860 | From total wheat 130 MT of wheat was found damaged* |
| **Total** | | **182,082** | **44,555** | **226,637** | |

*130 MT of wheat has been found fit as fish feed and will be reimbursed; the sale proceeds will be used for meeting program expenses.

# 7 Impact of SHOUHARDO project: quantitative analysis

From the many comparisons across the baseline and endline surveys that have been presented in this report, it is clear that there have been major improvements in many key SHOUHARDO outcome indicators. The main objective of this chapter is to provide quantitative evidence of whether these changes can be attributed to project interventions.

The indicators within each SHOUHARDO Strategic Objective that are looked at are given in Table 41. They fall into the following categories, listed in the order that they will be discussed in the chapter:

- Childrens' and mothers' nutritional status
- Childrens' and mothers' dietary diversity
- Children's health
- Caring practices for children and mothers
- Household food security
- Household economic security
- Women's empowerment.

The survey data used for this analysis only contain information on households that are SHOUHARDO project beneficiaries. All of the households have in some way been exposed to the project's interventions. Without the ability to compare outcomes with a control group of households that have not been exposed to the interventions, it is not possible to estimate precisely the magnitude of the impact of interventions on beneficiary households. However, there is great variation in the degree to which beneficiary households have been involved in the project and in the interventions they participated in (see Tables 1 and 34). This analysis relies on this variation to essentially use sub-groups of SHOUHARDO households that have not participated in interventions as control groups.

**Table 41: Impact analysis: Outcome indicators and project interventions examined**

| Outcome | Indicators | Types of project interventions examined a/ | | | | | |
|---|---|---|---|---|---|---|---|
| | | Number of interventions | Economic support | Groups | Food assist-ance | HHN | Sanit-ation |
| **SO1: Sustainably reduce chronic and transitory food insecurity** | | | | | | | |
| Food security | Months of adequate food, dietary diversity | x | x | x | x | | |
| Economic security | Percent hhs migrating for work, selling advance labor, taking loan from money lender | x | x | x | x | | |
| | Household asset index | x | x | x | x | | |
| **SO2: Sustainable improvement in health and nutrition of beneficiaries** | | | | | | | |
| Childrens' and mothers' nutritional status | Child stunting, wasting and underweight | x | x | x | x | x | x |
| | Mothers' weight | x | x | | x | x | |
| Dietary diversity | Childrens' and mothers' dietary diversity | x | x | | x | | |
| Children's health | Percent of children with diarrhea | x | | | | x | x |
| | Percent using proper diarrhea treatment | | | | | | |
| Care for children | % fully immunized | x | | | | x | |
| | % receiving Vit. A supplementation | x | | | | x | |
| | % continued breastfeeding 18-24m | x | | | | x | |
| | | x | | | | x | |
| Care for women | Completion of >= 3 antenatal visits | x | | | | x | |
| | More food and daytime rest in pregnancy | x | | | | x | |
| | Iron/FA supplementation in pregnancy | x | | | | x | |
| | Vitamin A supplementation after delivery | x | | | | x | |
| **SO3: Enhanced empowerment of women and girls** | | | | | | | |
| Empowerment | Decision making power, freedom of movement and freedom from patriarchal attitudes scores | x | x | x | | | |

a/ The interventions falling into each category are: Economic support: COG and cash-for-work; HHN: Courtyard sessions, demonstration feeding sessions, child growth monitoring; Groups: EKATA, VDC/SDC, PTA/SMC, Savings, and Mother's groups. Food assistance: food-for-work and food rations for mothers and children.

Two questions are asked for each outcome indicator:

(1) What is the overall impact of the SHOUHARDO project on the outcome? This is evaluated using a measure of the intensity of households' participation in the project: indexes of the number of interventions participated in over the 12 months prior to the endline survey. Two indexes are employed: one for the SO1 outcomes measured at the household level and the other for SO2 and SO3 outcomes specifically focused on children and women. Table 42 lists the interventions included in the indexes. One difference between them is that the household-level index includes participation of *any* household member in groups open to people who are not mothers of 6-24 month olds (EKATA, VDC/SMC and savings groups) while the child/mother level index includes participation only of mothers in these groups. Also, the child/mother level index includes HHN interventions while the household level one does not.

(2) Which specific interventions had an impact on the outcome? The types of interventions examined for each outcome are identified in Table 41. The impacts of economic support, participation in groups, and food assistance are examined for all SO1 and SO3 indicators. A variety of interventions are examined for the SO2 indicators, including HHN-specific interventions and sanitation interventions.

## *7.1 Interpretation of regression results*

Regression analysis is used to explore the above two questions. Logistic regression is employed for outcome indicators measured as dichotomous variables, such as whether or not a child is fully immunized (0=no, 1=yes). The reported statistic representing impact is an odds ratio. In the case of a dichotomous project intervention variable as well (for example, whether a household member participates in a savings group), the odds ratio can be interpreted as the increased likelihood of a positive outcome for households that participate in the intervention compared to those that don't. In the case of a continuous project intervention variable, such as the number of interventions households participate in, the odds ratio can be interpreted as the increase in the likelihood of a positive outcome with each additional intervention the household participates in. An odds ratio greater than one indicates a positive association between the intervention and the outcome; an odds ratio less than one indicates a negative association. Ordinary Least Squares (OLS) regression is employed for outcome indicators measured as continuous variables.

When interpreting the regression results it is important to keep in mind that there is a tendency for the poorest households to be participating in the most interventions and in some specific interventions targeted to the most vulnerable households (e.g., food-for-work, cash-for-work, and flood protection). This "selection bias" means that the regression estimates of impact may be biased. For example, if more food insecure households participate in more interventions, the estimates of the impact of the number of interventions participated in will be biased downwards since the households were worse off to begin with. Because of this bias, the regression coefficients (or odds ratios) on some intervention variables may not be an accurate reflection of the *strength* of impact of interventions (which is underestimated in the presence of targeting-based selection bias).

**Table 42: Interventions included in indexes of degree of participation in SHOUHARDO project**

| Indicator | Index for evaluating household-level outcomes | Index for evaluating child/mother-level outcomes |
|---|---|---|
| **Economic support** | | |
| COG: Agriculture | x | x |
| COG: Comprehensive Homestead Development (CHD) | x | x |
| COG: Income generating activities (IGA) | x | x |
| COG: Fisheries | x | x |
| Cash-for-work | x | x |
| **Infrastructure** | | |
| Sanitation (latrine, tubewell or drain) | x | x |
| Flood protection | x | x |
| **Food assistance** | | |
| Food-for-work | x | x |
| Food assistance for mothers and children 6-12 months | x | x |
| **Early childhood development** | x | x |
| **Participation in groups** | | |
| Mother's group | x | x |
| Household member participates in EKATA | x | |
| Household member participates in VDC/SMC | x | |
| Household member participates in Savings group | x | |
| Mother participates in PTA/SMC | | x |
| Mother participates in EKATA | | x |
| Mother participates in VDC/SMC | | x |
| Mother participates in Savings group | | x |
| **HHN interventions** | | |
| Courtyard sessions | | x |
| Demonstration feedings | | x |
| Growth monitoring | | x |
| Total number of interventions included in index | 14 | 18 |

Note: COG: Core Occupational Group.

They can give some evidence, however, of whether or not there is any positive impact. The bias also means that, in the event that a coefficient is statistically insignificant, we cannot conclude that there has been no impact but simply that the data do not allow a judgment.

For all regressions a number of variables are controlled for, including the demographic characteristics of households (household size and age-sex composition), characteristics of household heads (age, sex, and primary occupation), region of residence, and whether or not a household is located in an urban area. For child-level regressions the age and sex of the child, and the age and education of the child's mother are also included. For mother-level regressions the age of the mother and her education are controlled for. Note that variables that are intended to be influenced by the SHOUHARDO project (i.e., project outcome variables such as income) are not controlled for as this would interfere with the ability to detect impacts on the other

outcome variables. The data set employed for this analysis is the November 2009 HHN endline survey.

## *7.2 Childrens' and mothers' nutrition*

### 7.2.1 Child malnutrition

Table 43 reports the regression results for the relationship between the number of interventions a household participates in and malnutrition among children 6-24 months old. The results clearly indicate that the greater the number of interventions a child's household is involved in, the less likely she or he is to be stunted and underweight (the odds ratios for these outcomes are less than one and statistically significant). They suggest no impact of the project as a whole on wasting.

While the regression results for the other variables controlled for are not of primary interest, note that they are consistent with previous analyses of child nutrition. For example, the greater the child's age, the more likely he or she is to be malnourished. Girls are less likely to be malnourished than boys in this young age group. The more educated a mother is, the less likely her child is to be malnourished. Some interesting results are that among households in this very poor population the likelihood of a child being stunted is greatly increased if they live in a female-headed household. The likelihood of both stunting and underweight is higher in urban than rural areas.

Table 44 reports on the impact of specific interventions, including food assistance, economic interventions, sanitation, participation in groups and HHN interventions. Starting with food assistance, the greater the number of months a child receives SHOUHARDO food rations, the lower is the likelihood that he or she will be stunted. This result is strongly statistically significant (at the one percent level). The result implies that if a child receives food for a full 18 months, the probability of stunting declines by 58 percent compared to a child who received no food.[37] SHOUHARDO food assistance has undoubtedly contributed to the large reduction in stunting found over the life of the project. While the same association between the food actually received for a child and underweight is not found, there is some evidence that the food received by the child's mother while lactating contributes to reducing underweight. A statistically significant association between food received by a child and wasting is found, but the odds ratio is just slightly greater than one. Its magnitude is not significant from a nutritional standpoint.

The rest of the results in Table 44 demonstrate that it is not only food aid that brought about the declines in stunting and underweight in SHOUHARDO's operational area. Participation in the vegetable gardening component of CHD significantly reduces the probability of a child being stunted and underweight. The reported odds ratios for participation in SHOUHARDO vegetable gardening (which is not likely to be subject to selection bias since it is not purposefully targeted to the poorest) imply that children of participating households have an 18 percent lower likelihood of being stunted and a 15 percent lower likelihood of being underweight. Other interventions aimed at improving households' economic status—the agriculture components of COG and IGA, and cash-for-work—also appear to reduce child malnutrition.

[37] The odds ratio is unlikely to be affected by selection bias since blanket feeding is applied (there is no targeting).

**Table 43: Regression analysis of the relationship between the number of SHOUHARDO interventions households participated in over the previous year and child malnutrition**

| | Stunting | | | Wasting | | | Underweight | | |
|---|---|---|---|---|---|---|---|---|---|
| | Odds ratio | p-value b/ | | Odds ratio | p-value b/ | | Odds ratio | p-value b/ | |
| **Number of interventions in which household/mother participates** | 0.948 | 0.013 | ** | 0.962 c/ | 0.161 | | 0.947 | 0.008 | *** |
| Child's age | 1.260 | 0.000 | *** | 1.440 | 0.000 | *** | 1.603 | 0.000 | *** |
| Child's age-squared | 0.996 | 0.017 | ** | 0.991 | 0.000 | *** | 0.987 | 0.000 | *** |
| Sex of child (female=1) | 0.631 | 0.000 | *** | 0.789 | 0.061 | * | 0.887 | 0.211 | |
| Age of mother | 0.967 | 0.423 | | 0.993 | 0.888 | | 0.962 | 0.337 | |
| Age of mother-squared | 1.000 | 0.633 | | 1.000 | 0.999 | | 1.000 | 0.617 | |
| Mother's education: none a/ | | | | | | | | | |
| Mother's education: primary | 0.955 | 0.585 | | 0.882 | 0.238 | | 0.929 | 0.362 | |
| Mother's education: secondary | 0.797 | 0.061 | * | 0.732 | 0.048 | ** | 0.758 | 0.017 | ** |
| Household size | 1.250 | 0.067 | * | 0.709 | 0.017 | ** | 0.969 | 0.782 | |
| Household size-squared | 0.985 | 0.111 | | 1.023 | 0.036 | ** | 1.002 | 0.813 | |
| Age of household head | 0.997 | 0.606 | | 1.011 | 0.093 | * | 1.006 | 0.202 | |
| Whether headed by a female | 1.674 | 0.048 | ** | 1.008 | 0.980 | | 1.363 | 0.225 | |
| Percent females 0-15 a/ | | | | | | | | | |
| Percent females 15-64 | 0.989 | 0.032 | ** | 0.996 | 0.575 | | 0.990 | 0.047 | ** |
| Percent females 64+ | 0.988 | 0.266 | | 1.017 | 0.165 | | 0.992 | 0.451 | |
| Percent males 0-15 | 0.988 | 0.000 | *** | 1.002 | 0.704 | | 0.997 | 0.311 | |
| Percent males 15-64 | 0.993 | 0.194 | | 0.982 | 0.018 | ** | 0.993 | 0.171 | |
| Percent males 64+ | 0.976 | 0.033 | ** | 1.014 | 0.290 | | 1.007 | 0.523 | |
| Primary occupation of household head | | | | | | | | | |
| Farming a/ | | | | | | | | | |
| Agricultural laborer | 1.104 | 0.373 | | 0.992 | 0.956 | | 1.055 | 0.614 | |
| Non-agricultural laborer | 0.996 | 0.976 | | 0.810 | 0.212 | | 0.977 | 0.850 | |
| Salaried employment | 0.662 | 0.021 | ** | 1.148 | 0.507 | | 0.794 | 0.164 | |
| Trading and self employment | 1.064 | 0.610 | | 0.747 | 0.065 | ** | 0.915 | 0.446 | |
| Unpaid household work | 0.835 | 0.634 | | 0.902 | 0.829 | | 0.362 | 0.010 | ** |
| Other | 1.090 | 0.629 | | 0.917 | 0.696 | | 0.848 | 0.333 | |
| Region of residence | | | | | | | | | |
| North Char a/ | | | | | | | | | |
| Mid Char | 1.239 | 0.047 | ** | 1.019 | 0.894 | | 1.188 | 0.103 | |
| Haor | 1.388 | 0.003 | *** | 0.754 | 0.062 | * | 1.368 | 0.004 | *** |
| Coast | 0.678 | 0.001 | ** | 1.358 | 0.027 | ** | 1.256 | 0.035 | ** |
| Rural a/ | | | | | | | | | |
| Urban | 1.304 | 0.014 | ** | 1.190 | 0.206 | | 1.205 | 0.074 | * |
| R-squared | 0.109 | | | 0.073 | | | 0.086 | | |
| Number of observations | 3,286 | | | 3,224 | | | 3,318 | | |

a/ Reference category to which other categories are compared.

b/ Stars indicate that the coefficient is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.

c/ The wasting odds ratio for North Char is 0.967 and statistically significant at the 5 percent level.

Data source: November 2009 HHN endline survey.

**Table 44: Regression analysis of the impact of specific interventions on child malnutrition**

| | Stunting | | | Wasting | | | Underweight | | |
|---|---|---|---|---|---|---|---|---|---|
| | Odds ratio | p-value a/ | | Odds ratio | p-value a/ | | Odds ratio | p-value a/ | |
| Food assistance | | | | | | | | | |
| Months of food for pregnant mother | 0.979 | 0.437 | | 1.040 | 0.241 | | 1.005 | 0.849 | |
| Months of food for lactating mother | 0.996 | 0.722 | | 0.981 | 0.125 | | 0.977 | 0.020 | ** |
| Months of food for child 6-24 months | 0.968 | 0.009 | *** | 1.040 | 0.010 | ** | 1.003 | 0.791 | |
| Food-for-work | 0.922 | 0.654 | | 0.938 | 0.792 | | 1.024 | 0.891 | |
| Economic interventions | | | | | | | | | |
| COG: Agriculture | 0.908 | 0.325 | | 0.815 | 0.112 | | 0.795 | 0.014 | ** |
| COG: CHD | 0.970 | 0.699 | | 1.080 | 0.440 | | 0.977 | 0.756 | |
| Vegetable gardening b/ | 0.822 | 0.031 | ** | 0.973 | 0.804 | | 0.854 | 0.053 | * |
| COG: Income generating activities | 0.885 | 0.149 | | 0.988 | 0.914 | | 0.984 | 0.839 | |
| Agriculture c/ | 0.743 | 0.043 | ** | 1.140 | 0.367 | | 0.959 | 0.754 | |
| COG: Fisheries | 1.026 | 0.857 | | 1.089 | 0.622 | | 1.024 | 0.859 | |
| Cash-for-work | 0.759 | 0.045 | ** | 0.777 | 0.179 | | 0.804 | 0.097 | * |
| Sanitation | | | | | | | | | |
| Assistance with a latrine | 0.905 | 0.323 | | 0.940 | 0.628 | | 1.022 | 0.818 | |
| Assistance with a tubewell d/ | 0.782 | 0.049 | ** | 0.806 | 0.174 | | 0.735 | 0.038 | ** |
| Assistance with a drain (urban) | 0.905 | 0.596 | | 1.061 | 0.815 | | 1.204 | 0.314 | |
| EKATA | | | | | | | | | |
| Member of an EKATA group | 0.940 | 0.577 | | 0.782 | 0.092 | * | 1.040 | 0.713 | |
| Number of meetings attended | 1.000 | 0.917 | | 1.000 | 0.944 | | 0.996 | 0.350 | |
| Other groups | | | | | | | | | |
| VDC/SDC | 0.855 | 0.187 | | 1.115 | 0.465 | | 1.060 | 0.608 | |
| PTA/SMC | 0.944 | 0.712 | | 0.586 | 0.014 | ** | 0.668 | 0.007 | *** |
| Savings group | 0.911 | 0.262 | | 0.961 | 0.706 | | 0.918 | 0.283 | |
| Mother's group | 0.834 | 0.226 | | 0.888 | 0.542 | | 0.759 | 0.072 | |
| HHN interventions | | | | | | | | | |
| Courtyard sessions | 1.034 | 0.033 | ** | 0.915 | 0.681 | | 0.731 | 0.063 | * |
| Demonstration feeding sessions | 1.093 | 0.089 | * | 0.859 | 0.246 | | 1.015 | 0.885 | |
| Growth monitoring | 0.653 | 0.075 | * | 1.289 | 0.470 | | 1.040 | 0.955 | |

a/ Stars indicate that odds ratio is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.

b/ For stunting odds ratio applies to rural households only (not significant for sample as a whole).

c/ For stunting and underweight odds ratio applies to rural households only (not significant for sample as a whole).

d/ For underweight odds ratio applies to rural households only (not significant for sample as a whole).

Note: The independent variables in Table IMP3 are controlled for in all regressions.

Data source: November 2009 HHN endline survey.

We have seen in Chapter 3.3 of this report that there have been substantial improvements in access to safe water in the Haor and Coast Regions, especially safe water for cooking and washing. Given these improvements, and the primary importance of safe water in providing a proper health environment for children to live and grow in, it is not surprising that assistance with tube-well installation has helped to improve children's nutritional status. Children in households receiving a tubewell as part of the SHOUHARDO project have a 22 percent lower likelihood of being stunted and 27 percent lower likelihood of being wasted.[38]

Turning to membership in groups, being a member of an EKATA group appears to have no influence on children's nutritional status except possibly in the case of wasting (although this result is not strongly statistically significant). As will be seen below, EKATA has had a strong, positive influence on women's empowerment. Further, previous research has shown that women's empowerment has a strong influence on children's nutritional status because women with greater empowerment are better nourished themselves and provide higher quality care for their children.[39] Apparently this influence has yet to manifest itself at this deep level in the SHOUHARDO area.

An interesting finding is that participation of a mother in the Parent Teachers Association or School Management Committee of her school-aged daughter's school has quite a strong influence on her younger child's nutritional status. The results suggest that the likelihood of a child being stunted is reduced by over 40 percent, and being underweight by 33 percent, if her mother is a member of a PTA or SMC. While the result may be partially due to self-selection into these groups (that is, people who generally take more initiative might be from better-off households), the role they play in enhancing the quality of mothers' care of their younger children needs to be understood better and supported in future CARE activities.

Turning finally to interventions more specifically focused on health, hygiene and nutrition (HHN), because almost all women in the sample participated in these activities, there is not much of a control group from which to draw out any impact. The results do suggest, however, that participation in growth monitoring helped reduce stunting and in courtyard sessions helped reduce underweight. While the stunting odds ratios for courtyard and demonstration feeding sessions are greater than one (and statistically significant), they are only slightly so and are not significant from a nutritional standpoint.

### 7.2.2 Mothers' weights

Table 45 presents the results for impact on the weight of the mothers of children 6-24 months old. As we have already seen, the average mother's weight has changed very little over the life of the SHOUHARDO project, although there is some sign of a slight increase in Haor, Coast and urban areas. The regression results show only one intervention to have had a positive impact on mothers' weights: participation in the agriculture component of COG. The weight of mothers who participate in this intervention is estimated to be higher by 0.65 kgs than mothers who do not.

[38] The result for wasting only applies to rural households.

[39] See Smith, Lisa C., Usha Ramakrishnan, Aida Ndiaye, Lawrence Haddad and Reynaldo Martorell. *The importance of women's status for child nutrition in developing countries*. IFPRI Research Report No. 131. International Food Policy Research Institute, Washington, D.C.

**Table 45: Regression analysis of the impact of SHOUHARDO interventions on the weight of mothers of children 6-24 months old**

| | Coefficient | p-value a/ | |
|---|---|---|---|
| **Number of interventions in which households participated** | 0.037 | 0.537 | |
| **Food assistance** | | | |
| Months of food for pregnant mother | -0.087 | 0.231 | |
| Months of food for lactating mother | -0.033 | 0.258 | |
| Months of food for child 6-24 months | -0.007 | 0.846 | |
| **Economic interventions** | | | |
| COG: Agriculture | 0.649 | 0.016 | ** |
| COG: Comprehensive Homestead Development | | | |
| COG: Income generating activities | 0.254 | 0.281 | |
| COG: Fisheries | -0.321 | 0.413 | |

a/ Stars represent that the coefficient is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.
Note: The independent variables in Table IMP3 are controlled for in all regressions.
Data source: November 2009 HHN endline survey.

### 7.2.3 Children's and mothers' dietary diversity

The results for children's and mothers' dietary diversity—a key SHOUHARDO food security indicator—verify that the improvements in food security and child nutritional status that have occurred over the life of the project are a direct result of SHOUHARDO interventions (see Table 46). In addition to the intensity of involvement in the project, one specific type of intervention appears to be instrumental in improving the diversity of the diet of these groups: economic support to households through COG interventions. In particular, participation in the following improves dietary diversity: agriculture, the vegetable gardening component of CHD, the fruit component of COG, and Fisheries. These results are consistent for both mothers and children.

