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SAFETY NETS IN BANGLADESH: WHICH FORM OF TRANSFER IS MOST BENEFICIAL?

Operational Performance of the Transfer Modality Research Initiative

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1. INTRODUCTION

1.1 Background and Objectives of the Study

The International Food Policy Research Institute (IFPRI) and the United Nations World Food Programme (WFP) in Bangladesh are collaborating on an evaluation of the impacts of five alternative safety net transfer modalities on income, food security, and child nutrition in the northwest and southern regions of Bangladesh. The modalities include: (1) food rations only, (2) cash payments only, (3) a combination of food and cash transfers, (4) food rations conditional on attending nutritional behavior change communications (BCC) training sessions, and (5) cash payments conditional on attending the nutritional BCC training sessions. The BCC training sessions cover basic nutrition, control and prevention of micronutrient deficiencies, infant and young child feeding practices, health care, maternal nutrition, and hygiene.

The participants—4,000 ultra-poor women and their 21,600 family members—have been receiving substantial benefits since May 2012. IFPRI is conducting the research, and WFP-Bangladesh is implementing the transfer modalities.

The overall objective of the Transfer Modality Research Initiative (TMRI) is to provide evidence that can be used to streamline the social safety net system in Bangladesh, with the goal of improving the food and nutrition security and livelihoods of the very poor in a cost-effective way. The research will inform policymakers which type of program can best improve the income status and food and nutrition security of the poor and thus be a valuable tool to the government as it prepares its social protection strategy.

The research has the following specific objectives.

1. Measure the impact and cost-effectiveness of transfer methods on these key outcomes:
    a. household income,
    b. household food security, and
    c. child nutrition.
2. Evaluate the process of delivering benefits (that is, transfers and nutrition knowledge) at the operational level and solicit feedback from program participants.

This mid-term report addresses the second objective of the research, which provides program managers with information about implementation and operations. It augments program performance by helping managers identify bottlenecks and resolutions to them in order to make service delivery more effective and programs more successful.

The report is organized in six sections. Following the introduction, Section 2 describes the salient features of the TMRI. Section 3 discusses the data and methodology used for the evaluation. Section 4 provides the findings of evaluation of the TMRI implementation process. Section 5 assesses various aspects of participation in the TMRI, and Section 6 summarizes the findings and offers conclusions.

2. THE TRANSFER MODALITY RESEARCH INITIATIVE: KEY FEATURES

2.1 Research Design

IFPRI designed the Transfer Modality Research Initiative (TMRI) using a randomized controlled trial method of impact evaluation. More specifically, the team followed a cluster-randomized evaluation method using villages as clusters. The design includes a sample of program villages belonging to each of the five alternative transfer modalities (the treatment group) and a sample of non-program villages (the control or comparison group).

The transfer modality research has been implemented in two regions of Bangladesh: (1) rural areas of the northwest region (greater Rangpur district) where poverty and food insecurity rates are high, but markets function quite well and the physical infrastructure is reasonably good; and (2) rural areas of the southern region, where the physical infrastructure is relatively weak and markets do not function very well. In both regions, 3 transfer modalities are tested: only cash, only food, and cash + food. In addition, nutrition BCC + cash modality is tested in the northwest region because infrastructure conditions—and, subsequently, access to markets—are better in that area, so cash is assumed to work well there; nutrition BCC + food modality is tested in the southern region where access to markets is relatively poor.

During the sampling, upazilas and villages with community nutrition programs by other stakeholders like BRAC, Save the Children, CARE, and WFP were dropped.[1] This was done to avoid the likely spillover effect from other community-based programs on the villagers, which could skew the findings from the current interventions (namely, the BCC nutrition training sessions).

For the northern region, the selection process for the treatment and the control groups includes the following steps.

- From the list of all upazilas in the greater Rangpur district (consisting of 35 upazilas), five upazilas were randomly selected for the four modalities of the research—(1) food only, (2) cash only, (3) food and cash combination, and (4) cash conditional on attending nutrition BCC training. The upazilas in the north include Gangachara, Phulbari, and Pirgachha in Rangpur district; and Pirganj and Rajarghat in Kurigram district.

- The team then prepared a list of all villages (clusters) in the five selected upazilas. From the list, 250 villages (5 upazilas x 50 villages) were randomly selected. Treatment and control villages were randomly assigned among the 250 selected villages (50 villages per treatment arm and 50 villages to serve as the control group for each of the four treatment arms of the research).

- A complete village census was carried out in each of the 250 selected villages. The census questionnaire collected information on household demographics (for example, the age and

[1] The administrative structure of Bangladesh consists of divisions, districts, upazilas, and unions, in decreasing order by size. There are 7 divisions, 64 districts, 484 upazilas, and 4,498 unions (all rural). There are 87,320 villages in rural Bangladesh.

sex of household members), a set of poverty indicators, and participation in safety nets and other targeted interventions.

- The census results were used to randomly select 10 households from each cluster (for a total of 5,000 households). The selected households had to match the following criteria: poor (determined by poverty indicators), have at least one child age 6–24 months, and not receiving benefits from any other safety net interventions.

The same method described above was used for selecting the treatment and control groups in the southern region. The upazilas in the south include Bauphal, Bhandaria, Char Fasson, Dacope, and Fakirhat (in Bagerhat, Bhola, Khulna, Patuakhali, and Pirojpur districts).

Figure 2.1 shows the selected upazilas in the north and the south in the map of Bangladesh.

2.1.1 Total Sample Size

a) *Treatment for each of the four transfer modalities and one control in the northern region:* 250 clusters and 2,500 households (10 households per cluster; 2,000 treatment households + 500 control households)

b) *Treatment for each of the four transfer modalities and one control in the southern region:* 250 clusters and 2,500 households (10 households per cluster; 2,000 treatment households + 500 control households)

c) *Total sample size:* 500 clusters (400 treatment and 100 control clusters) and 5,000 households (4,000 treatment and 1,000 control households)

After selecting the treatment households (that is, those with TMRI participants) and control households for each of the modalities being evaluated, IFPRI provided WFP with the list and locations of the selected households so that WFP could implement the TMRI.

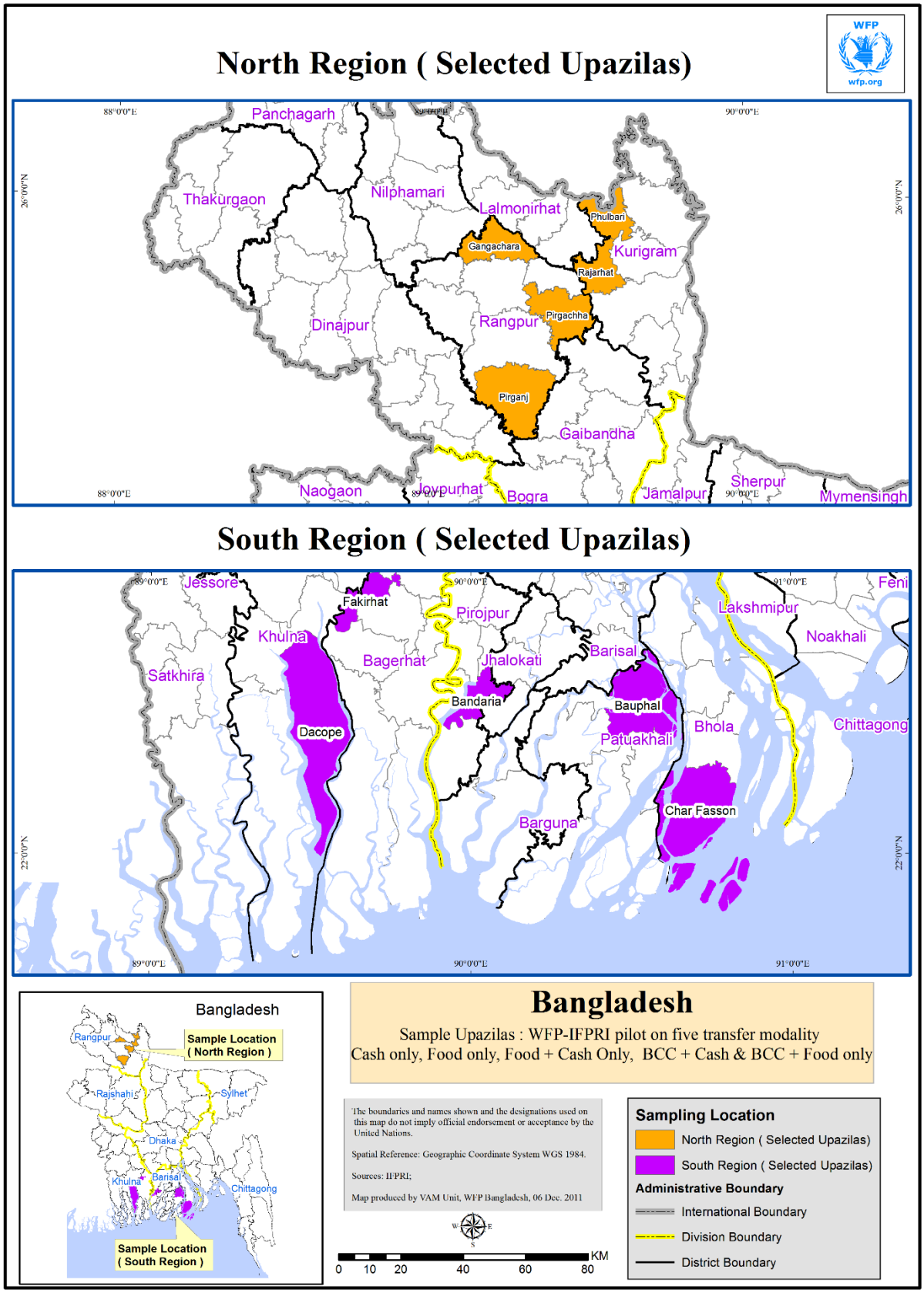
The quantitative impact evaluation involved three rounds of comprehensive household surveys of TMRI participants in treatment villages and non-participants in control villages. The first survey was designed as a baseline, to be conducted just before the start of transfers. The second follow-up survey will be conducted 12 months later, shortly after the first year of transfer distributions are completed. The third or the "end-line" survey will be conducted 24 months after the first transfer distributions took place in May 2012.

The research takes advantage of the longitudinal dataset that will emerge from the two rounds of surveys, enabling researchers to construct difference-in-differences (or double difference) impact estimates—meaning, they will determine the difference between the change in the treatment group and the change in the control group. Details of this impact evaluation method can be obtained from the TMRI design document (IFPRI and WFP 2012).

2.2 Description of the Transfer Modalities

Because the size of the transfer relative to household income is tremendously important in achieving sustainable food-security or livelihood improvements, the value of transfer-per-household within the treatment group was fixed at 1,500 taka (US$18.30) per household per month during the design phase of the TMRI. This is equivalent to around one-quarter of the average monthly household consumption expenditures of poor rural households in

Figure 2.1 Map of Bangladesh showing TMRI upazilas in the northwest and the southern regions



Bangladesh.[2] For cash transfers, the same value will be used throughout the research period. For food transfers, the food ration value is fixed at 1,500 taka at the beginning of the research and the resulting food *quantities* are maintained throughout the research period.

Most social safety net programs in Bangladesh target women, so the transfers in the TMRI would be made to women only. The women are considered the program participants and their families are the beneficiaries. The transfer's overall impact would be evaluated at the household level (with regard to income and food security) and the individual level (with regard to nutrition).

WFP is responsible for the implementation of the research initiative and for delivering the alternative benefits (described below) to the women and their households.

- ***Cash only:*** Cash is transferred to participants during the second week of every month, primarily delivered to the women via a new mobile phone cash-transfer system.

  NOTE: *The mobile phone cash transfer system is enabled by the women's possession of a mobile phone handset and SIM card. Accordingly, WFP made the provision for the distribution of mobile telephone handsets to all women in the program—the recipients of cash as well as food transfers—to ensure that the total value of program benefit is equal across all treatment arms. This strategy preserves the integrity of the experiment. In addition, mobile telephone handsets were distributed to the households in the comparison group as well to avoid introducing any inadvertent bias. Section 4.2 presents a detailed description of the mobile phone cash transfer system.*

- ***Food ration only:*** Food rations are transferred to participants during the second week of every month and include rice, pulses, and cooking oil. Based on nutrition standards and the current market prices of these three commodities, the composition and quantity of the monthly food ration are 30 kilograms (kg) of rice, 2 kg o*f mosoor* pulse (a type of lentil), and 2 liters of micronutrient-fortified cooking oil. A partner NGO would distribute the ration to the women at the distribution site nearest to their homes once a month on the same designated week as the cash transfer.

- ***Food and cash combination:*** The total transfer is a combination of 50 percent food and 50 percent cash. The monthly food ration therefore consists of 15 kg of rice, 1 kg of *mosoor* pulse, and 1 liter of cooking oil; the monthly cash transfer is 750 taka.

- ***Cash conditional on attending nutrition BCC:*** A monthly cash transfer of 1,500 taka per household is given to the selected female participants who regularly attend the nutrition BCC training sessions designed by IFPRI and WFP and imparted by a partner NGO. The BCC training sessions cover basic nutrition, control and prevention of micronutrient deficiencies, infant and young child feeding practices, health care, maternal nutrition, and hygiene.

[2] An IFPRI study in Bangladesh (Ahmed et al. 2009) concludes that the size of the transfer relative to household income is tremendously important when trying to achieve sustainable improvements in the food security and livelihoods of the poor. The study shows that transfers account for about 16 percent of total household consumption expenditures for participants of the Vulnerable Group Development (VGD) program, which has historically been the dominant safety net program in Bangladesh. The transfers account for about 30 percent of total household consumption expenditure of participants of the Rural Maintenance Program (RMP), a national safety net program targeted specifically to women. For the TMRI evaluation, the transfer amount is relatively higher than the amounts used in these dominant safety net programs, in order to be able to detect sizable impacts on outcome indicators.

- ***Food ration conditional on attending nutrition BCC:*** This is similar to the previous benefit, except substituting a food ration instead of cash. A monthly food ration of 30 kg of rice, 2 kg o*f mosoor* pulse, and 2 liters of micronutrient-fortified cooking oil is provided to selected women who regularly attend the nutrition BCC training sessions designed by IFPRI and WFP and imparted by a partner NGO.

  NOTE: *A broad communication strategy focused on education and behavior change (or support of behavior change) at the household and community level was developed. The behavior change communication (BCC) strategy involved four different activities: (1) group BCC trainings with the participants (that is, cardholders in the food + BCC or cash + BCC groups), (2) group BCC trainings with participants and other influential family members, (3) group meetings for community members, and (4) household follow-up visits to the participants' homes.*

  The participants attend the group meetings for cardholders once per month on the scheduled day of food or cash distribution. At the conclusion of the group training, individuals identified as needing further support receive individual counseling from the community nutrition worker on an as-needed basis. The BCC participants receive food/cash a few hours after the non-BCC participants. This serves to minimize the "spill-over effect" of the women sharing knowledge with non-BCC participants.

  The participants are also involved in family group meetings, which are scheduled once per week. They receive BCC messages alongside their mother-in-laws any other pregnant or lactating women in the household, their fathers, and any other influential family members in order to create a supportive household atmosphere and behavior change at the household level.

  The community nutrition workers delivering the BCC training also visit the cardholders in their homes twice per month in order to observe household level practice and encourage the adoption of positive behaviors.

  The participants in the BCC treatment arms receive their food or cash on the condition that they attended the training (specifically, the once-per-month training for cardholders only). Holding the group training session on the day of distribution encourages attendance. Each absence is treated on a case-by-case basis. In the case that participants are ill or otherwise unavailable, the community nutrition worker is advised to provide follow-up counseling at the household as soon as possible to ensure that all participants receive that week's BCC messages.

2.3 Roles of the Research Initiative Partners

International Food Policy Research Institute: IFPRI conceptualized the safety net transfer modality research and is responsible for evaluating the research initiative using the randomized design, which is considered the "gold standard" of impact evaluation. IFPRI research activities include: designing the surveys (baseline survey, mid-term process evaluation survey, follow up survey after the first year and end-line survey after the second year of transfer distributions); analyzing the survey data; preparing research-based reports; and disseminating research findings.

World Food Programme: WFP is responsible for the overall planning, management, and implementation of the operational component, including procurement and delivery of transfers

and nutrition BCC training and monitoring. WFP field offices (Rangpur in the northern region and Khulna in the southern region) are coordinating activities at the ground level.

Data Analysis and Technical Assistance Limited: DATA is responsible for collecting the field-level data for the research initiative under IFPRI's guidance and supervision. Their activities include: conducting training of survey enumerators together with IFPRI researchers; conducting village census for selecting beneficiary and control households; administering baseline, mid-term, and end-line surveys; entering and cleaning data; and delivering datasets to IFPRI for analysis.

Eco-Social Development Organization: ESDO is the partner NGO responsible for the field implementation of the transfer modalities, including undertaking monthly food and cash distributions and regularly delivering the nutrition BCC training sessions according to the research initiative's design specifications. ESDO has an agreement with an authorized bank (Dutch-Bangla Bank Limited) for the transfer of cash through mobile phones. The NGO also performs monitoring and reporting activities as per the field-level agreement with WFP, which provides necessary guidance and supervision.