In terms of food assistance, it is the food rations received by lactating mothers, rather than received for her child, that leads to better dietary diversity. The regression results tell us that a mother who receives a food ration for 18 months can be expected to have an increase in her dietary diversity score of 0.65. Her child can be expected to have an increase in her dietary diversity score of 0.76, well on the way to one additional food group.

**Table 46: Regression analysis of the impact of specific SHOUHARDO interventons on the dietary diversity of 6-24 month old children and their mothers**

| | Dietary diversity of children | | | Dietary diversity of mothers | | |
|---|---|---|---|---|---|---|
| | Coefficient | p-value a/ | | Coefficient | p-value a/ | |
| **Number of interventions in which household/mother participates** | 0.142 | 0.000 | *** | 0.147 | 0.000 | *** |
| **Food assistance** | | | | | | |
| Months of food for pregnant mother | -0.018 | 0.396 | | 0.006 | 0.769 | |
| Months of food for lactating mother | 0.042 | 0.000 | *** | 0.036 | 0.000 | *** |
| Months of food for child 6-24 months | 0.004 | 0.686 | | 0.007 | 0.507 | |
| **Economic interventions** | | | | | | |
| COG: Agriculture | 0.204 | 0.009 | *** | 0.171 | 0.027 | ** |
| COG: Comprehensive Homestead Development | | | | | | |
| Vegetable gardening | 0.404 | 0.000 | *** | 0.293 | 0.000 | *** |
| Fruits | 0.879 | 0.000 | *** | 0.767 | 0.000 | *** |
| Livestock | 0.060 | 0.432 | | 0.098 | 0.199 | |
| COG: Income generating activities | -0.027 | 0.690 | | 0.047 | 0.490 | |
| COG: Fisheries | 0.235 | 0.038 | ** | 0.197 | 0.079 | * |

a/ Stars indicate that odds ratio is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.
Note: The independent variables in Table IMP3 are controlled for in all regressions.
Data source: November 2009 HHN endline survey.

## *7.3 Child illness (diarrhea)*

Table 47 examines project impacts on diarrhea and its treatment. The prevalence of diarrhea has declined considerably since 2006 in the project area (from 23 to 9 percent), and there have been major increases in the percent of households providing Oral Rehydration Therapy and more food to children as treatments. The regression results give no evidence that the intensity of households' involvement in SHOUHARDO nor the project's sanitation interventions or participation of mothers in HHN courtyard sessions have led to the reduction in diarrhea prevalence. In fact there is some evidence that tubewell installations have *increased* diarrhea prevalences in one region, Mid Char.[40] The positive impact of tubewell installations found for stunting may be through some other pathway than illness, perhaps reducing the time taking for fetching water and thus freeing up time for other nutrition-enhancing activities.

[40] At the regional level, an odds ratio that is statistically significant and greater than one is only found for Mid Char. For all other regions it is statistically insignificant. Note that several studies in Bangladesh have found tubewell water to not be potable, containing zooplankton and bacteria levels outside accepted limits recommended by WHO, due to multiple contamination risks (see www.pubmedcentral.nih.gov/articlerender.fcgi?artid=93023).

**Table 47: Regression analysis of the impact of SHOUHARDO interventions on diarrhea of children 6-24 months and its treatment**

| | Whether child had diarrhea in the previous two weeks | | | Proper diarrhea treatment score b/ | |
|---|---|---|---|---|---|
| | Odds ratio | p-value a/ | | Coefficient | p-value a/ |
| **Number of interventions in which household/mother participates** | 1.030 | 0.394 | | 0.097 | 0.277 |
| **HHN intervention:** Courtyard sessions | 0.709 | 0.193 | | 0.091 | 0.731 |
| **Sanitation** | | | | | |
| Assistance with a latrine | 1.222 | 0.196 | | | |
| Assistance with a tubewell | 1.427 | 0.047 | ** | | |
| Assistance with a drain (urban only) | 0.983 | 0.954 | | | |

a/ Stars indicate that odds ratio is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.

b/ This score is the sum of dummy variables indicating whether child was given more to eat, given more to drink, and given oral rehydration therapy. The mean is 1.76 and the range 0 to 3.

Note: The independent variables in Table IMP3 are controlled for in all regressions.

Data source: November 2009 HHN endline survey.

## *7.4 Caring practices for children and their mothers*

The percent of children fully immunized by one year old increased by 22 percent (from 69 to 84 percent) over the life of the SHOUHARDO project. The results reported in Table 48 leave no doubt that mothers' participation in courtyard sessions led to this increase. A child whose mother participated in courtyard sessions led by Community Health Volunteers is almost three times more likely to be fully immunized than one who did not. The sessions have also had a very strong impact on extending the time for which a child is breastfed. The likelihood that a mother will continue to breastfeed her child up to two years of age is 3.5 times higher among mothers attending courtyard sessions. While the percent of children that received Vitamin A supplementation increased sharply since 2006, the data give no evidence that this is a result of participation of mothers in SHOUHARDO courtyard sessions.

Similar to caring practices for children, courtyard sessions have had a strong impact on caring practices for their mothers. The likelihood that a mother has at least three prenatal visits during pregnancy is 80 percent higher among mothers participating in courtyard sessions than those not. The likelihood that she takes more food and daytime rest during pregnancy, which were key messages of the courtyard sessions, is 34 percent higher. The likelihood of Vitamin A supplementation within 1.5 months after delivery is 70 percent higher. While the results suggest that iron/folic acid (IFA) supplementation is likely to be higher among participants than non-participants, the result is statistically insignificant for the sample as a whole. For North Char, however, the likelihood of IFA supplementation is over four times higher than for non-participants (see bottom row of table).

**Table 48: Regression analysis of the impact of SHOUHARDO interventions on caring practices for children 6-24 months old**

| | Whether child one year or old is fully immunized | | | Whether child received Vitamin A capsule in last 6 months | | | Whether child 18-24 months continued to be breastfed | | |
|---|---|---|---|---|---|---|---|---|---|
| | Odds ratio | p-value a/ | | Odds ratio | p-value a/ | | Odds ratio | p-value a/ | |
| **Number of interventions in which households participated** | 0.902 | 0.278 | | 0.98 | 0.829 | | 0.888 | 0.385 | |
| **HHN Intervention:** | | | | | | | | | |
| Courtyard sessions | 2.744 | 0.000 | *** | 1.309 | 0.299 | | 3.482 | 0.002 | *** |

a/ Stars represent that the coefficient is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.
Note: The independent variables in Table IMP3 are controlled for in all regressions.
Data source: November 2009 HHN endline survey.

In contrast to caring practices for children, the intensity with which households and mothers are involved in SHOUHARDO has a strongly statistically significant influence on the likelihood that she will receive four important types of care during and following pregnancy (see Table 49). The likelihood that the mother will receive all four types is increased the more SHOUHARDO interventions she and her household are involved in. This implies that project interventions other than the courtyard sessions themselves have improved caring practices for mothers.

**Table 49: Regression analysis of the impact of SHOUHARDO interventions on selected caring practices for women of children 6-24 months old**

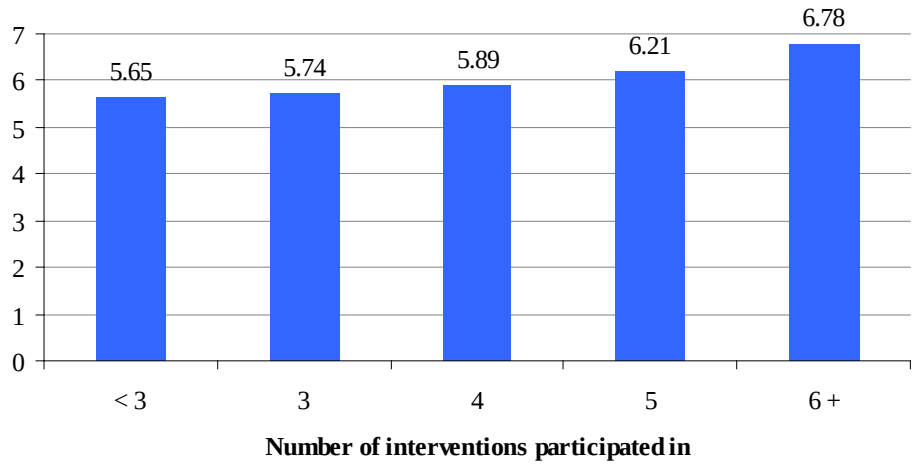
| | Whether had at least 3 antenal visits in last pregnancy | | | Whether took more food and daytime rest than usual during last pregnancy | | | Whether took iron/folic acid during last pregnancy | | | Whether had Vitamin A supplementation after delivery | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Odds ratio | p-value a/ | | Odds ratio | p-value a/ | | Odds ratio | p-value a/ | | Odds ratio | p-value a/ | |
| **Number of interventions in which households/women participated** | 1.188 | 0.000 | *** | 1.091 | 0.000 | *** | 1.200 | 0.000 | *** | 1.187 | 0.000 | *** |
| **HHN Intervention:** | | | | | | | | | | | | |
| Courtyard sessions | 1.792 | 0.001 | *** | 1.344 | 0.071 | ** | 1.341 | 0.148 | | 1.691 | 0.005 | *** |
| North Char only | | | | | | | 4.100 | 0.000 | *** | | | |

a/ Stars represent that the coefficient is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.
Note: The independent variables in Table IMP3 are controlled for in all regressions.
Data source: November 2009 HHN endline survey.

## *7.5 Household food security*

We have already seen that there has been substantial improvement in the food security status of households over the time SHOUHARDO project interventions have been in place. The data presented in Figure 31, for the example of dietary diversity, indicate that much of this increase was indeed the result of their participation in these interventions.

**Figure 31: Household dietary diversity score, by number of SHOUHARDO interventions participated in by household members**




Source: November 2009 HHN endline survey.

Table 50 provides the impact regression results for dietary diversity and the number of months of sufficient access to food in the past 12 months. The results confirm that the more SHOUHARDO interventions households participate in, the greater the number of months they have adequate food access and the higher the quality of their diet. The number of months of adequate food access increases with the number of interventions, but at a decreasing rate, as shown by the negative coefficient on the square of the number of interventions.[41] The squared number of interventions is not statistically significant in the dietary diversity score regression, indicating a linear relationship between the number of interventions and the dietary diversity score.

There are some interesting results to report for the other variables controlled for in the regressions presented in Table 50. Older household heads have more months of food access, and female-headed households also have more months of food access than male-headed households, holding all other factors constant.

[41] The squared variable is included to capture a possible non-linear relationship between the number of intervention and the food security variables. A positive value on the squared term implies that the effect of the number of interventions, combined with a positive value on the linear term, means that the effect of interventions on food security status is of greater magnitude when the number of interventions is large. Conversely, a negative value on the squared term, combined with a positive linear term, means that the impact of more interventions increases food security, but at a decreasing rate.

**Table 50: Regression analysis of the relationship between the number of SHOUHARDO interventions households participated in and food security**

| | Number of months sufficient food accessed (of 12) | | | Dietary diversity score | | |
|---|---|---|---|---|---|---|
| | Coefficient | p-value b/ | | Coefficient | p-value b/ | |
| **Number of interventions in which household participates** | 0.048 | 0.002 | *** | 0.21 | 0.000 | *** |
| **Number of interventions in which households participated squared** | -0.022 | 0.006 | *** | - | - | |
| Household size | 0.130 | 0.243 | | -0.047 | 0.610 | |
| Household size-squared | -0.013 | 0.136 | | 0.009 | 0.212 | |
| Age of household head | 0.009 | 0.054 | ** | 0.001 | 0.863 | |
| Whether headed by a female | 0.811 | 0.001 | *** | 0.291 | 0.164 | |
| Percent females 0-15 a/ | | | | | | |
| Percent females 15-64 | -0.013 | 0.004 | *** | 0.002 | 0.580 | |
| Percent females 64+ | -0.027 | 0.005 | *** | 0.027 | 0.002 | *** |
| Percent males 0-15 | -0.001 | 0.704 | | 0.003 | 0.121 | |
| Percent males 15-64 | -0.014 | 0.004 | *** | 0.018 | 0.000 | *** |
| Percent males 64+ | -0.014 | 0.146 | | 0.014 | 0.111 | |
| Primary occupation of household head | | | | | | |
| Farming a/ | | | | | | |
| Agricultural laborer | 0.177 | 0.091 | * | -0.417 | 0.000 | *** |
| Non-agricultural laborer | 0.333 | 0.031 | *** | -0.502 | 0.000 | *** |
| Salaried employment | -0.081 | 0.154 | | -0.048 | 0.725 | |
| Trading and self employment | 0.043 | 0.530 | | -0.152 | 0.114 | |
| Unpaid household work | -0.236 | 0.314 | | -0.343 | 0.269 | |
| Other | 0.344 | 0.089 | ** | -0.238 | 0.089 | * |
| Region of residence | | | | | | |
| North Char a/ | | | | | | |
| Mid Char | -0.594 | 0.000 | *** | 0.038 | 0.658 | |
| Haor | -0.915 | 0.000 | *** | 0.161 | 0.070 | * |
| Coast | -1.320 | 0.000 | *** | 0.475 | 0.000 | *** |
| Rural a/ | | | | | | |
| Urban | 0.327 | 0.001 | *** | 0.381 | 0.000 | *** |
| R-squared | 0.071 | | | 0.091 | | |
| Number of observations | 3,355 | | | 3,355 | | |

a/ Reference category to which other categories are compared.

b/ Stars represent that the coefficient is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.
Data source: November 2009 HHN endline survey.

Compared with households where the primary occupation is farming, households of laborers have more months of adequate food access. The North Char area has the most months of adequate food access, and urban areas have more months of food access than rural areas. With respect to diet diversity, households where the head is a laborer have lower diversity than farmer households, Haor and Coast Regions have greater diversity than North Char, and urban households have greater diversity than rural households.

Table 51 provides results for participation in specific interventions of SHOUHARDO. As can be seen, many of the program components have statistically significant positive impacts on the two measures of household food security. Households that received CHD support, particularly related to fruits and livestock, as well as support for IGAs had more months of adequate food access. Food assistance has also contributed to improved access to food: the greater the number of "person-months"[42] for which a household received food aid, the greater the number of months of sufficient food.

Participation in a savings group is associated with a slightly shorter time with adequate food access, all else equal (approximately six days). Lack of a positive impact may be partially explained by selection bias from program targeting; namely, that the program actively encourages poorer and more food-insecure households to participate in savings groups.

**Table 51: Regression analysis of the impact of specific SHOUHARDO interventions on household food security**

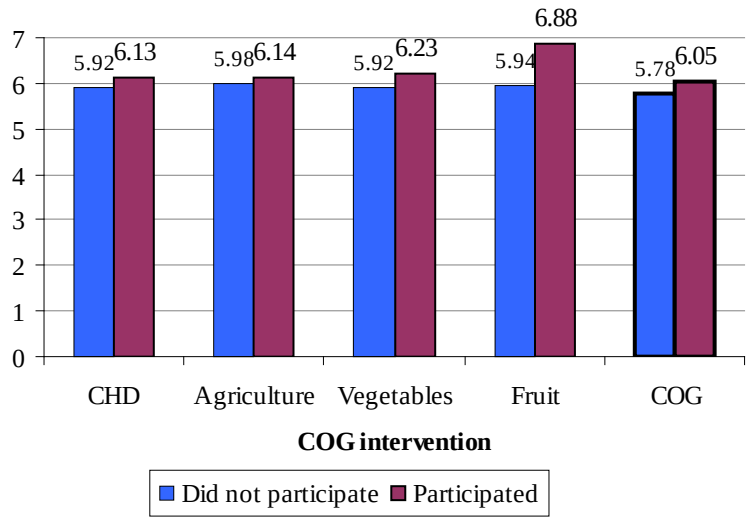
| | Number of months sufficient food accessed (of 12) | | | Dietary diversity score | | |
|---|---|---|---|---|---|---|
| | Coefficient | p-value a/ | | Coefficient | p-value a/ | |
| **Core Occupational Group support** | | | | | | |
| Agriculture | 0.048 | 0.593 | | 0.211 | 0.007 | *** |
| Comprehensive Homestead Development (CHD) | 0.110 | 0.132 | | 0.338 | 0.000 | *** |
| Any CHD support | 0.286 | 0.003 | *** | 0.128 | 0.121 | |
| Vegetables production | 0.060 | 0.452 | | 0.429 | 0.000 | *** |
| Fruits production | 0.543 | 0.000 | *** | 0.909 | 0.000 | *** |
| Livestock | 0.201 | 0.025 | ** | 0.071 | 0.358 | |
| Income generating activities (IGA) | 0.205 | 0.010 | ** | -0.006 | 0.930 | |
| Fisheries | 0.168 | 0.202 | | 0.222 | 0.051 | * |
| **Food assistance** | | | | | | |
| Number of person months for which household received food assistance | 0.021 | 0.009 | *** | 0.032 | 0.000 | *** |
| Food -for-work | 0.137 | 0.423 | | 0.418 | 0.005 | *** |
| **Participation in a savings group** | -0.200 | 0.020 | ** | 0.770 | 0.000 | *** |
| **Cash for work** | 0.164 | 0.197 | | 0.347 | 0.002 | *** |

a/ Stars represent that the coefficient is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.
Note: The independent variables in Table IMP10 are controlled for in all regressions.
Data source: November 2009 HHN endline survey.

[42] This is calculated as the number of months the household received food for a pregnant mother, a lactating mother, and a child 6-24 months.

Households that received support for agriculture and CHD—especially fruits and vegetables production—have higher diet diversity scores. These results support the assumption that increased homestead production of a range of food crops will actually improve the dietary quality of households. They imply that a household participating in the project's vegetable production activity has a 0.43 higher dietary diversity score than one that does not participate. The increased dietary diversity is even higher for the fruit production activity, at 0.91, almost an entire food group. Figure 32 provides descriptive results supporting these findings.

**Figure 32: Household dietary diversity, by participation in Core Occupational Group interventions**




Source: November 2009 HHN endline survey.

In addition to food assistance to mothers and children, food-for-work and cash-for-work have a positive impact on household dietary diversity. These results suggest that these kinds of measures that increase households' incomes (either cash or in-kind) do lead to improved dietary diversity of households. Households will use additional sources of income to obtain a more varied diet.

## *7.6 Household economic security*

As we have seen there have been substantial improvements in the economic status of households over the life of the project. Average household cash income[43] is estimated to have more than doubled. Table 52 reports results from regressions looking at whether these improvements have been brought about by the SHOUHARDO project.

[43] This was not measured in the HHN endline survey and is thus not included in this analysis.

**Table 52: Regression analysis of the impact of specific types of interventions on economic security**

| | Whether HH member migrated for work | | | Whether HH member took loan from money lender | | | Whether HH member sold labor in advance | | | HH asset index | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Odds ratio | p-value a/ | | Odds ratio | p-value a/ | | Odds ratio | p-value a/ | | Coefficient | p-value a/ |
| **Number of interventions in which households participated** | 0.902 | 0.278 | | 0.98 | 0.829 | | 0.888 | 0.385 | | -0.72 | 0.261 |
| **Core Occupational Group support** | | | | | | | | | | | |
| Agriculture | 0.814 | 0.044 | ** | 0.990 | 0.923 | | 0.882 | 0.402 | | -0.069 | 0.924 |
| CHD | 0.891 | 0.161 | | 1.125 | 0.168 | | 1.019 | 0.871 | | -0.620 | 0.290 |
| Any CHD support | 0.582 | 0.000 | *** | 0.972 | 0.802 | | 0.827 | 0.194 | | -0.811 | 0.291 |
| Vegetables production | 0.834 | 0.041 | ** | 1.159 | 0.105 | | 0.996 | 0.976 | | 0.379 | 0.550 |
| Fruits production | 0.794 | 0.152 | | 1.228 | 0.203 | | 1.602 | 0.017 | ** | -0.016 | 0.989 |
| Livestock | 1.059 | 0.560 | | 1.039 | 0.715 | | 1.009 | 0.948 | | -1.064 | 0.136 |
| IGA | 0.900 | 0.244 | | 1.077 | 0.433 | | 0.969 | 0.817 | | 0.520 | 0.411 |
| Fisheries | 0.606 | 0.002 | *** | 0.782 | 0.141 | | 0.727 | 0.177 | | -0.384 | 0.716 |
| **Food assistance** | | | | | | | | | | | |
| Number of person months household received food rations | 0.995 | 0.542 | | 0.998 | 0.812 | | 1.005 | 0.707 | | 0.180 | 0.774 |
| Food -for-work | 1.063 | 0.753 | | 1.425 | 0.055 | * | 1.467 | 0.130 | | -1.994 | 0.145 |
| **Participation in a savings group** | 0.785 | 0.017 | ** | 0.933 | 0.503 | | 0.944 | 0.706 | | -0.929 | 0.176 |
| **Cash for work** | 0.966 | 0.808 | | 1.381 | 0.020 | ** | 1.259 | 0.227 | | -0.206 | 0.839 |

a/ Stars represent that the coefficient is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.
Note: The independent variables in Table IMP10 are controlled for in all regressions.
Data source: November 2009 HHN endline survey.

Four indicators of economic status are considered: whether or not any household member had to migrate for work in the past 12 months; whether or not the household had to take a loan from a moneylender; whether or not any household member had to sell labor in advance, and an index of all assets owned by the household. The first three indicators represent negative coping strategies that vulnerable households must adopt in times of stress; program interventions should reduce the number of households that must resort to these strategies. The asset index is a measure of household wealth, and project interventions are expected to increase household wealth over time.

It should be emphasized that the regression results for the economic security indicators must be interpreted with particular care because there are potentially two offsetting factors at work with regard to these variables. On the one hand, the program interventions are designed to improve economic security of participating households, which would suggest that participation be associated with improvements in the economic security indicators. On the other hand, the project also strives to target some of its interventions toward the poorest among PEP households. This factor would suggest a negative relationship between project participation and household economic security variables for some interventions. The fact that many of the intervention coefficients (or odds ratios) reported in Table 52 are not statistically significant may be because these two factors offset each other, and strong statistical correlations cannot be observed (i.e., targeting-based selection bias is influencing the analysis). This may explain why the intensity of participation, i.e., the number of interventions participated in, shows no impact on the four indicators.

The rest of the results point to a number of interventions that have helped to improve households' economic status. Participation in agriculture, CHD—particularly vegetable production—fisheries, and savings groups reduces the odds that a household member will migrate for work. With respect to taking a loan from a moneylender, the only significant participation variables are food-for-work and cash for work. The odds ratios for participation in these activities are actually positive. Since these are the very project interventions that are targeted to the poorest and most vulnerable, we can only assume that these anomalous results are a result of selection bias. Whether a household member sold labor in advance is only significantly affected by participation in CHD fruits production, which appears to increase the odds that the household sold labor in advance. Perhaps there is some process at work related to fruit production that gives producing households incentive to sell their labor in advance.

## *7.7 Women's empowerment*

The regression results for women's empowerment are presented in Table 53. Four indicators are reported on: score for women's decision making within her household, freedom of movement score, freedom from patriarchal attitudes score, and whether or not the woman earns cash income. The scores are derived from adding up the number of positive responses to a series of questions to women about each of the three topics (see Section 4.1.1).

As can be seen in the table, program participation has strong positive impacts on each of these measures. The greater the number of interventions that a woman participates in, the greater is her:

- decision making power in her household;
- freedom of movement;
- freedom from patriarchal attitudes about family life; and
- likelihood of earning cash income.

Participation in EKATA, the only intervention specifically focused on women's empowerment, is associated with an almost 30 percent increase in the odds that women earn cash income. And, the more EKATA meetings a woman attends the greater is her decision-making power, freedom of movement, and freedom from patriarchal attitudes. Evidently the EKATA meetings have been successful in improving women's empowerment.

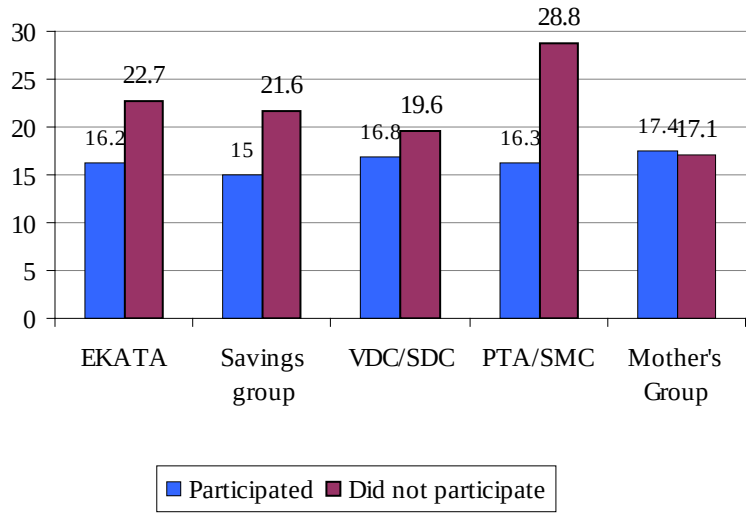
Participation of women in other groups also has significant positive impacts on the empowerment scores and whether women earn cash income. Participation in a VDC/SDC or in her daughter's school's PTA or SMC are both associated with increases in women's decision making power. Participation in a savings group increases a woman's freedom of movement, perhaps due to the greater autonomy that increased access to financial resources gives. Participation in a savings group, in VDC/SMC and in a PTA or SMC all lead to an increase in the likelihood that a woman will earn cash income. The increased likelihood is particularly high for membership in a PTA or SMC, at 90 percent. This may help explain why such membership is also associated with reductions in child malnutrition (underweight). Descriptive results for cash income earning confirm the regression results and are presented in Figure 33.

**Table 53: Regression analysis of the impact of SHOUHARDO interventions on women's empowerment**

| | Decision making score | | | Freedom of movement score | | | Freedom from patriarchal attitudes score | | | Whether woman earns cash income | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coeff-icient | p-value a/ | | Coeff-icient | p-value a/ | | Coeff-icient | p-value a/ | | Odds ratio | p-value a/ | |
| **Number of interventions in which household/woman participates** | 0.017 | 0.002 | *** | 0.102 | 0.000 | *** | 0.055 | 0.002 | *** | 1.167 | 0.000 | *** |
| **EKATA participation** | | | | | | | | | | | | |
| Whether participates | -0.005 | 0.846 | | -0.077 | 0.492 | | -0.033 | 0.706 | | 1.289 | 0.049 | ** |
| Number of EKATA meetings attended in last year | 0.003 | 0.018 | ** | 0.014 | 0.000 | *** | 0.010 | 0.001 | *** | 1.008 | 0.062 | ** |
| **Participation of woman in other groups** | | | | | | | | | | | | |
| Savings group | 0.028 | 0.159 | | 0.356 | 0.000 | *** | -0.005 | 0.934 | | 1.584 | 0.000 | *** |
| VDC/SDC | 0.100 | 0.000 | *** | -0.051 | 0.649 | | -0.377 | 0.000 | *** | 1.296 | 0.069 | ** |
| PTA/SMC | 0.144 | 0.000 | *** | 0.024 | 0.879 | | -0.142 | 0.228 | | 1.887 | 0.000 | *** |
| Mother's group | -0.103 | 0.004 | *** | -0.407 | 0.007 | *** | -0.060 | 0.623 | | 1.239 | 0.251 | |
| **COG support to woman's household** | | | | | | | | | | | | |
| Agriculture | 0.025 | 0.291 | | 0.355 | 0.000 | *** | 0.053 | 0.483 | | 1.164 | 0.211 | |
| Comprehensive Homestead Development | 0.043 | 0.024 | ** | 0.313 | 0.000 | *** | 0.252 | 0.000 | *** | 1.322 | 0.005 | *** |
| Income generating Activities | 0.022 | 0.290 | | 0.070 | 0.421 | | 0.088 | 0.179 | | 1.455 | 0.000 | *** |
| Fisheries | | | | | | | | | | | | |

a/ Stars represent that the coefficient is statistically significant at the 1% (***), 5%(**) or 10%(*) levels.
Note: The independent variables in Table IMP10 are controlled for in all regressions.
Data source: November 2009 HHN endline survey.

**Figure 33: Percentage of women earning cash income, by participation in SHOUHARDO groups**




Source: November 2009 HHN endline survey.

One interesting result is that participation in a VDC or SDC is negatively associated with freedom from patriarchal attitudes towards family life. Another is that mothers who participate in a mother's group (almost all women in the sample—96 percent) have lower decision making power and freedom of movement than those who don't.

As can be seen in the bottom panel of Table IMP13, participation of a household in CHD leads to improvements in all of the empowerment scores. Further, a woman involved in CHD has a 32 percent higher likelihood of earning cash income than one who doesn't. The results suggest that participation in the agriculture component of COG leads to greater of freedom of movement for women. We can conclude from these results that involvement of women in the SHOUHARDO project's economic activities has also contributed to increasing their empowerment.

Overall, the quantitative results from the endline survey show a very strong positive association between project interventions, both those directed specifically towards women and not, and women's empowerment.

## *7.8 Conclusion*

This analysis of the endline HHN survey data has demonstrated that most of the major improvements in household, woman, and child-level outcomes that have taken place since the start of the SHOUHARDO project can be attributed to the project activities themselves. The changes were brought about by a host of interventions, ranging from promotion of breastfeeding, to supporting savings groups, to empowering women through the formation of EKATA groups. In general, the more involved a household is in the project, the better off it is in terms of food security, equality of power between female and male household members, and the nutritional status of young children.

# 8 Recommendations

This section provides recommendations based on the findings of the final evaluation. They are organized by Strategic Objective and include an additional section on recommendations relating to program processes.

**Overall Recommendations**

***Continue integrated programming that focuses on the structural dimensions as well as technical aspects of poverty:*** CARE Bangladesh should continue to implement this holistic preventive approach targeting the poor and extreme poor, which worked so well in sustainably improving food security, ameliorating poverty, and reducing chronic malnutrition among children 6-24 months of age.

***Provide ongoing support to community groups and local NGOs:*** Addressing the underlying structural causes of poverty requires a long-term strategy that goes beyond the five-year project cycle. Ongoing support to community groups such as VDC/SDCs, EKATA groups, PNGOs and others needs to be secured in order to ensure their existence as well as their effectiveness in fomenting positive change within the communities. Additionally, while local partner NGOs have gained significant capacity through SHOUHARDO, much work still exists to strengthen their abilities to effectively implement development activities at the community level. Without further support, much of SHOUHARDO's impact in building and strengthening community institutions could erode over time.

## *8.1 SO1 Governance, Infrastructure, and Food Production*

### 8.1.1 Governance

***Define terms of office for VDC/SDCs and establish an election process:*** In consultation with all relevant stakeholders, a policy should be set that defines a time limit to the period of service for VDC/SDCs. Consultation with the LGDs is suggested, as they have shown considerable support for the SHOUHARDO approach; this may also help to consolidate LGDs' sense of ownership and responsibility. Clear guidelines for the initiation and facilitation of an election process are recommended. Although SHOUHARDO's resources to carry this out are now limited, it is suggested that the program make arrangements with the LGDs to develop a clear strategy for future operations of the VDC/SDCs.

***Provide refresher training sessions:*** As part of the exit strategy, a round of refresher training would be an ideal tactic to help the VDC/SDCs prepare for functioning autonomously and to renegotiate their relationships with service providers, especially the UP/PS. Training should be provided by agencies that are also available on a referral basis in the future, such as BRAC. For the longer term, and perhaps more importantly, a sustainable learning strategy should be developed with the VDC/SDCs that outlines a vision for continued capacity development.

***Increase and strengthen women's participation in the VDC/SDC:*** A follow-up program should attempt to increase public awareness of women's entitlement to equitable political participation. Sensitizing family members who at times hold women back from full participation could increase women's capacity to contribute to VDC/SDCs. It is acknowledged that full transformational change involves deep-rooted social value systems and is beyond the scope of any external program, and that lasting change will only come through people's own volition. However, increasing the linkages between VDC/SDCs and EKATA groups could contribute to this type of transformation. Although operating at a small scale, EKATA

groups have effectively helped women to recognize their own entitlements and to share their new knowledge with others in the community.

***Develop a database of village/slum projects:*** A database of all projects undertaken by VDC/SDCs would help future programs characterize the benefits of the various modalities. A simple format, feasible within the few months remaining in SHOUHARDO, would be to count the number of each type of VDC/SDC project, such as road rehabilitation, bridge construction, social forestry, family violence interventions, *khas* land titling applications, etc. With minimal analysis, this could provide a more thorough sense of the impact of the VDC/SDCs' work than is currently available. Through this process, common patterns may emerge that could inform a follow-up program on how to best support projects that arise from the plans of local institutions. This also would be the best base from which to develop a more effective set of indicators for measuring each project's impact.

For follow-up phases, a more complex inventory should be developed that compiles information on VDC/SDC projects and analyzes them in terms of the roles and responsibilities of each actor involved. Project analysis should include the nature of the impact in terms of food and livelihood security, and social relations (gender relations, class relations), as well as the scope for replicability. Workshops similar to the type CARE offers to discuss its major interventions should be held to analyze the impact of VDC/SDC projects.

***Strengthen role of and collaboration with UP/PS:*** To help ensure that UP/PS members have a sense of ownership and responsibility for continued support to and nurturing of VDC/SDC and other related village-level groups, future programs should have a clearer understanding of the UP/PS' political interests, frame of thinking, and available resources (financial, equipment, human, technical, moral authority, comparative advantage). The objectives would be to help the UP/PS and VDC/SDCs develop win-win relationships, in which the UP values the VDC/SDCs' added resources, and to enable UP/PS to increase the legitimacy of the development committees. A logical place to institute this closer relationship is in the facilitation of elections for the VDC/SDC.

***Work with entire unions:*** If future programs work with all the villages in a union, it may help to secure the support of all ward members. This could help maximize the VDCs' electoral resource and leverage with the UP. "All-union" interventions are favored in the CARE Bangladesh governance technical paper. This strategy should be closely monitored to ensure that if it increases conflicts, they could be mediated within a broad win-win framework with the UP. This recommendation may be less applicable to the urban context, where coverage of all slums in large cities will likely be difficult. Of course, this recommendation must take into consideration the current emphasis of targeting PEPs and the most remote villages. A follow up program could define a two-tiered method of support, where more benefits are provided to those villages deemed most vulnerable, while other services are provided to the rest of the villages in the union.

***Provide strategic support to the UP/PS:*** Strengthening the capacities of the UP/PS would directly improve the support to the poor and extremely poor. One way to do this would be to carry out an in-depth analysis of the functioning of standing committees to see if and how they are applying the new rules and regulations issued by LGD. Follow up trainings are also recommended. If future programs continue partnerships with LGSP, this could be a prime area of collaboration and interest.

***Analysis of the specific services to be provided by NBDs:*** While the program has focused on increasing the responsiveness of service providers and on helping PEPs to claim their rights to those services, a more specific and detailed analysis of these services would help to build a clearer vision, identify indicators of sustainability, and help to guide future programming. A considerable inventory could be compiled using

documents such as the institutional capacity baseline document and the community empowerment study. This inventory would complement databases which currently emphasize VDC/SDCs. Based on this, a framework of rights-to-services could be set out and some specific strategies taught. If the idea was to use this as a major source of feedback to the ministries, SO1 technical managers and M&E departments should be tasked with analysis, in conjunction with NGO partners and perhaps an external consultant. The analysis should look at the interests of service providers, such as whether they need to show that they are responsive to the community in order to gain advancement in the ministry, or whether their main motivation is simply to see that their work is appreciated and benefits people.

***Continue support for UP complexes***: Future programs should consider continued investment in UP complexes, but preferably only on the condition that an assessment is done once the complexes supported under SHOUHARDO are completed. This assessment should consider whether the UP complexes are actually used in the interests of the poor, whether the NBDs provide more services, and whether there is better integration among LEBs and NBDs as a result. There should be a plan for maintenance and operation and financial self-sustainability, which preferably demonstrates the commitment of the UP to raise resources locally and not rely only on transfer payments. If it can be shown that facilities are used effectively, and that sustainability is likely, then the investment may be worthwhile and considered alongside other investment options.

***Strengthen capacities in conflict resolution and legal advice:*** At a minimum, follow-up programs should ensure that everyone involved in the program receives appropriate training in conflict resolution, as a number of people reported confrontations that resulted in injury. It is recommended that communities be categorized in terms of the risk of violent conflict, and that appropriate protection measures are taken given these categorizations. Obtaining legal capacity may help the program to prepare proactively for possible conflict scenarios.

***Advance the interests of the poor to fishing water access:*** There are some indications of slow advancement on this difficult issue, and it would be good to gather information on where community fishing cooperatives have been able to obtain rights, particularly if they were previously denied. A follow-up program should develop a brief strategy for making progress on the issue in the short, medium, and long term.

### 8.1.2 Infrastructure Projects

***Ensure adherence to environmental regulations and environmentally sustainable practices:*** Given limited awareness of proper use of pesticides among PEPs, it is necessary to initiate further environmental studies as per Regulation 216 and disseminate findings to the PEPs to promote more sustainable agriculture practices. Environmental implications during implementation of IGAs should be reviewed and guidelines for sustainable procedures developed. Special attention is needed to ensure that embankments adhere to environmental requirements, including provision of drainage and regulatory structures. ORGANS floating gardens may pollute the stagnant water in adverse conditions. Therefore, it is recommended that CARE make arrangements for trial water quality testing for suspected cases of pollution to ensure avoidance of environmental problems resulting from project interventions.

***Increase the number of program staff with specialized knowledge in environmental assessment:*** Inclusion of program staff with specialized knowledge and/or skills related to environmental assessment and mitigation would strengthen overall implementation of the program.

### 8.1.3 Food Production and Income-Generating Interventions

***Develop specific links with Comprehensive Homestead Development*:** More specific links should be made between CHD COGs and MCHN so that the improved nutritional behaviors learned are reinforced by suitable food production. This could include pairing pregnant and lactating mothers with CHD women, so that they can teach these new mothers the intensive gardening techniques that could lead to availability of more nutritious foods for their children.

***Implement transparent bookkeeping methods for the non-literate***: Whatever model communities choose for savings activities, a follow-up program must place greater emphasis on the use of bookkeeping methods that are equally transparent to non-literate and literate/numerate persons, to avoid co-opting decision making within the savings group and the loss of savings.

***Promote better market linkages with COGs:***The program should build the capacity of PEP households to better access markets to sell their products.

***Promote increased participation of women in the market:*** Market Management Committees (MMCs) should always include women so that there is a gender lens placed on the management of these markets, This also would help ensure that VDCs continue to support increased participation of women in market-led activities, including the development of marketing strategies to support women's particular business activities.

***Assist PEP households to build their resilience to adapt to continuing climate change:***
SHOUHARDO and other programs will also be challenged in the future to put more effort on assisting PEP households to build their resilience to adapt to continuing climate change.

***PEP households need closer links with a range of research institutes***- Research institutes could conduct operations research with rice and crop varieties that may prove more resilient to unpredictable climate change, including drought, flood and cold.

***SHOUHARDO and future programs should build on the lessons learned through its establishment of savings groups:*** In its remaining months, SHOUHARDO should identify best practice models and develop innovative ways of record keeping for low levels of literacy and numeracy, so that savings groups' processes remain transparent for all members. SHOUHARDO should collaborate with micro-finance institutions and NGOs interested in promoting savings country wide to develop a policy on savings approaches for PEP that could be adopted by the national government.

## *8.2 SO2 Nutrition, Health and Hygiene*

***Link new mother volunteers to VDC/SDCs:*** Where mothers have already been identified in the communities to take over GMP and some health education activities, provide them all with follow-up support to assure they acquire the basic skills in weighing, filling out the growth chart and health forms, and providing feedback and counseling to the mothers. Create a linkage between this new volunteer and the VDC/SDCs.

***Provide clear instruction about the influence of improved health practices on children's learning potential:*** Orient the VDC/SDCs to the health and nutrition situation in the community, compare it to other communities, and provide a clear understanding of the relationship between pregnant mothers' and infants' nutritional status with the child's future learning capacity and physical productivity.

***Support the CHVs and link them with the MOH and FW for reporting and monitoring rather than just with a PNGO:*** The individual will be responsible for GMP, educational sessions, home visits, referrals to health services, and keeping the VDC abreast of health and nutrition indicators for the community. Mentor MOH and FW staff in how to provide support to the community worker.

***Tailor messages to pregnant women and lactating mothers:*** Divide the courtyard sessions so that pregnant women meet to learn and discuss messages relevant to them, while in another group, lactating mothers receive messages and practice skills around infant and young child feeding. Limit the number of key messages to 12 or less (one per month) and spread the sub-topics out over two or three courtyard sessions.

***Amplify demonstration feeding sessions:*** Demonstration feeding sessions should be held at least monthly in all communities for mothers with children six months to two years of age. Assure that the food prepared is of the appropriate consistency and nutrient density. Have participants propose ways to create a food from what they normally cook, rather than always making a special preparation like *kitcheri*.

***Customize didactic materials to the local context:*** Revise the current materials used in the courtyard sessions, putting each picture on a separate sheet so they are large enough for the groups to see clearly. Conduct simple qualitative research to focus courtyard sessions on addressing barriers to adopting health and nutrition behaviors. For growth monitoring and promotion, ask Save the Children about the counseling materials they use, which enable the CHV to give the right guidance for each situation.

***Promote ante-natal care, vaccinations and IFA supplements as early as possible in the pregnancy:*** Even though mothers may not be enrolled for food distribution until their fourth month of pregnancy, encourage much earlier identification and support the women to seek ANC, TT, and particularly IFA tablets as soon as pregnancy is confirmed. The folic acid in the IFA tablets is most critical during the first weeks of the pregnancy.

***Engage the community in advancing and maintaining its own environmental health:*** Continue to emphasize environmental health and diarrheal disease in future programming. It is important that local communities define, understand, and act to ensure environmental health, including the maintenance of sanitation infrastructure and safe drinking water. Future programming should strive to help communities systematically conduct and act on an assessment of environmental health status in their localities. A long-term goal would be to develop a protocol to support the development of community capacity, leaving in place a sustainable development process that local government can promote and support.

## *8.3 SO3 Empowerment for Women and Girls*

***Increase scale of EKATA groups:*** A follow-up phase should increase the number of EKATA groups. Although VDC/SDC and COG groups contributed to aspects of women's empowerment, EKATA groups appeared to be the strategy that greatly contributed to a woman's awareness of her legal rights and consciousness of herself and others as interdependent. Greater awareness in these areas could contribute to increased participation and leadership within other groups.

***Strengthen linkages between EKATA groups and other women's networking bodies:*** Ensure that economic empowerment activities are paired with consciousness raising about legal rights, transformative action, political representation, and defense against gender abuse or harassment. Stronger links between EKATA and VDC/SDCs will help women to understand how they can address gender power relations in the broader context.

***Include men and adolescent boys in empowerment strategy:*** SHOUHARDO's empowerment strategy could be significantly strengthened with modification. Building mass public awareness about gender disparity could increase impact. Including women and girls in EKATA learning circles is an important component to meeting this goal, but cannot on its own reduce the negative impacts of a patriarchal society. Most of the program's empowerment efforts target women and girls for economic capacity development and social awareness raising, but do not adequately sensitize men and adolescent boys to gendered norms which contribute to inequitable entitlements between males and females. In order to transform complex behavioral patterns and value systems, *all* contributors must increase their understanding of the patterns and systems, actions and reactions that perpetuate gender disadvantage.

***Provide counseling service capacity development*:** By including capacity development for counseling services that address the psychosocial aspects of violence against women, a follow-up phase would provide communities with more effective options of dealing with gendered violence besides threatening and shaming.

***Expand training and follow up:*** Critical aspects of effective empowerment advocacy such as negotiation skills, counseling, and business development are not included in the training provided by SHOUHARDO. A follow-up phase should include these elements as part of capacity development. Additionally, similar to MTE recommendations, the final evaluation recommends that future training programs could be strengthened and reinforced by offering refresher and follow-up sessions. In most cases training is offered once. Training is not synonymous with learning, particularly when complex behavioral and systemic changes are the desired outcome. For these concepts to take root, reinforcement will be necessary.

***Enhance leadership development*:** SHOUHARDO could be strengthened by enhancing leadership development efforts. The present leadership process is working, yet the lack of a clear process of bringing in and developing additional leaders may limit its functionality in the long run. Committees are formed without a process of re-election or reformation and many women leaders participate in more than one committee, which could potentially lead to power consolidation.

***Expand and enhance ECCD:*** A follow-up phase of SHOUHARDO should continue, expand, and enhance the ECCD model. Additional emphasis should be placed on raising community awareness of the importance of education for girls. The management committees of ECCD centers include women from the local community, and their involvement is critical for girls' education. Women who have realized their own empowerment may be more pro-active in promoting gender equitable educational entitlements.

***Strengthen M&E systems:*** Monitoring and evaluation systems for women's empowerment could be strengthened by including indicators that measure outcome in addition to current Indicator Performance Tracking Table (IPTT) metrics for output. Suggested output indicators are women's level of participation in different committees, actions taken by women after receiving training, and increased women's solidarity.