Technical Committee: The Technical Committee provides guidance on the research initiative and is chaired by the secretary of the Ministry of Disaster Management and Relief (MDMR). The rest of the committee consists of representatives from the Economic Relations Division of the Ministry of Finance; the Food Planning and Monitoring Unit of the Ministry of Food; the Department of Women Affairs of the Ministry of Women and Children Affairs; the Institute of Public Health and Nutrition of the Ministry of Health and Family Planning; the Department of Primary Education; the Local Government Engineering Department of the Local Government Division; the Bangladesh Bureau of Statistics; IFPRI; and WFP.

The overall management and coordination of the research initiative are being undertaken by WFP in close coordination with IFPRI.

3. METHODOLOGY AND DATA FOR THE MID-TERM PROCESS EVALUATION

A comprehensive evaluation exercise pays attention to four critical elements: an assessment of provision, utilization, coverage, and impact of new services (Habicht, Victora, and Vaughan 1999). The first three elements (provision, utilization, and coverage) can be thought of as exercises in assessing how well the project succeeds in delivering goods and services to the target populations. *Provision* refers to the intended availability of new services, such as food or cash. *Utilization* implies the measurement of the rate of use of these services, such as acquisition of food and nonfood items through cash transfers by program participants. The issue of *coverage* asks whether the target population is being reached—for instance, what proportion of the listed participants has received the transfers and nutrition BCC training.

Collectively, this work goes under various names: operations research, process evaluation, monitoring, performance evaluation, or formative evaluations (Carletto and Morris 2001; Habicht, Victora, and Vaughan 1999; Rossi and Freeman 1993). We refer to it as *process evaluation*, which can be invaluable in opening the "black box" of programs and shedding light on how and why certain impacts are achieved (fully or partially) or not.

IFPRI complements its engagement in impact evaluation with real-time monitoring and operations research, which provides program managers with invaluable information about implementation and operations. This helps managers identify and address bottlenecks so that services can be delivered more effectively and programs run more successfully. IFPRI has used such techniques in a number of evaluations, including studies of Bangladesh's school-feeding program (Ahmed 2004), food-for-education program (Ahmed and del Ninno 2002; Ahmed and del Ninno 2005), and comparing food and cash transfers (Ahmed et al. 2009). These techniques have also been employed in evaluations of conditional cash transfer programs in Honduras and Mexico; food assistance in Haiti (Loechl et al. 2009); the WFP cash transfer pilot program in Malawi; and a food vs. cash study in Sri Lanka.

3.1 Process Evaluation of TMRI

IFPRI collected information for the mid-term evaluation of the TMRI from October to December 2012. Researchers used both quantitative and qualitative methods to collect information about the process of TMRI planning, implementation, and participation by transfer recipients. Moreover, the mid-term evaluation has been supplemented by program monitoring data routinely collected by WFP and its implementing partners.

A quantitative household survey was carried out for the TMRI process evaluation in October 2012. In this survey, 1,000 households (800 TMRI participants and 200 non-participant control households) were randomly selected from the baseline sample of 5,000 households. These 1,000 households came from 250 villages: 125 from the north and 125 from the southern region. From each village, four households were randomly selected for the mid-term survey.

Data Analysis and Technical Assistance Limited (DATA), a Bangladeshi consulting firm with expertise in conducting complex surveys and data analysis, was contracted by IFPRI to

implement the household survey. DATA worked under the supervision and guidance of IFPRI researchers.[3]

Qualitative research was conducted with TMRI participants, non-participant community members, and implementing partners (WFP and ESDO) during November and December 2012. It was carried out by IFPRI researchers and qualified qualitative field researchers. Open-ended questions were asked in key informant interviews and focus group discussions to determine whether women and men prefer cash or food transfers and why; how they perceive their well-being; whether the transfers have made any difference in their livelihoods and, if so, how and why; whether the BCC training component of the TMRI has made any difference in their livelihoods and, if so, how and why; whether cash and food transfers affect the social/community relations between beneficiaries and nonbeneficiaries within the communities; and other details. IFPRI researchers also conducted key informant interviews and focus group discussions with program administrators, service providers, local government officials, school teachers, community and religious leaders, and others.

[3] During the past two decades, DATA has carried out all IFPRI surveys in Bangladesh, including more than 40 household surveys and several market, school, and other institutional surveys. Besides IFPRI, DATA's excellent reputation has earned them numerous contracts from various international organizations, including the World Bank, the World Food Programme, Tufts University Friedman School of Nutrition Science and Policy, IRIS Center at the University of Maryland, University of Sydney, University of Waikato in New Zealand, University of Bath, IDS at the University of Sussex MISEREOR, the Population Council, Save the Children (USA), CARE, and the US Department of Agriculture.

4. THE PROCESS OF TMRI EVOLUTION AND IMPLEMENTATION

This section first presents the rationale and a chronology of the evolution of the TMRI. It then describes the structure of TMRI implementation by WFP. Finally, the section provides the results of the evaluation of the operational performance of WFP and the Eco-Social Development Organization (ESDO) in transfer delivery to program participants and assesses the process of improving the implementation of the nutrition behavior change communications (BCC) component of the TMRI. Information from IFPRI's quantitative household survey and qualitative field research, as well as WFP's monitoring and progress reports was used for the evaluation.

4.1 Rationale and Evolution of TMRI

Although research on cash transfers and food transfers has increased considerably, compelling studies that directly compare their relative impacts in the same setting remain limited. In Bangladesh, an IFPRI study examined the efficacy of food- and cash-based interventions in enhancing the food security and livelihoods of the rural ultra poor by evaluating four national programs (Ahmed et al. 2009). As noted by the authors, however, a limitation of the study design was that the four programs differed from each other along a number of dimensions, including the value of the transfers, the requirements that beneficiaries had to fulfill in order to obtain them, and the extent of complementary forms of assistance like savings and credit. These program features and contextual factors influence the effects of food and cash transfers on household income, food security, and child nutrition. Therefore, the question remains: What makes a more effective social safety net program in Bangladesh: transfers of food or cash?

In order to provide definitive evidence on the relative benefits and drawbacks of different transfer modalities at improving livelihoods and food and nutrition security of the poor in Bangladesh, IFPRI designed a pilot intervention keeping all aspects of the intervention the same—value of transfers, frequency of transfers, and payment dates—except for the modality: either (1) cash, (2) food, (3) a combination of cash and food, or (4) cash and food transfers accompanied by a nutrition BCC component. Each modality was randomly assigned so that differences in impacts could be ascribed to modality and not to other confounding factors. IFPRI included this research design in a comprehensive research proposal for the Policy Research and Strategy Support Program (PRSSP) in Bangladesh, which was submitted to the US Agency for International Development (USAID) for a four-year program starting in October 2010. USAID approved the IFPRI research proposal to fund the program.

As originally planned in the research proposal, the funding for IFPRI's TMRI evaluation research was to be provided by USAID under the PRSSP. However, the actual coverage of the TMRI increased significantly beyond what had been planned for in the evaluation's final design, so additional funding was required. At IFPRI's request, the German Ministry for Economic Cooperation and Development (BMZ) through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) provided supplemental funding for the baseline survey. Subsequently, the Swiss Agency for Development and Cooperation (SDC) provided funds to conduct the mid-term process evaluation and to partially cover the cost of the impact evaluation survey at the end of the TMRI's first year.

The design of the TMRI needed an agency for its implementation. The following is a sequence of events leading to the implementation of the transfer modality research by WFP-Bangladesh.

- In September 2010, after IFPRI had submitted the PRSSP research proposal to USAID, Akhter Ahmed of IFPRI met with John Aylieff, who was at that time the WFP-Bangladesh country representative, to explain the concept of the TMRI and explore whether WFP-Bangladesh would be willing to implement the research. Aylieff found the concept interesting and discussed it with his colleagues but left Bangladesh later that month.
- In early October 2010, Ahmed met with WFP Deputy Country Representative Michael Dunford to follow up on the potential for implementation. At Dunford's request, IFPRI prepared a concept note on the transfer modality research and shared it with WFP-Bangladesh.
- In mid-October 2010, Christa Räder arrived in Dhaka as the new Country Representative of the WFP-Bangladesh program. Ahmed met with her, explained the TMRI, and shared the concept note with her. Räder was enthusiastic about the transfer modality research and started exploring funding possibilities to implement the research by WFP (see Box 4.1). In the meantime, IFPRI received comments from WFP-Bangladesh on the concept note and revised it accordingly in January 2011. In February, WFP-Bangladesh received positive feedback on the concept note from its headquarters in Rome.
- In February 2011, at WFP's request, the Food Planning and Monitoring Unit (FPMU) of the Ministry of Food and Disaster Management (MFDM), Government of Bangladesh (GOB) organized a forum where Ahmed and Räder explained the TMRI design to representatives of several relevant government agencies. Initially, the TMRI was to be implemented only in the northwest region (greater Rangpur district) where poverty and food insecurity rates and severity are high, but markets function quite well and the physical infrastructure is reasonably sound. However, the GOB participants of the forum suggested IFPRI-WFP also include the southern region because it is prone to natural disasters and markets do not function very well. Accordingly, IFPRI and WFP redesigned the TMRI to be implemented in both the northern and southern parts of Bangladesh.
- In March 2011, the USAID Mission in Bangladesh hosted a meeting of potential donors to raise funds for the transfer modality research implementation. IFPRI and WFP presented the concept and implementation aspects of the TMRI, and IFPRI revised the concept note based on comments received in the meeting.
- In April 2011, Christa Räder sent the TMRI concept note to the German Ministry for Economic Cooperation and Development (BMZ) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the German federal agency for international cooperation and development. In June 2011, when Räder presented the Bangladesh Country Programme 2012-2016 to the WFP Executive Board in Rome, the representative of Germany made a strong intervention in favor of the TMRI and offered funding for it.
- In October 2011, Räder informed Akhter Ahmed that WFP would go ahead with the implementation since Germany had decided to provide funding to the WFP-Bangladesh country office.
- Upon receiving confirmation from WFP for TMRI implementation, IFPRI started preparing to select participants (treatment) and comparison (control) groups and the baseline survey. From December 21, 2011 to January 23, 2012, Data Analysis and Technical Assistance Limited (DATA)—the survey firm contracted by IFPRI—conducted the village census in each of the 500 selected villages (clusters) belonging to the treatment groups (400 villages) and the control group (100 villages). The census results were used by IFPRI and DATA to select 5,000 households (4,000 treatments and 1,000 control). IFPRI gave the list of selected households to WFP in February 2012, so that WFP could make preparation for transfer delivery to the 4,000 treatment households.
- In February 2012, the Economic Relation Division of Bangladesh's Ministry of Finance signed an operational framework with WFP for the implementation of the TMRI.

- In April 2012, the Government of Bangladesh formed an inter-ministerial steering committee, chaired by the secretary of the Ministry of Disaster Management and Relief, to oversee the TMRI implementation process.
- During February and March 2012, IFPRI and DATA trained enumerators to administer the baseline household survey instruments and completed the baseline survey of TMRI participant and control households.
- By mid-April 2012, WFP completed all arrangements for implementing the TMRI in the north and the south. It contracted an NGO to deliver food and cash transfers (through mobile banking technology) and BCC training, as well as procurement and packaging the food items for delivery. The implementation of the transfers and BCC training began in May 2012.
- The TMRI was formally launched in Dhaka on May 16, 2012, at an event hosted by the Disaster Management and Relief Division, Ministry of Food and Disaster Management. The chief guest, the then State Minister Shirin Sharmin Chaudhury of the Ministry of Women and Children Affairs, and chair, the then Secretary Aslam Alam, Relief and Disaster Management Division of the Ministry of Food and Disaster Management, made remarks that were well-received. WFP Country Representative Christa Räder presented the current safety net situation and new challenges, and IFPRI-PRSSP Chief of Party Akhter Ahmed presented the concept and design of the TMRI. More than 100 guests, including representatives from the government, embassies, NGOs, civil society, UN agencies, and the media attended the launch ceremony.

4.2 The Implementation Structure

To maintain the integrity of the research initiative, it is essential that beneficiaries receive their due transfers in a timely, error-free manner in accordance with the established distribution plan. The transfers and activities must remain standard across all TMRI participants (beneficiaries), and the influence of external confounding factors must be minimized. To ensure this, WFP provides operational oversight on the planning, management, and implementation of the research initiative. The TMRI activities are undertaken at the field level through the Eco-Social Development Organization (ESDO). WFP also takes measures to sensitize and build the awareness of local government, participants, and other stakeholders about the TMRI in order to ensure smooth implementation.

WFP has a strong field presence and a dedicated team for the TMRI to ensure that the activities are carried out to plan and meet the expected standard. A detailed implementation plan ensures timely delivery of the food and cash transfers and nutrition BCC to the participating women, each of whom were issued a participant card and an identification number. A beneficiary identification system exists to ensure that the correct person receives the entitlement. The WFP field team closely monitors all activities, including food and cash distributions, nutrition BCC delivery, and verification of transfer receipt through household visits. These mechanisms ensure that the research is implemented in a controlled environment and the influence of external factors is minimized to the extent possible.

WFP is responsible for procuring the appropriate food commodities and ensuring their appropriate packaging, storage, and quality control. Food is packaged individually, and each food entitlement includes a 15 kilogram (kg) bag of rice, 1 kg bags of lentils, and 1 liter bottle of cooking oil. Individual packaging makes for a more streamlined distribution process. The food (and cash) distribution sites have temporary string fences to encourage orderly lines, and each participant presents a photograph identification card to receive their entitlement.

For cash transfers, mobile phone technology has been introduced with the expectation that it will provide a more secure, efficient, and transparent modality to distribute cash entitlements and reduce the opportunity for leakage. Via ESDO and an authorized bank, WFP introduced this technology with a pilot sample of cash recipients. ESDO and Dutch-Bangla Bank Limited (DBBL, the partner bank) collaborated to conduct training sessions for cash recipients on the use of mobile phones for receiving cash. Each individual beneficiary established a bank account with DBBL, which provides a mobile-based banking service that allows account holders to make transactions. To withdraw cash, an account holder visits a local and mobile DBBL cash-point agent and a series of messages are exchanged between the agent and the account holder through DBBLs central server. This effectively authorizes the electronic transfer of money from the account holder to the cash-point agent's account, who then provides cash in hand to the account holder. The cash-point agents receive Tk 10 in commission per transaction (paid by WFP) for their services.

The following process is followed for the mobile phone cash transfer:

1. WFP transfers the total monthly cash requirement to ESDO's account held with DBBL. ESDO then uploads payment instructions for each TMRI cash-transfer participant's mobile to DBBL, authorizing the individual transfers as per the distribution date.
2. As per the payment instructions, DBBL credits all the individual accounts by debiting ESDO's account at the central level through a batch-process system.
3. The participant receives an SMS notification upon credit of her account. The participant collects her cash on the set distribution date from the DBBL cash-point agent at the ESDO designated distribution site. For this, the participant needs her mobile phone, her account number (which is her phone number plus a check digit displayed on her ID card), and her PIN to undertake the cash out process.
4. A DBBL agent is present at the distribution site. The agent initiates the transactions by entering the participant's mobile account number and selects the "cash out" option from a menu available on the participant's mobile phone. This sends a request to DBBL's server via SMS.
5. The DBBL server sends an SMS prompt to the participant's mobile phone, requesting verification through a four-digit PIN.
6. If the PIN is entered correctly, the DBBL system debits the participant's mobile account for the requested amount. The agent is notified by SMS that the transaction was successful.
7. The agent's account is credited and the agent hands over the cash amount to the participant.
8. The participant receives an SMS confirmation of the cash out and a balance update from the DBBL server to her mobile.
9. ESDO is present at each distribution point. The distribution is randomly cross-monitored by WFP and often attended by local government representatives.

The nutrition behavior change communication component of this research was designed specifically for the TMRI by WFP in consultations with IFPRI and local technical experts. The nutrition BCC provides a holistic approach to the promotion of positive nutrition behaviors in the household. It is targeted at participating women, their family members, and influential community members through group and one-on-one counseling sessions. To ensure the quality of its delivery, WFP ensured a low ratio of community nutrition workers to beneficiaries and regularly monitored delivery services. A timely feedback mechanism and organization of refresher training sessions ensure that the nutrition BCC meets the standard expected.

The government established a Technical Committee to promote efficient research operation, encourage government ownership, and ensure that the findings from the research initiative are used for evidence-based reform of social safety nets. The committee, which consists of representatives from relevant government agencies, provides technical guidance and advocacy. WFP facilitates joint field visits and meetings with Technical Committee members.

4.3 The Implementation Process

4.3.1 WFP's Monitoring Findings

In October 2012, just prior to IFPRI's mid-term evaluation of the TMRI, the sixth round of transfers was completed. At this time, WFP maintained 10–15 percent monitoring coverage in order to cross-check the distributions and activities and undertook additional post-distribution household level monitoring to confirm receipt of transfer. Monitoring is conducted carefully to avoid potentially influencing participant behaviors or entitlement use.

Food Transfers and Physical Cash Transfers

WFP's monitoring reports show no incidence of leakage or loss of food or cash transfers. Because the food commodities are individually packaged, the risk of leakage is reduced. The packaging ensures that each participant receives her full entitlement and makes for easier carrying.

To minimize opportunity cost to the participants, the distribution and training sites are no more than 2 kilometers (km) from the participants' homes. Monitoring reports indicate that the women travelled on average 1.5 km to reach the sites and that participants tended to share a rickshaw van to facilitate the transport of food transfers to their homes.

Mobile Phone Cash Transfers

To preserve the integrity of the research, all 4,000 participants as well those in the 1,000 control households under the TMRI will receive a basic mobile handset (Nokia 1280) valued at approximately US$21 and a Banglalink SIM card, even though the mobile is only required for the participants receiving cash.

At the time of the mid-term process evaluation in October 2012, all TMRI participants (cash and non-cash) in the northwest have already received mobile sets. Households belonging to the control group in the northwest received their handsets in June 2013. In the south, cash participants received mobile phones in a phased approach from early October until the first week of December 2012. The non-cash participants received their handsets from the end of October through December 2012. The control households received their handsets in June 2013.

The pilot of mobile phone cash transfers began in July 2012 with 230 participants in the northwest. Applying lessons learnt, the number increased month by month, focusing first on the northwest then moving to the south. As of October 2012, four rounds of mobile cash transfers had been undertaken to a total of 1,630 participants, according to WFP field monitoring reports. By December 2012, all 2,500 cash recipients in both regions received cash through mobile phones. All participants successfully had their mobile accounts credited through electronic transfer and shortly thereafter withdrew their monthly transfer. The "cash-outs" take place with local agents of partner Dutch Bangla Bank Limited with ESDO partners present to ensure that transactions occur in accordance with the distribution plan and to assist participants as necessary.

The main challenges faced in the mobile transfers include participants forgetting their personal identification numbers (PIN), which are necessary to initiate all transactions. Disruptions in network coverage can also cause delays in cash-out transactions, and participant illiteracy, including numerical illiteracy, caused challenges for the participants when initially operating the handset. The dedication of the DBBL team in partnership with ESDO, the local NGO partner, to help participants and WFP overcome these challenges is to be commended.

Upon registering for the mobile account, participants were trained in orientation sessions tailored to the largely illiterate population to develop awareness on mobile cash transfers. The orientation sessions involved briefing participants on the mobile handset operation, orientation to banking systems and a primary focus on keeping the PINs secret. This training was critical to ensuring a secure and efficient cash-out process. Key messages were repeated at every distribution site, and within 1-3 months the majority of the participants were found to be acquainted with the system.

Some of the benefits of the mobile banking system include improved transparency and security and potentially lower implementation costs. The introduction of the mobile banking system also provides previously "un-banked" participants with the opportunity to access basic banking services. Although due to the controlled nature of the research requiring 'cash-out' of the transfers many of the services were not availed. The transfer of the mobile phones to the participating women provides increased opportunities for communication in regards to contact with family and friends and also in accessing employment and other services.

Nutrition Behavior Change Communication (BCC)

WFP has made significant efforts, to improve the content and delivery of the BCC training modules since their inception. To ensure that women's interests are maintained for the duration of the study, WFP reviewed the BCC delivery mechanism to avoid tiring the women of the training sessions and to ensure they continue to absorb and apply the nutrition information they learn in each session.

The nutrition BCC consists of six modules, which were delivered over seven sessions: (1) overall importance of nutrition and diet diversity for health; (2) hand-washing/hygiene for improving nutrition and health; (3) micronutrients: diversifying diets, Vitamin A; (4) micronutrients: diversifying diets, iron, iodine, and zinc; (5) feeding young children: breastfeeding (6) feeding young children: complementary feeding; and (7) maternal nutrition.

The training plan includes sessions for the women participants (the target audience), as well as combined sessions with the participants' influential family/household members—for example, their mother-in-law. Monthly community level sessions are also held, where community leaders, teachers, religious leaders, and others are encouraged to attend.

Participants received a full cycle of modules by December 2012, at which point the training cycle was repeated but incorporated new methods of delivery in order to keep the women interested to attend.

Positive behavior changes were seen in the participants' households, according to field monitoring reports. Women's hygiene practices improved, including frequency of hand-washing before cooking and eating meals, breastfeeding, and after using the washroom. Women also purchased, or influenced their husbands to purchase, more diverse foods, namely vegetables and proteins, when they could afford it. Participants are aware that these practices are important for improved health and strength and to keep babies and young children growing

properly. Mothers also reported that their children were less susceptible to illness, including diarrhea and colds.

To reinforce positive behavior change, the group training sessions involved real-life examples, discussions, and role playing. In addition, community nutrition workers visited participants' homes in the weeks following sessions.

In its initial weeks, the quality of the nutrition BCC was considered inadequate. During the first distribution of transfers and delivery of nutrition BCC training in May 2012, a joint IFPRI-WFP team visited the TMRI sites in the north and noticed low-quality BCC training due to improperly trained community nutrition workers. A concerted effort was undertaken to address the way trainers were presenting the sessions' subject matter and interacting with the women participants. In June 2012, more community nutrition workers were employed, monitoring and supervision tools were revised, and community nutrition workers and field facilitation officers attended bimonthly refresher courses to improve their own nutritional knowledge and facilitation skills.

Feedback from the field has demonstrated that the BCC training and materials must be simpler, more accessible, and more practical for participants to absorb the messages and apply them. Based on this feedback, further revisions focused on refining the modules by avoiding jargon and technical terms and incorporating a simple, clear connection between improved nutritional behaviors and better health. In November–December 2012, a second round of refresher training for community nutrition workers covered these modifications and further sharpened their delivery skills to strengthen interaction with trainees.

4.3.2 IFPRI Interviews with Officials of Implementing Agencies

As part of the TMRI mid-term evaluation, IFPRI researchers interviewed WFP and ESDO officials. The interviews are summarized below.

Interviews with WFP Officials

WFP staff members were enthusiastic about the project from the beginning. Country Director Christa Räder was specifically interested in objective analysis because "an emphasis on the 'outcome' can lead to implementable policies," she said. The WFP country team worked diligently to secure funds, and in June 2011, Germany pledged considerable resources. Switzerland soon followed suit (see Box 4.1).

Nusha Choudhury (Head, Vulnerability Analysis and Mapping Unit, WFP-Bangladesh) mentioned that she had always been highly impressed with IFPRI's quality of work, primarily the methodologies and data collection techniques the Institute uses. She was concerned, however, that some of the poorest households may be excluded from the TMRI study because of the requirement that participants have a child younger than two. Despite this concern, Choudhury was interested to discover precisely how the nutrition behavior change communication training course, combined with food or cash transfers, would lead to changes in nutritional outcomes. More money or income does not always lead to improvements in child nutritional status, she said, so this study would help practitioners better identify what does.

Rezaul Karim (Head, Program Planning and Implementation Support Unit, WFP-Bangladesh) mentioned that WFP's involvement with programs as unique as TMRI has played a positive role in establishing a credible relationship with the government. He said that the program gave WFP the opportunity to expand their network to include several ministries of the government, such as Food; Disaster Management and Relief; Women and Children Affairs; Education; and

Box 4.1 Christa Räder, WFP Representative in Bangladesh, on Evidence Creation for Social Safety Nets

Christa Räder, World Food Programme (WFP) country representative in Bangladesh, is enthusiastic about objectivity. She worries that ideology dominates dialogue about social assistance programs and that too much emphasis is placed on the input side of safety nets and too little attention on outcomes. "An emphasis on the outcome can lead to policies and programs based on evidence," Räder said in an interview with IFPRI during the mid-term evaluation of the two organizations' collaborative study of what makes safety net programs most effective at improving livelihoods, food security and child nutrition among the poor. According to Räder, the Bangladesh government spends about US$2.5 billion on social protection each year with unfortunately little emphasis and positive impact on nutrition. Safety net programs, especially those which target families with small children need to focus on achieving better nutrition results, she says, and "TMRI [Transfer Modality Research Initiative] is doing that."

Räder's keen interest in creating an evidence base on how to achieve nutrition outcomes through food and cash transfer programs led her to be supportive of the TMRI from the project's outset. Together with her WFP team, she worked diligently to secure funding for implementing the project. When she presented the Bangladesh Country Programme 2012-2016 to the WFP Executive Board, the representative of Germany made a strong intervention in favor of the TMRI and offered funding for it. Initially, however, most other donors were not as receptive. Ultimately, after an inception workshop was held to publicize the merits of the TMRI, the Swiss government pledged substantive resources as well.

Collaboration with the Bangladesh government, Räder pointed out, was also of paramount importance in getting the TMRI off the ground because, "all UN agencies operate within a national context." As the project's initial funding was uncertain, it took WFP a while to bring government officials on board. Once they did become involved, the government formed an interministerial Technical Committee to oversee the implementation of the TMRI. Räder happily acknowledged that the Bangladesh government has typically been more open to discussing and developing new ideas than many other developing-country governments.

When asked about WFP's shift from food aid to cash transfers, Räder clarified that the shift has actually gone from food aid to food assistance, the latter covering a range of transfer modalities, including cash transfers. Therefore, she explained, TMRI is not a deviation from WFP's core strategic plan; in fact, it's particularly important here because Bangladesh is one of WFP's largest development programs.

Other WFP-Bangladesh staffers are excited about TMRI as well, and Räder explained that her team is as ecstatic about research as she is: "They also believe that objective results can influence government policies." But, while decision based on evidence has become a core aspect of the organization's culture, Räder adds that, in general, WFP also has a passionate workforce that is deeply committed to delivering effective programs.

Räder and her team are pleased to be working with IFPRI on the TMRI because the Institute has a solid reputation for producing high-quality, credible work that is not influenced by any external forces. "I get inspiration from research," Räder explained. "I don't want to state that we are doing great without showing the evidence. With TMRI, we are delivering innovative safety nets, and conducting research."

Health and Family Planning. When asked about the choice of commodities, Karim said that WFP needed to strike a balance between price and quality, as per international standards. He explained that rice was procured locally from enlisted suppliers. The tender was floated, suppliers provided samples, and WFP's procurement committee made recommendations. Medium-sized *mosoor*, a popular variety of lentil, was chosen because IFPRI suggested that a less popular type might hamper acceptance and, hence, consumption.

Karim also mentioned that to select an implementing partner for the TMRI study, WFP reviewed proposals from five NGOs. The organizations themselves were then evaluated by the WFP Technical Committee. The Eco Social Development Organization (ESDO) was selected to carry out the project in both the northern and the southern regions because it had an impressive track record in the field, and its management had demonstrated efficiency and integrity.

Hafiza Khan, head of the WFP office in Khulna, told the IFPRI team that WFP is strict about maintaining storage standards. During the initial stage, they carefully supervised the conditions in warehouses and supplied wooden pallets and racks to put food bags on. There are stringent regulations on how to manage a food warehouse, and regular fumigation, moisture control, and other basics are part of routine maintenance.

For two days, experts from the Dhaka office trained ESDO field officers on how to effectively manage a warehouse. Most importantly, they visited every single ESDO warehouse to check whether they were suitable or not and suggested modifications whenever required.

Khan confirmed that, compared to other food-based programs, reselling of food by participants has not been an issue in the TMRI because this is a food package as opposed to one commodity. Moreover, the quality of the products has been really good, so the participants do not want to sell it.

WFP-Bangladesh provided additional support for monitoring the BCC component since delivery at the beginning was unsatisfactory, mainly due to issues with content of training materials and message delivery style of CNWs. Problems with training were frequently informed to the head office. The team, especially Aklima Parvin, the lead nutritionist for TMRI, collaborated with all parties involved to improve BCC standards.

Khan was curious about how the impact of using the mobile phone would be evaluated, since cash was distributed by hand in more than half of the distributions over the first 12 months. Nonetheless, she was glad everyone got a mobile phone. She observed that some beneficiaries felt the need to spend the money on children because they thought they were getting it for them. WFP asked ESDO to make sure beneficiaries do not feel any such obligation.

When asked to comment on ESDO's performance, Khan said they are doing well. They were struggling a bit at the beginning to work efficiently with the government, probably because they did not have a strong presence in the southern areas of Bangladesh. However, their performance has been up to the mark.

Jakir Hossain, WFP senior program assistant in Khulna, reported in an interview with IFPRI that the mobile phone networks used for some of the TMRI cash transfers were not always accessible during distribution times, so beneficiaries have had to wait to receive their entitlement. Hossain was also concerned about the risk of participants selling the mobiles they were given for participation in the TMRI—primarily those receiving food transfers who did not need the mobile to receive their entitlement. At this point, both Hossain and Khan agreed

with IFPRI's Akhter Ahmed that participants' mobile phones should not be replaced if stolen or lost to cut down on potential sale/replacement schemes. It was decided that if a cash participant loses her mobile phone or has it stolen, and does not have a second handset in the household to avail, she should receive the remaining cash entitlements by hand.

Interviews with ESDO Officials

ESDO and WFP collaborated in the field to implement the TMRI. ESDO Executive Director Shahid Uz Zaman told IFPRI researchers that he faced difficulties in hiring competent community nutrition workers to impart BCC training. After the IFPRI team observed the poor quality of BCC training sessions in the northern Gangachara upazila in May 2012, WFP and ESDO planned drastic improvements.

While discussing mobile technology adoption, Zaman described it as an amazing innovation in the development sector of Bangladesh. Managers at the Chars Livelihoods Project (CLP) asked him whether they could visit the field to see how this technology was implemented. "The idea that the very poor cannot adopt such technologies has been proven wrong through the TMRI," said Zaman (see Box 4.2).

Shamsul Haque Mridha, ESDO's project coordinator for TMRI, mentioned that his team was worried about beneficiary selection because it can take a long time and they were working within strict time constraints. The ESDO team was relieved to learn that beneficiaries had already been selected jointly by IFPRI and DATA. ESDO still faced challenges, however, particularly in dealing with local administrators in Fakirhat, Khulna.

Mridha was also concerned after WFP and IFPRI's first field visit in May 2012 revealed that cash and food distributions to both BCC and non-BCC participants were taking place at the same time. This practice is avoided because it can lead to spillover effects—meaning that TMRI participants not attending BCC training might learn from those who are attending the sessions, which, while a side benefit for the individuals, distorts the experimental research. WFP advised ESDO to revise their schedule so that distributions are done separately to minimize interaction.

Mridha said that ESDO was happy to take on the challenge and thought TMRI would be a good learning experience. Executive Director Zaman was so dedicated to the cause that he transferred employees from other active projects to TMRI. WFP notified ESDO relatively late in terms of the project's schedule, so they had very little time to prepare before the first distribution. The team was specifically worried about beneficiary selection because that takes the most amount of time, so when they realized selection had already been done they were relieved. However, once ESDO learned that beneficiaries were selected from areas all over the region, the NGO workers did face the challenge of having to travel long distances to reach them.

The first real issue on the ground was finding TMRI participants quickly enough to create their photo identity cards before distributions began. The major hurdle, however, was convincing local officials to allow TMRI to operate in certain areas. Initially, union council chairmen as well as the upazila administration were not happy with TMRI because they had not been involved in the selection process. This problem was the most serious in Fakirhat upazila in Khulna. Additionally, while recruiting community nutrition workers, ESDO faced pressure from local influential people, who wanted their friends or relatives to be hired. The problems were eventually overcome with WFP's support.

Box 4.2 Shahid Uz Zaman, ESDO Executive Director, on TMRI Implementation

Shahid Uz Zaman started the Eco-Social Development Organization (ESDO) as a community club called *Hojoborolo* in April 1988 during one of the worst floods ever to hit Bangladesh. People in the north were severely affected, so Zaman and some college students in Thakurgaon district helped families by giving them shelter at the school.

Initially, Zaman explained during a TMRI mid-term interview with IFPRI, the informal club used personal funds before transitioning into a formal NGO in November 1988. The group, in the meantime, continued to provide support to flood victims suffering the effects of malnutrition and illness, namely diarrhea. Oxfam assisted them by providing food relief, but there were no official donors until 1991 when the *Palli Karma Shahayak Foundation* (PKSF) sanctioned an official donation for microcredit purposes, which, at the time, was not yet a popular concept. In fact, the first few borrowers returned the money after some days, saying they could not afford the installments. The concept gained popularity over time, however, and, currently, the net profit from microfinance serves as the main source of operational funds for the ESDO.

ESDO first collaborated with WFP in 1998 on the Integrated Food Security and the Vulnerable Group Development programs. WFP has since involved ESDO in several projects in the north, and got in touch with them to submit a proposal for TMRI. ESDO was selected as the implementation partner for both the north and the south. "We were excited about working with a reputed international research organization like IFPRI because we knew we'd be able to learn a lot from the experience," said Zaman. His team was relieved that they did not have to select the TMRI participants, given the project's time constraints.

Zaman recruited people from other food security related projects, and WFP provided tremendous support in the field, which made things easier. ESDO still faced challenges in the field, however, including dealing with local administrators, who wanted a more significant role in the project especially in Fakirhat in Khulna. Some influential local leaders were reluctant to allow the TMRI to proceed without their direct involvement. There was a point when some ESDO staffers were scared to go to those places because of a fear of physical assault. Nevertheless, field officers persistently worked hard to convince local government officials and now feel positive about the project.

Another challenge revolved around setting up BCC training centers, which was difficult since no ready-made structure was available to rent. Around 27 centers in the south had to be changed due to water logging issues. WFP cooperated in many areas to resolve the problem, especially when budget constraints surfaced for ESDO.