## *8.4 SO4 Disaster Preparedness*

***Integrate SO4 with other SHOUHARDO SOs:*** SO4 operates with considerable independence from other SOs. There is a strong need to horizontally integrate disaster preparedness and management in all of the sector activities being carried out by SHOUHARDO in its Title II programming. By not integrating Disaster Preparedness with other strategic objectives, SHOUHARDO is missing opportunities for a synergistic effect. To build resilient communities, a comprehensive approach is needed that combines risk reduction activities (infrastructure, appropriate seeds, livestock protection activities, etc.), early warning and disaster response, and livelihood recovery. CHVs could be trained to respond to disaster-related health threats, as a means of integrating disaster preparedness with the rest of SHOUHARDO. The

program may consider reducing the geographical coverage to implement a more comprehensive approach since resources will need to be more concentrated, while still promoting early warning and emergency response in the wider area.

***Promote Household Level Disaster Preparedness:*** SHOUHARDO has not adequately promoted disaster preparedness activities directly at the community or household level. Since other program activities operate at the household level, opportunities for mainstreaming disaster preparedness activities were missed. Building the capacity of households to do disaster preparedness planning allows these plans to be harmonized at the community level through the VDC to create a community plan. Community plans can then be rolled up into ward plans and union plans. Finally these plans can be consolidated at the upazila level, making it a truly bottom-up participatory approach to disaster planning.

***Bring VDCs into Disaster Preparedness:*** The apparent gap between DVs and UDMC/PDMCs could be partially filled if VDC/SDCs are involved. VDC/SDCs are both more respected by the UP/PSs and they themselves may be more respectful of community volunteers. This involvement could take various forms, such as supporting the DMC and the ward member or commissioner with community-level activities, at which the VDC/SDC models the support to and respect for DVs.

***Seek additional means to motivate and retain Disaster Volunteers:*** Aside from helping to improve their relationship with the DMCs, the Disaster Volunteers play a crucial role in retaining community capacity for DRR and emergency response. Though they may not need to be active on a daily or weekly basis, there is a need to keep them connected to the DMCs and for them to be available when such resource people are needed. SHOUHARDO should help negotiate with LGD and MoDFM to ensure that this network is continued and some form of regular contact and learning opportunity is identified. In this way the identity of the Disaster Volunteers is reinforced and they maintain their enthusiasm to be called on when needed.

***Check UDMCs' preparedness as part of exit strategy:*** The example found in one community of a UP chair who had failed to keep the microphone working was an isolated case, nevertheless the program should go back and ensure that preparedness procedures have not declined, and carry out some short refresher training if needed.

***Continue the emergency response facility:*** This has been proven to be crucial in the ability of CARE Bangladesh and its partners to respond quickly (often at the leading edge) to major disasters during the implementation of SHOUHARDO, in an entirely complementary manner to other relief efforts that came afterwards.

## *8.5 Program Processes*

***Enhance exit strategies****:* Exit strategies in a follow-up phase must consider the capacity development required for communities to sustain their efforts, particularly their linkages with local government. CARE is commended for including PNGOs in the design of a general exit strategy, and this process should be modeled. Future exit strategies should be designed early in the program rather than one year before program's end. The primary focus of future exit strategies should be on strengthening the capacities necessary for handover, rather than phasing out financial and human resources at program's end.

***Increase follow-up training and training materials for PNGO staff:*** Follow-up phases of SHOUHARDO should ensure that adequate training materials are available to orient new PNGO staff. This will help to clarify the program's goals and objectives and will assist PNGOs in systematizing the many trainings that are necessary due to high staff turnover. Furthermore, by increasing the number of

refresher training sessions, PNGO capacity will be enhanced, ultimately leading to more effective handover.

***Conduct a small study to determine how much of the food ration was consumed by various family members.*** Gather information about whether the ration complemented or substituted usual foods, and what the savings was used for. This information will inform ration size decisions in the future.

# Annex 1: Terms of Reference

**Terms of Reference for FINAL EVALUATION**
**of USAID PL 480 Title II**
**CARE DAP/SHOUHARDO Program (17 June 2009)**

**A. Introduction**

1. The SHOUHARDO Program is funded through Food for Peace (FFP) Title II, operating from October 2004 to May 2010. The overall goal of the Program is to 'Sustainably reduce chronic and transitory food insecurity of 400,000 households (HHs) in 18 districts of Bangladesh by 2009'.

2. This program is attempting to address not only the availability, access and utilization issues that lead to food insecurity, but also the underlying issues that contribute to vulnerabilities such as a lack of participation, social injustice, and discrimination that hold people back from realizing their full potential in leading healthy and productive lives.

3. SHOUHARDO has a total resource of 277,292 MT worth of commodities for both direct distribution and monetization; and a cash budget of USD 99.2 million.

4. SHOUHARDO represents a new approach to development for CARE Bangladesh in its choice of working areas and the proportion of its interventions implemented by partner NGOs. The Program operates in four major regions of Bangladesh – Kishoreganj, Rangpur, Tangail and Chittagong. 95% of the implementation is through 44 local partner NGOs, the remaining 5% through direct delivery. Each of these four regions possess their own unique topography, but are consistent in that the beneficiaries within are some of the most marginalised groups in Bangladesh due to their remoteness. Kishoreganj is the 'haor' region. These are large expanses of depressed land with elevated mounds scattered in the area. During the wet season, the depressions are water logged, with the mounds being transformed into virtual islands. It is on these mounds that people live. The water logged area becomes a rich abundance of fish, which unfortunately does not serve the poor as these are immediately transgressed on by elites and organised crime syndicates which claims all the fish as their own. The only means of transport during these times is by boat. In the dry season, the water subsides creating an even harsher terrain to cross as the only means of movement literally becomes 'walking'. Rangpur and Tangail are the 'North Chars' and the 'Mid Chars' respectively, dependent largely on crops. Char lands are silt deposits due to shifting water currents. These are usually considered 'khas' land. 'Khas' land, in principle, is reserved for the poor as they are mostly new formations of land on which land tax has not been paid and accordingly come under the jurisdiction of the Land Ministry. But again, such land becomes a source of conflict as elites and organized crime groups occupy such land by force, once again marginalizing the poor. Chittagong is the 'coastal' area of Bangladesh. The poor living in this area are prone to regular cyclones and slow-onset disasters such as salination of their crop and homestead land, which directly impacts on their food security.

5. To reach the Goal, SHOUHARDO has 4 Strategic Objectives (SOs). The logical framework is shown below, together with Intermediate Results (IRs).

**SO1: Improved availability/economic access to food through strengthening livelihoods, entitlements and enhancing accountability of service providers.**

**SSO1.1: Targeted institutions effectively mobilize and manage resources to reduce vulnerability to food insecurity**

*IR1.1.1: Capacity of participating institutions to effectively mobilize and manage resources enhanced.*

**SSO1.2: Enabling environment of high risk areas supports people's ability to improve their food and livelihood security**

*IR 1.2.1: Communities aware of legal provisions and mobilized around entitlements (land tenure, access to khas land, eviction, fishing and local government).*

*IR 1.2.2: Community people's access to different services and common resources increased and service provider's accountability enhanced*

*IR 1.2.3: Improved infrastructure facilities to protect livelihood and reduce vulnerability*

**SSO1.3 Vulnerable HHs are engaged in new or enhanced economic activities that increase their production /income and build assets.**

*IR 1.3.1: Capacity of HHs to identify new income options enhanced*

*IR 1.3.2: Market access enhanced*

**SO2: Sustainable improvement in the health and nutrition of project participants.**

**SSO 2.1: Targeted HHs have adopted appropriate health, hygiene and nutrition practices**

*IR2.1.1: Members of 400,000 HHs (pregnant women, lactating mothers and adolescents girls) and opinion leaders of community trained and able to understand health, hygiene, safe motherhood and nutrition practices and strengthen linkages with health service providers.*

*IR 2.1.2: 1,000 rural and 60 urban Early Childhood and Development Centres (ECDs) established and providing early childhood education and, growth promotion services*

*IR 2.1.3: 52,800 pregnant & 92,800 mothers with severely/moderately malnourished children (0-2 years old) utilize take-home rations to improve nutritional status*

**SSO 2.2: Hygienic environment established through development of infrastructure and improved hygiene practices in 60% villages and urban slums**

*IR 2.2.1: Community led total safe water and sanitation is achieved*

*IR 2.2.2: Improved hygiene behavior practiced*

*IR 2.2.3: Basic structure implemented to ensure hygienic environment*

**SO3: Enhanced empowerment of 400,000 women and girls from targeted vulnerable HHs.**

**SSO 3.1: Women and girls are participating in enhanced educational opportunities**

*IR 3.1.1: Women and girls trained and practicing life skills and functional literacy in formal and non-formal settings*

*IR 3.1.2: Participation of women in 300 SMCs/PTAs increased, and the committees are demonstrating responsiveness to promote women and girls education*

**SSO 3.2: Entitlement of women/girls improved whereby they can effectively voice concerns, mobilize resources and influence decisions**

*IR 3.2.1: Targeted areas are sensitized on women's entitlements*

*IR 3.2.2: Enhanced capacity of 400 women's groups to identify, analyze problems/opportunities, develop action plans, access/mobilize resources*

*IR 3.2.3: 50 women's groups establish linkages with Regional/National women's networks for greater voice in policy, laws related to reproductive rights, family laws and violence against women*

**SO4: Targeted communities and institutions are better able to prepare for, mitigate and respond to natural disasters.**

**SSO 4.1: Enhanced capacity of communities and targeted institutions to overcome and manage disaster situations**

*IR 4.1.1: Targeted institutions and communities trained and capacitated on disaster preparedness, response and mitigation*

**SSO 4.2: Appropriate infrastructure implemented to minimize disaster risk and losses**

*IR 4.2.1: Community-led disaster preparedness plans developed or updated in 500 unions and 19 urban committees*

*IR 4.2.2: Appropriate structures developed to mitigate against disaster*

**SSO 4.3: National-level bodies facilitate appropriate disaster policy formulation, amendment and reinforcement**

*IR 4.3.1: NIRAPAD strengthened as a network to coordinate, raise awareness and disseminate best practices*

6. When conducting the Final Evaluation, the team must consider that the Program was delayed for various reasons and that effective implementation only began in mid CY 2006. The Mid Term Evaluation Report may be reviewed to obtain more information on this.

**B. Objectives**

7. The evaluation has the following objectives:
   a. Output (at the Intermediate Result (IR) level) assessment to map how effective SHOUHARDO was in implementing its activities and reaching its 'output' targets.
   b. Impact assessment to analyze how effective the Program was in reaching its 'outcome' (Strategic Objective (SO) and Sub-Strategic Objective (SSO)) targets. The evaluation needs to measure impact on the lives of targeted beneficiaries in terms of all 3 aspects of the unifying framework (human condition, social position and enabling environment). It also needs to be able to measure to what extent the Program has contributed in reducing poverty and shifting the underlying causes of poverty particularly in terms of power relationships, social exclusion, discrimination and marginalization. The evaluation must capture both positive and negative impacts with plausible explanation. Additionally, SHOUHARDO's contribution to Country Office Impact Statements is also expected, as well as how in line this is to the strategy of Food for Peace (FFP).
   c. Analysing and assessing the validity of the hypothesis that reaching the targets at the Output level would lead to the Outcome level changes being pursued. In other words – were the Intermediate Results (IR) appropriate to reach the changes desired at the Sub-Strategic Objective (SSO) level; and then consequently, were the SSOs appropriate to reach the changes desired at the Strategic Objective (SO) level; and finally, were the SOs appropriate to reach the overall Goal of the Program.
   d. Assess which approaches, interventions and activities have proved to be most effective and why.
   e. Assess which approaches, interventions and activities have proved to be least effective, together with reasons why, and that should be 'de-emphasised' or even 'dropped' in such a Program.
   f. Assess the 'sustainability' of the positive changes brought about by the Program in this phase – in terms of human condition, social position and enabling environment.

g. The strength of the partnerships with its implementing partners; the government; and its technical partners. What's worked well and what can be improved needs to be detailed, with recommendations of how this can be further strengthened in such a Program.
h. Make recommendations of what further effort is required to maintain and sustain the positive changes.

**C. Scope of Work**

8. The Final Evaluation team will conduct a thorough review of the SHOUHARDO Program to complete its objectives. This will include but not necessarily be limited to:
   a. desk review of any relevant reports, studies, short films, concerned with the Program, or additional reports and studies which may add value to the Final Evaluation. This will include the DAP Proposal; Baseline Report; the Mid-Term Evaluation Report; the seven Thematic Studies; the Well-Being Analysis Studies conducted at each Regional level; all Results Reports; Financial Reports; Institutional Capacity Assessment of Local Government Report; PACC theme paper; and SII document as mandatory;
   b. interviews with selected persons from within CARE Bangladesh and the Program's partners (including Program participants, USAID, PNGOs, government partners, and other technical partners as appropriate); as well as other major food security players in Bangladesh such as World Food Program (WFP), Char Livelihood Program (CLP) and Save the Children – USA (SCF-US).
   c. review of existing M&E data stored at the central and regional levels
   d. conduct selected primary surveys on selected topics, or to verify certain information derived from other sources. The primary surveys can be used as a cross-check for the information already retained by the program, and provide a degree of confidence to the Final Evaluation team on such information. The primary surveys will also be used to fill 'gaps' in the information system which have not been covered by the M&E system, or studies and reports generated to date. These will be finalised and agreed between the Final Evaluation team and CARE, after the draft plan is submitted to CARE.

**D. Composition of Review Team**

9. The Final Evaluation team is expected to consist of members which sets up the team to have a good local understanding, together with specialists who are recognised international experts in the different disciplines SHOUHARDO engages in. Specifically, the team is expected to consist of experts in 'food and nutrition security', 'economic security', 'health and hygiene', 'governance', 'rights based approaches', 'women empowerment', 'community empowerment', 'institutional development', 'urban', and 'disaster management'.
10. The team is expected to make a critical analysis of both 'software' and 'hardware', and how effective the Program has been to compliment one with the other.
11. The team size is expected to be between 5 to 8 strong (with a healthy mix of both expatriate and local team members, as well as an appropriate mix of gender). All the proposed members of the team must have a demonstrated track record, and be recognised as seasoned professionals who can conduct such a complex evaluation with a high degree of proficiency.
12. The composition and number of team members has deliberately not been 'exactly' defined, leaving it open for bidders to define this. At the time of review of proposals, this will be a critical assessment area for CARE in its determination of the winning bid.

**E. Timeline**

13. The Final Evaluation is scheduled to take place over the months of August – October 2009. The expected start date is 10 August 2009. The draft report is to be submitted by 30 September 2009, around which time a detailed presentation is to be made to USAID and CARE. CARE will take till 8

October 2009 to provide detailed feedback on the draft report. The submission date for the Final Report is 17 October 2009.

14. The Final Evaluation will rely on secondary desk reviews, with ample emphasis placed on primary surveys directly in the field, covering all four regions of the Program.

**F. Proposal**

15. Detailed proposals are expected from interested firms detailing the 'methodology to be employed'; a 'detailed workplan with timeline'; and a 'detailed budget'. A detailed profile of the firm and consultants to be engaged must also be provided. Applications must be received no later than 14 July 2009.

**G. Point of Contact**

16. The contact person at CARE is Faheem Khan, Chief of Party, SHOUHARDO, CARE Bangladesh. All queries should be directed to faheem@carebangladesh.org .

**H. Deliverables**

17. Detailed softcopy of the Final Report. This will be formatted to A4 size paper, and in a condition which can be printed without any need for further adjustments. The report itself must at a minimum contain an
    i. Executive Summary
    ii. Introduction
    iii. Objectives of Final Evaluation
    iv. Process how Final Evaluation was conducted
    v. Findings of review
    vi. Recommendations
    vii. Conclusions

18. Softcopies of any data files used

**Necessary documents:**

I. Copy of passport with "N" category visa / work permit, which will enable the consultant to work in Bangladesh. If the consultant does not come with such type of visa or work permit, the consultant will work in Bangladesh with his/her own peril. CARE Bangladesh will not assume any responsibility of obtaining visa or work permit for the consultant.
II. Curriculum Vitae (CV) of the consultant / firm and the persons who will be involved with the consultancy works mentioning the experience in the line of consultancy works.
III. Details proposal for the consultancy.
IV. Filled up Form 16 & 17 (attached herewith) with signature of consultant (scan copy is acceptable) .
V. The attached Form 12 will be the integral part of the contract. The consultant must comply with the conditions laid down in the Form 12.
VI. For consulting firm / Agency / organization copy of valid trade license / business certificate must be submitted.
VII. For consulting firm / Agency / organization copy of VAT registration certificate is needed.
VIII. Copy of valid TIN certificate is required
IX. Self certification from consultant regarding the antiterrorism (format is given below).
X. Declaration is needed for tax payment in own country (W-9 for the USA nationals) and documents of last year tax payment.

**The General Terms and Conditions:**

I. The consultant must comply with the rules in connection with “Fly America Act”, which ensure use of American airline for your international transport. If any American airline is not available, use the airline having code share with American airlines. If there is no code share with American airline then you have to certify it and later on it is necessary to be certified by concerned staff of CARE Bangladesh. This has to be done prior to travel. In that case the consultant needs to fill up the **Form 19** with signature of consultant (scan copy is acceptable). The Form 19 is attached herewith.

II. The consultant may use US code share flight in order to comply with FLY America Act. In this case the flight number should be a US carrier and not the code share flight number. If there is no US carrier out of Dhaka but there is a number of US carrier from India, China, Singapore, Middle east and Thailand, those locations to be considered when booking a ticket or certifying the ACT.

III. The consultant will strictly adhere to the FLY America Act and get clearance from CARE Bangladesh if they are to procure non US carrier ticket.

IV. The consultant will fill out the FLY America Exception Checklist that will be certified by CARE Bangladesh beforehand. The consultant will not certify the American Act. The certification should be done by CARE Bangladesh after ensuring non availability US carrier.

V. All reports and documents prepared during the assignment will be treated as CARE property. The reports / documents or any part, therefore, cannot be sold, used and reproduced in any manner without prior written approval of CARE Bangladesh.

VI. The consultant shall use the CARE name or marks only for activities authorized by CARE in writing. All other uses will be deemed infringements of the CARE trademark.

VII. The consultant / firm agrees that during the period of this agreement and for a further period of twelve months, S/he shall not issue any written materials or express publicly any personal opinion concerning the services under this agreement, except with the prior written approval of CARE Bangladesh.

VIII. The consultant / firm shall not without first obtaining the consent in writing of CARE Bangladesh, permit any of his duties or obligations made under this contract to be performed or carried out by any other person, or reassign its interest in a contract.

IX. In the event that the consultant requires additional time to complete the contract, over and above that previously agreed to, but without CARE Bangladesh changing the scope of work, CARE Bangladesh' s prior written concurrence to the same is necessary.

X. CARE Bangladesh may make general changes, in written within the scope of the content affecting the services to be performed or time of performance. If any such changes cause an increase or decrease in the cost or time required for performance of any part of the work under the contract, CARE shall make equitable adjustment in the contract price, delivery schedule, or both and shall modify the contract in writing accordingly.

XI. The consultant will be responsible for the safekeeping and return, in good working condition and order, of all the organization's property, which may be assigned to him/ her for use or custody. Failure to return the property in good order will result in a deduction of payment to cover the cost of repair or replacement.

XII. In the event of failure on the Consultant's part to meet the agreed deadline CARE-Bangladesh reserves the right to penalize the Consultant or his / her firm at the rate of 1% of the total consultancy fee for delay per day from the deadline.

XIII. After completion of the assignment and submission of the final output, evaluation will be done by the concerned unit/office on the basis of which final payment will be made. Final payment will be withheld until evaluations have been submitted.

XIV. The consultant will be responsible to pay tax, VAT, duties or any others (as applicable in Bangladesh/other than Bangladesh/consultant's own country). CARE Bangladesh will deduct VAT and Tax at source from the invoice of the consultant / consulting firm as per the prescribed rate of rule of Government of Bangladesh (GoB), which will be applicable at the time of making payment to the consultant/ firm. CARE Bangladesh will issue VAT coupon instead of depositing the deducted amount into GoB Treasury. CARE will hand over one copy of the VAT coupon to the consultant/ firm. Tax / VAT exemption may be applicable subject to submission of appropriate documents.

XV. Notwithstanding anything contained in this agreement CARE-Bangladesh may at any time terminate this agreement in whole or in part by requiring the consultant to stop performing the work or any part thereof. In this event the consultant shall have no claim against CARE-Bangladesh by reason of such termination, other than payment in proportion to the work performed under the agreement less any sums previously paid on account thereof.

XVI. The consultant may terminate this agreement by giving a reasonable period of notice to CARE. In this event, the Consultant shall have no claim against CARE-Bangladesh by reason of such termination, other than payment in proportion to the work performed under the agreement less any sums previously paid on account therefore. Upon expiration or termination (by any of the involved parties) of this agreement, the consultant shall surrender to CARE all confidential material relating to CARE in his or her possession, of whatever origin. The confidentiality should also be kept after your consultancy with CARE ceases.

XVII. The Consultant shall be solely responsible for his/her own insurance (health, travel, etc). CARE will not bear any cost in this regard.

XVIII. The Work : Consultant shall complete the work (the "Work") on Schedule, which is attached and incorporated into this agreement. The Work shall be of good quality and performed according to generally accepted standards.

XIX. Relationship of Consultant to CARE : Consultant is not an employee of CARE. Consultant is not entitled to receive benefits usually afforded CARE employees. Consultant shall pay all taxes and fees related to the Work other than those that are paid by CARE according to Schedule A. Nothing in this agreement shall create an employer/employee relationship, partnership or joint venture between the parties. Consultant has no right or permission to agree to anything in the name of, or for the account of, CARE, or to create or accept any obligation on behalf of CARE.

XX. Ownership of Work : Consultant agrees that it created the Work, it hereby provides CARE all rights to the Work, and no other party has any rights to the Work. Consultant agrees that: (a) on CARE's reasonable request, Consultant will sign any document stating that CARE owns the Work and has all rights to the Work, including without limitation, copyright applications, assignments and other documents required to protect CARE's right to the Work; and (b) on CARE's request, Consultant

shall provide CARE all originals, copies or other documents containing a part or all of the Work. These obligations extend beyond the expiration or termination of this agreement.

XXI. Confidential Information : Consultant may receive confidential information regarding CARE in connection with the Work. Consultant shall never disclose any of CARE's confidential information to anyone or use CARE's confidential information for its own purposes without CARE's prior written agreement; provided, however, that confidential information may be disclosed to government authorities if the disclosure is required by law and Consultant has provided CARE notice and a reasonable opportunity to defend against such disclosure.