ESDO put in a lot of effort to make the BCC component a success, especially for recruiting credible community nutrition workers and training them according to local needs. ESDO used feedback from beneficiaries to judge how well trainers were doing. Aklima Parvin, the lead TMRI nutritionist from WFP, worked diligently with ESDO to improve training quality.

While talking about mobile technology adoption, Zaman pointed out that it is a huge innovation in the development sector of Bangladesh. Other NGOs had asked him whether they could visit the field to see how this technology was implemented. "The idea that the very poor cannot adopt such technologies has been proven wrong through TMRI," claimed Zaman.

To keep benefits equal across all modalities, all TMRI participants received mobile phones and SIM cards even though only participants receiving mobile cash transfers required them. Mobile phones were delivered about halfway through the program. ESDO and the Dutch-Bangla Bank Limited (DBBL) collaborated to conduct training sessions for cash recipients on the use of mobile phone for receiving cash.

TMRI participants adopted the mobile phone cash transfer system well. "Almost 97 percent can use the phone effectively," said Mridha. "Those getting BCC were even more prompt with adapting, since they were used to the process of getting trained."

Ainul Haque, the ESDO north zonal manager for TMRI in Rangpur, provided some insight into local perceptions of the project. He said:

> A religious leader in Radhakrishna village in Pirganj upazila tried to convince some TMRI participants that they were making a big mistake by taking the transfer. One participant, Habiba, started believing she would become Christian if she took the help. Her husband was also reluctant because someone had convinced him that his wife was selected because she is pretty. He said, 'This is why the other poor women were not chosen, but Habiba was.' Habiba had received transfers four times, but withdrew herself from the project thereafter. The religious leader suggested the whole process was suspicious since no government officials were involved, and everything was happening 'too easily,' so there had to be a catch. We were concerned that if the religious leader convinced the whole village, no one from that village would take the transfer. We collaborated with WFP to motivate Habiba and her husband, but it didn't work.

There were a total of three dropouts motivated by fearful religious reasons, according to Haque, "One cash transfer participant refused to take the money for the fear of turning into Christian," he said, "despite family pressure to continue to take project benefits. Her husband even physically abused her to convince her, but she was adamant. When she returned her card she asked us, 'Why would you give me money? One cannot get so much money so easily. This is Christian's money. I cannot take it.' We could not get her back into the program in any way." There were other rumors surrounding the repercussions of accepting transfers, including one that talked of dead bodies being removed from graves and stamped on the back if transfers were taken.

Haque reported that every single BCC session is monitored by ESDO, and CNWs are ranked every month to make sure they are performing up to the desired standards. WFP allowed ESDO to recruit more CNWs in unions with more BCC villages. Haque observed that, in general, it appeared that BCC trained groups are better at grasping contents of training on mobile phone use because they have the mentality of participating in BCC trainings and are used to the process. In certain training sessions, they were made team leaders.

Like their counterparts in the northern region, ESDO South Zonal Manager Moniruzzaman Sohail and his team were relieved that beneficiaries had already been selected by IFPRI and DATA. However, the team encountered some tough questions from some people who were not selected to participate in TMRI, wanting to know why they could not receive assistance despite being as poor as the participants.

Sohail also mentioned the misconception among TMRI participants and their neighbors that accepting transfers meant they would need to convert to Christianity. He did notice a stark difference between those participants who received the nutrition BCC training component and those who did not, stating that the former were less superstitious and the "doors to their brains were open."

Sohail shared some positive stories about the TMRI participants as well as some of the challenges they faced. “One participant’s child was suffering from diarrhea,” Sohail said, referring to a participant in Fakirhat upazila, Khulna. “She consulted a doctor who asked her to give zinc tablets and syrup to her child. She recalled learning about it in BCC, so she didn’t buy the medicine and instead fed her child food items containing zinc and it worked.”

In another instance, after the seventh distribution, Najma, a participant from the combined food-and-cash group, returned her mobile phone and said that she did not want any more assistance. “We feared that other participants would get influenced and back out, so we went to her house and tried to pursue her to change her decision,” Hossain explained. But Najma would not because she believed the TMRI providers planned to take her body away if she died. “We requested the imam of the neighboring mosque to convince her,” Hossain continued. “We also asked a female union council member for help, and she was very cooperative. She went to Najma’s house and said, ‘If your dead-body is taken away, I will take responsibility for it.” Ultimately, Hossain and his team tried to explain to Najma’s husband. “He liked our Muslim greetings and finally came to terms with the fact that [TMRI] might not be a Christian missionary assistance. Najma agreed to continue receiving transfers and took back the mobile phone.”

5. PARTICIPATION IN THE TMRI

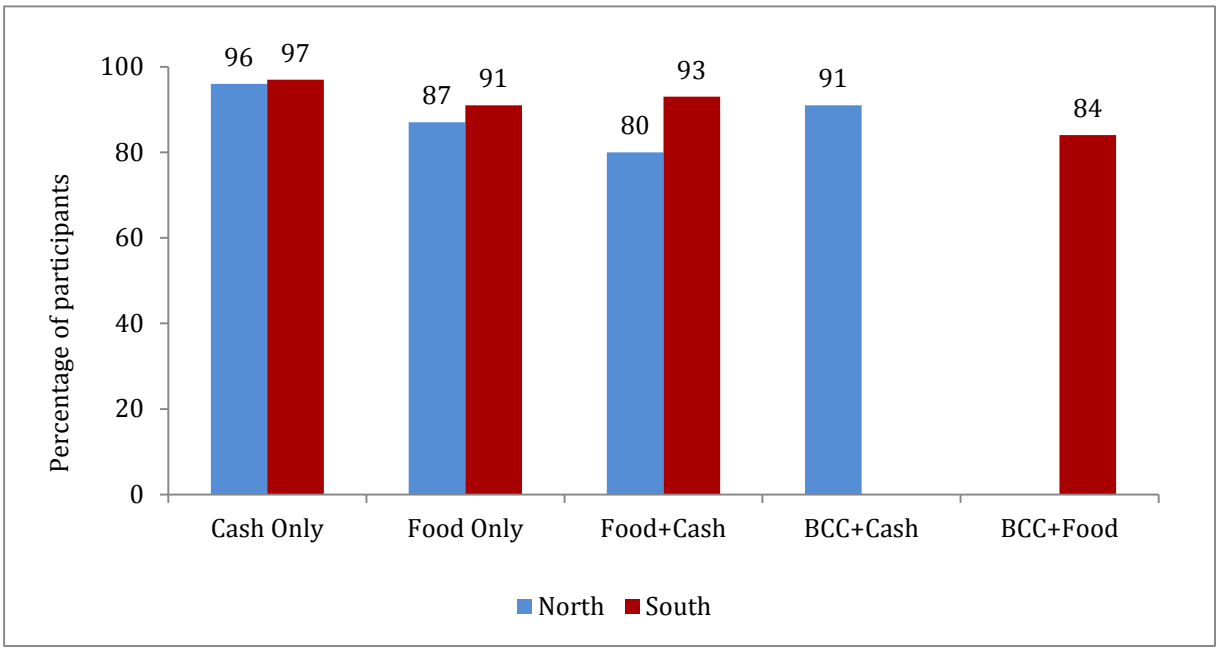
In this section we explain various aspects of the TMRI from the perspective of the women participating in the project, using quantitative information collected in the household survey described in Section 3. We then present qualitative research findings depicting a sample of participants' views about the usefulness of their involvement in the TMRI, attending the BCC training sessions, and changes in their social relations arising from participation in the project.

5.1 Quantitative Research Findings on TMRI Participation

5.1.1 Transfer Distribution Process

ESDO (in consultation with WFP) selected distribution centers in locations that would be convenient for most of the beneficiaries, and an overwhelming majority of participants (both in the northern and southern zones) were, in fact, satisfied with the locations (Figure 5.1). However, participants receiving food were found to be relatively less content with their distribution center's location. The survey results show that participants who were not satisfied with the location cited the difficulty of carrying food as their main reason for dissatisfaction.

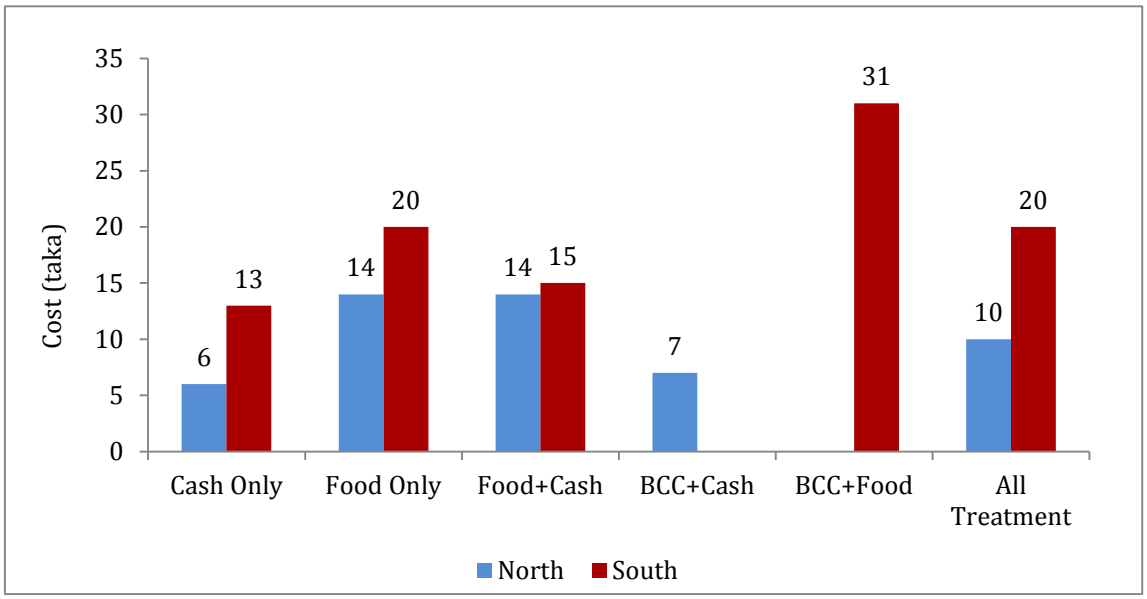
Figure 5.1 Percentage of participants satisfied with their distribution center's location



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

In general, the cost of transportation to the distribution centers was higher in the south than in the north (Figure 5.2). The villages in the south are more widely dispersed, and rural road infrastructure is relatively less developed there than in the north. The data presented in Figure 5.2 also shed light on why food beneficiaries were more likely to be dissatisfied with the distribution center locations—namely because the cost of commuting from the distribution center back home is much higher for food recipients than it is for cash recipients because of the cost of carrying food. However, it is evident from the survey that transport costs are not too high to discourage the participants from coming to collect the transfer.

Figure 5.2 Transport costs to and from distribution center

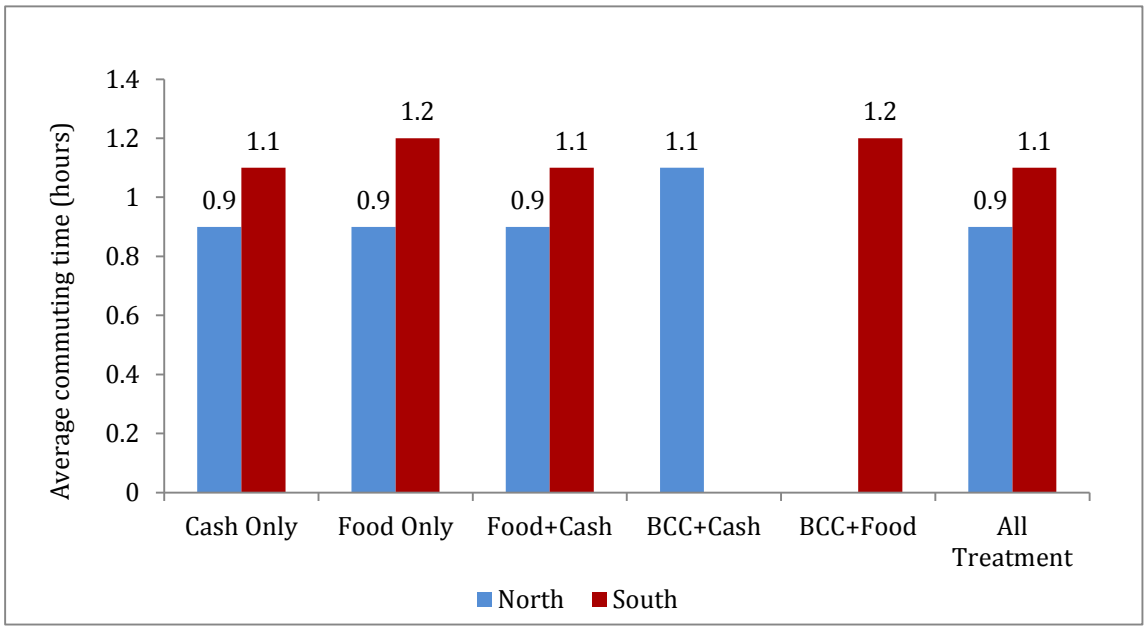


Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

On average, commuting to and from the distribution centers takes roughly half an hour each way, which indicates that the centers are quite conveniently located (Figure 5.3). The commuting time in the south is slightly higher because villages there are more spread out and rural infrastructure is less developed.

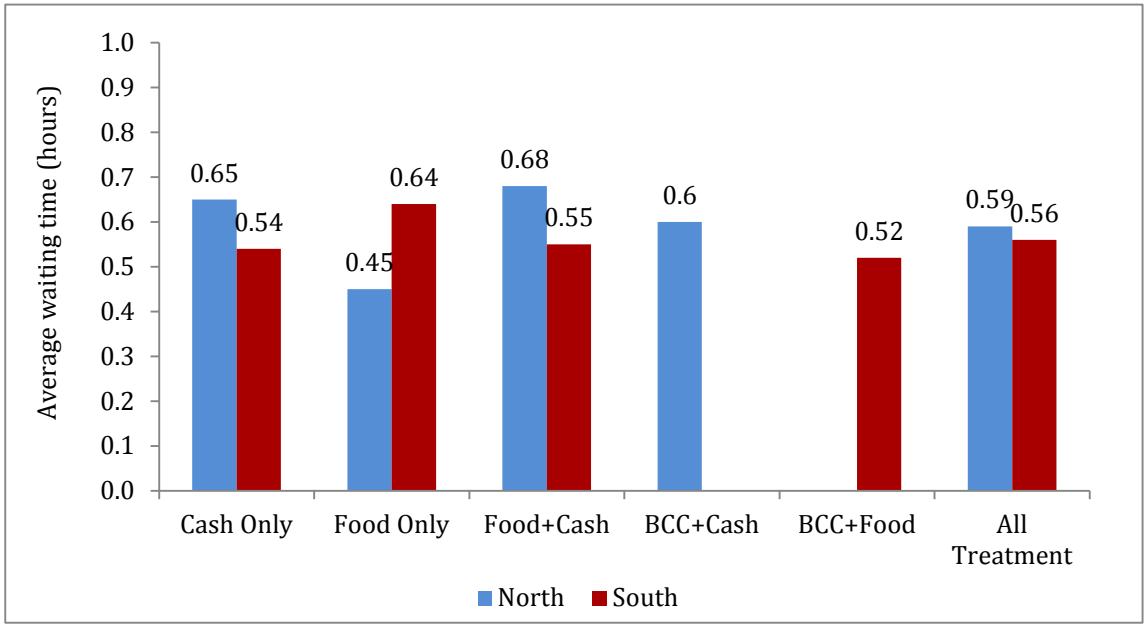
Average waiting time to collect transfers was around half an hour (Figure 5.4).

Figure 5.3 Average commuting time to and from distribution center



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

Figure 5.4 Average time waiting for transfers at the distribution center

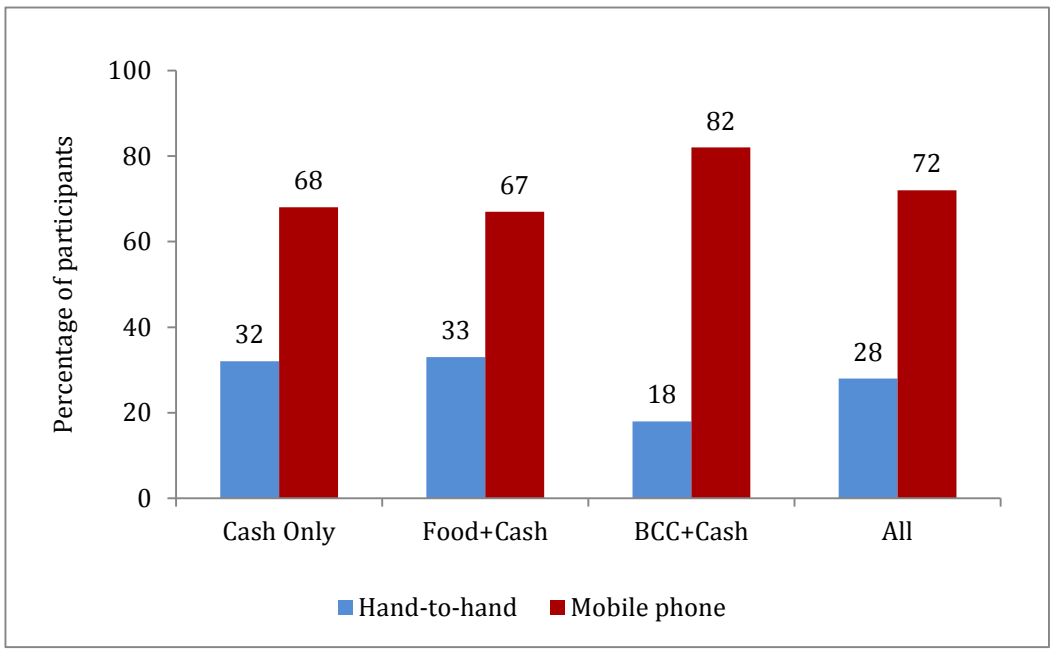


Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

The majority of cash recipients in the north (72 percent) preferred mobile phone transfer of money (Figure 5.5). As the household survey results demonstrate, the main reason for this preference is that the beneficiaries get a free mobile phone in the process. Some others pointed out that with mobile phone transfer, the risk of money getting lost was less.