XXII. Confidential information of CARE means any information (written, oral or observed) relating to CARE's: (a) donors and potential donors; (b) beneficiaries; (c) employees; (d) business and strategic plans; (e) finances; and (f) relationship with any governmental entity. Confidential information of CARE also includes information specifically designated confidential by CARE or which Consultant knows or reasonably should know is not generally known to the public. These obligations extend beyond the expiration or termination of this agreement.

XXIII. Indemnity : Consultant shall defend, indemnify and hold CARE harmless from any losses, claims, damages, liabilities and expenses related to Consultant's Work or performance of this agreement. These obligations shall extend beyond the expiration or termination of this agreement.

XXIV. Compliance with Laws : The Consultant shall comply with all laws, regulations, and orders applicable to it in connection with the Work otherwise CARE reserves the right to take any legal action against consultant / consulting firm under the law of Bangladesh.

XXV. CARE Policies : While on CARE premises (including in CARE vehicles) or performing the Work, Consultant shall comply with CARE policies provided orally or in writing to the Consultant, including those relating to security and prohibiting harassment and discrimination.

XXVI. CARE Name : Consultant shall not use CARE's name in any publicity or disclose to the public any information relating to the Work without CARE's prior written consent. These obligations extend beyond the expiration or termination of this agreement.

XXVII. Invoice Statements and Adjustments : Consultant shall provide CARE original copies of periodic and final invoice to CARE Bangladesh as agreed beforehand. The invoice should indicate services performed, any reimbursable expenses, any past payments and any other information CARE reasonably requests. When CARE requests, Consultant shall provide CARE a final invoice within 15 (fifteen) days after the Work completion. CARE's payment of any invoice shall never prevent CARE from questioning its correctness. If any invoice statement is found to be incorrect, the invoice statement shall be corrected immediately and an appropriate payment shall be made. The payment will be made either by cheque in favour of the consultant (individual or firm as the case may be) or by wire transfer. The amount, if that is transferred through bank transfer, to be sent to the following bank account:

a. Name of account:
b. Name of Bank:
c. Address of the bank:
d. Account number:
e. Swift code:

XXVIII. Books and Records : Consultant shall keep complete and accurate books and records regarding this agreement and that provide the basis for the invoice statements to CARE. During the term of this agreement (including any renewals and extensions) and for three (3) years afterwards, CARE, USAID, the U.S. Comptroller General or any of their duly authorized representatives shall have access to any books, documents, papers and records of Consultant that are related to this agreement for the purpose of making audits, examinations, excerpts and transcriptions. These obligations extend beyond the expiration or termination of this agreement.

XXIX. Certification regarding Terrorism : Consultant hereby certifies that it has not provided and will not provide material support or resources to any individual or organization that it knows, or has reason to know, is an individual or organization that advocates, plans, sponsors, engages in, or has engaged in an act of terrorism.

XXX. Legal Notices : Any legal notice relating to this agreement shall be delivered by hand or sent by confirmed fax or mail to the party's address herein or to another address provided in writing by the party. Confirmation means that there is evidence of transmittal, such the recipient's written reply or signature or an electronic confirmation. Notices to CARE shall be sent with one copy addressed "Attention: Senior Procurement Officer" and another copy addressed to Consultant's principal CARE contact.

No Assignment : Consultant shall not assign this agreement or have another person or entity perform any of the Work without CARE's prior written consent.

No Other Persons Benefit : No person or entity that is not a party to this agreement has any right to enforce, take any action or claim it is owed any benefit under this agreement.

Entire Agreement : This agreement states the entire understanding of the parties and replaces any prior or separate agreements, whether oral or written, regarding this subject matter.

XXXI. Amendments : This agreement cannot be amended except by a document signed by all the parties.

XXXII. Severability : If any part of this agreement is held invalid, illegal or unenforceable, the rest of the agreement will remain valid, legal and enforceable and will not be impaired.

XXXIII. CARE Payment : CARE shall pay Consultant the amount on Schedule. If there is a dispute between the parties, CARE may refuse to pay a portion or all of the payments until the dispute is resolved.

XXXIV. <u>Payable incidental expenses :</u>

XXXV. Per-diem rate : Actual amount but maximum BDT. 800.00 / USD11.67 (approximately @Tk. 68.5=USD 1.00) per day. The consultant will be paid as per submission of actual invoice.

XXXVI. Lodging rate : Actaul amount but maximum BDT 1,500.00 / USD 21.89 (approximately @Tk. 68.5=USD 1.00) per day for all districts and for Dhaka and Chittagong districts realistic ceiling. The consultant will be paid based on the submission of actual invoice

XXXVII. Transportation in connection with consultancy service (in country or outside the country) : Based on submission of actual invoice.

XXXVIII. Departure Taxes : CARE will reimburse the actual cost upon submission of original invoice

XXXIX. Air ticket (round the trip) : CARE will reimburse the actual cost upon submission of original invoice, boarding pass and original air ticket.

XL. Visa fee : CARE will reimburse the actual cost upon submission of actual invoice.

XLI. Remuneration for travel days coming into Bangladesh to conduct the consultancy : This only applies to Consultants coming from abroad. If the travel time, including transit time, is less than 5 hours, the Consultant will be entitled to half a days remuneration of the agreed daily fee. Should this travel time exceed 5 hours, the Consultant will be entitled to one full days pay of the agreed daily fee for the consultancy. The Consultant must abide by the CARE USA Procurement clauses for international travel.

XLII. Cost for sending invoice (from abroad) : The Consultant is wholly responsible to bear all costs related to sending original invoice and other reports as determined by the TOR.

XLIII. Manner of Payment : Consultant's compensation and reimbursable expenses shall be paid. Payment will be made after completion of work and upon submission of the original invoice through account payee check / bank transfer. For payment consultant has to submit an invoice to General Manager-Finance, CARE Bangladesh with a copy of work contract and ToR. Partial payment may be made based on the justified reason. No advance will be paid but only the incidental expenses may be paid as advance. Payment may be made by installment based on the requirement. No foreign payments to proxy or nominated individuals will be made. Consultants and /or companies that do not have foreign currency bank account will be paid in local currency that is calculated on the date of contract signature by the CARE authority.

XLIV. Arbitration : "Any dispute or difference arising out of or in connection with this PO or the interpretation of any terms thereof shall be referred to arbitration in accordance with the arbitration Act, 2001 or any other arbitration Act for the time being in force in Bangladesh. Each party shall appoint its own arbitrator and the two arbitrators so appointed shall appoint a third arbitrator who shall act as chairperson of the arbitral tribunal. The place or arbitration shall be Dhaka, Bangladesh. The language of the arbitration proceeding shall be in English.

**Note : If you have any further query related to the necessary documents and general terms & conditions please contact Shah Mohammed Iqbal - Procurement Officer, CARE Bangladesh .**

# Annex 2: August 2009 Endline Survey

CARE Bangladesh collected data on most indicators through periodic surveys conducted every six months between February 2006 and August 2009. This data, which covered key indicators for SO1, SO3 and SO4, was collected using sampling methods and instruments comparable to the baseline, which made direct comparison to the baseline possible. After the baseline survey, data for monitoring SO2 IPTT indicators were collected by other methods, thus the data were useful for the IPTT but could not be compared to the baseline. To collect endline data for SO2 indicators and the overall anthropometric indicator, CARE Bangladesh commissioned two endline surveys in late 2009. CARE contracted ICCDR, B to conduct both of these endline surveys and provided the design for the first, which collected only anthropometric measurements. TANGO provided the survey design for the second, which collected anthropometric measurements on the age group comparable to the baseline, as well as data for the other SO2 indicators and data to measure project impacts that may be associated with nutritional status.

CARE Bangladesh envisioned the August 2009 endline survey as a longitudinal study to determine whether nutritional status of children measured in the 2006 baseline survey had changed.

The following excerpt from the final report prepared by ICCDR, B (available upon request to CARE Bangladesh) describes the sampling methodology:

***Sampling Design and Size***

"The survey was a cross sectional household survey using a probability proportionate to size (PPS) sampling method. The assessment of nutritional impact ('stunting' and 'wasting') in SHOUHARDO was a nationwide survey conducted to find out the nutritional status of children within 36 to 59 months who were under 2 years of age during the baseline survey. In the sample frame, CARE Bangladesh selected 45 villages in each region and 45 urban slums across all four SHOUHARDO regions. The villages/slums were picked on the basis of probability proportionate to size (PPS). In total, 180 villages and 45 slums were sampled, and a total of 3,200 children measured, each region being divided into districts and each district into *upazilas*. The *upazila* was divided into unions and each union consisted of one village. In each village, 15 children were selected. The urban municipality was divided into wards and each ward divided into *mahallas* and *mahallas* into slums. In total, 45 wards were selected in 4 regions. From every slum 11-12 children were sampled."

The sample included a total of 3,200 children, half of whom had been measured in the 2006 baseline survey. The purpose for splitting the endline sample to 50 percent children who were sampled in the baseline, and the other half being children who were not sampled in the baseline, was to eliminate any concern that the former were unduly advantaged by the program.

***Limitations of the August 2009 Endline***

An important limitation of the August 2009 endline survey is that the cohort and non-cohort samples of children were not selected randomly. This is evident from the fact that all months of age between 36 and 60 months old are not equally represented. In the cohort sample lower ages are underrepresented and upper ages overrepresented; in the non-cohort sample the opposite occurred. It is not clear how any children less than 48 months could have been included in the cohort since they were either not yet born or less than six months old at the time of the baseline. Yet 39 percent of the cohort children fall into this category. Thus, there were obviously some problems at either the sample selection or data collection stages.

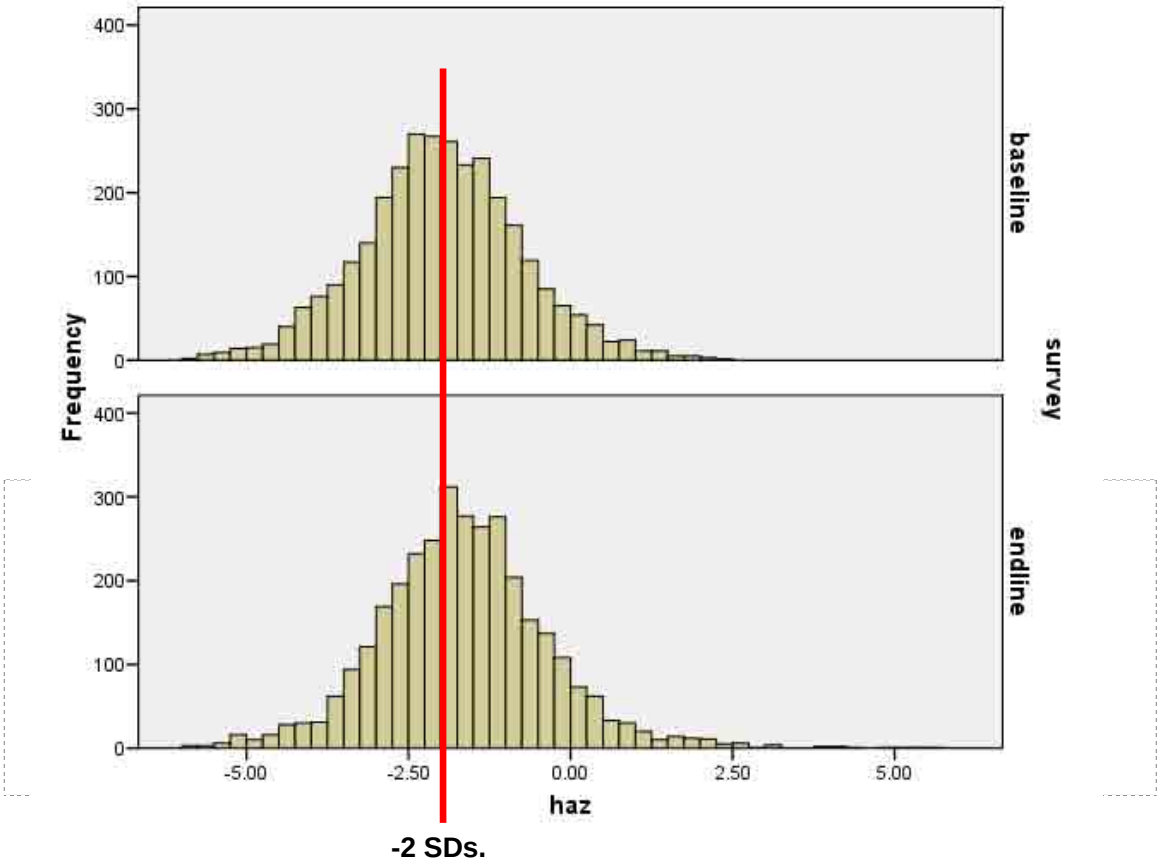
An additional limitation of the cohort design in measuring impact of SHOUHARDO is that the baseline was undertaken in February 2006. Food distribution and many other project interventions including growth monitoring and promotion, health education, etc. did not start until August 2006. Therefore, we know that approximately one-third of the children sampled in the baseline and again in the endline never received food rations because they were over two years of age when ration distribution started.

A third issue is that the age of the children for whom data were collected in the two surveys differs. Since there are strong differences in the malnutrition rates of children in Bangladesh depending on their age, it is inappropriate to directly compare the rates of children 6-24 month old (as was done for the baseline) to those who are 4-5 years old (as was done for the endline), even when the same children are measured. Nevertheless, it is useful to look at how children's nutritional status has changed over time if the change is compared to norms for the general population. This issue, then, does not mean that longitudinal analysis of the data cannot be used to give some background information for understanding how the SHOUHARDO project has impacted children's nutritional status.

The final, and most important, limitation is that the endline survey data were not collected on the correct age group for undertaking such a longitudinal analysis. The survey took place 42 months after the baseline. The children who were 6 to 24 months old then would have been 48 to 66 months old at the time of the endline survey. Since the endline survey covered children 36 to 60 months, the data only allow examination of changes for the group of children who were 48-60 months at endline (6-18 months at baseline).

# Annex 3: SO2 Additional Tables and Figures

**Figure 34: Comparison of height-for-age z-score distributions across baseline and endline surveys (children 6-24 months)**




Sources: Baseline HHN survey and November 2009 endline HHN survey.

**Table 54: Prevalence of malnutrition among endline 5 year olds, baseline-endline comparison**

| | Baseline (6-18m) | Endline (48-60m) | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Stunting** | | | | | |
| All sample children | 46.9 | 42.8 | -8.7 | 0.126 | |
| | (44.7, 49.1) | (40.4, 45.3) | | | |
| North Char | 45.9 | 37.7 | -17.8 | 0.010 | ** |
| Mid Char | 43.5 | 37.1 | -14.7 | 0.073 | * |
| Haor | 55.7 | 48.9 | -12.2 | 0.041 | ** |
| Coast | 37.5 | 47.2 | 25.6 | 0.003 | *** |
| Urban | 41.8 | 40.9 | -2.0 | 0.826 | |
| Rural | 47.1 | 42.9 | -8.8 | 0.104 | |

| | | | | | |
|---|---|---|---|---|---|
| Number of children | 2,007 | 1,584 | | | |
| **Wasting** | | | | | |
| All sample children | 11.9 | 13.5 | 12.9 | 0.523 | |
| | (10.5, 13.4) | (11.8, 15.2) | | | |
| North Char | 10.2 | 12.0 | 18.3 | 0.434 | |
| Mid Char | 10.5 | 21.1 | 100.1 | 0.000 | *** |
| Haor | 8.9 | 11.5 | 29.3 | 0.491 | |
| Coast | 19.0 | 8.8 | -53.9 | 0.000 | *** |
| Urban | 11.9 | 11.1 | -7.3 | 0.724 | |
| Rural | 11.9 | 13.6 | 14.0 | 0.398 | |
| Number of children | 1,993 | 1,584 | | | |
| **Underweight** | | | | | |
| All sample children | 53.9 | 49.4 | -8.4 | 0.045 | ** |
| | (51.7, 56.0) | (46.9, 51.8) | | | |
| North Char | 50.6 | 45.2 | -10.6 | 0.068 | * |
| Mid Char | 49.1 | 51.7 | 5.3 | 0.606 | |
| Haor | 59.1 | 51.6 | -12.6 | 0.046 | ** |
| Coast | 52.8 | 48.3 | -8.6 | 0.408 | |
| Urban | 50.1 | 49.0 | -2.3 | 0.767 | |
| Rural | 54.0 | 49.4 | -8.6 | 0.035 | ** |
| Number of children | 2,006 | 1,584 | | | |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.
Notes: Children who were 5 years old at endline were 6-18 months at the time of the baseline survey.
Confidence intervals (95%) are reported below each sample-level malnutrition prevalence.
Sources: Baseline HHN survey and August 2009 endline child nutritional status survey.

**Table 55: Prevalence of malnutrition among endline 5 year olds, baseline-endline comparison by sex**

| | Baseline | Endline | Percent difference | p-value for difference a/ |
|---|---|---|---|---|
| **Stunting** | | | | |
| Girls | 48.5 | 43.5 | -10.4 | 0.182 |
| Boys | 45.4 | 42.2 | -7.0 | 0.404 |
| **Wasting** | | | | |
| Girls | 10.7 | 12.9 | 20.7 | 0.474 |
| Boys | 13.1 | 13.9 | 6.8 | 0.837 |
| **Underweight** | | | | |
| Girls | 54.5 | 49.8 | -8.6 | 0.154 |
| Boys | 53.3 | 49.0 | -8.1 | 0.159 |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.
Notes: Children who were 5 years old at endline were 6-18 months at the time of the baseline survey.
See previous table for the numbers of children on which calculations are based.

Sources: Baseline HHN survey and August 2009 endline child nutritional status survey.

**Table 56: Care for children 6-24 months with diarrhea, baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent given more to drink** | | | | | |
| **All** | **42.1** | **47.4** | **12.4** | **0.003** | ******* |
| North Char | 37.4 | 39.4 | 5.4 | 0.593 | |
| Mid Char | 49.1 | 78.4 | 59.7 | 0.021 | ** |
| Haor | 47.5 | 43.6 | -8.1 | 0.797 | |
| Coast | 34.1 | 49.6 | 45.4 | 0.001 | *** |
| Urban | 36.1 | 54.5 | 50.7 | 0.023 | ** |
| Rural | 42.3 | 47.1 | 11.2 | 0.024 | ** |
| **Percent given more to eat** | | | | | |
| **All** | **6.5** | **30.5** | **367.6** | **0.000** | ******* |
| North Char | 11.1 | 24.1 | 117.5 | 0.022 | ** |
| Mid Char | 14.1 | 25.9 | 83.4 | 0.128 | |
| Haor | 1.6 | 31.2 | 1898.0 | 0.000 | *** |
| Coast | 3.2 | 34.3 | 958.7 | 0.000 | *** |
| Urban | 5.9 | 34.2 | 480.7 | 0.000 | *** |
| Rural | 6.5 | 30.3 | 363.7 | 0.000 | *** |
| **Percent continued to be breastfed** | | | | | |
| **All** | **98.6** | **95.2** | **-3.5** | **0.121** | |
| North Char | 100.0 | 98.0 | -2.0 | 0.322 | |
| Mid Char | 98.3 | 94.0 | -4.3 | 0.315 | |
| Haor | 98.3 | 91.9 | -6.5 | 0.511 | |
| Coast | 97.9 | 98.6 | 0.7 | 0.781 | |
| Urban | 98.2 | 96.4 | -1.8 | 0.477 | |
| Rural | 98.6 | 95.1 | -3.5 | 0.167 | |
| **Percent given oral rehydration therapy** | | | | | |
| **All** | **57.2** | **92.0** | **60.8** | **0.000** | ******* |
| North Char | 62.0 | 89.0 | 43.5 | 0.000 | *** |
| Mid Char | 45.4 | 94.7 | 108.6 | 0.000 | *** |
| Haor | 55.1 | 89.1 | 61.7 | 0.000 | *** |
| Coast | 64.1 | 97.0 | 51.4 | 0.000 | *** |
| Urban | 73.9 | 87.2 | 17.9 | 0.014 | ** |
| Rural | 56.7 | 92.2 | 62.8 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

The number of children for whom indicators are calculated are:

Percent given more to drink: baseline 705; endline 285

Percent given more to eat: baseline 703; endline 279

Percent continued to be breastfed: baseline 672; endline 259

Percent given oral rehydration therapy: baseline 708; endline 283.

Sources: Baseline HHN survey and November 2009 endline HHN survey.

**Table 57: Percent of children 6-24 months consuming from nutritionally important food groups in previous 24 hours (November 2009 endline)**

| Food group | Percent |
|---|---|
| **Cereals, roots and tubers** | |
| Cereals | 90.7 |
| Roots and tubers | 21.7 |
| **Vegetables and fruits** | |
| Dark, green leafy vegetables | 52.2 |
| Vegetables with yellow or orange inside | 14.3 |
| Other vegetables | 60.4 |
| Fruits with yellow or orange inside | 9.9 |
| Other fruits | 16.7 |
| **Protein-rich foods** | |
| Meat | 4.1 |
| Eggs | 19.7 |
| Fish and seafood | 47.1 |
| Dairy products | 30.7 |
| Legumes/pulses | 24.6 |
| **Fats** | |
| Foods with fats | 66.8 |

Source: November 2009 endline HHN survey.

**Table 58: Hand washing behaviors of mothers of children 6-24 months, by region and urban/rural; baseline-endline comparison**

| | Baseline | Endline | Percent difference | p-value for difference a/ | |
|---|---|---|---|---|---|
| **Percent washing hands before food preparation** | | | | | |
| All | 60.9 | 94.2 | 54.8 | 0.000 | *** |
| North Char | 38.9 | 94.0 | 141.4 | 0.000 | *** |
| Mid Char | 56.8 | 95.4 | 67.9 | 0.000 | *** |
| Haor | 67.8 | 97.8 | 44.4 | 0.000 | *** |
| Coast | 72.3 | 87.9 | 21.5 | 0.000 | *** |
| Urban | 76.6 | 91.5 | 19.5 | 0.000 | *** |
| Rural | 60.3 | 94.3 | 56.5 | 0.000 | *** |
| **Percent washing hands before eating** | | | | | |
| All | 93.7 | 99.9 | 6.5 | 0.000 | *** |
| North Char | 93.7 | 99.6 | 6.3 | 0.000 | *** |
| Mid Char | 95.7 | 99.8 | 4.3 | 0.000 | *** |
| Haor | 92.1 | 100.0 | 8.5 | 0.000 | *** |
| Coast | 94.5 | 99.9 | 5.7 | 0.000 | *** |
| Urban | 98.7 | 99.4 | 0.8 | 0.112 | |
| Rural | 93.5 | 99.9 | 6.8 | 0.000 | *** |
| **Percent washing hands before feeding children** | | | | | |
| All | 73.6 | 99.8 | 35.5 | 0.000 | *** |
| North Char | 54.5 | 99.7 | 83.1 | 0.000 | *** |
| Mid Char | 73.7 | 99.5 | 35.1 | 0.000 | *** |
| Haor | 76.2 | 100.0 | 31.2 | 0.000 | *** |
| Coast | 85.6 | 99.6 | 16.4 | 0.000 | *** |
| Urban | 79.3 | 99.6 | 25.7 | 0.000 | *** |
| Rural | 73.4 | 99.8 | 36.0 | 0.000 | *** |
| **Percent washing hands after defecation** | | | | | |
| All | 97.2 | 100.0 | 2.9 | 0.000 | *** |
| North Char | 95.9 | 100.0 | 4.3 | 0.000 | *** |
| Mid Char | 98.0 | 100.0 | 2.0 | 0.001 | *** |
| Haor | 96.8 | 100.0 | 3.3 | 0.000 | *** |
| Coast | 98.2 | 100.0 | 1.9 | 0.000 | *** |
| Urban | 98.7 | 99.7 | 1.0 | 0.050 | ** |
| Rural | 97.1 | 100.0 | 2.9 | 0.000 | *** |

(Table continues on next page.)

| | | | | | |
|---|---|---|---|---|---|
| **Percent washing hands after cleaning babies bottom** | | | | | |
| All | 79.9 | 99.8 | 24.9 | 0.000 | *** |
| North Char | 57.5 | 100.0 | 74.0 | 0.000 | *** |
| Mid Char | 79.8 | 99.7 | 25.0 | 0.000 | *** |
| Haor | 82.3 | 99.5 | 20.8 | 0.000 | *** |
| Coast | 95.0 | 100.0 | 5.2 | 0.000 | *** |
| Urban | 90.8 | 100.0 | 10.1 | 0.000 | *** |
| Rural | 79.4 | 99.7 | 25.6 | 0.000 | *** |

a/ Stars indicate a statistically significant difference at the 1% (***), 5%(**) or 10%(*) levels.

Note: The number of women for whom indicators are calculated is: baseline 3,092; endline: 3,356.

# Annex 4: List of Key Informants and Officials Interviewed

**11 November**
NILG: Mr Hashem, Director; Kamrun Naher

**12 November**
Local Government Engineering Department (LGED): Saroj Kumar Sarker, Team Leader, Large Infrastructure Component; Enamul Kabir Ahmed, Project Director; Md. Kabir Uddin Shah, AE
Local Government Department LGD: Mr. Ashoke Midhab Roy, Joint Secretary, Local Government Division

**15 November**
Shoulmari Union: UP Chairman, UP and UDMC members

**17 November**
Lalmonirhat Sadar Upazilla, UNO
Lalmonirhat District, Deputy Commissioner
Mogolhat Union, Habibur Rhaman, UP Chairman

**18 November**
Mayor, Pourashava of Rangpur

**22 November**
Hobiganj District: Abul Kashem Talukder, Deputy Commissioner; Md. Salaluddin Chowdhury, Additional Deputy Commissioner; Mirza Mohammad Ali Reza, Snr Assistant Commissioner; Mohammad Altaf Hossain, Assistant Commissioner; Kisinger Chakma, Assistant CommissionerDr. Md. Golam Mustafa, District Livestock Officer; Md. Mosharref Hossain, District Fisheries Officer; Kazi Delvar Hossain, Upazilla Food Officer

Baniachang Upazilla: Iqbal Hossain Khan, UNO; Md Motalib Mia, Chairman, Kayapasha Union; Md. Warish Uddin Khan, Chairman, Baniachang North-West Union; Dr. Nimani Das, Chairman, Pukka Union

**6 December**
Local Governance Support Project: Mr. A.H.M. Qushur, Executive Secretary, LGS
Ministry of Food and Disaster Management: M.A. Wazed, Joint Secretary (Relief)
Disaster Management Bureau: Md. Abu Sadeque, Director

# Annex 5: List of Villages and Village Codes

**List of Villages/Slums Visited with Codes and Meetings**

| Date | Group/individual consulted | Implemented by | Village/Slum | Union/Ward | Upazila | District | Region | Eval. team member |
|---|---|---|---|---|---|---|---|---|
| Nov 15, 2009 | SDC, ECCD, EKATA, MCHN | JSKS | Bashbari Slum | Ward | Syedpur | Nilfamari | North Char | Darren, Shawkat |
| Nov 15, 2009 | UP, UDMC, Disaster volunteers | - | - | Shoulmari | Jaldhaka | Nilfamari | North Char | Darren, Shawkat |
| Nov 16, 2009 | UNO | - | - | - | Lalmonirhat sadar | Lalmonirhat | North Char | Darren, Shawkat |
| Nov 16, 2009 | DC | - | - | - | Lalmonirhat sadar | Lalmonirhat | North Char | Darren |
| Nov 16, 2009 | Kashlands recipient households, VDC | | Kornapur | Kornapur | Mogolhat | Lalmonirhat | North Char | Darren |
| Nov 16, 2009 | LCS, Women Entrepreneurs | - | Khansama Bazaar | Khansama | Kawnia | Rangpur | North Char | Shawkat |
| Nov. 16, 2009 | MCHN, ECCD/CRC, EKATA | DD | Nama Kuniagacha | Haragach?? | Kawnia | Rangpur | North Char | Shawkat |
| Nov 16, | VDC, and??? | | Nama Kuniagacha | Haragach?? | Kawnia | Rangpur | North Char | Darren |
| Nov 17, 2007 | VDC female members | ESDO | Rajpur | Rajpur | Lalmonirhar sadar | Lalmonirhat | North Char | Shawkat |
| Nov. 17, 2009 | VDC & UDCM UP & other Service providers | | Rajpur | Rajpur | Lalmonirhar sadar | Lalmonirhat | North Char | Darren |
| Nov. 17, 2009 | EKATA, MCHN, ECCD | | Rajpur | Rajpur | Lalmonirhar sadar | Lalmonirhat | North Char | Shawkat |
| Nov. 17, 2009 | VDC, male farmers | ESDO | Madhuram | Rajpur | Lalmonirhar sadar | Lalmonirhat | North Char | Darren |
| Nov. 18, 2009 | VDC male members, VDC piloting | JSKS | Char Varat Gopaljhar | Shoulmari | Jaldhaka | Nilfamari | North Char | Darren |
| Nov. 18, 2009 | VDC female | JSKS | Char Varat | Shoulmari | Jaldhaka | Nilfamari | North Char | Shawkat |

| Date | Group/individual consulted | Implemented by | Village/Slum | Union/Ward | Upazila | District | Region | Eval. team member |
|---|---|---|---|---|---|---|---|---|
| | members | | Gopaljhar | | | | | |
| Nov. 18, 2009 | VDC, and numerous community members | JSKS | Taluk Shoulmari | Shoulmari | Jaldhaka | Nilfamari | North Char | Darren |
| Nov. 18, 2009 | VDC | JSKS | Char Varat Taluk Sholmari | Shoulmari | Jaldhaka | Nilfamari | North Char | Shawkat |
| Nov. 9, 2009 | VDC, MCHN, CHDs and Ag, ECCD, EKATA | | | | | | | |
| Nov 14, 2009 | SDC, PIC, EKATA, ECCD, | MUKTI | Teknaf Pahar | Cox's Bazar | Cox's Bazar | Cox's Bazar | Coast | Mustafa |
| Nov 15, 2009 | VDC, PIC, EKATA, ECCD, MCHN, CHV | MUKTI | Kaimmar Ghona | S Mithachari | Ramu | Cox's Bazar | Coast | Marie, Mustafa |
| Nov 15, 2009 | VDC, PIC, EKATA, ECCD, CHV, MCHN | MUKTI | Paner Chhara | S Mithachari | Ramu | Cox'sbazar | Coast | Marie, Mustafa |
| 16 Nov, 2009 | VDC, PIC, CHV, | COAST Trust | Saidpara Jhautalapara | Baroghop | Kutubdia | Cox's Bazar | Coast | Mustafa |
| 16 Nov, 2009 | UP Chairman/ Members, Disaster Volunteers | COAST Trust | - | Kaiarbeel | Kutubdia | Cox's Bazar | Coast | Mustafa |
| 16 Nov, 2009 | VDC, PIC, CHV, MCHN, Key informant (teachers) | COAST Trust | Nayapara/ Barai tali | Dakshin Durang | Kutubdia | Cox's Bazar | Coast | Marie |
| 17 Nov, 2009 | SDC, MCHN, CHV, ECCD | CWFD | Bou Bazar | South West Bakalia | Chittagong CC | Chittagong | Coast | Mustafa |
| 17 Nov, 2009 | UP Chairman/ Members, Disaster Volunteers | CWFD | - | West Bakalia | Chittagong CC | Chittagong | Coast | Marie, Mustafa |
| Nov 15, 2009 | VDC, PIC, | MUKTI | Kaimmar | S Mithachari | Ramu | Cox's Bazar | Coast | Marie, |

| Date | Group/individual consulted | Implemented by | Village/Slum | Union/Ward | Upazila | District | Region | Eval. team member |
|---|---|---|---|---|---|---|---|---|
| | EKATA, ECCD, MCHN, CHV | | Ghona | | | | | Mustafa |
| Nov 15, 2009 | VDC, PIC, EKATA, ECCD, CHV, MCHN | MUKTI | Paner Chhara | S Mithachari | Ramu | Cox'sbazar | Coast | Marie, Mustafa |
| 16 Nov, 2009 | VDC, PIC, CHV, | COAST Trust | Saidpara Jhautalapara | Baroghop | Kutubdia | Cox's Bazar | Coast | Mustafa |
| 16 Nov, 2009 | UP Chairman/ Members, Disaster Volunteers | COAST Trust | - | Kaiarbeel | Kutubdia | Cox's Bazar | Coast | Mustafa |
| 16 Nov, 2009 | VDC, PIC, CHV, MCHN, Key informant (teachers) | COAST Trust | Nayapara/ Barai tali | Dakshin Durang | Kutubdia | Cox's Bazar | Coast | Marie |
| 17 Nov, 2009 | SDC, MCHN, CHV, ECCD | CWFD | Bou Bazar | South West Bakalia | Chittagong CC | Chittagong | Coast | Mustafa |
| 17 Nov, 2009 | UP Chairman/ Members, Disaster Volunteers | CWFD | - | West Bakalia | Chittagong CC | Chittagong | Coast | Marie, Mustafa |
| 21 Nov, 2009 | Women's Group, Men's Group, Key informant (positive deviance farmer), UP Chairman | ASD | Ururgaon | Banglabazar | Duarabazar | Sunamganj | Haor | Marie, Mustafa |
| 21 Nov, 2009 | VDC, women's group, men's group MMC | ASD | Baghmara | Banglabazar | Duarabazar | Sunamganj | Haor | Marie, Mustafa |
| 22 Nov, 2009 | Men's Group, Women's Group, Select VDC members, ORGANS | SUS | Uzandhol | Tarol | Derai | Sunamganj | Haor | Marie, Mustafa |
| 22 Nov, 2009 | Women's Group, Men's Group,, | SUS | V*hati*dhol | Tarol | Derai | Sunamganj | Haor | Marie |

| Date | Group/individual consulted | Implemented by | Village/Slum | Union/Ward | Upazila | District | Region | Eval. team member |
|---|---|---|---|---|---|---|---|---|
| | Fishermen Group, Select VDC members | | | | | | | |
| 22 Nov, 2009 | VDC, PIC, LCS, CHV | SUS | Vholposi | Vatipara | Derai | Sunamganj | Haor | Mustafa |
| 22 Nov, 2009 | VDC, ECCD, Volunteers (Health, Agriculture, EKATA, IGA) | DD | Santinagar | 2 No. Baniachong | Baniachong | Hobigonj | Kishoregonj | Shawkat |
| 22 Nov, 2009 | EKATA | | Shibpasha | Shibpasha | Ajmerigonj | Hobigonj | Kishoregonj | Shawkat |
| 22 Nov, 2009 | ALO | PNGO | Badauri | 1 No. Baniachong | Baniachong | Hobigonj | Kishoregonj | Shawkat |
| 22 Nov, 2009 | VDC, Protection Wall | PNGO | Badauri | 1 No. Baniachong | Baniachong | Hobigongj | Kishoregonj | Darren |
| Nov 23, 2009 | VDC, ORGANS | DD | Adarshagram | 2 No. Baniachong | Baniachong | Hobigongj | Kishoregonj | Shawkat |
| Nov 23, 2009 | ALO | DD | Adarshagram | 2 No. Baniachong | Baniachong | Hobigongj | Kishoregonj | Shawkat |
| Nov 23, 2009 | Mass mobilization, VDC, Mound Protection, Community Meeting | SUS | Fulpur & Rahmatpur | Kewajhor | Mithamoin | Kishoregonj | Kishoregonj | Darren |

# Annex 6: Literature Reviewed for the Final Evaluation

***Main Documents***

SHOUHARDO Proposal
Mid-Term Review, vol 1 & 2
Thematic Papers (7)
Operational Guidelines for each SO
Annual Results Report FY 2009
CARE Bangladesh Partnership Policy Manual – 2005

***Specific Documents***

Including guidelines, manuals, policies, case studies

| | English | Bengali |
|---|---|---|
| M&E | | |
| | M&E Manual | |
| | Baseline Survey Report | |
| | ICDDR,B. Assessment of nutritional impact ('Stunting' and 'Wasting') of the SHOUHARDO Programme, CARE Bangladesh. Oct. 2009 | |
| SO1 | | |
| | Terms of Reference For SHOUHARDO Program Advisory and Coordination Committee | Minutes of DSCC, USCC Coordinating Committee meetings |
| | Right to information: A key to people's empowerment | VDC/SDC Grading Tools |
| | Fishing Rights established in the 'Ranagaon village' of Netrakona | Training Guide for UP and other government officials |
| | Gaibandha Khas Land | |
| | Kurigram Slum Relocation | |
| | CARE Bangladesh governance technical paper | |
| | Report on training of UP/PS and NBD by NILG | |
| | Cream Separator Dairy Activity: A Case Study | Savings Group Guidelines |
| | Comprehensive vegetable cultivation initiative | |
| | Proshinchor - a village on the move | |
| | Guidelines for Planning and Implementation of Infrastructure Projects | |
| | Pesticide Evaluation Report and Safe Use Action Plan | |
| | Noakhali - Excavations of Hope: Reconstructing a canal for ensuring food security: Connecting to Schools, Markets and Success | |
| SO2 | | |
| | Operational Guidelines on MCHN | CHV Training Modules |
| | MCHN Impact Report | CHV Job Aids |
| SO3 | | |

| | | |
|---|---|---|
| | Early Childhood Care and Education – giving whole communities a new lease on life<br>EKATA Conceptual Framework publication<br>EKATA Resource Package, SHOUHARDO-Education Collaboration Initiative , CARE Bangladesh 2007<br>SHOUHARDO Snapshots EKATA, CARE Bangladesh Empowerment, Knowledge and Transformative Action 2006<br>SHOUHARDO Snapshots ECCD Early Childhood Care and Development 2005 | CRCMC Training Module<br>ECCD Operational Guidelines |
| SO4 | | |
| | EPP Guidelines<br>Disaster Risk Reduction & Humanitarian Assistance Implementation Strategies – Feb 2008 to Feb 2010<br>Mobilizing for Social Change, Netrakona: A story of community solidarity, effective planning and food security | EPP Guidelines<br>Disaster Volunteer Training Module<br>Directory of Union Level Officials and Volunteers for disaster response |

Videos:
Power of Participation: Kewarjore
Khas Land Rights

Secondary Literature:
Population Census – 2001, National Series, Volume 2 Union Statistics, Bangladesh Bureau of Statistics
*Unlocking the Potential: National Strategy for Accelerated Poverty Reduction*, General Economics Division, Planning Commission, Government of the People's Republic of Bangladesh, October 2005 (Poverty Reduction Strategy Paper)
WFP Vulnerability Maps

# Annex 7: Staff Responsibilities

**CARE-Chittagong Regional Office**
**Month:October,2009**
Date: Update on November 01, 2009

| Sl.# | EMP.# | Name | Designation | Major Responsibilities | Remarks |
|---|---|---|---|---|---|
| 1 | 7228 | S.M. Khalequez Zaman | RC | 1. Effective Strategic planning and leadership.<br>2. Overall implementation of SHOUHARDO program in the region.<br>3. Ensure efficient resource Management (funds, commodities, human)<br>4. Monitoring/Evaluation and Program Reporting 5. Efficient Information & Communication Management and effective networking and collaboration. | Attend meeting on 18th Nov. 09. |
| 2 | 7311 | Md. Ayub Khan | RPM | 1. Implement Program activities in quality and quantity. 2. Manage Partnership, provide strategic direction and guidnce<br>3.Review and finalize the PP of PNGOs and forward for approval<br>4.Supervise the activity of CARE DD area<br>5. Coordinate and manintain netwok with Stakeholders<br>6. Coaching, mentorin and supervise the staffs<br>7. Reportable to Rrgional Cooridnator. | Attend meeting on 18th Nov. 09. |
| 3 | 7329 | Dr. Fahmida Banu | RTAM | 1. Formulate Regional Technical Implementation Plans<br>2. Supervision of Implementation and Progress<br>3. Coordinate with TCs on technical capacity strengthening issues 4. Capacity Building of PNGO and LEB | Attend meeting on 18th Nov. 09. |

| | | | | | |
|---|---|---|---|---|---|
| 4 | 6981 | Shahedul Islam Matabbor | RCLM | 1. Manage commodity and ensure smooth operation. 2. Technical guidance to the commudity staffs. 3. Prerae report on commudity and preserce. 4. Maintain network and liaison with respective stake holders | Attend meeting on 18th Nov. 09. |
| 5 | 6934 | Mani Mala Roy | Campaign M. | 1.Coordination and Mobilization of Campaign on Stop VAW and Access to Khas Land 2. Capacity building 3. Networking and building relationships | 0 |
| 6 | 7200 | Abdul Aziz | RIM | 1.Coordinate planning and implementation of the structural interventions of the program. 2. Capacity building of Partner NGO, Pourashava/City Corporation and CARE field engineers in the implementation of structural interventions including Cash For Work (CFW). 3. Ensure the interventions are being implemented effectively and achieving optimal performance. 4. Reporting and documentation of the structural interventions of the program. 5. Maintain effective liaison with LGED, Pourashava/City Corporation (CC) and other engineering department in district/Upazila level and NGO officials. | 0 |
| 7 | 6981 | Md. Shohedul Alam Matabbar | RCLM | 1. Commodity planning and budgeting. 2. Transport and Logistics management. 3. Warehouse management. 4. Commodity supply chain management and accounting. 5. Reporting, monitoring and Audit | 0 |

| | | | | | |
|---|---|---|---|---|---|
| 8 | 4596 | Nazim Uddin | TM - L&G | 1. Understand technical requirements of PNGO and communities (including DD areas)<br>2. Respond to technical Needs of PNGOs/DD, SHOUHARDO frontline staff and communities<br>3. Information Management and Coordination<br>4. Other Ad-hoc Tasks | 0 |
| 9 | 7558 | Dr. Khan Tawhid Parvez | TM - H &N | 1.Understand Technical Requirements of PNGO and Community (Including DD areas<br>2. Respond to Technical Needs of PNGOs and DD Communities<br>3. Information Management and Coordination<br>4. Other Ad-hoc Tasks | Attend meeting on 18th Nov. 09. |
| 10 | 6918 | Khalada Khatun | TM- Emp. (Act) | 1.Understand technical requirements of PNGO and DD communities<br>2. Respond to technical Needs of PNGOs, SHOUHARDO frontline staff and DD communities 3. Information Management and Coordination 4. Other Ad-hoc Tasks | Attend meeting on 18th Nov. 09. |
| 11 | 7342 | Palash Mondal | TM-H & A | 1.Understand technical requirements of PNGO and DD communities<br>2. Respond to technical Needs of PNGOs/DD, SHOUHARDO frontline staff and communities<br>3. Information Management and Coordination<br>4. Other Ad-hoc Tasks | Attend meeting on 18th Nov. 09. |
| 12 | 7369 | Md. Shah Alam Talukder | RGM | 1.Financial planning and expense monitoring<br>2. Sub-Grant Fund Management<br>3. Review and finalize the financial reports of ROs under SHOUHARDO<br>4. Performance management of CARE staff and Capacity building of CARE and partner staff.<br>5. Oversee compliance and accuracy on major procurement<br>6. Facilitation of Audit | Attend meeting on 18th Nov. 09. |

| | | | | | |
|---|---|---|---|---|---|
| 13 | 7339 | Jefarson Chakma | RM&EM | 1. Develop Plans of Effectively Unrolling the M&E/MIS Systems for SHOUHARDO Program2. Capacity build of M&E Officers (Both CARE and PNGOs) in Information Systems3. Supervise and monitor the quality of information4. Dealing with ad-hoc information requests5. Other ad-hoc tasks | Attend meeting on 18th Nov. 09. |
| 14 | 7415 | Md. Monirul Islam Mia | M&E O | 1. Develop Plans of Effectively Unrolling M&E Systems Developed for the Program<br>2. Capacity Build of PNGO M&E Officers in Information Systems<br>3. Supervise and Monitor the Quality of Information 4. Dealing with Ad-Hoc Information Requests 5. Other Ad-Hoc Tasks | Attend meeting on 18th Nov. 09. |
| 15 | 7142 | Md. Motiur Rahman Prodhan | RFO | 1.Ensure that all the financial activities under the DD areas are completed in time2. Expense monitoring to ensure proper utilization and proper charging of the expenses 3. Tracking of fund status for proper reporting and ensuring timely fund requests 4. Financial report preparation for internal and donor reporting 5.Ensure support to the DD area activities. | Attend meeting on 18th Nov. 09. |
| 16 | 7352 | Delowar Hossain | SGO | 1.Sub-Grant Management<br>2. Monitoring of the subgrant activities<br>3. Sub-grants Budget preparation and budget monitoring<br>4. Coordinate PNGO certification and follow up deviations<br>5. Capacity building of PNGO staff in the area of financial management | 0 |