No TMRI participants in the south had received mobile phones at the time of the mid-term process evaluation, so their preference could not be meaningfully recorded.

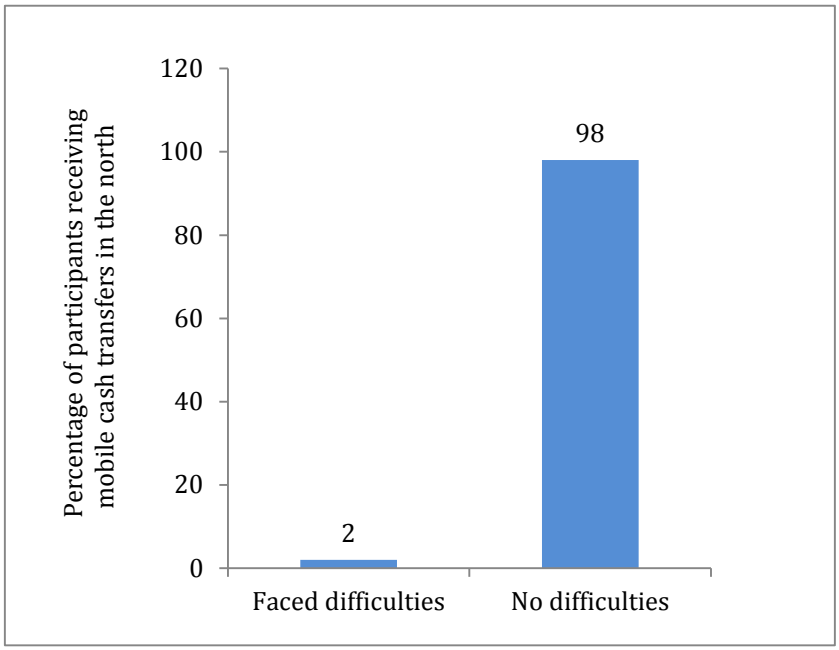
Figure 5.5 Preference for cash transfer through mobile phones versus as hand-to-hand transfer (north only)



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

Nearly all mobile phone users (98 percent) reported that they had not faced any difficulties using the technology to receive cash transfers (Figure 5.6).

Figure 5.6 Responses to whether or not mobile phone users had any difficulties receiving cash transfers



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

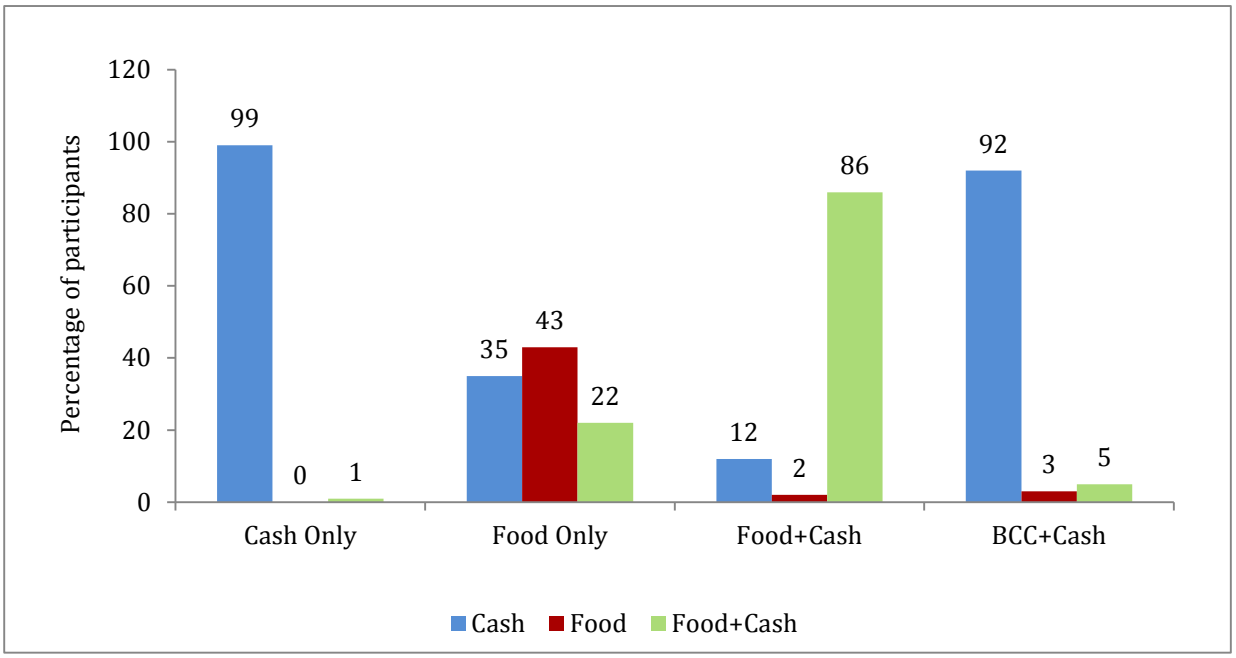
5.1.2 Participants' Preferences for Type of Transfer Payment

The household survey asked program participants whether they preferred only food, only cash, or a combination of food and cash. Figures 5.7 and 5.8 show their preference patterns by region.

Most participants expressed a preference for the transfer type they were currently receiving. In the north, 99 percent receiving cash preferred cash, 92 percent receiving BCC training and cash preferred cash, and 86 percent receiving a combination of food and cash preferred both types. The exception to this adherence was the food-recipient group, in which only 43 percent reported a preference for food (Figure 5.7). In the south, 97 percent receiving cash preferred cash, 71 percent receiving food preferred food, 90 percent receiving BCC training and food preferred food, and 75 percent receiving the combination preferred both (Figure 5.8).

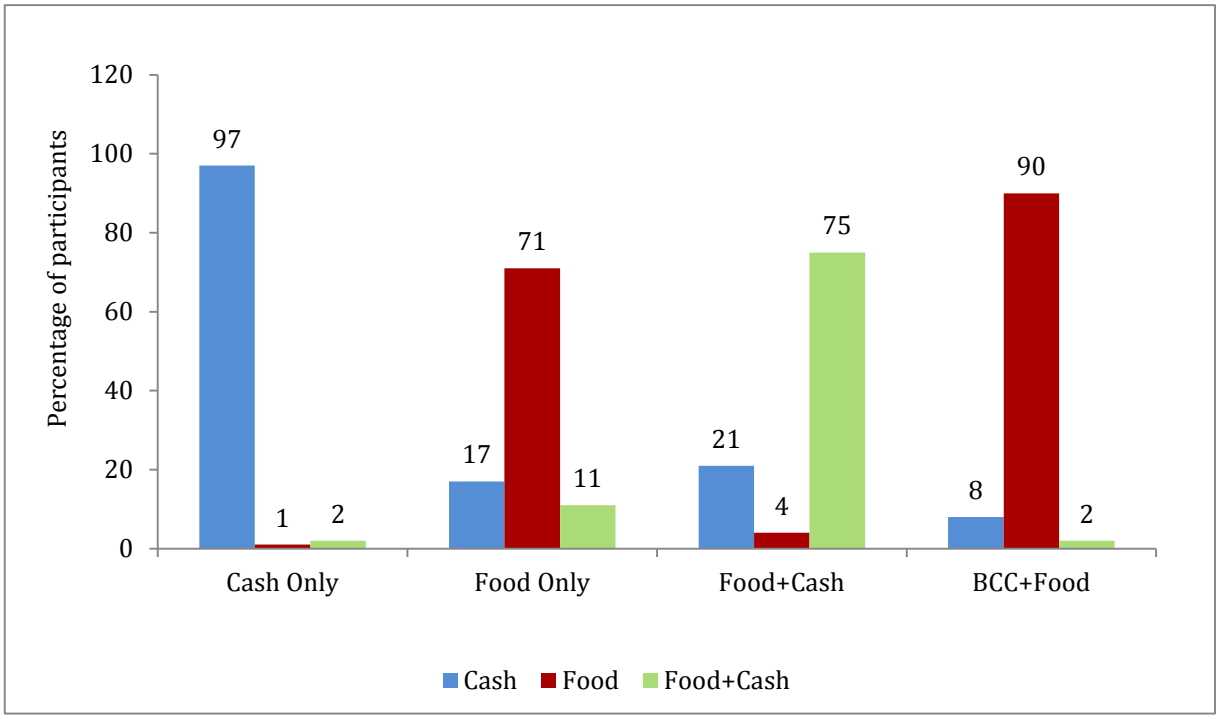
The household survey indicated the following reasons for these results: In both zones, those who mentioned a preference for a combination of food and cash wanted exactly half of each (as opposed to more or less of one over the other). In the north, about 42 percent of the people who preferred cash pointed out that if they received food instead of cash, they would have to sell a portion of the food ration to have money to buy non-food items. Similarly in the south, 36 percent of the people who preferred cash claimed that cash is much more liquid and can be used easily. Around 40 percent of those who preferred food in both the north and south said the ration was better since it supported their family. Lastly, those who showed an affinity for a combination of food and cash stated that the ration was important for food security while cash was important for non-food items.

Figure 5.7 Participants' preference for type of transfer, northern region



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

Figure 5.8 Participants' preference for type of transfer, southern region



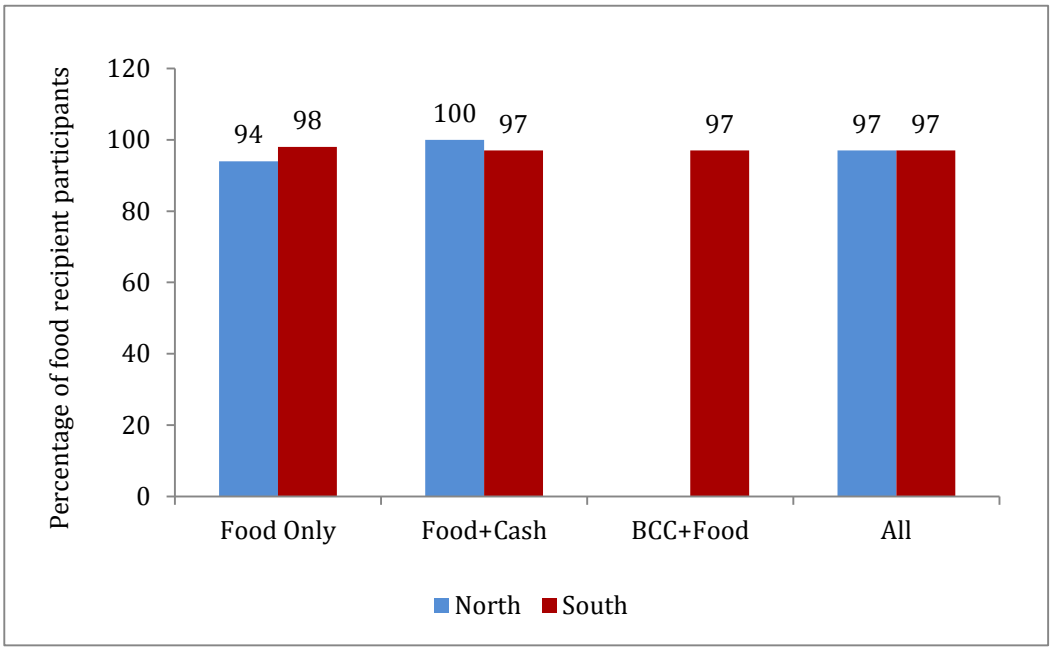
Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

5.1.3 Participants' Use of Transfer

In both regions, almost all participants (97 percent) consumed the entire quantity of rice given to them (Figure 5.9). About 89 percent in the north and 92 percent in the south completely consumed the pulses (Figure 5.10). For cooking oil, the figures varied more across zones: 98 percent consumed it entirely in the south while the corresponding figure for the north is 91percent (Figure 5.11). The household survey results suggest that 8 percent of the food recipients in the north and 6 percent in the south gave a part of their pulse ration to relatives and neighbors. A minimal percentage of food recipients sold the food they received: in the south, about 2 percent of the people said they sold a portion of the pulses, but this was the highest figure reported.

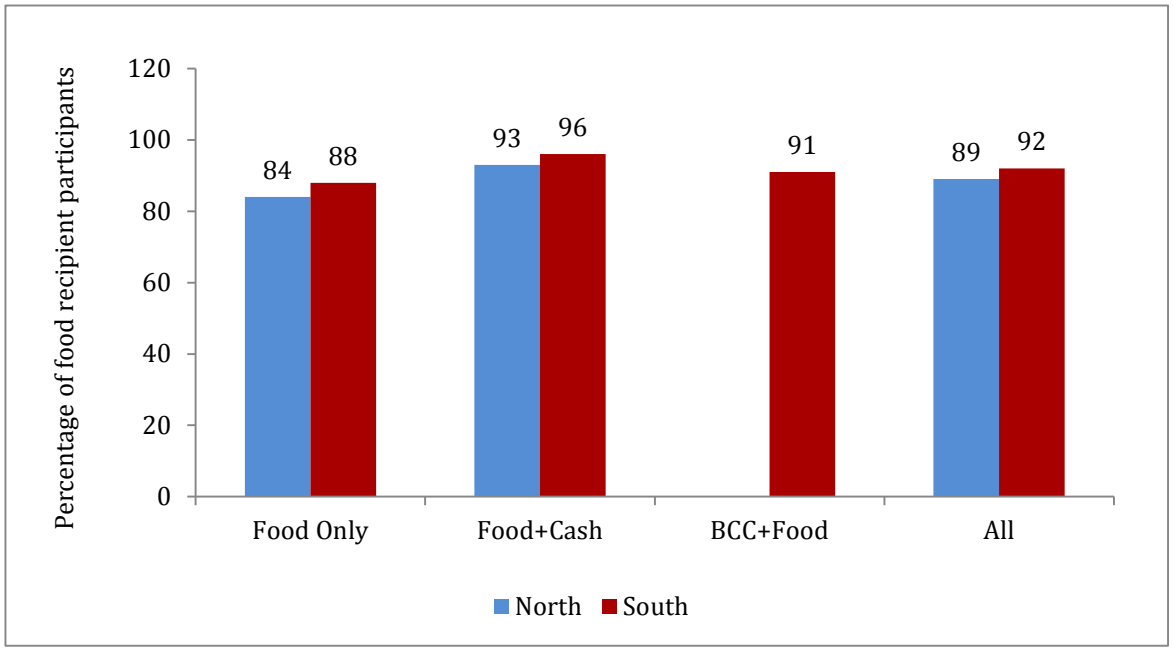
Figure 5.12 shows how the cash transfer recipients used the transfer money. In the north, 81 percent of the cash recipients spent the money on household food consumption; in the south, the corresponding figure is 84 percent. Around one-fifth of the cash transfer recipients in both zones saved a portion of the transfer. A significant percentage—20 percent in the north and 34 percent in the south—spent part of it on health care purposes. About 9 percent of the cash recipients in the north and 14 percent in the south used some of the money for their children's education.