| | | | | | |
|---|---|---|---|---|---|
| 17 | 4605 | Rafiqul Islam Talukder | SGO | 1.Sub-Grant Management<br>2. Monitoring of the subgrant activities<br>3. Sub-grants Budget preparation and budget monitoring<br>4. Coordinate PNGO certification and follow up deviations<br>5. Capacity building of PNGO staff in the area of financial management | 0 |
| 18 | 3992 | Md. Shohidul Islam | PSO | Ensure logistics and other supports at region, managing workshop, meeting and training. | Attend meeting on 18th Nov. 09. |
| 19 | 7148 | Ms. Mondira Dewan | ASO | Assit Regional team for comunication, preserve document and administrative support for program managemnt. | 0 |
| 20 | 6952 | Mohammad Hasem Tareque | FS | 1.Manage the field level activities of DD area.<br>2. Supportive supervisse the FF<br>3. maintain coordination and netwrok at local level (uniion, Upazila level).<br>Mobilise Local Support Structure to be More Responsive to the Needs of the Community in<br>4. Information Management and Coordination to asssit regional management.<br>5. Other Ad-hoc Tasks | Attend meeting on 18th Nov. 09. |
| 21 | 4612 | Mithu Rani Chowdhury | FS | Do | 0 |
| 22 | 6207 | Md. Abdul Jalil | PO | 1.Assist PNGO for program inpmelentation and prepare reports, PP.<br>2. Assist PNGO for technical guidance and capacity building of program staff<br>3. Information Management<br>5. Other Ad-hoc Tasks as and when requred by the region. | Attend meeting on 18th Nov. 09. |

| | | | | | |
|---|---|---|---|---|---|
| 23 | 4009 | Rafiqul Islam | PO | Do | |
| 24 | 3782 | Shahjahan Siraj | PO | Do | |
| 25 | 3261 | Zakir Hossain | PO | Do | |
| 26 | 4151 | Md. Harunur Rashid | PO | Do | |
| 27 | 2365 | Md. Joynal Abedin | PO | Do | |
| 28 | 6351 | Rokon Uddin Ahmed | PO | Do | |
| 29 | 5803 | Poritush Goshami | PO | Do | |
| 30 | 7490 | Afroza Sharmin | PO | Responsible for SHOUHARDO Urban activity in City Corporation for:<br>1.Assist PNGO for program implementation and prepare reports, PP.<br>2. Assist PNGO for technical guidance and capacity building of program staff<br>3. Information Management<br>5. Other Ad-hoc Tasks as and when required by the region. | Attend meeting on 18th Nov. 09. |

| | | | | | |
|---|---|---|---|---|---|
| 31 | 4170 | Ratan Manik Sarker | IO | 1. Coordinate infrastructure and FFW/ CFW activities of PNGO/DD/LGED/PS/City Corporation 2. Provide technical guidance and capacity building to PNGOs technical staff. 3. Coordination and liaison with other implementing partners (LGED/Pourashava/ City Corporation).<br>4. Reporting. | Attend meeting on 18th Nov. 09. |
| 32 | 4653 | Mojibur Rahman | IO | Do | |
| 33 | 3065 | Md. Mohiuddin | IO | Do | |
| 34 | 3679 | Nur Mohammad | IO | Do | |
| 35 | 7256 | ASM Mizanur Rahman Mridha | IO | Do | |
| 36 | 3678 | Md. Anwar Hossain | IO | Do | |
| 37 | 7266 | Mahedi Hassan | WHM | 1.Oversee appropriate warehousing<br>2.Receipts and dispatches<br>3.Reporting(Maintain inventory daily commodity) 4.Staff supervision | |

| | | | | | |
|---|---|---|---|---|---|
| 38 | 4398 | Nipu Rani Dey | FF | 1.Develop Capacity of Community to Solve Problems in line with the SHOUHARDO Core Message<br>2. Mobilise Local Support Structure to be More Responsive to the Needs of the Community<br>3. Assistance in Implementation of Infrastructure<br>4. Assist in Disaster Preparedness Activities<br>5. Information Management and Coordination6. Other Ad-hoc Tasks | |
| 39 | 4733 | Swapna Rani | FF | Do | |
| 40 | 4889 | Syeda Badrun Nessa | FF | Do | |
| 41 | 7077 | Md. Mosrakul Alam | FF | Do | |
| 42 | 7491 | Md. Mojibur Rahman | FF | Do | |
| 43 | 2309 | Nurul Amin | ATF | 1. Procurement of Goods<br>2. Ensure items are appropriately distributed<br>3. Information Management and Coordination<br>4. Other Ad-hoc Tasks | |

# Annex 8: SHOUHARDO Program Endline Questionnaire

**CARE – Bangladesh**

## 8.5.1 SHOUHARDO Program

**ENDLINE HOUSEHOLD SURVEY**

| | | | | |
|---|---|---|---|---|
| **Ques. SL** | | | | |
| **Unique ID** | | | | |

Start Time: _____ End Time: _____

### A. Identification

| | |
|---|---|
| **Survey Team's ID** | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A1 | Date of interview | : | | | | | | | |
| | | | *dd* | | *mm* | | *yy* | ID | Signature |
| A2 | Name of Interviewer | 1 | | | | | | | |
| A3 | Name of Interviewer | 2 | | | | | | | |
| A4 | Reviewed by (Supervisor/ Name & 0Code) | | | | | | | | |
| A5 | Reviewed by (Team Leader/Name & Code) | | | | | | | | |
| A6 | Reviewed by others (Name & Code) | | | | | | | | |
| A7 | Data Entry by (Name/Code) | | | | | | | | |
| A8 | Entry Date | | | | | | | | |
| A9 | Data entry checked by (Name/Code) | | | | | | | | |
| A10 | Data entry checked Date | | | | | | | | |

**Area Identification**

| | **Area** | **Name** | **Code** |
|---|---|---|---|
| A11 | District | | |
| A12 | Upazila | | |
| A13 | Union | | |
| A14 | Village | | |
| A15 | Pourashava/ City Corporation | | |
| A16 | Slum | | |
| A17 | Area Type:<br>*Code: 1=North Char, 2=Mid Char, 3=Haor, 4=Coast* | | |

### 8.5.1.1 Respondent's Identification

| | | | |
|---|---|---|---|
| A18 | Name of HH head: _____ | | |
| A19 | Respondent's Name: 1. _____ | ID | |
| A20 | Relationship with HH Head<br>*Code: 1= HH head self, 2=Wife, 3= Husband, 4= Son, 5=Daughter, 6=Father, 7=Mother, 8= Daughter in law/son in law, 9= Brother, 10=Sister, 11=Father in law, 12=Mother in law, 13= Nephew/niece, 14= Grandfather, 15= Grandmother, 16= Grandson/daughter, 17 =Sister-in-law/ Brother-in-law, 18= Brother's wife 19= Others (e.g. servant - specify)* | Code | |
| A21 | Respondent's Name: 2. _____ | ID | |
| A22 | Relationship with HH Head<br>(*Please use code same as variable A20)* | Code | |
| A23 | Household well-being category[44]:<br>*Code: 1= Extreme Poor, 2=Poor* | Code | |

[44] Information on Households well-being category should be extracted from WBA record sheet

# PART A. HOUSEHOLD INFORMATION

## B. Age, sex and primary occupation of household members

| MID | Name of HH Member<br><br>(Start with the name of HH head) | Sex (male=1, female=2) | Age (months/ years) | | Primary occupation |
|---|---|---|---|---|---|
| | | | Month (for < 2 years old) | Year | |
| | | B1 | B2 | B3 | B4 |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |

*Codes for B4: 1=Farming: on own land only; 2=Farming: as sharecropper or on rented in/mortgaged in land only; 3=Farming: on own land and rented in/mortgaged in/sharecropped land; 4=Agri. day labor; 5=Agri. Contract labor; 6=Fishing; 7=Poultry and livestock rearing; 8=Non-agricultural day labor; 9=non-agricultural contract labor; 10= Casual labor, 11=Regular salaried employment in Government, NGO or other institutions; 12=Regular salaried employment in some fixed business establishment (shop, factory, hotel, etc.) or in transport sector (bus, truck, etc.); 13=Self employed in business/service provision; 14=Petty business, 15=Business owner using hired labor; 16=Paid "volunteers"; 17=Rickshaw/rickshaw van puller; 18=Boatman; 19=Unpaid household work; 20=Servant/ Maid; 21=Student; 22=Beggar; 23=Old/ Disabled/child; 24=Unemployed; 25=Other (specify); 26= Unpaid household Labor*

## C. Economic security

| | | *Code: 1=Yes, 2=No* |
|---|---|---|
| C1 | Did any resident household member migrate out of the village / slum for part of last 12 months to find employment? | |
| C2 | Did any resident household member sell labor in advance for part of last 12 months? | |
| C3 | Did any resident household member take an interest-bearing loan from non-formal sources in the last 12 months? | |

**Housing characteristics**

| | | | |
|---|---|---|---|
| C4 | What is the main construction material of the walls of your main house? | Code | |

*Code: 1 = Brick; 2 = C.I. Sheet / wood; 3 = Mud wall; 4 = Bamboo; 5 = Straw/jute stick/leaves; 6 = Thatched bamboo/polythene; 7 = Other*

| | | | |
|---|---|---|---|
| C5 | What is the main construction material of the roof of your main house? | Code | |

*Code: 1 = Concrete; 2 = C.I. Sheet / wood; 3 =Tiles; 4 = Bamboo; 5 = Straw/jute stick/leaves; 6 = Thatched bamboo/polythene; 7 = Other*

| | | | |
|---|---|---|---|
| C6 | How many rooms do you have for your family to live in your house? | Code | |

### Ownership of consumption assets

| | **Asset** | **Own?** (1=yes, 2=no) | **If owned, how many?** |
|---|---|---|---|
| C7_1 | Furniture (bed, Table, Chair, Cupboard) | | |
| C7_2 | Stove, lantern, flashlight | | |
| C7_3 | Household kitchen utensils | | |
| C7_4 | Bicycle/Rickshaw/Van | | |
| C7_5 | Boat | | |
| C7_6 | Motorcycle | | |
| C7_7 | Wagon | | |
| C7_8 | Watch or clock | | |
| C7_9 | Radio / Cassette player | | |
| C7_10 | TV / VCP / VCR / VCD | | |
| C7_11 | Mobile Phone set | | |
| C7_12 | Jewelery | | |
| C7_13 | Sewing machine | | |

## D. Access to and Use of Social Services

Accessibility = it is available in the village/union (for primary school and shalish, available in the village).
Utilization = the household's use of the service

| | Type of Service | Accessibility *(Code: 1=Yes, 2=No, 3=Don't know)* | Utilization *(Code: 1= frequently; 2=sometimes; 3=never; 88=not applicable)* |
|---|---|---|---|
| | | A | B |
| D1 | Health service (primary health care) | | |
| D2 | Primary school (village) | | |
| D3 | Social welfare | | |
| D4 | Union Parishad | | |
| D5 | Grammo Shalish (village) | | |
| D6 | Services provided by the Department of Women's Affairs | | |
| D7 | Other (specify) | | |

## E. Household Food Security

### Food consumption

Now I would like to ask you about the types of foods that you or anyone else in your household ate yesterday during the day or at night. Did you or anyone else from your household eat food from any of the following groups?
(*Code: 1=Yes, 2=No)*

| | | Code | | | Code |
|---|---|---|---|---|---|
| E1 | **Any cereals**, e.g. rice, bread, wheat, wheat bread, rice flakes, puffed rice, barley, wheat grain, popcorn? | | E8 | **Any meat**, such as, liver, beef, poultry, lamb, pork, etc.? | |
| E2 | **Any pumpkin, carrots, squash, or sweet potatoes** or vegetables that are yellow or orange inside? | | E9 | **Any eggs?** | |
| E3 | **Any white potatoes, white yams** or other foods made from roots and tubers? | | E10 | **Any fresh or dried fish or shellfish?** | |
| E4 | **Any dark green, leafy vegetables**, e.g., ipomoea, amaranth, spinach, parwar sag, and drumstick leaves? | | E11 | **Any legumes/pulses**, e.g. Bengal gram, black gram dal, lentil, Khesarl? | |
| E5 | **Any other vegetables**, e.g. cucumber, radish, pepper, string beans, cabbage, cauliflower, radish, onion? | | E12 | **Any Milk or Milk products**, e.g. cow milk, buffalo milk, goat milk, yogurt, curd, cheese? | |
| E6 | **Any ripe papaya, mangoes** or other fruits that are yellow or orange inside? | | E13 | **Any foods prepared using fat,,** e.g., oil, butter, dalda or ghee? | |
| E7 | **Any other fruits**, e.g. banana, papaya, sithphal, grapefruit, apple, orange, jackfruit, jambu fruit, plums, melon, tomato, date, lemon, etc. ? | | E14 | **Any sugar or honey?** | |
| | | | E15 | **Others (specify)** | |

**Months of Insufficient Food**

In which months of the year did your family not have enough food to eat?
(Depending on the response, fill the box with the appropriate code) *Code: 1=Yes or 2=No*

| | Month | Code |
|---|---|---|
| E16_1 | January (Poush) | |
| E16_2 | February (Magh) | |
| E16_3 | March (Falgun) | |
| E16_4 | April (Chaitra) | |
| E16_5 | May (Baishakh) | |
| E16_6 | June (Jiashtha) | |

| | Month | Code |
|---|---|---|
| E16_7 | July (Ashar) | |
| E16_8 | August (Sravan) | |
| E16_9 | September (Bhadra) | |
| E16_10 | October (Ashyin) | |
| E16_11 | November (Kartik) | |
| E16_12 | December (Augrahayan) | |

**Household Food Access**

| | | Code |
|---|---|---|
| E17_1 | How often did you eat three 'square meals' (full stomach meals) a day in the past 12 months (not a festival day)? | **Most of the time**(3 meals each day for most of the year).....1<br>**Often** (at least 3 times a week) 2<br>**Sometimes** (7-12 times within the last 12 months).....3<br>**Rarely** (only 1-6 times within the last 12 months).....4<br>**Never**.....5 |
| E17_2 | In the last 12 months, how often did you or any of your family have to eat potato, wheat, or another grain although you wanted to eat rice (not including when you were sick)? | **Never**.....1<br>**Rarely** (only 1-6 times within the last 12 months).....2<br>**Sometimes** (7-12 times within the last 12 months).....3<br>**Often** (a few times each month).....4<br>**Most of the time**(most days/weeks).....5 |
| E17_3 | In the last 12 months how often did you yourself skip entire meals due to scarcity of food? | **Never**.....1<br>**Rarely** (only 1-6 times within the last 12 months).....2<br>**Sometimes** (7-12 times within the last 12 months)).....3<br>**Often** (a few times each month).....4<br>**Most of the time**(most days/weeks).....5 |
| E17_4 | In the last 12 months how often did you personally eat less food in a meal due to scarcity of food? | **Never**.....1<br>**Rarely** (only 1-6 times within the last 12 months)).....2<br>**Sometimes** (7-12 times within the last 12 months).....3<br>**Often** (a few times each month).....4<br>**Most of the time** (most days/weeks).....5 |
| E17_5 | In the past 12 months how often did food stored in your home run out and there was no money to buy more that day? | **Never**.....1<br>**Rarely** (only 1-6 times within the last 12 months).....2<br>**Sometimes** (7-12 times within the last 12 months).....3<br>**Often** (a few times each month).....4<br>**Most of the time**(most days/weeks).....5 |
| E17_6 | In the past 12 months how often did you worry about where food would come from? (Mathar bhitre koto chinta from food or money worries). | **Never**.....1<br>**Rarely** (only 1-6 times within the last 12 months).....2<br>**Sometimes** (7-12 times within |

| | | Code |
|---|---|---|
| | | the last 12 months).....3<br>**Often** (a few times each month).....4<br>**Most of the time**(most days/weeks).....5 |
| E17_7 | In the past 12 months, how often did your family purchase rice? | **Never**.....1<br>**Rarely** (once every few months).....2<br>**Sometimes** (a few times each month).....3<br>**Often** (every week).....4<br>**Most of the time**(every day).....5 |
| E17_8 | In the past 12 months how often did your family purchase food (rice, lentils etc.) on credit (or loan) from a local shop? | **Never**.....1<br>**Rarely** (only 1-6 times within the last 12 months).....2<br>**Sometimes** (7-12 times within the last 12 months).....3<br>**Often** (a few times each month).....4<br>**Most of the time**(this happens a lot).....5 |
| E17_9 | In the past 12 months how often did your family have to borrow /take food from relatives or neighbors to make a meal? | **Never**.....1<br>**Rarely** (only 1-6 times within the last 12 months).....2<br>**Sometimes** (7-12 times within the last 12 months).....3<br>**Often** (a few times each month).....4<br>**Most of the time**(this happens a lot).....5 |

# F. Water and Sanitation

What are the major sources of water for your household?

| | | 1st source | | | 2nd source | |
|---|---|---|---|---|---|---|
| | | Source | Distance | | Source | Distance |
| | | S1 | D1 | | S2 | D2 |
| F1 | Drinking | | | | | |
| F2 | Cooking | | | | | |
| F3 | Washing | | | | | |

*Code: 1=Hand tube well, 2=Tara pump, 3= Deep tube well, 4=Shallow tube well, 5=Ring well/ indara, 6=Pond, 7=River/canal, 8=Supply water (piped), 9=Pond sand filter, 10=Rainwater harvesting system, 11=Other (specify)*

| | | | |
|---|---|---|---|
| F4 | If source is tube well/Tara pump, has the tube-well/Tara pump been tested for arsenic?<br>*Code: 1=Yes, 2=No, 77=Do not know, 88=N/A ->If answer is Yes then ask F6* | Code | |
| F5 | If tested, does the tube well/Tara pump have arsenic?<br>*Code: 1=Yes, 2=No* | Code | |

*(Interviewer: If yes, ask whether the well is marked red or green, personally check)*

| | | | |
|---|---|---|---|
| F6 | Does the HH have access to a latrine?<br>*Code: 1=Yes, 2=No - Skip up to C7* | Code | |

What type of latrine do your household members use?

***Adult Men*** F6_1 ***Adult Women*** F6_2 8.5.1.1.1.1.1 Boys 5-15Yrs F6_3 ***Girls 5-15Yrs*** F6_4

*Code: 1=Ring-slab/offset latrine (water seal), 2=Pit latrine (covered), 3=Ring-slab/offset latrine (water seal broken), 4=Pit latrine (uncovered), 5=Septic latrine, 6=Hanging/open latrine, 7=Local adopted hygienic latrine, 8=Open defecation 88=N/A*

Condition of latrine (interviewer observe directly; see guidelines for more information)

| | **Condition** | *Code: 1= yes; 2=no* |
|---|---|---|
| F7 | 1. Is the latrine functioning? | |
| F8 | 2. Does the latrine show signs of use? | |
| F9 | 3. Is the latrine itself clean? For example, is the pan and slab (or place to sit while defecating) clean? | |
| F10 | 4. Is the surrounding area of the latrine clean? | |
| F11 | 5. Does the latrine have an unbroken water seal?<br>*If this is not applicable, write 88=N/A* | |

## G. Participation in SHOUHARDO

### Core Occupational Group activities

Did anyone in your household receive support (training or inputs) in any of the following areas from the SHOUHARDO project?
(Interviewer: Read list one-by-one and record responses)

| | **Area of support** | **Code: 1=Yes, 2=No** |
|---|---|---|
| G1 | Agriculture | |
| G2 | CHD – Vegetable garden | |
| G3 | CHD – Fruit production | |
| G4 | CHD – Goat | |
| G5 | CHD – Cow | |
| G6 | CHD – Poultry | |
| G7 | CHD – Other livestock | |
| G8 | IGA activity (non agriculture) | |
| G9 | IGA activity (agriculture - seed, technical assistance) | |
| G10 | IGA livestock – Goat | |
| G11 | IGA livestock – Cow | |
| G12 | IGA livestock – Poultry | |
| G13 | IGA livestock – Other livestock | |
| G14 | Fisheries: fish culture | |
| G15 | Fisheries: fishing | |

### Sanitation

| | | **Code: 1=yes, 2=no** |
|---|---|---|
| G16 | Did SHOUHARDO help your household get access to a latrine? | |
| G17 | Did SHOUHARDO help your household get access to a tube well? (Do not count tube well platform) | |
| G18 | (Slum households only): Did the SHOUHARDO project help construct a sanitation drain near your home? | |

### Early childhood development

| | | |
|---|---|---|
| G19 | Are there children under 7 years old living in your household? (code: 1=yes, 2=no) | |
| G20 | If yes, does any child attend preschool at a SHOUHARDO Early Childhood Development Center (SBK, preschool)? (code: 1=yes, 2=no) | |
| | If yes, is the child a boy or a girl? (code: boy=1, girl=2) | |
| G21 | Child 1 | |
| G22 | Child 2 | |
| G23 | Child 3 | |

**Participation in SHOUHARDO groups**

Is anyone in your household a member of the following groups?
(Interviewer: Read list one-by-one and record responses)

| | | **Code: 1=yes, 2=no** |
|---|---|---|
| G24_1 | Agriculture group | |
| G24_2 | CHD group | |
| G24_3 | IGA group | |
| G24_4 | Fisheries group | |
| G24_5 | Village/slum development committees (VDC/SDC) | |
| G24_6 | Savings Group | |
| G24_7 | EKATA | |
| G24_8 | Mother's Group | |
| G24_9 | Other_____ | |

**Other**

| | | **Code: 1=yes, 2=no** |
|---|---|---|
| G25 | Did your household receive support for house raising from the SHOUHARDO project? | |
| G26 | Did your household receive support for mound protection or extension from the SHOUHARDO project? | |
| G27 | Did anyone in your household participate in the cash-for-work program of the SHOUHARO project? | |
| G28 | Did anyone in your household participate in food-for-work program of the SHOUHARO project? | |

| | | |
|---|---|---|
| G29 | During the past two years, did anyone in your household receive any aid or food from programs other than SHOUHARDO? (*Code: 1=Yes, 2=No*) | |
| G30 | If "yes", what was the program?<br>_____<br>(Ask to see any ration cards and list source of aid) | |

# PART B. INFORMATION ON CHILDREN 6 - 24 MONTHS OLD AND THEIR MOTHERS

**(Respondent is the selected index child's mother)**

## H. Age verification of index child aged 6-24 months and identification of mother

| | |
|---|---|
| | Name of index child: _____ |

**Interviewer:** Now I would like to know the date of birth of (NAME) and his/her exact age in months.

Fill in the table below with the child's date of birth (column A) and age in months (column B). To do so, request a vaccination card or birth certificate from the mother to verify the age of the child. If a vaccination or birth card is not available, use *the local calendar of events* provided in the training to approximate the month and year of birth. In this case, fill in the year and month of birth only, i.e. leave the day of birth blank, and record the age of the child in months.