Figure 5.9 Percentage of participants who consumed all of the rice in transfer



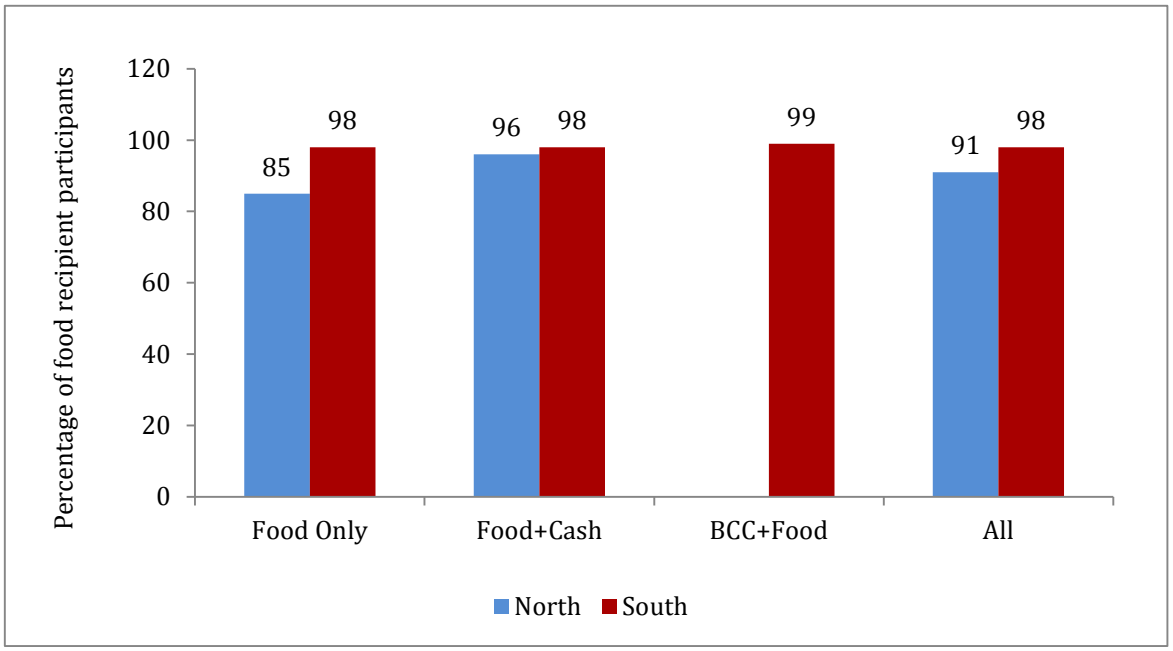
Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

Figure 5.10 Percentage of participants who consumed all of the pulses in transfer



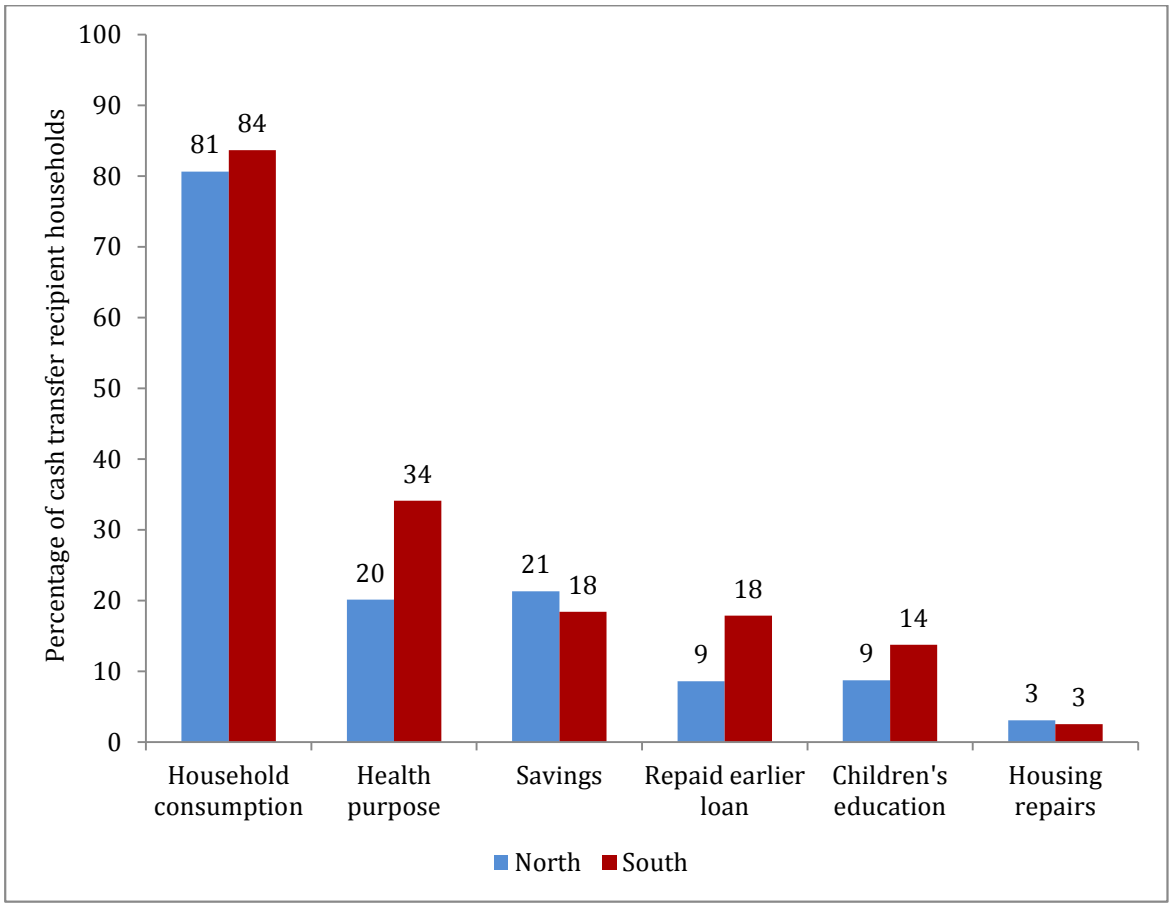
Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

Figure 5.11 Percentage of participants who consumed all of the cooking oil in transfer



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

Figure 5.12 Use of money received by cash-only transfer participants for various purposes by region



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

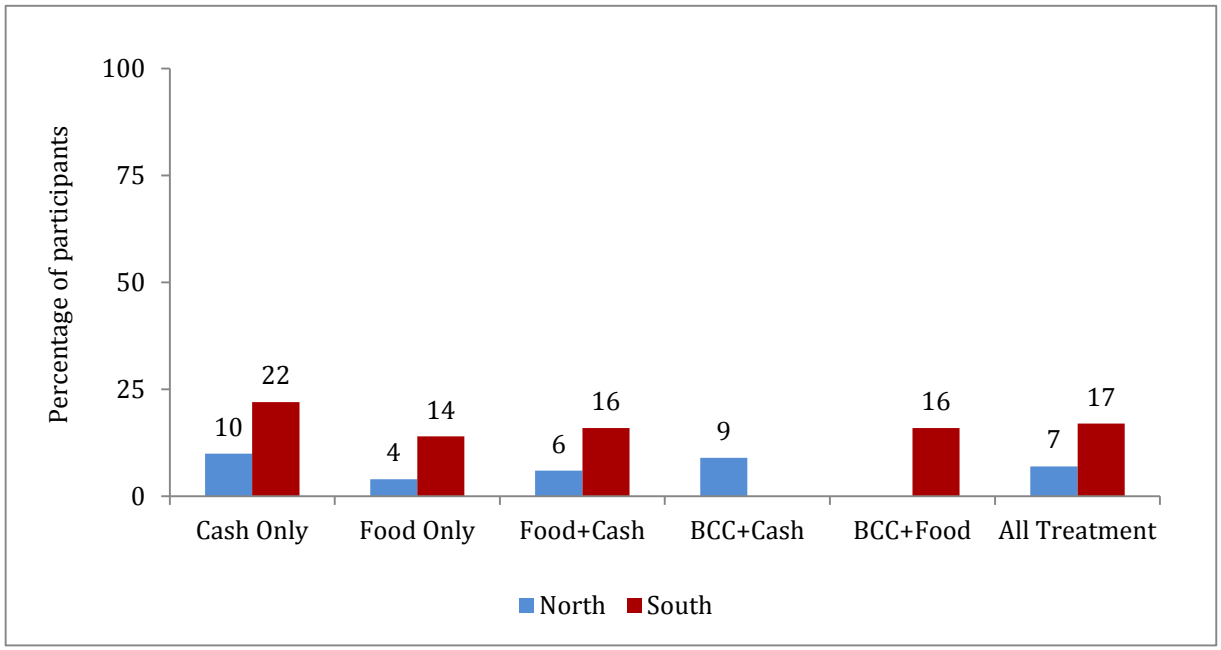
5.1.4 Effects on Private Transfers

Do the TMRI transfers impede participants' ability to receive private transfers? Figure 5.13 shows the percentage of participants reporting a reduction in private transfers owing to TMRI participation. Overall, the negative effect, in terms of remittances received from within and outside of the country, was minimal for TMRI participants in the north. In the south, however, the overall share of participants reporting crowding out of private transfers was 17 percent, ranging from 14 percent for food recipients to 22 percent for cash recipients.

5.1.5 Participation in BCC Training

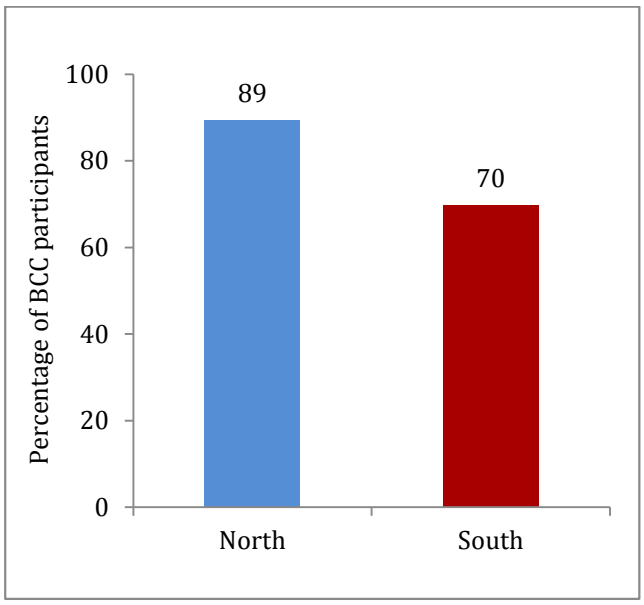
In the north, a majority of participants (89 percent) had attended all available nutrition BCC training sessions as of October 2012—the time of the evaluation household survey (Figure 5.14). The percentage in the south was considerably lower (70 percent). The household survey indicates that illness was a major reason beneficiaries in the south were unable to attend all sessions.

Figure 5.13 Percentage of participants reporting a reduction in private transfers owing to TMRI participation



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

Figure 5.14 Percentage of BCC participants attending training sessions regularly

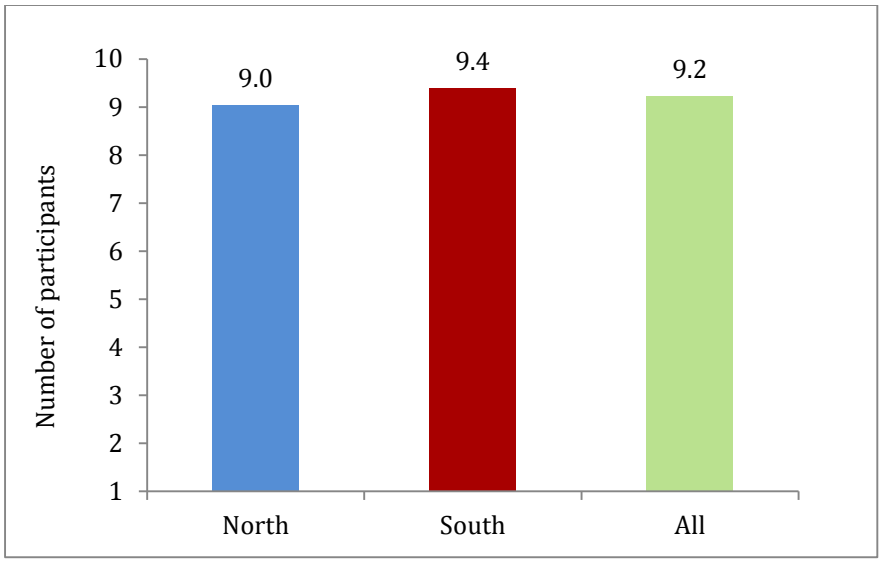


Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

WFP training guidelines stipulate that the community nutrition worker should visit a participant's home if she misses a session. The household survey results indicate that this was adhered to more strictly in the south, where 92 percent of the respondents reported that a community nutrition worker visited them at home if they missed a session.

On average, 9.2 participants attended each training session (Figure 5.15).

Figure 5.15 Average number of participants attending each BCC training session



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

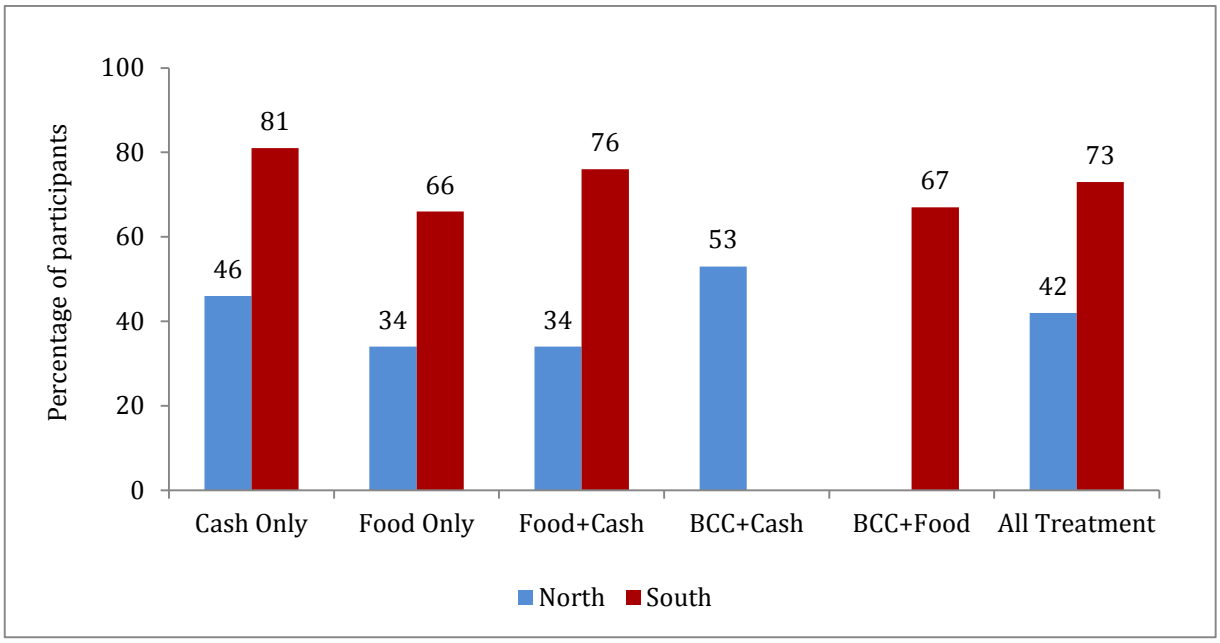
5.1.6 Transfer, Empowerment, and Social Relations

Since the transfer is targeted to women, researchers thought it possible that this could have an effect in the status of participants' family and social life regarding finances, confidence in speaking in public, and mobility. The results of the household survey show that around two-thirds of the respondents in the south reported participating more in making decisions about spending money, compared to 42 percent of participant women in the north (Figure 5.16). About 64 percent of the participants in the south felt they had greater mobility after starting to receive their transfers compared with only 37 percent in the north (Figure 5.17). Again, in the south, 70 percent of participants felt their status within the household had improved as a result of the transfer compared with only 49 percent in the north (Figure 5.18).

Although the results indicate that women in the south felt more empowered and that their status had improved because of participation in the TMRI, caution is warranted when comparing differences between these results and those in the north. A greater increase in the empowerment of women in the south does not necessarily mean that women in the north were less empowered. It could mean that a greater number of women in the north already felt empowered prior to their participation in the TMRI.

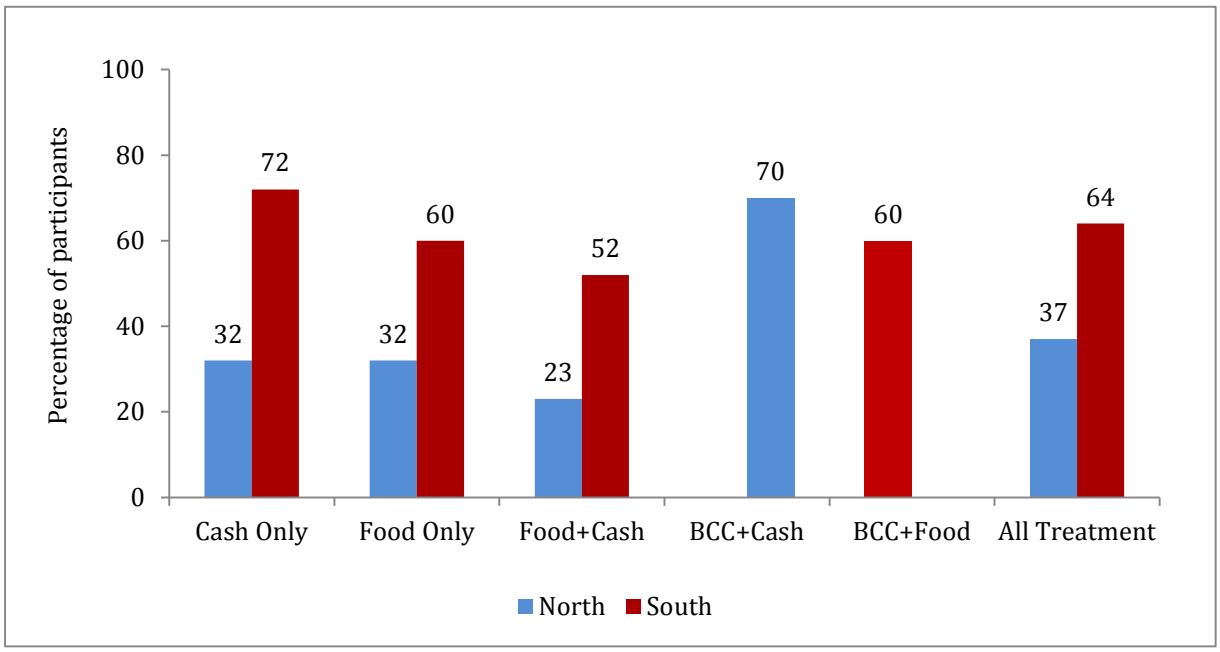
In the north, a greater percentage of women receiving BCC training reported feeling more empowered in the aspects mentioned above. The results in the south do not provide enough evidence to conclude that women receiving a particular type of transfer are benefiting more than others.