If the child is 6-24 months old, his/her mother is the respondent for the remainder of the questionnaire. Write her name in column C.

| | In what month and year was (NAME) born?<br><br>WRITE THE DATE IN ENGLISH<br><br>USE CODES AT BOTTOM OF PAGE FOR MONTHS | Record age of (NAME) in months<br><br>(Use chart provided to determine age in months from birth dates and months) | Identify the eligible respondent (**MOTHER** of the index child) and write her name in this column |
|---|---|---|---|
| | A | B | C |
| | DAY ☐☐<br>MONTH ☐☐<br>YEAR 200☐ | | |

(Code: 1=Yes, 2=No)

| | | |
|---|---|---|
| H1 | Is index child 6-24 months old? | |

**Note to interviewer: If the child is not 6-24 months old, ask if another child in the household is. If yes, then this new child becomes the index child. If not, thank the mother and move on to the next household.**

**Months in Bengali and English**

| MONTH | CODE |
|---|---|
| January (Poush) | 01 |
| February (Magh) | 02 |

| MONTH | CODE |
|---|---|
| July (Ashar) | 07 |
| August (Sravan) | 08 |

| | |
|---|---|
| March (Falgun) | 03 |
| April (Chaitra) | 04 |
| May (Baishakh) | 05 |
| June (Jiashtha) | 06 |

| | |
|---|---|
| September (Bhadra) | 09 |
| October (Ashyin) | 10 |
| November (Kartik) | 11 |
| December (Augrahayan) | 12 |

## I. Information about index child's mother

### General

| | | |
|---|---|---|
| I1 | How old are you? (years) | |
| I2 | What is your completed education level? (see codes below) | |
| I3 | What is your primary occupation? (see codes below) | |
| I4 | As you know, some women take up jobs for which they are paid in cash. Others sell things, have a small business or work on the farm or in the family business. In the last 12 months, have you done any of these things? (1=yes, 2=no) | |
| I5 | If yes, did you earn any money from your work in the last 12 months? (1=yes, 2=no) | |

*Codes for I2. 0=No class, 1=Class 1, 2=Class 2, 3=Class 3, 4=Class 4, 5=Class 5, 6=Class 6, 7=Class 7, 8=Class 8, 9=Class 9, 10=SSC pass,12=HSC pass, 14=Graduate, 16=Masters, 17=Pre primary school (e. g., BRAC school), 18= Did not attend school but can read/write*

*Codes for I3: 1=Farming: on own land only; 2=Farming: as sharecropper or on rented in/mortgaged in land only; 3=Farming: on own land and rented in/mortgaged in/sharecropped land; 4=Agri. day labor; 5=Agri. Contract labor; 6=Fishing; 7=Poultry and livestock rearing; 8=Non-agricultural day labor; 9=non-agricultural contract labor; 10= Casual labor, 11=Regular salaried employment in Government, NGO or other institutions; 12=Regular salaried employment in some fixed business establishment (shop, factory, hotel, etc.) or in transport sector (bus, truck, etc.); 13=Self employed in business/service provision; 14=Petty business, 15=Business owner using hired labor; 16=Paid "volunteers"; 17=Rickshaw/rickshaw van puller; 18=Boatman; 19=Unpaid household work; 20=Servant/ Maid; 21=Student; 22=Beggar; 23=Old/ Disabled/child; 24=Unemployed; 25=Other (specify); 26= Unpaid household Labor*

### Participation in EKATA

| | | |
|---|---|---|
| I6 | Are you a member of an EKATA group? (Code: 1=yes, 2=no)<br>(If no, skip to I9). | |
| I7 | If yes, how often does the EKATA group usually meet? (Code: 1=once a week; 2=once a month; 3=once a year) | |
| I8 | How many EKATA group meetings have you attended in the last year? | |

*Note to interviewers: In slums these groups are called "Community Resources Centers" (CRC).*

### Participation in other SHOUHARDO activities

| | | **Code: 1=yes, 2=no** |
|---|---|---|
| I9 | Do you have a daughter who is attending school at the elementary or higher level?<br>(If no, skip to I14) | |
| I10 | If yes, does her school have a Parent-Teacher Association (PTA)? | |
| I11 | If yes, have you attended any PTA meetings? | |
| I12 | Does her school have a School Management Committee (SMC)? | |
| I13 | If yes, have you attended any SMC meetings? | |
| I14 | Are you a member of a village/slum development committee (VDC/SDC)? | |
| I15 | Are you a member of a savings group? | |
| I16 | Are you a member of a SHOUHARDO project mother's group? | |

| | | |
|---|---|---|
| I17 | Have you attended 'courtyard' sessions of the SHOUHARDO project? | |
| I18 | Have you attended demonstration feeding sessions of the SHOUHARDO project? | |

**Growth monitoring**

| | | |
|---|---|---|
| I19 | For how many months in the last year did you take (NAME OF INDEX CHILD) to be weighed and measured by your Community Health Volunteer? | |

**Food assistance**

| | | |
|---|---|---|
| I20 | Did you or (NAME OF INDEX CHILD) receive food rations from the SHOUHARDO program? *(Code: 1=Yes, 2=No)* | |
| I21 | If "yes", for how many months in the last 12 months was the food received | **Number of months** |
| I22 | For you (when you were pregnant) | |
| I23 | For you (when you were lactating) | |
| I24 | For (NAME OF INDEX CHILD) | |

Interviewer: The rest of the questions in this section (Section I) should be asked to the child's mother without men present

**Decision making in household**

To what extent are you able to make the following kinds of decisions?
*(Interviewer: Ask about each item in the list)*

*(Code: 1=can decide alone; 2=can decide with husband or other adult male family members; 3= Husband makes decision after discussion with wife, 4=not involved in decision; 88= not applicable).*

| | Type of decision | Code |
|---|---|---|
| I25_1 | Buying small food items, groceries, toiletries | |
| I25_2 | Buying clothing for yourself and your children | |
| I25_3 | Spending money that you yourself have earned | |
| I25_4 | Buying or selling major household assets (land, livestock, crops) | |
| I25_5 | Buying or selling jewelry | |
| I25_6 | Use of loans or savings | |
| I25_7 | Expenses for your children's education | |
| I25_8 | Expenses for your children's marriage | |
| I25_9 | Medical expenses for yourself or your children | |
| I25_10 | Expenses for family planning (contraceptives) | |
| I25_11 | To move to shelter during time of disaster | |
| I25_12 | Actively participate and involved in ***salish*** decision making | |

**Freedom of movement**

Are you usually permitted to go to the following places on your own, only if someone accompanies you, or not at all?
*(Code: 1=alone; 2=not alone; 3=never; 88=not applicable).*

| | | Code |
|---|---|---|

| | | |
|---|---|---|
| I26_1 | To the local market to buy things | |
| I26_2 | To a local health center or doctor | |
| I26_3 | To homes of friends in the neighborhood | |
| I26_4 | To a nearby mosque/shrine? | |

**Attitudes about family life**

Now I would like to get your opinion on some aspects of family life. Please tell me if you agree or disagree with each statement.

*(Code: 1=agree; 2=disagree; 99=Don't know/depends)*

| | | **Code** |
|---|---|---|
| I27_1 | The important decisions in the family should be made only by the men of the family. | |
| I27_2 | If the wife is working outside the home, then the husband should help her with household chores. | |
| I27_3 | A married woman should be allowed to work outside the home if she wants to. | |
| I27_4 | The wife has a right to express her opinion even when she disagrees with what her husband is saying. | |
| I27_5 | A wife should tolerate being beaten by her husband in order to keep the family together. | |
| I27_6 | It is better to send a son to school than it is to send a daughter. | |

| | | | |
|---|---|---|---|
| I28 | Was it possible for the interviewer to ask the above questions to the woman without her husband or any man present?<br>*(Code: 1=Yes, 2=No)* | **Code** | |

## J. Antenatal Care

| | | Codes | Skip |
|---|---|---|---|
| J1 | **Now I would like to ask you some questions about your last pregnancy.** | | → |
| J2 | Did you have any antenatal check-ups during your **last** pregnancy? | Yes .....1<br>No .....2 → J3 | |
| J3 | How many check-ups did you have during your pregnancy? | Number of visits..... ☐☐ | |
| J4 | Do you have an antenatal card or a prescription sheet for your pregnancy?<br>If yes: May I see it please? | Yes, Seen .....1<br>Yes, Not Seen.....2<br>No Card.....3 → J6 | |
| J5 | **Interviewer: Verify Number of Antenatal Visits**<br><br>Is the number of documented visits on the card different than the stated number of visits in J3? | Same as stated.....1<br>Different than stated.....2<br><br>Note number of documented visits... ☐<br>☐ | |
| J6 | During your **(current/last)** pregnancy, do/did you take the same amount of food as you usually take or do/did you take more or less food than you usually take? | More food .....1<br>Less food .....2<br>Same as usual .....3 | |
| J7 | During your **(current/last)** pregnancy, do/did you take as much daytime rest as you usually take? | More rest .....1<br>Less rest .....2<br>Same as usual .....3 | |
| J8 | In your (**current /last)** pregnancy, did you take any iron and folic acid tablets like this?<br>**(Interviewer: shows her the iron tablet)** | Yes .....1<br>No .....2 → J9 | |
| J9 | For how many months during your last pregnancy did you take iron and folic acid tablets? | 1-2 ……1<br>3-4 ……2<br>5-6……..3<br>> 6 ……4 | |
| J10 | Did you receive Vitamin A within one and a half months of delivery of the child?<br>(Interviewer: show her the red Vitamin A capsule) | Yes .....1<br>No .....2 | |

## K. Food Consumption of the Mother of the Child

Now I would like to ask you **(mother)** about the types of foods that you **(mother)** ate yesterday during the day or at night. Did you **(mother)** eat food from any of the following groups?

**ASK EACH QUESTION ACTIVELY, E.G., DID YOU EAT ANY CEREALS YESTERDAY**?

*Code: 1=Yes, 2=No*

| | | Code | | | Code |
|---|---|---|---|---|---|
| K1_1 | **Any cereals**, e.g. rice, bread, wheat, wheat bread, rice flakes, puffed rice, barley, wheat grain, popcorn? | | K1_8 | **Any meat**, such as, liver, beef, poultry, lamb, pork, etc.? | |
| K1_2 | **Any pumpkin, carrots, squash, or sweet potatoes** or vegetables that are yellow or orange inside? | | K1_9 | **Any eggs?** | |
| K1_3 | **Any white potatoes, white yams** or other foods made from roots and tubers? | | K1_10 | **Any fresh or dried fish or shellfish?** | |
| K1_4 | **Any dark green, leafy vegetables**, e.g., ipomoea, amaranth, spinach, parwar sag, and drumstick leaves? | | K1_11 | **Any legumes/pulses**, e.g. Bengal gram, black gram dal, lentil, Khesarl? | |
| K1_5 | **Any other vegetables**, e.g. cucumber, radish, pepper, string beans, cabbage, cauliflower, radish, onion? | | K1_12 | **Any Milk or Milk products**, e.g. cow milk, buffalo milk, goat milk, yogurt, curd, cheese? | |
| K1_6 | **Any ripe papaya, mangoes** or other fruits that are yellow or orange inside? | | K1_13 | **Any foods prepared using fat,**, e.g., oil, butter, dalda or ghee? | |
| K1_7 | **Any other fruits**, e.g. banana, papaya, sithphal, grapefruit, apple, orange, jackfruit, jambu fruit, plums, melon, tomato, date, lemon, etc. ? | | K1_14 | **Any sugar or honey?** | |
| | | | K1_15 | **Others (specify)** | |

Now I would like to ask you about the types of foods that your **child** (name) ate yesterday during the day or at night. Did (name) eat food from any of the following groups?

**ASK EACH QUESTION ACTIVELY, E.G., DID (NAME) EAT ANY CEREALS YESTERDAY**?

*Code: 1=Yes, 2=No*

| | | Code | | | Code |
|---|---|---|---|---|---|
| K2_1 | **Any cereals**, e.g. rice, bread, wheat, wheat bread, rice flakes, puffed rice, barley, wheat grain, popcorn? | | K2_8 | **Any meat**, such as, liver, beef, poultry, lamb, pork, etc.? | |
| K2_2 | **Any pumpkin, carrots, squash, or sweet potatoes** or vegetables that are yellow or orange inside? | | K2_9 | **Any eggs?** | |
| K2_3 | **Any white potatoes, white yams** or other foods made from roots and tubers? | | K2_10 | **Any fresh or dried fish or shellfish?** | |
| K2_4 | **Any dark green, leafy vegetables**, e.g., ipomoea, amaranth, spinach, parwar sag, and drumstick leaves? | | K2_11 | **Any legumes/pulses**, e.g. Bengal gram, black gram dal, lentil, Khesarl? | |
| K2_5 | **Any other vegetables**, e.g. cucumber, radish, pepper, string beans, cabbage, cauliflower, radish, onion? | | K2_12 | **Any Milk or Milk products**, e.g. cow milk, buffalo milk, goat milk, yogurt, curd, cheese? | |
| K2_6 | **Any ripe papaya, mangoes** or other fruits that are yellow or orange inside? | | K2_13 | **Any foods prepared using fat,**, e.g., oil, butter, dalda or ghee? | |
| K2_7 | **Any other fruits**, e.g. banana, papaya, sithphal, grapefruit, apple, orange, | | K2_14 | **Any sugar or honey?** | |

| | | | | | |
|---|---|---|---|---|---|
| | jackfruit, jambu fruit, plums, melon, tomato, date, lemon, etc. ? | | | | |
| | | | K2_15 | **Others (specify)** | |

## L. Child Immunization (<u>only if child is 12 to 23.9 months of age</u>)

| | | Codes | Skip |
|---|---|---|---|
| L1 | Do you have a card where (NAME'S) vaccinations are written down?<br>If yes: May I see it, please? | Yes, Seen .....1 → L3<br>Yes, Not Seen .....2 → L2<br>No Card.....3 | |
| L2 | Did you ever have a vaccination card for (NAME)? | Yes .....1<br>No .....2 → L5 | |
| L3 | (1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD.<br>(2) WRITE "44" IN "DAY" COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED | DAY MON YEAR | Skip to L11 If all vaccines given and recorded in card |
| | BCG<br>POLIO1<br>POLIO 2<br>POLIO 3<br>DPT 1<br>DPT 2<br>DPT 3<br>MEASLES | BCG ..... ☐☐ ☐☐ 200☐<br>P1 ..... ☐☐ ☐☐ 200☐<br>P2..... ☐☐ ☐☐ 200☐<br>P3..... ☐☐ ☐☐ 200☐<br>D1 ..... ☐☐ ☐☐ 200☐<br>D2 ..... ☐☐ ☐☐ 200☐<br>D3 ..... ☐☐ ☐☐ 200☐<br>MEA ..... ☐☐ ☐☐ 200☐ | |
| L4 | Has (NAME) received any vaccinations that were not recorded on this card?<br><br>RECORD "YES" ONLY IF RESPONDENT MENTIONS BCG, POLIO 1-3, DPT 1-3, AND/OR MEASLES VACCINE (S) | YES.....1<br>(PROBE FOR VACCINATIONS AND WRITE "66" IN THE CORRESPONDING DAY COLUMN IN Question L3)<br>NO.....2 → L11<br>DON'T KNOW.....8 | |
| L5 | Please tell me if (NAME) received any of the following vaccinations:<br>A BCG vaccination against tuberculosis, that is, an injection in the left shoulder that caused a scar? | YES.....1<br>NO.....2 | |
| L6 | Polio vaccine that is, drops in the mouth? | YES.....1<br>NO.....2<br>DON'T KNOW.....8 → L8 | |
| L7 | How many times did (NAME) receive polio vaccine: | TIMES .....☐ | |
| L8 | DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops? | YES.....1<br>NO.....2<br>DON'T KNOW.....8 → L10 | |
| L9 | How many times? | NUMBER OF TIMES.....☐ | |
| L10 | An injection given to prevent measles after 9 months of age? | YES.....1<br>NO.....2<br>DON'T KNOW.....8 | |

| | | | |
|---|---|---|---|
| L11 | Has (NAME) received a vitamin A capsule like this in the last 6 months?<br>CHECK IMMUNIZATION CARD IF AVAILABLE<br>**Interviewer: Show blue and red Vitamin A capsule as either may have been given depending on child's age** | YES.....1<br>NO.....2<br>DON'T KNOW.....8 | |

## M. Breastfeeding

| | | Codes | Skip |
|---|---|---|---|
| M1 | Did you ever breastfeed (NAME)? | Yes .....1<br>No .....2 → | N1 |
| M2 | Are you still breastfeeding (NAME)? | Yes .....1 →<br>No .....2 | |

## N. Childhood Diarrhea

| | | Codes | Skip |
|---|---|---|---|
| N1 | Has (NAME) had diarrhea (having 3 or more loose stools in 24 hours) in the last 2 weeks? | Yes .....1<br>No .....2 → | O1 |
| N2 | Was (NAME) given the same amount to drink as before the diarrhea, or more, or less? | Same .....1<br>More.....2<br>Less .....3<br>Don't know .....8 | |
| N3 | Was (NAME) given the same amount of food to eat as before the diarrhea, or more, or less? | Same .....1<br>More.....2<br>Less .....3<br>Don't know .....8 | |
| N4 | **Check M1 and M2 and tick:**<br>**Whether child is still breastfed or not.** | Still breastfed .....1<br>Other .....2 → | N6 |
| N5 | Did you continue to breastfeed (NAME) during diarrhea? | Continued.....1<br>Did not continue.....2 | |
| N6 | What did you do to treat his/her diarrhea?<br>(Multiple responses possible) | Home made (sugar/salt) saline .....1<br>Home made (Labon-gur) saline…… 2<br>Packet saline .....3<br>Rice Poser .....4<br>Pill/capsule/syrup .....5<br>Injection .....6<br>Intravenous.....7<br>Home remedies/Herbal medicine/plants..8<br>Plain Drinking Water .....9<br>Did not give anything.....10<br>Others _____ 11<br>(Specify) | |
| N7 | Did you seek advice or treatment of (NAME) for diarrhea? | Yes .....1<br>No .....2 | |

## O. Mothers' Hand Washing Habits

| | **When do you wash your hands?** | Code | Definition of codes |
|---|---|---|---|
| O1 | Before food preparation | | Code: 0 = no, 1 = water only, 2 = with ashes or clay, 3 = with soap |
| O2 | Before eating | | |
| O2 | Before feeding Children | | |
| O4 | After defecation | | |
| O5 | After cleaning babies bottoms | | |
| O6 | Other | | |

## P. Height and weight (Selected child 6-23.9 months and her/his mother)

Interviewer: Request permission of the respondent to measure the height and weight of the randomly selected child ages 6-23.9 months and their mother.

| | | Codes |
|---|---|---|
| P1 | Write the NAME of the randomly selected child aged 6-23.9 months from Table 1 in Section H | Name_____ |
| P2 | Age of (NAME) from the table **(If the birth date was estimated with the local events calendar, only record the month and the year)** | DAY ..... ☐☐<br>MONTH..... ☐☐<br>YEAR ..... 200☐ |
| P3 | Sex of (NAME) | Male.....1<br>Female …….. 2 |
| P4 | Length of child measured lying down (in centimeters) | ☐☐.☐ |
| P5 | Date measured | DAY ..... ☐☐<br>MONTH..... ☐☐<br>YEAR ..... 200☐ |
| P6 | Result | CHILD MEASURED .....1<br>CHILD SICK .....2<br>CHILD NOT PRESENT.....3<br>CHILD REFUSED .....4<br>MOTHER REFUSED.....5<br>OTHER.....6<br>_____<br>(SPECIFY) |
| P7 | Weight of child and mother weighed ***together*** (in kilograms) | ☐☐.☐ |
| P8 | Weight of the mother ***only*** (in kilograms) | ☐☐.☐ |
| P9 | SPECIFICATION OF WEIGHTING SCALE | Brand: _ _ _ _ _ _ _ _ _ _ _ _ _<br>Model: _ _ _ _ _ _ _ _ _ _ _ _ _ |

| | | | |
|---|---|---|---|
| | **RECORD THE TIME THE INTERVIEW ENDED.** | HOUR..... ☐☐<br>MINUTES..... ☐☐ | |

# Annex 9: Selected Outcome Indicator Comparisons from IPTT

| | Baseline | Project Goal | Endline |
|---|---|---|---|
| Program Goals | | | |
| **Stunting** | 51.9 | 49.8 (-4%) | 36.4 |
| **Wasting** | 15.2 | 14.26 (-5%) | 16.0 |
| **Underweight** | 55.9 | 52.5 (-6%) | 44.2 |
| SO 1 | | | |
| ***Food security*** | | | |
| **Number of months of adequate food provisioning** | 5.2 | 8.0 | 7.5 |
| **Average household dietary diversity score** | 5.1 | 6.0 | 5.9 |
| ***Economic security*** | | | |
| **Whether member migrated for work in last 12 months** | 42.9 | 36.4 | 19.6 |
| **Whether member sold labor in advance in last 12 months** | 15.4 | 12.3 | 3.9 |
| **Whether member took a loan from moneylender in last 12 months** | 48.8 | 28.2 | 21.4 |
| **Average household monthly income (BDT)** | 2,133 | 2,560 | |
| SO2 | | | |
| **Underweight prevalence of children 6-24 months old** | 55.9 | 53.4 | 44.2 |
| **Percent of children 6-24 months with diarrhea in last 2 weeks** | 22.9 | 18.0 | 9.1 |
| **Percent of children 12-24 months fully immunized** | 68.9 | 60.0 | 84 |
| **Percent of pregnant mothers having completed at least 3 ANC visits during her pregnancy** | 16.4 | 18.4 | 58.6 |
| **Percent of households with access to arsenic-free drinking water** | 88.5 | 50.0 | 90.9 |
| **Percent of households using a hygienic latrine** | 10.7 | 60.0 | 60.1 |
| **Percent with access to a latrine** | 85.0 | NA | 96.4 |
| **Percent of households with a latrine for whom the latrine is functioning** | 33.3 | NA | 91.9 |
| **Percent of households with a latrine for whom the latrine shows signs of use** | 97.0 | NA | 94.1 |
| **Percent of households with a latrine for whom the latrine is clean** | 10.7 | NA | 60.1 |
| **Percent of households with a latrine for whom the area surrounding latrine is clean** | 9.9 | NA | 59.8 |
| **Percent of households with a latrine for whom the latrine has an unbroken water seal** | 44.2 | NA | 47.6 |