Figure 5.16 Percentage of participant women who feel more confident about spending money as a result of the transfer



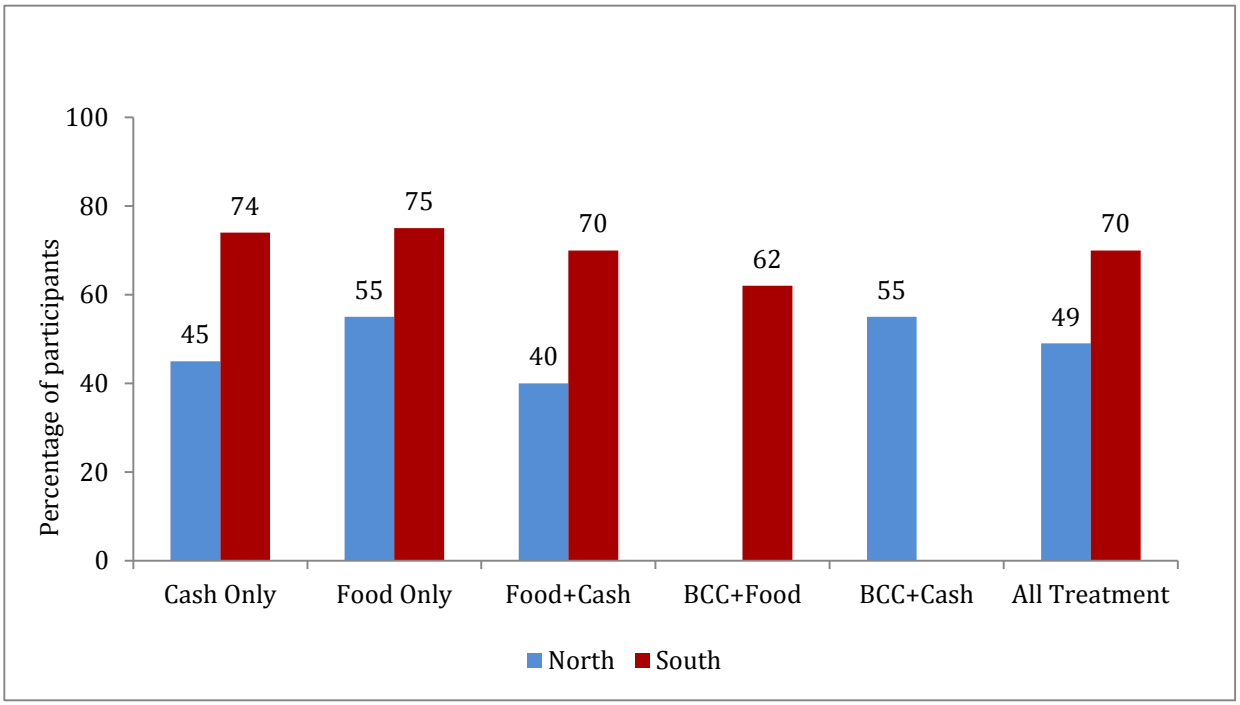
Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

Figure 5.17 Percentage of participants who feel they have greater freedom of movement as a result of the transfer



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

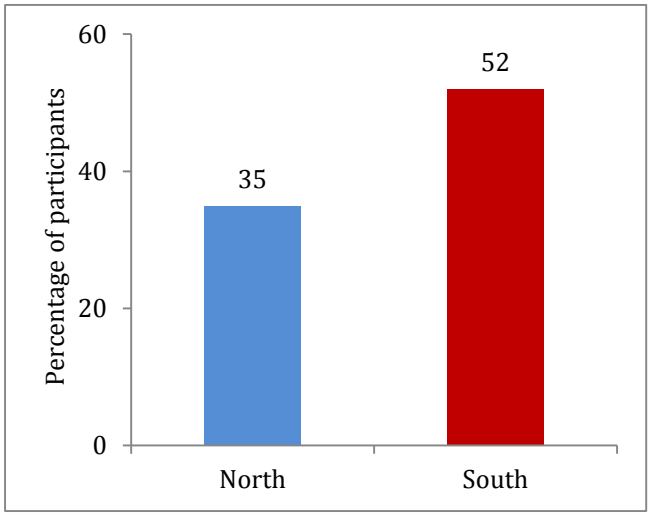
Figure 5.18 Percentage of participants who feel that their status within the household improved as a result of the transfer



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

A number of participants reported that they felt more respected within the community after they started to receive their transfers; a greater percentage (52 percent) of those women were from the southern region (Figure 5.19). A possible explanation, further supported by the qualitative research findings in the next section, is that the participants may have previously had to borrow various items from friends and neighbors, which they no longer had to do after receiving transfers. Thus, they no longer felt obliged to anyone anymore, which led to an increase in their self-esteem.

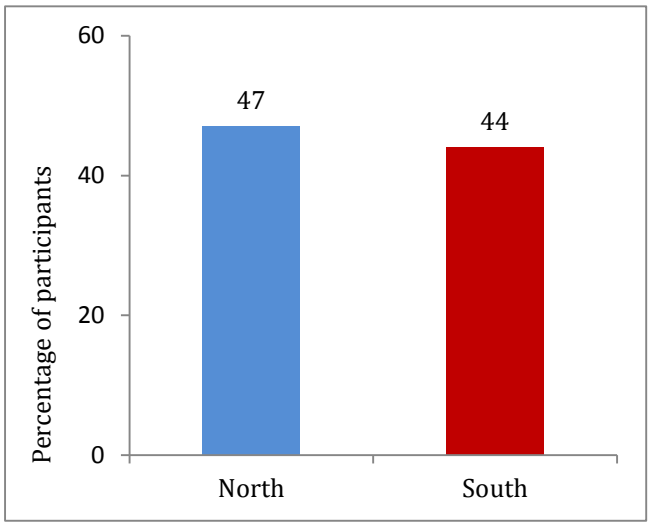
Figure 5.19 Percentage of participants who feel that their social status in the community has improved as a result of the transfer



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

The experimental design of the TMRI is such that a number of people who are eligible to receive the transfer were excluded from participating. Thus, some dissatisfaction among those who did not receive the transfer may be expected. It is not too surprising, therefore, that around half of the beneficiaries reported that they felt resented by some in the community who were not receiving the transfer (Figure 5.20).

Figure 5.20 Percentage of participants who feel resentment from those in their community not receiving a transfer



Source: IFPRI Household Survey for TMRI Process Evaluation, 2012

5.2 Qualitative Research Findings: Quotes from TMRI participants

5.2.1 On the usefulness of the transfer

Northern region

"I bought clothes for my children. I planted a couple of trees in my yard. My daughter-in-law bought a goat and gave it to others on lease."
—Food + cash participant (Satakuti village, Kurigram upazila)

"We built a latrine with the cash. We could not build the latrine with one month's cash. At first we installed the ring, then we placed the slab, and finally we set up the bamboo walls around it."
—Cash + BCC participant (Majhitari village, Kurigram upazila)

"We consumed the food. We bought two goats with the income we could save. We have eight members in our family, but only one of them is the earning member. We have been receiving the rice [transfer]. It has been a great support for our family. Otherwise, we might have had to spend a lot of money to buy rice."
—Food transfer recipient (Rajballov village, Gangachhara upazila)

Southern region

"I do not have any words to explain how much this transfer means to me. Now I send my children to private tutors before their exams so they can score well. I bear the expenses of my brother-in-law's education as well."
—Food + cash participant (Bahir Dashpara village, Bauphal upazila)

"We had so much hardship in the past. We could only afford to eat one square meal a day. Last winter, I went to work at the jetty on the other side of the river. I had to work all night. I had to carry sacks of sand into the boat. I would take a few breads with me from home. I worked there for three nights. Then I came back home. I was bedridden for 7 days. I did not have any strength. But now we can eat three square meals a day, and I got my strength back."
—Food + BCC participant (Pashorer Dhar village, Dacope upazila)

"In the past, we had to borrow money from others. But now we do not have to borrow money and instead lend money to others. It feels good to be able to help others in need."
—Cash transfer participant (Char Manohar village, Char Fasson upazila)

5.2.2 On BCC Training

Northern region

"I have learned about nutritious food for babies. Now, I feed my baby potato mash, lentils, and rice. I keep a portion of curry [aside] before putting in chilies to give it to him."
—Cash + BCC participant (Mahindarkhandroketro village, Rajarhaat upazila)

"I wash my hands with soap after using the toilet. I wash my children's hands as well. We wash our hands before taking our meal. This prevents us from diseases."
—Cash + BCC participant (Majhitari village, Kurigram upazila)

Southern region

"I have learned to keep my hands clean [by] attending those training sessions. In the past, I would feed my baby without washing my baby's or my hands. So, my baby often suffered from digestive problems and diarrhea. Now, after attending the training sessions, I know that I must wash my hands after cleaning the baby. Everyone must wash their hands before eating. Now we do not get sick so often."
—Food + BCC participant (Pashorer Dhar village, Dacope upazila)

5.2.3 On Social Relations

Northern region

"In the past, I did not visit my relatives or attend a party when invited, because we would never have any money in hand. It is embarrassing to visit someone empty-handed. But now I can go to someone's house when invited."
—Food participant (Rajballav village, Gangachhra upazila)

Southern region

"After collecting the cash, I give it to my husband. My husband asks me about what he should do with the money. We have a better understanding between us now."
—Cash participant (Barbak village, Dacope upazila)

"I could not give my opinion or say something [convincingly] in any family affairs before. But now I can express my opinions."
—Food + cash participant (Bahir Dashpara village, Bauphal upazila)

5.3 Case Studies

Case Study 5.1

Espa Begum (food only): *"My children did not have to starve during* Kartik *this year."*

Participant and her household: Espa Begum lives with her husband and four children in Paschim Dhaniram village under Fulbari upazila of Kurigram district (in the north) in a home given to her by her father. She is 33 years old, and her family does not own any cultivable land.

For about half the year, Espa's husband, Saifur (40), works as an agricultural laborer for other people and, when no work is available, he catches fish. Often, he is unable to catch enough fish to earn sufficient income, however, so he goes to Dhaka or Bogra seeking employment as a rickshaw-puller. Saifur regrets not having any land of his own, saying that, if he did, he could grow rice and other crops to make life less of a struggle for his family. The wage he receives is insufficient to properly maintain a family of six.

Espa's children are 14 (Kajuli), 11 (Ismail), 8 (Shorifa), and 1 (Ufeli). Kajuli was taken out of school when she was about 10 years old because her mother fell ill, and Kajuli had to take care of the household chores. She was not reenrolled because her parents could not afford her educational expenses.

Particular household challenges: *Kartik* (mid-October to mid-November) and *Chaitra* (mid-March to mid-April) are periods of extreme hardship for the family because of the lack of work available in the area during these months. In the past, the family has often been forced to go hungry during these lean seasons or switch to inexpensive food of poorer quality. Often, the couple had to buy groceries on credit or borrow money from neighbors for sustenance. There were times when Ismail (11) skipped classes in order to help his father catch fish. Espa recalls:

> We always went through a very hard time during *Kartik* and *Chaitra* and could only manage to eat one square meal ourselves and feed our children two meals a day. If we needed one and a half kilograms of rice, we cooked only one. Sometimes, even my children had only one instead of two meals a day.

TMRI participation: Since May 2012, Espa has been receiving 30 kg of rice, 2 liters of micronutrient-fortified cooking oil, and 2 kg of pulses each month from the IFPRI-WFP Transfer Modality Research Initiative (TMRI). Both Espa and her husband acknowledge the beneficial impacts the transfer has had on their lives. For example, they have been able to eat relatively more during the *Kartik* lean season. In addition, they can now afford to eat food of a much better quality. Previously, they ate inexpensive foods that they grew around their homestead, such as taro leaves, green bananas, radish, and Ceylon spinach. Eating fish or meat was out of question. Espa said, "There have been changes in our daily food menu. We consume

dal throughout the week. We buy eggplants and red amaranth from the market and sometimes fish—large fish—too. The [transfer] has helped us a lot."

TMRI benefits: Espa happily points out that her children's health has improved because she can now feed them regularly. The kids are sick less frequently and Ufeli, who was extremely thin before, has gained some weight.

While the major impact of the transfer has been on their diet, the household has benefited in other ways as well. It has allowed Espa and Saifur to save some of the money they would normally have spent on rice, pulses, and oil. Saifur bought a fishing net and some poultry with the money saved. Espa used some of the savings to pay her sons' private tutor, which she previously did by borrowing money. In fact, after she started receiving the transfer, the household has rarely needed to borrow money, which is a big boost to the family's collective self-esteem.

Espa was delighted to also receive a mobile phone from the TMRI because now she can communicate with the staff of the transfer program, which was previously very difficult. The communication makes it easier for her to receive the food transfers at their appointed distribution times without any hassle. She can also communicate with her relatives and husband via the mobile phone.

In the words of one of her neighbors, Espa describes her selection to be part of the TMRI food-transfer group this way: "Allah finally looked at [us] and gave the support [we] needed."

Case Study 5.2

Mina Khatun (cash only): *"Everything has changed. There have been changes in our diet and clothing. There have been changes in how often we go to visit others. It has brought changes in everything."*

Participant and her household: Mina Khatun is 25 years old. She lives with her husband, two children, and father-in-law in Basuniatari village under Fulbaria upazila of Kurigram district (in the north).

Mina's husband, Babul Hossain, is 32. He inherited his father's homestead but owns no farm land. He works as an agricultural laborer and migrates to Dhaka almost every year during the lean season to work as a rickshaw puller. Babul is the main earner in his family, but his father is a *Kabiraaj* (Ayurvedic practitioner), who occasionally makes some money from his practice. Mina and Babul have one son and one daughter.

TMRI participation: As a TMRI beneficiary, Mina has been receiving Taka 1,500 in cash every month since May 2012, which is primarily used to buy food. From time to time, however, the cash has been put to other uses. For example, Babul recently bought two goats and repaired the roof of their house, which was damaged during the rainy season. He also bought some saplings, which he hopes will grow into large trees and, when sold in the future, fetch him a good price.

Babul plans to use any income resulting from these investments to meet the marriage expenses of their daughter. Regarding this future marriage, he says: "We have been saving money in a bank [account]. We deposit 100 taka per month and plan to keep this account going till our daughter grows up and finishes her education.… We will keep the account active as long as we can. I have made a promise to Allah."

TMRI benefits: Mina says that the transfer has improved her relationship with community members and enabled her family to visit their relatives more often. She explains:

> In the past, my father and my *fupu* [paternal aunt] used to ask us to visit them, but we did not have proper outfits or money, so we felt embarrassed to go anywhere. You must at least take some biscuits, if nothing else, for the family you are going to visit, but we could not even afford to do that. That's why we would not visit anyone. But now we can go see our relatives and buy new clothes for our children.

Moreover, Mina feels that after she started receiving the transfer money, people in the village were more willing to interact with her. "People respect me now. In the past, when I tried to socialize with them, they were not too friendly. They acted as if they were worried I might ask them for a loan."

While Babul agrees with his wife about positive interactions with community members brought about by receiving cash transfers, he is also aware of gossip among some of his neighbors concerning the transfer. He believes the gossip is caused by resentment from people who were not selected to be transfer recipients and ignores it. Babul says:

> People say things, but we do not pay any heed to them. They say, 'Don't think that they are giving you the money for no reason. They will come to collect your body after your death and sell different body parts to other organizations.' I reply, 'If they have to, they will. I don't care.' I believe that people who help others during crisis, can never do such things.

Case Study 5.3

Laisu Begum (food + cash combination): *"It is better that my wife gets the money. If I received it, I would have spent it on things not important for us and our children." —Laisu's husband*

Participant and her household: Laisu Begum is 20 years old and has been married to her husband for about five years. They have two young children (five-year-old daughter, Shumi, and two-year-old son, Shumon) and live in extreme poverty in Satakuti village in Fulbari upazila of Kurigram district (in the north).

Laisu and her 25-year-old husband, Shahidul, don't own any arable land. In fact, they do not even own their tiny one-room house, which was built on a small piece of land owned by Shahidul's uncle. Shahidul juggles a number of jobs, including agricultural laborer, sharecropper, and rickshaw-puller (depending on availability of work).

Particular household challenges: The family suffered most during the lean season of *Chaitra* when Shahidul was unable to find agricultural work. They could only manage to eat one square meal a day during that time.

TMRI participation: Laisu receives 15 kg of rice, 1 kg of pulses, 1 liter of oil, and Taka 750 each month through the TMRI program's food + cash transfers. She says the transfers have been a major boon to the family: "We had many hardships in our lives before—too much to bear. Now we are happy. We can live well. We can feed our children properly."

The transfers have benefited the household in a number of ways. The rice they receive lasts about two weeks; the oil and pulses last through the whole month. Thus, the couple is able to save some money, which, in addition to the cash transfers, has enabled them to build a kitchen, repair their one-room home, buy poultry, and lease some land to cultivate crops.

Laisu feels that their improved economic status has led to better relations between her and Shahidul. Previously, if she asked Shahidul to buy some food when there was none in the house, he would become angry and hit her. Now, she says, he is generally quite pleasant and does not fight with her anymore. Laisu is also on better terms with her mother-in-law because she gives her some of the pulses received through the TMRI. Laisu believes relations with her neighbors have also improved because she sometimes lends them money or oil and lets them use her TMRI-assigned mobile phone upon request. She takes great pride and pleasure in being able to help other members of the community.

When Shahidul was asked about whether he had any reservations about his wife receiving the transfers rather than him, he said no, that instead he feels the cash is being judiciously used primarily because it is being given to his wife. "It is better that my wife gets the money. If I received it, I would have spent it on things not important for us and our children," he explained.

Case Study 5.4

Nurunnahar (cash + nutrition BCC training): *"I have learned how many kinds of food there are and the benefits of eating different types."*

Participant and her household: Nurunnahar has been living in Mohidor Khondokhetro village under Rajarhat upazila of Kurigram district with her husband, two sons, and mother-in-law since her wedding. She is 25 and her husband, Mohammad Manju, is 32. He works as a wage laborer for other farmers since the couple owns now cultivable land.

Particular household challenges: Previously, during the lean season of *Aswin* and *Kartik* (mid-September to mid-November), when there are few agricultural activities, Manju would sometimes go to Dhaka to work as a rickshaw-puller; other times, he would just stay at home, unemployed. It was then that they had to borrow money to support their family and quite frequently skipped a meal or two every day to get by.

TMRI participation: Nurunnahar receives Taka 1,500 in cash each month from the TMRI and attends monthly training sessions on different aspects of nutrition as part of the IFPRI-WFP research initiative. She feels that the sessions have taught her much that she did not already know: "I have learned about nutritious food for babies, [so] I feed my baby son mashed potato, lentils, and rice. I keep a portion of curry aside before adding chilies to it for him."

TMRI benefits: Nurunnahar says the cash transfers have helped her family in many ways. Not only can they spend more money on food, but they could also buy hens and ducks, make household repairs, and repay a number of debts. Nurunnahar herself bought two goats and has lent them out to another household on *Adhi* (an arrangement where someone buys the goat and gives it to a second party who raises it and shares profits with the owner). Furthermore, she has opened a savings account for her sons, where she deposits Taka 200 every month.

Manju agrees that the allowance has helped them improve their overall condition but would have preferred to receive the transfer in his own name, not his wife's. He explains:

> It would have been better if the money came in my name, so I could have kept it myself and bought groceries as I liked. For example, if I need to go to the market to buy something, I do not have money—I have to ask my wife for it. Sometimes it feels quite embarrassing.

Case Study 5.5

Shabita Biswash (food + nutrition BCC training): *"[Before] the BCC training, we knew nothing about nutrition, the proper way of cooking, [our] child's health. Now, we keep our surroundings neat and clean. We use soap to wash hand before eating food and after using the toilet."*

Participant and her household: Shabita Biswash lives with her husband, Bikash, in a joint family in Laudubi Pasharerdhar village in Dacope upazila of Khulna district (in the south). They only have one child (a one-year old named Shuvo), but the household has 8 members. Shabita's mother-in-law, Kobita, is the household head, but the principal earners are Bikash (a tricycle-van driver), father-in-law (a potter), and brother-in-law (also a van driver). Kobita formerly worked selling green coconut in the Tetulia River bank for roughly five years, but her absence caused problems in the household maintenance so she had to leave the job. Shuvash, Bikash's disabled elder brother, and Dipali, Bikash's sister who is a widow, cannot contribute to the family's income and are treated like a burden.

Particular household challenges: The family members, like most of the village residents, are converted Christians. In the past, this village had been inhabited by Hindus. But missionaries came here almost 20 years ago and were able to convert almost 90 percent of the local Hindu population to Christianity by offering much-needed financial support. Shabita learned of this after her marriage, that her husband's family was previously *Sanaton* Hindu. Her father-in-law, Pachu, said, "We lived in unbearable poverty and have left our intrinsic religion for survival."

"We did not have adequate food and shelter," Kobita, Shabita's mother-in-law, explained. "All of us starved for days at a stretch. [The missionaries] induced us to become Christian with better shelter and food. At that time, existence was more important to us than religion."

The household is extremely poor and faces most hardships during the rainy season. They cannot go outside for work due to the heavy rainfall, which is so intense that people avoid going outside unnecessarily. To survive, they had no choice but to take out loans with high interest from a local money-lender.

TMRI participation: After being selected to participate in the TMRI, Shabita started receiving 30 kg rice, 2 kg pulses, and 2 liters of oil every month in addition to BCC training. She said that prior to the transfers, not all family members had adequate food and they lived in "unspeakable misery. Sometimes we ate only in the morning and evening." With the assistance from the TMRI, Shabita says, "Now we can eat at noon as well. This food helps us a lot."

TMRI benefits: Once she began receiving the TMRI transfers, Shabita started saving *musty* (about a handful of rice) every day, which, she hopes, will help during the lean season. She has participated in a local association for past year and managed to save Taka 300 per month. However, her mother-in-law is the one to spend the savings, according to the family's needs, because, Shabita says, "[Kobita] is wiser than me and will never misuse [the money]."

Although Shabita is illiterate, she attends the TMRI BCC training sessions, where she learns about hygiene and nutrition. Three of her family members attend the sessions with her, and they discuss what they've learned afterward. She said, "The BCC training helps us in various ways. [Before it,] we knew nothing about nutrition, the proper way of cooking, [our] child's health, and so on. Now, we keep our surroundings neat and clean. We use soap before and after toilet and taking food."

Shabita's sister-in-law, Dipali, said the BCC training boosted their family status within the community. The neighbors regularly come over to hear what the family learned in the latest training session; it has facilitated a position for them within the Hindu community. Dipali explained, "We were scruffy before BCC training, which is why Hindu families did not socialize with us. However, we are now quite clean, and Hindus welcome us cordially to their house."

The mobile phone Shabita received through the TMRI study has also been very useful to help the family keep in touch with relatives whom, Bikash said, they were previously unable to reach. Shabita, very emotional at the end of her interview with IFPRI researchers, repeatedly expressed her gratitude for the extraordinary support provided by the TMRI.

Case Study 5.6

Minara Begum (food only): "*If men would get the food, they would have exercised power. Now, we [women] get it so we have the power. Women's calculation is different from men's. We care more about our children's present and future. We try to feed them well and take care of their education for their future."*

Participant and her household: Minara Begum is 40 years old and lives in Uttar Charmongol village in Char Fashion upazila of Bhola district (in the south) with her husband, Mohammad Yasin (age 50). The couple has three sons—Faruk (18), Furkan (12), and Alamin (8)—and two daughters—Lucky (5) and Romana (1). They have no arable land. Yasin, the main breadwinner of the family, works mainly as a day laborer but also sometimes as a rickshaw-puller or a fisherman, depending on the season and availability of work. The eldest son, Faruk, works in a private clinic in Dhaka and sends money home every month.

TMRI participation: Minara is one of the TMRI food-transfer beneficiaries. She receives 30 kg rice, 2 kg oil, and 2 kg pulse every month and acknowledged that the transfer is a big boon to her family. "Now we are in a good condition. Because we get the rice, we saved some money and bought a goat, chickens, and ducks," she said.

Minara thinks that since receiving the transfers, her relationship with her husband has improved. He now gives her preferences priority and brings her the foods she likes from the village market. Minara is pleased by this new decision-making capacity and her ability to be involved in important matters with her husband. She believes that selecting women as transfer recipients instead of men was wise: "If men would get the food, they would have exercised power. Now, we [women] get it so we have the power. Women's calculation is different from men's. We care more about our children's present and future. We try to feed them well and take care of their education for their future."

Particular household challenges: Minara has to walk to and from the TMRI distribution center, which is quite far from her home. She does not mind the distance, however, because she is happy to receive the transfer. Often, if he is not working that day, her husband accompanies her to the distribution center to help carry the food. When asked about her selection into the program, Minara said, "I have been selected because of Allah's mercy."

6. SUMMARY AND CONCLUSIONS

Motivation: Which types of transfer—cash, food, or a combination of the two— make safety net programs most effective at improving livelihoods, food security, and child nutrition among the poor in Bangladesh? If entitlements are made contingent upon participation in nutrition education training, do recipients develop healthier eating habits (when money allows) and better caring practices for their children in the long run?

Structure and partners: IFPRI designed the Transfer Modality Research Initiative (TMRI), a pilot intervention, to provide definitive evidence that will help answer these and other questions about social protection programs in Bangladesh. By keeping all aspects of the intervention the same (namely, the value and frequency of transfers and the delivery dates), the project team could ensure, to the extent possible, that any difference in outcomes is attributable to the modality (that is, the form of assistance received)—either (1) cash, (2) food, (3) a combination of cash and food, or (4) cash or food accompanied by a nutrition behavior change communications (BCC) component. Modality #1 was fixed at 1,500 taka (U$18.75) per household per month; #2 included rice, pulses, and micronutrient-fortified cooking oil; #3 was 50 percent food and 50 percent cash; and #4 was equivalent to either #1 or #2 in exchange for regular attendance of training sessions covering basic nutrition, micronutrient-deficiency prevention, infant and young-child feeding practices, health care, maternal nutrition, and hygiene. (See Section 2.2 for a full description of modalities.) Each modality was randomly assigned to poor women to avoid confounding factors.

The initiative is an ongoing collaboration between IFPRI, the UN World Food Programme (WFP), the Eco-Social Development Organization (ESDO), and the Government of Bangladesh. IFPRI conceptualized the research and is responsible for evaluating the TMRI. WFP has been implementing the TMRI in the northwestern and southern regions of Bangladesh since May 2012. It provides operational oversight on the planning, management, and implementation to maintain transfers, standard activities, and minimal influence by external confounding factors. ESDO undertakes the TMRI activities in the field, and the government established a Technical Committee that promotes efficient research operations, encourages government ownership, and makes relevant TMRI findings accessible for use in any necessary social safety net reform.

Successes: Among its successes, the TMRI has seen satisfactory performance by WFP in its implementation of the intervention, according to the operational performance evaluation conducted by IFPRI after the sixth distribution of transfers in October 2012. Since the intervention began in May 2012, participants have received their monthly entitlements (including food, cash, and/or nutrition BCC training sessions) on time, and no incidences of leakage or loss have occurred. The pilot of mobile phone cash transfers was slowly rolled out beginning in July 2012. As of October 2012, four rounds of mobile cash transfers to a total of 1,630 participants (65 percent of the total 2,500 recipients of cash) had been undertaken.

During the midterm review, ESDO staffers mentioned that they had noticed a stark difference between participants who received nutrition BCC training and those who did not. One ESDO staffer said the participants in training sessions tended to be less superstitious; “The doors to their brains,” he said, “are open.” Another success ESDO workers noted was that participants in the BCC training sessions adapted more promptly to mobile phone cash transfers (once they were introduced as part of the TMRI intervention in July 2012), presumably because this group

of participants was more accustomed to training. In general, all TMRI participants adopted the mobile phone cash transfer system quite well.

Challenges: The TMRI implementation process also faced several challenges. While WFP has made significant efforts to improve both, the content and delivery of the nutrition BCC training sessions were considered inadequate in their initial weeks. A concerted effort was undertaken to address the way trainers were presenting the subject matter and interacting with the women participants. In June 2012, more community nutrition workers were hired and trained, supervision tools were revised, and refresher courses were mandated for existing community nutrition workers and field officers to improve their own nutritional knowledge and facilitation skills. Subsequently, the nutrition BCC component has continued to show improvements each month. Field monitoring demonstrates that positive changes in hygiene practices and dietary diversity were seen in the BCC participants' households.

While the mobile transfers went fairly smoothly, there were some challenges. Some participants forgot their personal identification number (PIN), necessary to initiate all transactions. The mobile phone networks used for some of the TMRI cash transfers were not always accessible during distribution times, so beneficiaries had to wait to receive their entitlement. Disruptions in network coverage also caused delays in cash-out transactions. Illiteracy, including numerical illiteracy, was initially problematic for some participants when operating the handset, but the dedication of the Dutch-Bangla Bank Limited team in partnership with ESDO commendably helped participants and WFP overcome these issues.

Initially, ESDO field staffers encountered certain problems related to the experimental nature of the TMRI. TMRI participants were selected by IFPRI researchers using a rigorously vetted random selection process, but, unlike other safety net programs, union council chairmen and upazila administration were not involved in the selection process at all. This led to some backlash from people who were not selected, wanting to know why they could not receive the much-needed assistance provided by the TMRI intervention despite being as poor as those who were chosen to participate. People in the villages where the intervention took place were suspicious of the study since no government officials were involved and entitlements appeared almost too easily; some women reacted to the ease of receiving so much money and food by assuming there had to be "a catch." A misconception arose among some TMRI participants in both in the northwestern and southern regions that accepting transfers meant they would need to convert to Christianity. ESDO skillfully and diplomatically managed to inform participants that this was not the case and persuade them to continue taking part in the TMRI intervention.

Ongoing issues: During IFPRI's midterm field visit in November 2012, the team noticed cases where a transfer-entitlement card was issued in a young woman's mother-in-law's name instead of her own, meaning the transfer went to the mother-in-law, not the young woman/mother. IFPRI immediately notified ESDO and WFP of this practice and asked that it be stopped. WFP later informed IFPRI that initially 717 cases (about 18 percent of all participants) turned out to be mothers-in-law (that is, not the actual selected participants), but they had reduced that number to 70 cases after IFPRI identified the problem. ESDO must rectify this issue completely and provide IFPRI the list of all 717 cases to control for them in the impact analysis.

TMRI participation: Most women expressed a preference for the transfer type they were currently receiving. Only 28 percent of all cash recipients preferred "hand-to-hand" cash over mobile transfers, and 98 percent indicated that they had not faced any difficulties using the

mobile phones. These findings indicate that it is misguided to assume the very poor cannot adopt mobile phone technologies.

Most participants were found to be happy with the location of distribution sites. Although recipients of food packages incurred higher transport costs, they deemed that those costs were not high enough to discourage them from traveling to collect the food entitlement. The majority of food transfer recipients ate the entire quantity of food they received rather than selling it, and more that 80 percent of the participants used cash transfers to meet food consumption needs.

IFPRI's evaluation of TMRI participation suggests a clear regional difference between the northwest and the south. Participants in the south were more likely to miss nutrition BCC training sessions, but community nutrition workers in the south were more likely to pay home visits if beneficiaries missed a session. Participants in the south also spent comparatively more on health care, child education, and loan repayment than those in the northwest. Women in the south indicated that they felt more empowered and that their status had improved because of their TMRI participation.

Overall, participants were enthusiastic about the TMRI benefits, emphasizing that the transfers helped them to feed their families and achieve improvements in indicators of family welfare.

REFERENCES

Ahmed, A.U. 2004. *Impacts of feeding children in School: Evidence from Bangladesh.* A study commissioned by the United Nations University. Washington, D.C.: International Food Policy Research Institute.

Ahmed, A.U., and C. del Ninno. 2005. Feeding minds while fighting poverty: Food for education in Bangladesh. In *Economic reforms and food security: The impact of trade and technology in South Asia.*, ed. S. Babu and A. Gulati. New York: The Haworth Press.

Ahmed, A.U., and C. del Ninno. 2002. *The food for education program in Bangladesh: An evaluation of its impact on educational attainment and food security.* Discussion Paper 138. Food Consumption and Nutrition Division. Washington, D.C.: International Food Policy Research Institute.

Ahmed, A. U., A. Quisumbing, J. Hoddinott, M. Nasreen, and E. Bryan. 2009. *Comparing food and cash transfers to the ultra poor in Bangladesh.* Research Monograph 163. Washington, D.C.: International Food Policy Research Institute.

Carletto, C., and S. Morris. 2001. Designing methods for monitoring and evaluating food security and nutrition interventions. In *Food security in practice: Methods for rural development projects,* ed. J. Hoddinott. Washington, D.C.: International Food Policy Research Institute.

Habicht, J. P., C. G. Victora, and J. P. Vaughan. 1999. Evaluation designs for adequacy, plausibility and probability of public health programme performance and impact. *International Journal of Epidemiology* 28 (1): 10-18.

IFPRI (International Food Policy Research Institute) and WFP (World Food Programme). 2012. *Safety nets in Bangladesh: Which transfer modality will yield maximum benefit? Concept and implementation of a research initiative,* Dhaka.

Levinson, F. J., B. L. Rogers, K. M. Hicks, T. Schaetzel, L. Troy, and C. Young. 1999. *Monitoring and evaluation: A guidebook for nutrition project managers in developing countries.* Washington, D.C.: World Bank.

Loechl, C., Menon, P., Arimond, M., Ruel, M.T., Pelto, G. Habicht, J-P. and Michaud, L. 2009. Using programme theory to assess the feasibility of delivering micronutrient Sprinkles through a food-assisted maternal and child health and nutrition programme in rural Haiti. *Maternal and Child Nutrition* (2009), 5 pp. 33-48.

Rossi, P. H., and H. E. Freeman. 1993. *Evaluation.* Newbury Park, Calif., U.S.A.: Sage Publications.